

freud[®]

Precisely the best



World's Best Woodworking Tools

Freud's Innovation

TiCo™ Freud-Made Hi-Density Carbide



Page 10

Hi-Density carbide blends to maximize life and material finish

Entry & Interior Door Router Bits



Page 208

Create wood doors up to 2-1/4" thick with variable length tenons

Box Joint Cutter



Page 68

Cuts flat square 1/4" & 3/8" grooves for perfect box joints

Premier Fusion Technology



Page 21

The new standard in general purpose saw blades

Dial-A-Width Dado Set



Page 64

No shims required

2+2 Bit Technology



Page 210 & 302

No sanding needed

Freud's Technology

A manufacturer and marketer of superior carbide cutting tools for more than 50 years, Freud leads the industry in innovative manufacturing, precision products and quality service. Freud's product selection includes diamond-sharp saw blades, router bits, shaper cutters, planer knives and power tools.

Precision Products

- Freud engineers consistently develop revolutionary designs that set a new standard for high quality woodworking tools.

Quality Service

- Freud's Lifetime Guarantee on its bits, saw blades and cutters ensures that every Freud customer is satisfied.
- Nearly 40 Power Tool Service Stations across the United States are authorized to service Freud tools, ensuring you'll find help when you need it.

Awards & Recognition

Numerous trade magazines honor Freud products with recognition and awards for quality and innovation.

- American Woodworker magazine editors awarded the prestigious "Editors Choice" award to Freud's SD508 8" Super Dado.
- American Woodworker recognized five Freud products with a "Best Buy" seal: SD208 8" Pro Dado, JS102 Adjustable Fence Biscuit Joiner, JS100 Biscuit Joiner, FT2000E 3-1/4 HP Variable Speed Plunge Router, and FJ85 Heavy Duty Variable Speed Jigsaw.
- Handy Magazine awarded their annual "Innovation Award" to Freud for the Entry and Interior Door Router Bit Set.
- Popular Woodworking presented a "Readers' Choice Award" to Freud's SD208 8" Pro Dado.
- Wood Magazine editors selected the SD508 8" Super Dado as winner of the "Editors' Choice" award for excellence.
- Workbench named Freud's Dial-A-Width Dado Set, the SD608, as one of their "Top 10 Innovative Tools of the Year."

Innovative Manufacturing

A world leader in the production of woodworking tools, Freud employs the most innovative, technologically advanced manufacturing operations in the world. To ensure that the highest quality products meet the toughest design standards, Freud owns and operates six manufacturing facilities in Western Europe. All of the facilities are ISO9001 Vision 2000 quality certified, an acknowledgement to top quality production processes.

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Freud is one of the few manufacturers of woodworking tools in the world that produces its own MicroGrain Carbide with Titanium, called TiCo™, a combination of Titanium and Cobalt. Freud develops different types of carbide for each application to maximize the cutting life and performance of the tool.

In addition, Freud operates one of the most modern product development research centers in Europe for cutting tools. By overseeing the entire manufacturing process, from start to finish, Freud guarantees the highest quality, most advanced products in the industry.

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Freud's Key Manufacturing Facilities

Production of standard
& special cutterheads



Production of Carbide



Production of Router Bits



Production of Saw Blades



CERTIFICATE



Certificato Nr 50 100 4138

Si attesta che / This is to certify that

IL SISTEMA QUALITÀ DI
THE QUALITY SYSTEM OF

POZZO SPA

freud®

SEDE LEGALE:

VIA PADOVA 3 - Z.I. FELETTO
UMBERTO
I-33010 TAVAGNACCO (UD)

UNITA' PRODUTTIVE:

Z.I. VIA MARCUZZI
I-33034 FAGAGNA (UD)
S.S. 464 KM 43
I-33035 MARTIGNACCO (UD)
VIA UDINE NUCLEO PRADIS
I-33010 COLLOREDO DI MONTE ALBANO
(UD)

È CONFORME AI REQUISITI DELLA NORMA

HAS BEEN FOUND TO CONFORM TO THE REQUIREMENTS OF

UNI EN ISO 9001:2000

Questo certificato è valido per il seguente campo di applicazione

This certificate is valid for the following product or service range

**Progettazione e produzione di lame circolari, teste
portacoltelli, frese saldobrasate, punte e componenti in
Metallo Duro (EA 17)**

***Design and manufacture of saw blades, cutter heads,
brazed cutters, router bits and Hard Metal components
(EA 17)***

Data/Date

2004-03-16

Data di scadenza/Expiry date

2007-03-03

Lead Auditor: Giuseppe Peloso



SGQ N° 049A
SGA N° 016D

Membro di MLA EA per gli schemi di accreditamento SGQ, SGA, PRD e PRS
e di MLA IAF per gli schemi di accreditamento SGQ, SGA e PRD
Signatory of EA MLA for the accreditation schemes QMS, EMS, Product and Personnel
and of IAF MLA for the accreditation schemes QMS, EMS and Product

Per l'Organismo di Certificazione
For the Certification Body

TÜV Italia S.r.l.
Cinisello Balsamo (MI)

Nico Mastroiello

Nico Mastroiello
Management Representative



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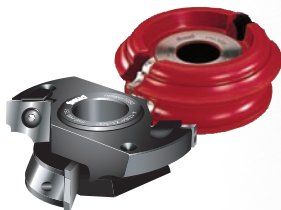
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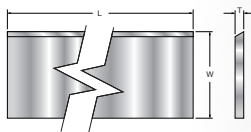
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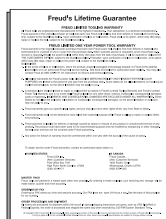
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Saw Blades

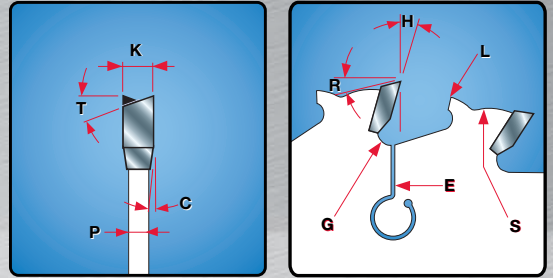
A world leader in cutting tool technology, Freud has earned a reputation for quality woodworking tools and accessories. With several unique design features, Freud saw blades are among the longest lasting and best performing blades in the industry. Choose from a variety of blade designs, sizes and coatings to select the best blade to suit your project. Freud saw blades – precisely the best.



Saw Blades Table of Contents

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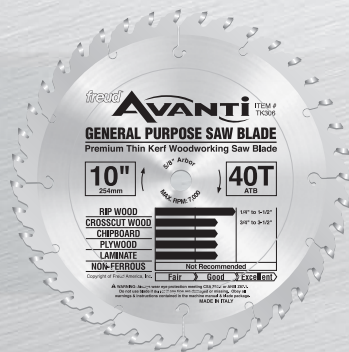
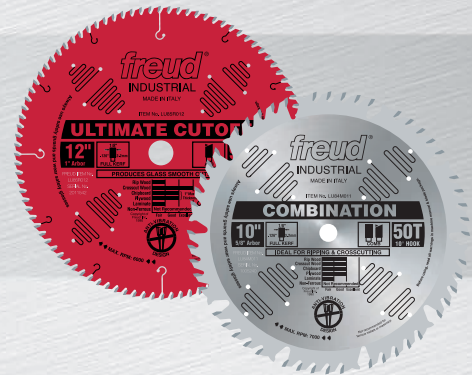


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Saw Blades: Technical Information

Glossary Of Terms

Anti-Kickback Limiter – (L)

The projection at the back of the tooth shoulder that limits the maximum tooth bite to the safe amount for the blade design.

ATB – Alternate Top Bevel

Tooth configuration where the top bevel alternates from right to left. Top bevel can range from 10 degrees to 40 degrees. Used for crosscutting hardwoods and softwoods and general-purpose cutting.

Bore

Arbor hole diameter

Brazing

The method used to attach the carbide tips to the blade body. Both the blade and the body are heated above the melting point of the brazing compound, which then flows, by capillary action into the joint, forming a bond between the parts.

COMB – Combination Grind

A mixture of ATB and Flat Top tooth design where each group of 5 teeth are led by a flat-topped raker tooth and followed by top bevel teeth alternating from left to right. Multi-purpose use.

Expansion Slots – (E)

Slots that are cut into the radius of the blade body controlling the expansion of the blade that may occur due to heat and centrifugal force.

FLAT – Flat Top Grind

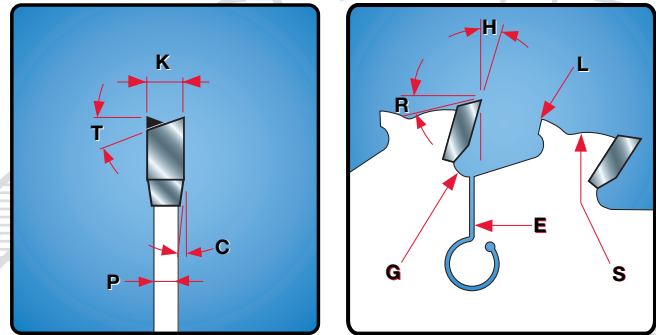
Teeth are ground flat on top with 0 degrees of top bevel angle. Durable and long lasting, this blade is used for ripping or general purpose.

Gullet – (G)

The area cut out in the blade body in front of each tooth. The gullet is designed for chip removal. The higher the ratio of teeth to blade size the smaller the chip size, and therefore the smaller the gullet.

Hook Angle – (H)

The angle that the face of the tooth makes with a line projecting radially from the center of the bore coming into contact with the tooth. Hook Angle ranges from 25 degrees to -7 degrees.



Kerf – (K)

The width of cut a saw blade makes under ideal conditions.

Plate – (P)

The thickness of the saw blade body.

Radial Side Clearance – (C)

The clearance angle on the side of the tooth.

Relief Angle – (R)

The angle made by the top of the tooth away from the cutting edge to a line tangent to the blade circumference.

Shoulder – (S)

The part of the blade body directly behind each tooth, which provides support for the tooth.

TCG – Triple Chip Grind

Tooth grind where one flat-topped tooth is followed by a trapezoidal tooth that is slightly higher. The higher tooth pre-cuts the material narrower than the final kerf, helping to eliminate chipping in brittle materials, such as chipboard and laminates.

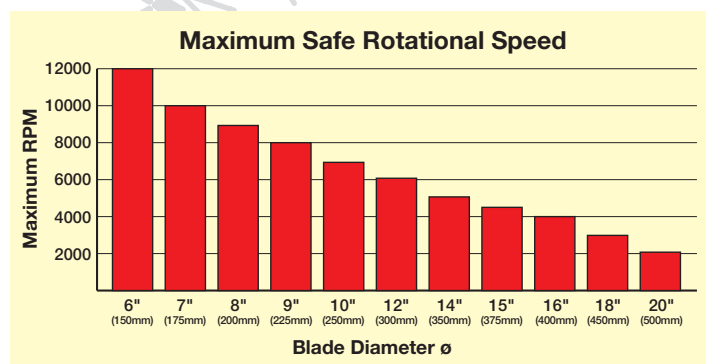
Tensioning Ring

The area in the blade that is pre-tensioned for maximum flatness over a broad temperature range, and operational speed. The tensioning ring can be seen on most blades as a faint ring approximately 3/4 the diameter of the blade.

Top Bevel Angle – (T)

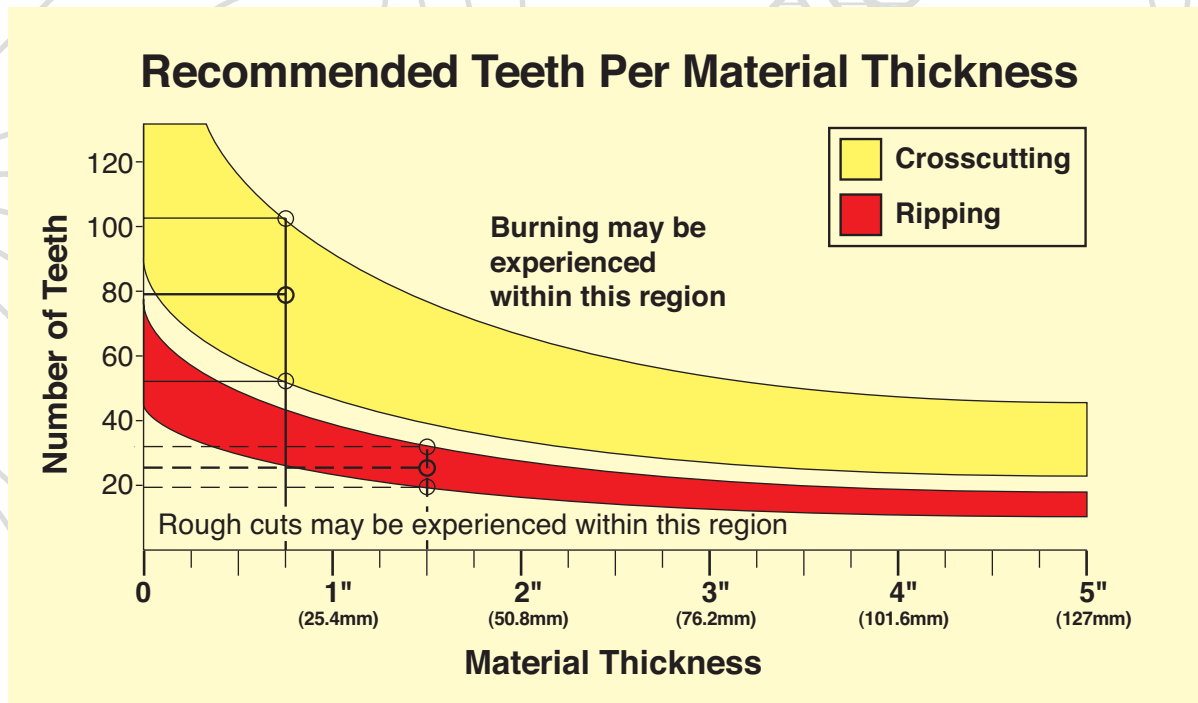
Angle that the top of the tooth makes from side to side.

Equivalency Table For Industrial Saw Blade Sizes			
mm	Inches	mm	Inches
150	6	235	9-1/2
160	6-1/2	250	10
170	7	300	12
184	7-1/2	350	14
200	8	400	16
210	8-1/2	450	18
220	9	500	20



Saw Blades: Technical Information

Valuable Information: The correct number of teeth is more important than the highest number of teeth. See chart below.



How To Use This Chart

1. Find the material thickness you will be cutting on the bottom scale.
2. Extend a vertical line up into the shaded area that matches the cut that you will be making (ripping or crosscutting).
3. Extend horizontal lines from the points that the vertical lines enter and exit the shaded area. These two lines represent the maximum and minimum number of teeth that should be used to make the cut.
4. Extend a horizontal line centered between the first two horizontal lines.
THIS LINE REPRESENTS THE IDEAL NUMBER OF TEETH THAT SHOULD BE USED TO MAKE THE CUT.

EXAMPLE 1:

How many teeth should be used to crosscut a 3/4" thick board?

The heavy solid line is extended vertically into the light yellow crosscut region. The two light solid lines are extended horizontally from where the vertical line crosses the boundaries of the crosscut region. The heavy solid line is drawn horizontally, from the middle of the crosscut region. The chart shows that the blade to use to crosscut a 3/4" thick board should have between 56 and 104 teeth. Ideally, an 80-tooth blade should be used. You then select the blade closest to the ideal number of teeth.

EXAMPLE 2:

How many teeth should be used to rip a 1-1/2" thick board?

The heavy dashed line is extended vertically into the orange ripping region. The two light dashed lines are extended horizontally from where the vertical line crosses the boundaries of the ripping region. The heavy dashed line is drawn horizontally from the middle of the ripping region. The chart shows that the blade to use to rip a 1-1/2" thick board should have between 20 and 32 teeth. Ideally, a 26-tooth blade should be used. You then select a blade closest to the ideal number of teeth, which in this case would be a 24-tooth blade.

Freud—Leaders In Carbide Technology

About Freud's TiCo™ Hi-Density Carbide



Freud Hi-Density Carbide Blends:

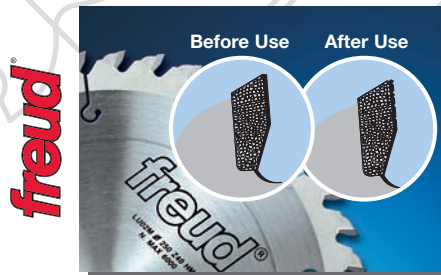
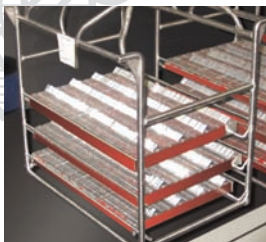
- Non-Ferrous Blend
- Ripping Blend
- General Purpose Blend
- Combination Blend
- Crosscutting Blend
- Panel Sizing Blend
- Laminated Panel Blend

TiCo™ Hi-Density Carbide is a new specially formulated, highly compact Titanium Cobalt Carbide engineered and manufactured by Freud to maximize performance on all Freud cutting tools.

Designed in Freud research and development laboratories, Freud's TiCo™ Hi-Density Carbide is scientifically developed using the following elements (as well as proprietary elements), to produce a supreme product:

- TiC=Titanium Carbide is known for its high strength, excellent wear resistance, resistance to corrosion, and high melting/boiling points (heat resistance).
- Co=Cobalt also known for its density, hardness, and corrosion resistance; but it's also a very impact resistant element.
- W=Tungsten is an extremely dense and durable hard metal.

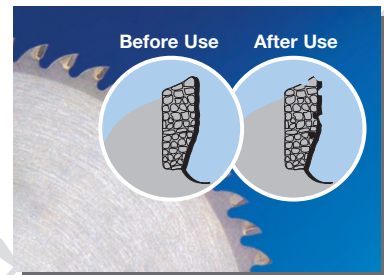
This new carbide is much smaller and more densely packed than other carbides on the market today, enabling the carbide teeth on Freud's blades, bits and cutters to last up to four times longer than standard products. Carbide size is extremely important when it comes to sharpness as well as the rate at which an edge wears. The larger the carbide grain, the faster an edge will wear. While standard carbides measure as large as 5 microns, and an advanced micrograin carbide can measure at 1 micron, Freud's TiCo™ Hi-Density Carbide is miniscule in comparison at .8 microns, with a laminate blend as small as .4 microns.



TiCo™ Hi-Density Carbide

Freud's premium quality TiCo™ Hi-Density Carbide allows for a sharper edge that gives a better finish with a dramatically longer cutting life. And since the grains are much smaller and more dense there is not as dramatic a loss to the cutting edge, so wear occurs much more slowly.

Competitors



Standard Grade Carbide

Large grain carbide cannot be sharpened to such tight tolerances and as a result leave a rougher finish. Plus, the cutting edge wears much more quickly due to larger pieces of material eroding away with use. In fact, after just a few cuts with standard carbides, life and finish begin to suffer.

Using precise mixtures of cobalt (for impact resistance), titanium (for its anti-corrosive properties), tungsten (for its hardness), and a number of proprietary elements, Freud creates over 20 different blends of TiCo™ Hi-Density Carbide designed specifically for each cutting application to maximize blade life and material finish. Other carbide that is purchased "off-the-shelf" is usually non-specific and therefore will not maintain the proper tooth geometry or sharp edge. Freud-made carbides are designed to produce the best finish and life for their particular purpose.

Freud's industrial carbide blends range from highly impact-resistant for durability in ripping to extremely hard for maintaining a sharp edge in laminate cutting. For example a TiCo™ Hi-Density Ripping Carbide contains a moderate amount of cobalt allowing the carbide to withstand the impact demands when ripping, while a TiCo™ Hi-Density Laminate Carbide is a sub micrograin, dense carbide formulation that is half the size of Freud's other TiCo™ blends. At 0.4 microns, this carbide which contains a maximum amount of tungsten is the hardest of all which allows the edge to stay sharpest in laminate, melamine and solid surface cutting applications

Freud—Leaders In Carbide Technology

Tungsten Carbide (WC)

Tungsten Carbide is a combination of Tungsten and Carbon in powder form. This powder is created by a process of carburization in a Hydrogen furnace to create very fine particle sizes in the 2 to 0.2 μm range.

Cobalt (Co)

Cobalt is used as the binder that holds the different carbide powders together. It also provides the bonding surface for the brazing process. Freud uses only Cobalt from a special process which yields a certain grain structure required for a strong bond.

Atomized Carbide Powder

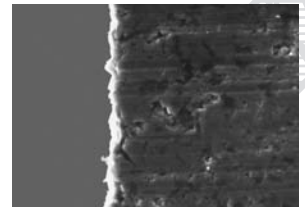
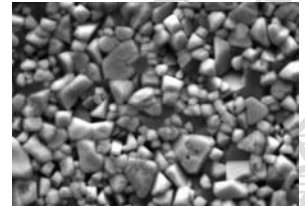
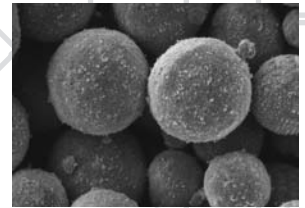
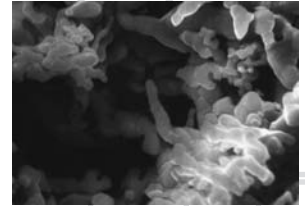
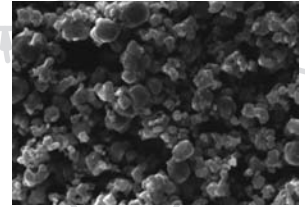
Atomized Carbide powder is a mixture of Tungsten Carbide, Cobalt and other carbides, which was mixed with wax and alcohol to form a homogeneous mixture then atomized in Nitrogen atmosphere. The spherical shape makes the mixture flow evenly into the presses yielding a higher quality carbide. The average size of the spheres are approximately 150 μm .

Crystalline Structure

This is an image of the crystalline structure of the carbide after sintering in a vacuum furnace. The light colored crystals are the Tungsten Carbide, notice how fine and even the grain sizes are one to another. The dark zones are the Cobalt binder.

Magnified Cutting Edge

The Tungsten Carbide crystals can be seen after grinding. Freud's finer grain mixture allows for a sharper edge which will resist wear better and last longer because as particles break off there is less rounding of the cutting edge.



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TiCo™ Hi-Density Industrial Carbide Blend Chart

Increasing Impact Strength

Increasing Hardness

Non-Ferrous TiCo™ Hi-Density Carbide Blend	Ripping TiCo™ Hi-Density Carbide Blend	General Purpose TiCo™ Hi-Density Carbide Blend	Combination TiCo™ Hi-Density Carbide Blend	Crosscutting TiCo™ Hi-Density Carbide Blend	Laminate/Plastic/ Solid Surface TiCo™ Super Hi-Density Carbide Blend
High cobalt content—allowing the carbide to withstand impact when cutting non-ferrous metals	Medium Cobalt content—allowing the carbide to withstand the impact demands when ripping.	A perfect blend of Cobalt, Titanium and Tungsten—both impact resistant and hard carbide for general purpose applications.	A little less Cobalt content and more Hi-Density Tungsten Carbide—allowing the carbide to keep an edge longer in combination applications.	More Hi-Density Tungsten Carbide content making the carbide very hard—allowing the carbide to maintain a sharp cutting edge in crosscut applications.	Super Hi-Density Tungsten Carbide—half the size of standard micro-grain carbide (.4 microns vs. .8) making this carbide the hardest of all to withstand laminate, melamine & solid surface cutting—while still giving a chip and swirl-free cut.

All of these technological advancements add up to:

- Sharper Edge—Flawless Finish
- Controlled Wear—Stays Sharper 4X Longer
- Precise Formulation—Maximum Performance
- More sharpenings—More cut for the money
- Extra Long Life—More cut for the money

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Freud—Leaders In Coating Technology

All Freud blades feature industry-first protective coatings to shield the blades from extreme heat, build-up and corrosion.



About Freud's Silver I.C.E.™ (Industrial Cooling Element) Coating

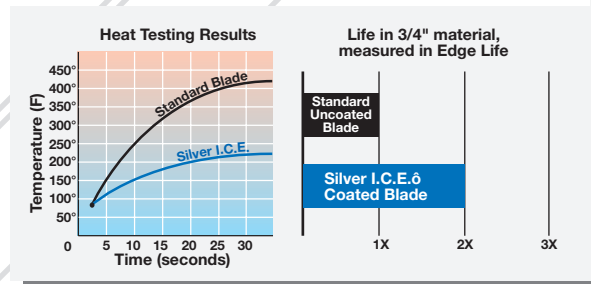
Silver I.C.E.™ Coating - a revolutionary new coating that resists corrosion and resin or "pitch" build-up and resists heat up to 2 times longer than standard polished blades.

Blades featuring **Silver I.C.E.™ Coating** resist corrosion and build-up, and have 2 times more heat resistance and life than polished blades.

Silver I.C.E.™ Coating protects the blade from heat stress that can cause rapid loss of tension, which in turn causes blade warp, over heating and poor cut quality. Additionally, this coating reduces the possibility for pitch build-up, which further reduces the heat element responsible for drag on the motor. Less drag means longer tool life and longer blade life. Less pitch also means less down time for blade cleaning.



Silver ICE Coating Testing Versus Standard Uncoated Blades



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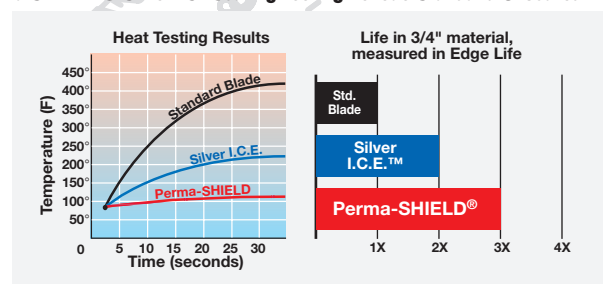
About Freud's Perma-SHIELD® Coating

Perma-SHIELD® - a state of the art formulation produces a coating that is superior to any today, and will withstand the toughest woodworking applications. Combine **Perma-SHIELD®** Industrial Coating System with the other features Freud has pioneered, on a full range of products, and you have a superior wood cutting tool that will answer the needs of all woodworkers.

Perma-SHIELD® - coating virtually eliminates heat generated from friction. The non-stick coating envelops the blade plate and cutting edge in a protective layer resulting in complete thermal insulation in even the harshest conditions. Blades coated with **Perma-SHIELD®** resist binding in large volume cutting, which reduces blade warp. This lubricating feature allows the blades to spin freely and reduce stress on the motor and saw carriage, in turn prolonging the life of the machine. Like Silver I.C.E., **Perma-SHIELD®** eliminates pitch and debris build-up reducing down time for cleaning.



Perma-SHIELD® & Silver ICE Coating Testing Versus Standard Uncoated Blades



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Freud—Leaders In Coating Technology

freud
Coated Blades



Coated Blades Reduce Blade Drag

Freud's coatings significantly reduce blade drag keeping the blade cool, improving the quality of cut, and extending the life of the blade.

Standard
Uncoated Blade



Standard Uncoated Saw Blades

A non-coated saw blade produces more drag and develops more heat. This heat distorts most saw blades, compromising its cut quality and reducing its cutting life.

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Coated Blades



Prevents Corrosion

Freud coatings protect the blade from humidity and corrosion, therefore improving feed rate and extending the life of the blade.

Standard
Uncoated Blade



Open to Corrosion

A non-coated saw blade is more susceptible to corrosion, therefore increasing blade drag, reducing blade life, and causing more strain on the saw's motor.

freud
Coated Blades



Reduces Pitch Build-up

Freud's coatings reduces pitch build up; maintaining the quality of cut and reducing blade clean up time.

Standard
Uncoated Blade

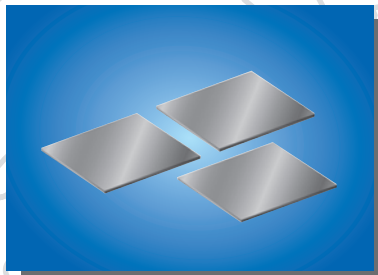


Pitch Build-up

A non-coated saw blade is receptive to pitch build up; altering the blade's cutting performance with life and finish.

Freud—Leader In Manufacturing & Engineering

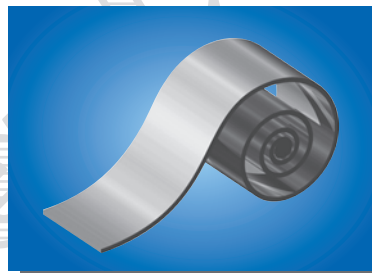
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Premium Anti-Fatigue Steel

Pre-Hardened and pre-flattened steel (46 to 48 Rc) – recognized as the world's highest quality steel – ensures precision manufacturing and performance longevity, even under heavy load.

Competitors



Average Soft Rolled Steel

Rolled, soft steel (30 Rc) cannot maintain precision manufacturing tolerances and is therefore unable to remain stable and precise under load.

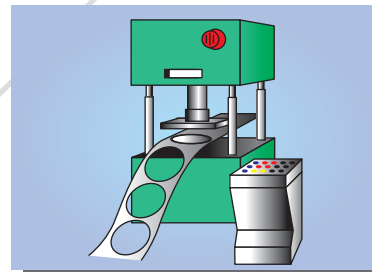
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High Performance Laser Cut

Revolutionary high-tech lasers cut each Freud saw blade, ensuring a precise blade body time after time. These lasers are so powerful, Freud is able to utilize a high strength steel (46 to 48 Rc) for the blade bodies, so they will remain flat and true, even after years of use.

Competitors



Stamped Die Cut Blades

Most other manufacturers are forced to use a softer metal (30 Rc) because the 'stamp' or die is also made of steel. This punching process cuts 2/3 of the way through the material; the remaining 1/3 is stretched until it tears. This process creates stresses in the blade that often lead to blade flexing and 'wandering' within the cut.

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Safety Feature: Kickback Reducing Design

New shoulder design for added safety, reduces the effects of dangerous kickbacks and make the saw blades good at cutting wood with loose knots & nails, and are superb at cutting even the poorest quality chipboard.

Competitors



No Safety Feature

Saw blades without anti-kickback system gives no safety benefit at all to the user and may also damage the blade and the workpiece itself.

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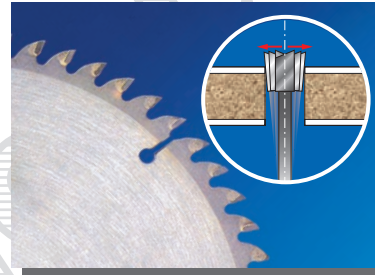
Freud—Leader In Manufacturing & Engineering



Anti-Vibration Technology

Freud's anti-vibration design stabilizes the blade to reduce chatter for a flawless finish and long life. This feature also produces a low noise saw blade.

Competitors



No Anti-Vibration

Saw blades without anti-vibration vent technology can move sideways in the cut producing chattering and noise, resulting in poor cut quality.



Balancing

All Freud blades are precision balanced to ensure vibration-free cuts. Blades are balanced on computer-controlled equipment that determines exactly where material needs to be removed. Once material is removed, the blade is rechecked to ensure that it is perfectly balanced.

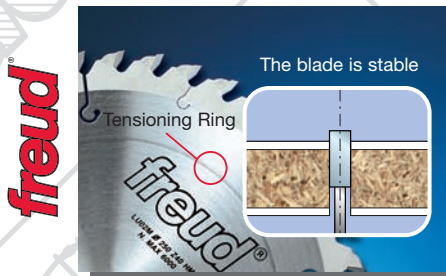
Competitors



Imperfectly Balanced Saw Blades

A non-balanced blade has different weights in various parts of its body which evokes vibration during rotation and an unbalanced blade can also chatter and create unnecessary rework costing quality, time, and money.

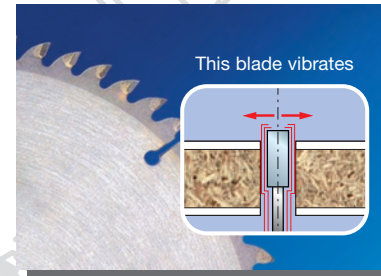
15



Tensioning Ring

Pretensioning balances the centrifugal and thermal forces the blade endures while cutting and ensures that the blade stays truer under load. Freud's exclusive computer-controlled equipment pretensions the blades, leaving a faint ring near the outside diameter of the blades.

Competitors

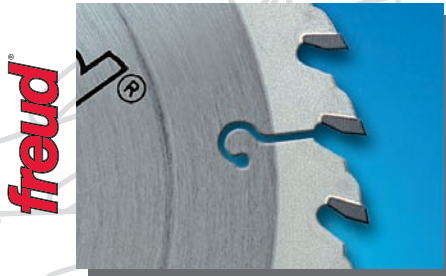


Non-Tensioned Blade

Some manufacturers do not tension their blades. Saw blades that are not properly tensioned cannot handle changes in temperature and stresses endured in standard cutting applications. A non-tensioned blade can lead to an unstable cut causing premature wear of carbide teeth, poor cutting finish and a reduction in the cutting life of a saw blade.

freud®

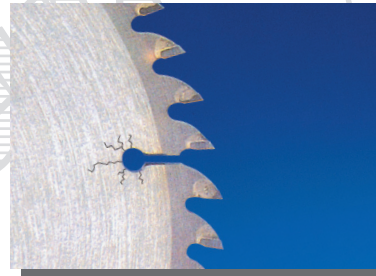
Freud—Leader In Manufacturing & Engineering



Expansion Slots Reduce Noise

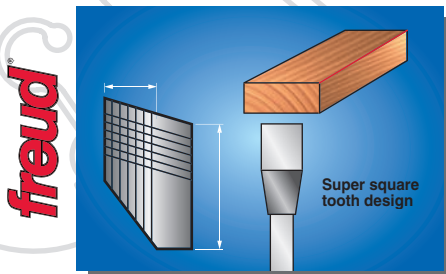
The Freud designed laser cut expansion slots are unique in design to dissipate blade stress over a greater area and produce a quieter operation.

Competitors



High Noise with Die Cut Expansion Slots

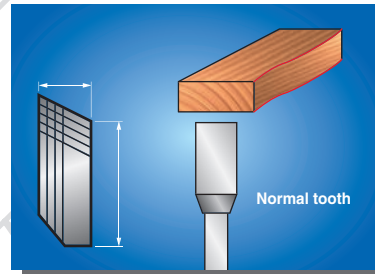
Other designs are not as effective at reducing stress. Punched holes can lead to cracking and high noise.



Super Square Tooth Design

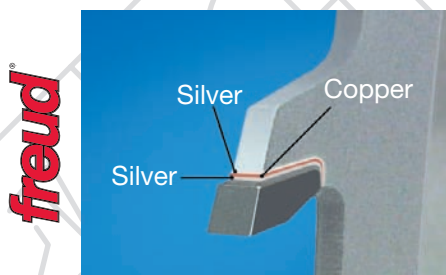
The super square tooth cuts more precisely than a normal tooth and with a higher number of sharpenings, lasting longer than standard teeth.

Competitors



Normal Tooth

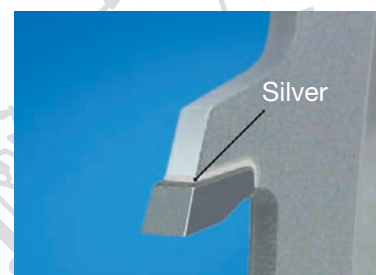
The larger cutting surface of a traditional tooth compromises the cutting quality because the tool tends to follow the work pieces grain.



Tri-Metal Brazing

Freud's innovative Tri-Metal Brazing process bonds the carbide tips to the steel blade body. This method consists of copper alloy sandwiched between layers of silver alloy. The copper allows for flexibility and impact resistance to protect the carbide tips and steel shoulders when cutting knots, laminates, hardwoods, etc.

Competitors

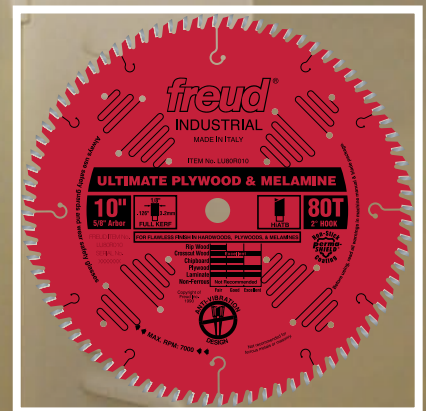


Standard Brazing

Other manufacturers only use silver alloy, which does not allow for expansion during operation. This causes the bond to develop stresses, leading to cracks in the carbide and failed joints.

Industrial Saw Blades

Freud's Industrial Series of blades are designed for the serious woodworker. Available in a variety of styles for different applications, LU and LM blades feature thick carbide tips, precision-tensioned bodies and other premium features found in every Freud blade. Industrial blades include red Perma-SHIELD® coating or Silver I.C.E.™ coating to help reduce friction, heat build-up and gumming, which add up to longer blade life.



Industrial Full Kerf &
Thin Kerf Saw Blades

GUIDE TO CHOOSING A

For This Cut

	Non-Ferrous Cutting		Ripping		Ripping & Crosscutting		Crosscutting	
Description	Thin Stock Non-Ferrous		Ripping		General Purpose Life & Finish	Combination	Slide Miter / Radial Arm	Heavy-Duty Crosscut
Material Thickness	MAX.	MAX.						
Material Type	Copper, Brass, Aluminum		Hardwoods Softwoods		Hardwoods, Softwoods, Veneered Plywoods	Hardwoods, Softwoods, Veneered Plywoods	Hardwoods, Softwoods, Veneered Plywoods	Hardwoods, Softwoods, Plywoods, Chipboards
Application	Long life & Burr-free cuts in thick stock non-ferrous metals		Glue line rips with material 3/4" to 2-3/4"		The blade that does it all - Crosscutting & Ripping	Crosscutting & Ripping (emphasis on ripping)	Fast clean cuts with a slide miter saw or radial arm saw	Cabinet Maker's Blade
Tooth Count	72T/80T		24T		40T	50T	60T	60T
Tooth Design								
Hook Angle	-7° -5°		20°		18°	10°	-5°	10°
Catalog Section	Specialty Blades Pages 44 to 46		Ripping Blades Pages 40 to 43		Premier General Purpose Blades Pages 20 to 21	General Purpose / Combination Pages 35 to 39	Crosscut Blades Pages 23 to 28	Crosscut Blades Pages 23 to 28

Perma-SHIELD®
FULL KERF Silver I.C.E.
 Perma-SHIELD®
THIN KERF Silver I.C.E.

LU89M010	LU90M010	LM72R010 LM72M010 LU87R010	LM74R010 LM74M010	P410	LU84R011 LU84M011 LU83R010	LU83R010	LU91R010 LU91M010	LU73M010

Use This Blade

Impact Resistant

Special carbide blend able to withstand extreme impact when cutting.

Increasing Impact Strength

C A R B I D E

Non-Ferrous TiCo™ Hi-Density Carbide Blend
High Cobalt content - allowing the carbide to withstand impact when cutting non-ferrous metals.

Ripping TiCo™ Hi-Density Carbide Blend
Medium Cobalt content - allowing the carbide to withstand the impact demands when ripping.

General Purpose TiCo™ Hi-Density Carbide Blend
A perfect blend of cobalt, titanium and tungsten - both impact resistant and hard carbide for general purpose applications.

Combination TiCo™ Hi-Density Carbide Blend
A little less Cobalt content and more Hi-Density tungsten carbide - allowing the carbide to keep an edge longer in combination applications.

Crosscutting TiCo™ Hi-Density Carbide Blend
More Hi-Density tungsten carbide content making the carbide very hard - allowing the carbide to maintain a sharp cutting edge in crosscut applications.

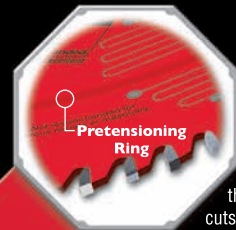
MORE WORK...

USE FULL KERF BLADES FOR ULTIMATE STABILITY
 USE THIN KERF BLADES FOR FAST CUTS OR FOR SAWS UNDER 3HP



Freud-Made Hi-Density TiCo™ Carbide
Freud uses extremely dense, ultra-fine carbide grain (up to 40% smaller) giving more actual carbide per tooth for a sharper edge and longer life.

Oversized Carbide Teeth
50-60% larger than standard carbide teeth for up to 4 times more resharpenings.



Pretensioned Blade
Balances the centrifugal & thermal forces on the blade for truer cuts under load.



Laser Cut High Strength Steel
Ensures stable, flat, & true blades even after years of use.



10" SAW BLADE

Crosscutting		Laminates / Melamine			Chipboard	Plastics	Solid Surface
Ultimate Cut Off Blade	Ultra Finish In Plywood, Woods & Melamine	Thick Stock Laminates/Melamine	Single Sided Laminates/Melamine	Double Sided Laminates/Melamine	Stacked Chipboard	Plastics	Solid Surface
M 1/4" 1-5/8" M A X	M 1/4" 1-5/8" M A X	M 1" 2-3/4" M A X	M 1/4" 1-5/8" M A X	M 1/4" 1-5/8" M A X	M 1-1/4" 3-1/2" M A X	M 1/4" 1-5/8" M A X	M 1/4" 1-5/8" M A X
Hardwoods, Softwoods, Veneered Plywoods	Hardwoods, Softwoods, Veneered Plywoods, Double Sided Melamine	Laminates, Melamine, Chipboards, Plywoods	Laminates, Chipboards, Plywoods	Laminates, Melamine, Chipboards, Plywoods	Chipboard Plywoods	Acrylic, Polycarbonates, Vinyl.	Solid Surface materials such as DuPont® Corian®
Glass smooth finish	Chip-free & splinter-free cuts	Chip-free cuts in thick stock double-sided laminates & plywoods	Fast-chip free cuts in one sided laminates & plywoods	Ultra long life & chip-free cuts in double sided laminates & plywoods	Fast sizing of thick or stacked chipboard up to 3-1/2"	Clean, smooth & burn-free cuts in plastics	Ultra long life & swirl-free cuts in Solid Surface materials
80T	80T	60T	80T	80T	40T	80T	72T
ATB Grind	High ATB Grind	Triple Chip Grind	Triple Chip Grind	Triple Chip Grind	Triple Chip Grind	Modified Triple Chip Grind	Triple Chip Grind
10°	2°	-6°	10°	-3°	13°	-3°	0°
Crosscut Blades Pages 23 to 28	Crosscut Blades Pages 23 to 28	Laminate Blades Pages 29 to 32	Laminate Blades Pages 29 to 32	Laminate Blades Pages 29 to 32	Stacked Chipboard Blades Pages 33 to 34	Specialty Blades Pages 44 to 46	Specialty Blades Pages 44 to 46
LU85R010 - LU74R010	LU80R010 LU80M010 LU79R010	- LU92M010 -	LU98R010 -	LU97R010 LU97M010 LU96R010	- LU81M010 -	- LU94M010 -	LU95R010 LU95M010 -

For This Cut

Description

Material Thickness

Material Type

Application

Tooth Count

Tooth Design

Hook Angle

Catalog Section

◀ Perma-SHIELD®
◀ Silver I.C.E. FULL KERF
◀ Perma-SHIELD®
◀ Silver I.C.E. THIN KERF

Use This Blade

Extra Hard Carbide

Maintains a sharp cutting edge for fine finish, chip-free cuts, & long life

SCALE

Increasing Hardness

Crosscutting TiCo™ Hi-Density Carbide Blend

More Hi-Density tungsten carbide content making the carbide very hard - allowing the carbide to maintain a sharp cutting edge in crosscut applications.

Laminate / Plastic / Solid Surface TiCo™ Super Hi-Density Carbide Blend

Super Hi-Density Tungsten Carbide - half the size of standard MicroGrain carbide (.4 microns vs. .8) making this carbide the hardest of all to withstand laminate, melamine & solid surface cutting while still giving a chip and swirl-free cut.

No Scoring Blade Needed
Reduces chatter leaving a flawless cut in laminates & melamine.



Laser Cut Anti-Vibration Slots
A breakthrough innovation designed & engineered by Freud to minimize blade vibration.



No Aftermarket Stabilizer Needed
Stable blade provides superior finish & long cutting life.



Drastically Reduces Vibration & Sideways Movement
For clean and true cuts in each application.



...LESS CHATTER

USE FULL KERF BLADES FOR ULTIMATE STABILITY FULL KERF
USE THIN KERF BLADES FOR FAST CUTS OR FOR SAWS UNDER 3HP THIN KERF

The
New
Standard
In General Purpose
Saw Blades!

Introducing Freud's New

The Most Technologically

Gives superior performance in both
crosscutting and ripping

Flawless
Crosscuts

Flawless
Rips

Premier

FUSION

Not recommended for ferrous materials

Before using, read all warnings in machine manual & blade package.

freud®

Premier

FUSION

Item #: P410

STANDARD IN GENERAL PURPOSE SAW BLADES

NOT



Cuts & Ripping for Solid Woods, Veneers & Melamines

FUSION

Non-Stick
Perma-Shield
Coating

PATENT
PENDING



Features TiCo™
High Density
Carbide
Crosscutting Blend
For Maximum
Performance



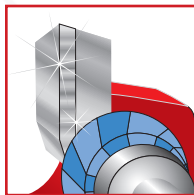
Perma-SHIELD® non-stick coating virtually eliminates heat generated from friction, prevents corrosion, and reduces pitch build-up and blade drag

Premier

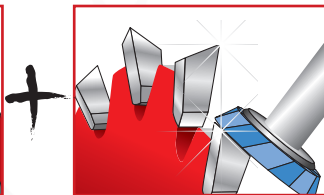
FUSION

Advanced Blade On The Market!

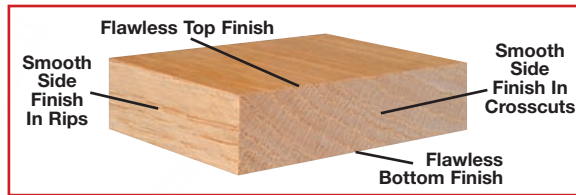
The Fusion tooth design fuses Freud's 30° Hi-ATB tooth with Freud's unique double side grind tooth geometry. The design provides a glass smooth side finish while also giving a flawless top & bottom finish in veneered plywood, hardwoods, and melamine.



Double Side Grind

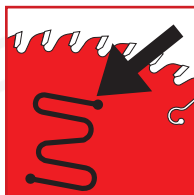


Hi-ATB Grind



Smooth & Flawless Cuts

Patent Pending



Combination of unique design and special polymer filler reduces vibration above and beyond any other blade resulting in superior performance.

One Blade Does It All—Crosscuts & Rips

Recommended Use & Cut Quality

RIPS WOOD:
CROSSCUTS WOOD:
PLYWOOD:
LAMINATE:
NON-FERROUS: Not Recommended

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)

Ripping



Crosscutting



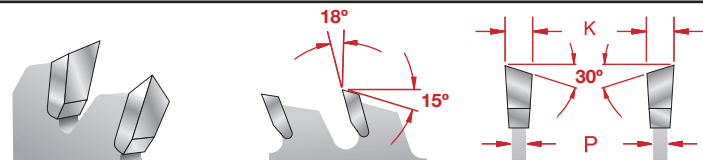
Freud engineers have discovered the ultimate combination of fused tooth grind geometry, blade body rigidity, precise tensioning, a special carbide blend and superior carbide brazing, non-stick Perma-SHIELD® coating and high performance anti-vibration – all working together in concert to provide the ultimate cut. One blade does it all. Whether you're ripping or crosscutting, a Premier Fusion blade will tackle any project.

Application

Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
P408	8"	34 Hi-ATB	5/8"	.126	.098
P410	10"	40 Hi-ATB	5/8"	.126	.098
P412	12"	48 Hi-ATB	1"	.126	.098
P414	14"	54 Hi-ATB	1"	.126	.098

• Carbide Grade Chart •

Increasing Hardness
H30S H20S H10S **H01S** H00S H00K H00X
Increasing Impact Strength



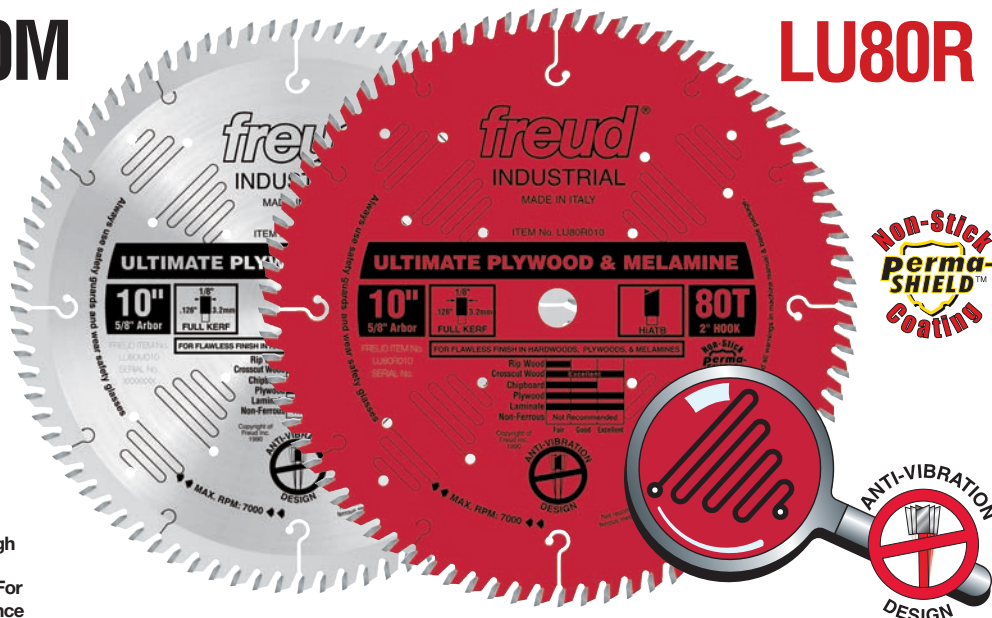
Ultimate Plywood & Melamine Blades

LU80M

LU80R



Features TiCo™ High Density Carbide Crosscutting Blend For Maximum Performance



Flawless Finish In Veneered Plywood, Melamine & Laminates For Virtually Chip-Free Cuts

Application

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended
CUT QUALITY:	Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)



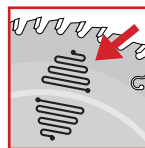
Depth of Cut



The LU80 saw blade provides flawless, chip-free edges in veneered plywoods, fine moldings, melamine, laminates, and crosscuts in solid woods. Using advanced technology, Freud developed this line of saw blades that features laser-cut, anti-vibration slots that practically eliminate the vibrations that resonate in standard blades. The combination of High ATB tooth design and anti-vibration slots makes these blades the ultimate finish blades. The result is a cut so smooth it eliminates the need for stabilizer or a scoring blade!

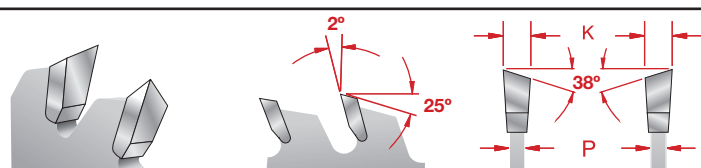
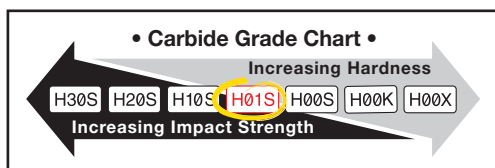


High Alternate Top Bevel (HiATB) Tooth Design produces splinter-free cuts



Laser-Cut Anti-Vibration Slots drastically reduce vibration and sideways movement in the cut extending blade life and giving a crisp, splinter-free flawless finish

	Silver ICE™	Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
NEW	LU80M010	LU80R010	10"	80 Hi-ATB	5/8"	.126	.087
NEW	LU80M012	LU80R012	12"	96 Hi-ATB	1"	.126	.087



Tips

Techniques

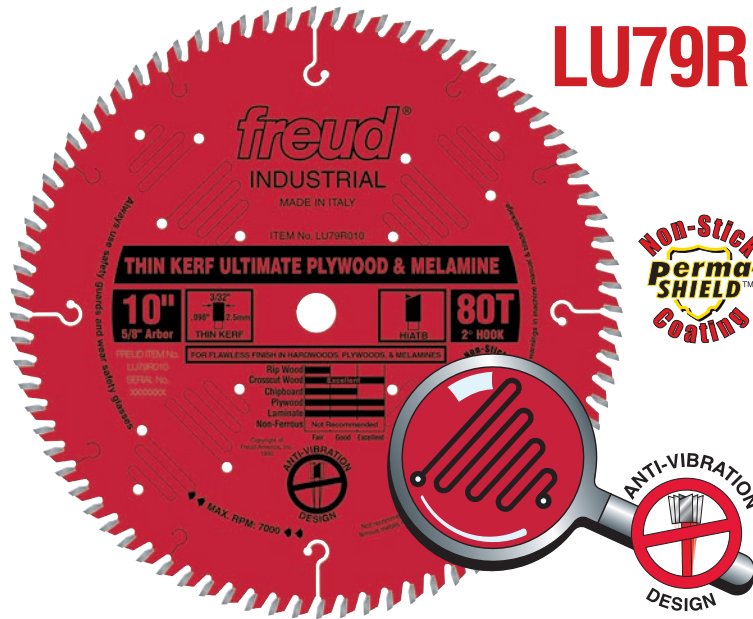
When you need a smooth finish on both sides of plywood or laminate use a zero clearance insert or blade with Hi-ATB teeth.

Thin Kerf Ultimate Plywood & Melamine Blades

LU79R



Features TiCo™ High Density Carbide Crosscutting Blend For Maximum Performance



Crosscut Blades

Flawless Finish In Veneered Plywood, Melamines & Laminates For Virtually Chip-Free Cuts

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended
CUT QUALITY:	Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)



Depth of Cut

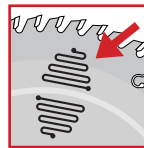


Using advanced technology, Freud developed the LU79 thin kerf line of saw blades that features laser-cut, anti-vibration slots that practically eliminate the vibrations that resonate in standard blades. This blade provides flawless, chip-free edges in veneered plywoods, fine moldings, melamine, laminates, and crosscuts in solid woods. The combination of Hi-ATB tooth design and anti-vibration slots makes these thin kerf blades the ultimate finish blades. The result is a cut so smooth it eliminates the need for a stabilizer or a scoring blade!

Application

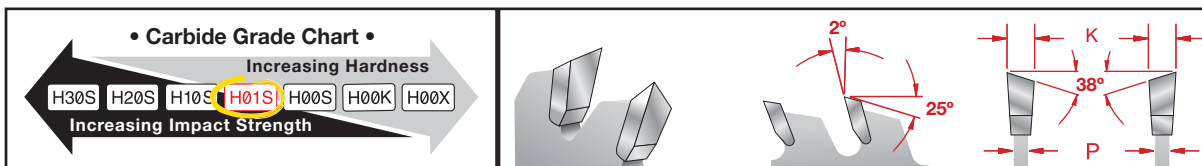


High Alternate Top Bevel (HiATB) Tooth Design produces splinter-free cuts



Laser-Cut Anti-Vibration Slots drastically reduce vibration and sideways movement in the cut extending blade life and giving a crisp, splinter-free flawless finish

Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU79R010	10"	80 Hi-ATB	5/8"	.098"	.071"
NEW LU79R012	12"	96 Hi-ATB	1"	.098"	.071"



When you need a smooth finish on both sides of plywood or laminate use a zero clearance insert or blade with H-iATB teeth.

Tips
Techniques

SAW BLADES-INDUSTRIAL

freud



Industrial Ultimate Cut-Off Blades

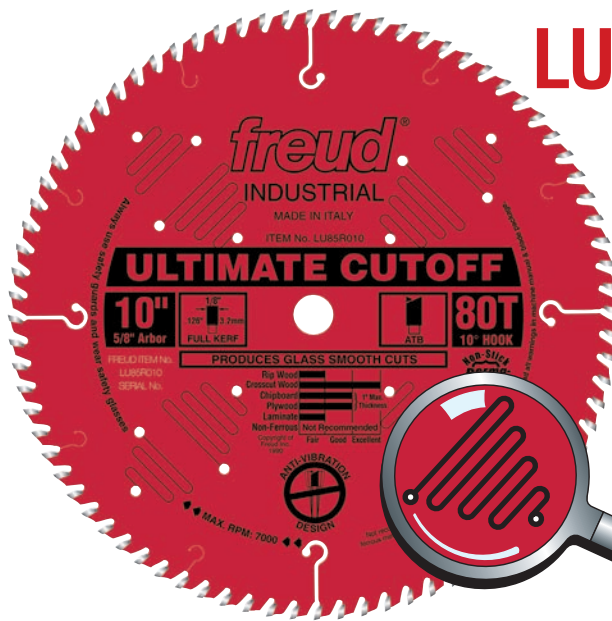
LU85R



No Stabilizers Needed



Features TiCo™ High Density Carbide Crosscutting Blend For Maximum Performance



Ultimate Crosscutting Blades For Glass-Smooth Finishes

Recommended Use & Cut Quality

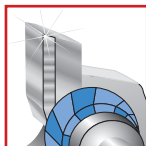
- RIPS WOOD:**
- CROSSCUTS WOOD:**
- CHIP BOARD:**
- PLYWOOD:**
- LAMINATE:**
- NON-FERROUS:** — Not Recommended —
- CUT QUALITY:** Fair → Good → Excellent (Not recommended for ferrous metals or masonry)



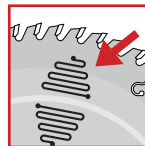
Depth of Cut



This superior blade gives glass-smooth finishes when crosscutting hard and soft woods, so no sanding is required. What makes this blade so special is the unique side grinding of each tooth. The teeth actually polish the material as it cuts. New laser-cut anti-vibration slots practically eliminate the vibration that resonates in standard blades, producing glass-smooth finishes. With a finish this perfect you won't need stabilizers!

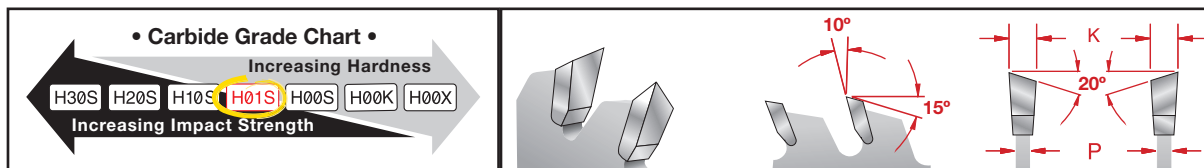


Unique Side Grind polishes the material to produce a superior finish



Laser-Cut Anti-Vibration Slots drastically reduce vibration and sideways movement in the cut extending blade life, and giving a crisp, flawless finish

Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU85R008	8"	64 ATB	5/8"	.116	.098
LU85R009	9"	72 ATB	5/8"	.116	.098
LU85R010	10"	80 ATB	5/8"	.116	.098
LU85R012	12"	96 ATB	1"	.116	.098
LU85R014	14"	108 ATB	1"	.136	.118
LU85R015	15"	108 ATB	1"	.136	.118



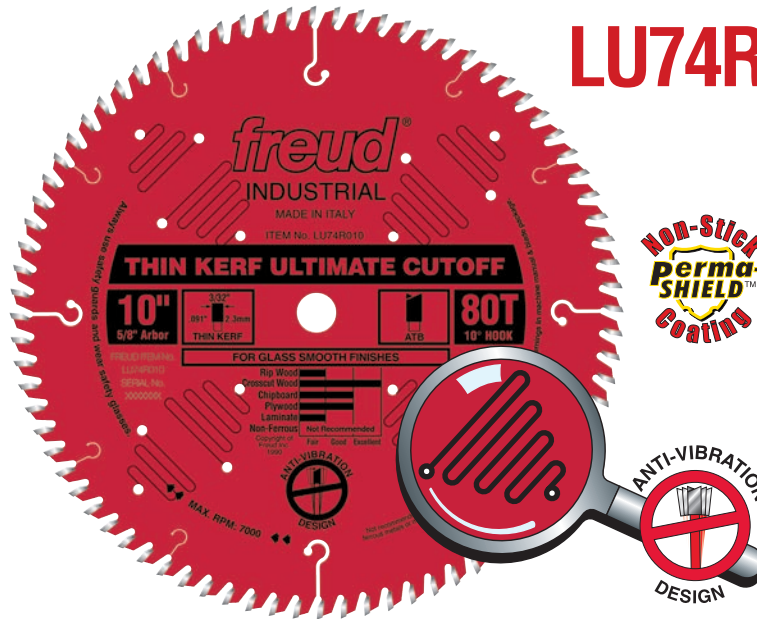
Industrial Thin Kerf Ultimate Cut-Off Blades

LU74R

No Stabilizers Needed



Features TiCo™ High Density Carbide Crosscutting Blend For Maximum Performance



Non-Stick
perma-SHIELD™
Coating

ANTI-VIBRATION
DESIGN



Crosscut Blades

Ultimate Cut-Off Blades For Glass-Smooth Finishes With Underpowered Saws

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended
CUT QUALITY:	Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)

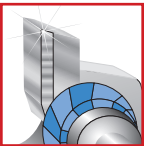


Depth of Cut

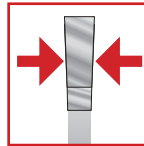


This thin kerf blade produces glass smooth surfaces when crosscutting hardwoods and softwoods, thanks to Freud's unique side grinding technology. The larger blades are ideal for miter box applications. Thin kerf blades remove less material than standard carbide blades, thus requiring less horsepower to produce equally good results.

Application

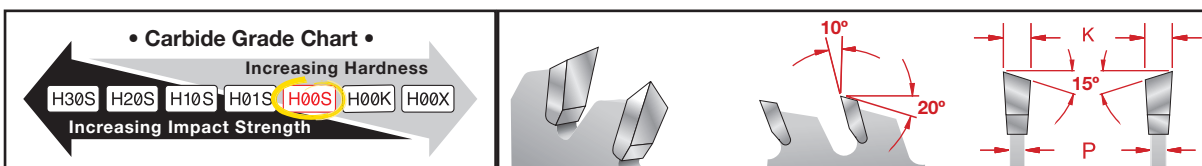


Unique Side Grind polishes the material to produce a superior finish



Thin Kerf allows for easier feeding and reduced waste

Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU74R008	8"	64 ATB	5/8"	.087	.063
LU74R010	10"	80 ATB	5/8"	.091	.071
LU74R012	12"	96 ATB	1"	.091	.071
LU74R014	14"	108 ATB	1"	.118	.087



Maintain a proper feed rate. Feeding too slow causes burning of the material. Feeding too fast can be dangerous and produces a poor dull cut.

Tips
Techniques

SAW BLADES-INDUSTRIAL

freud®

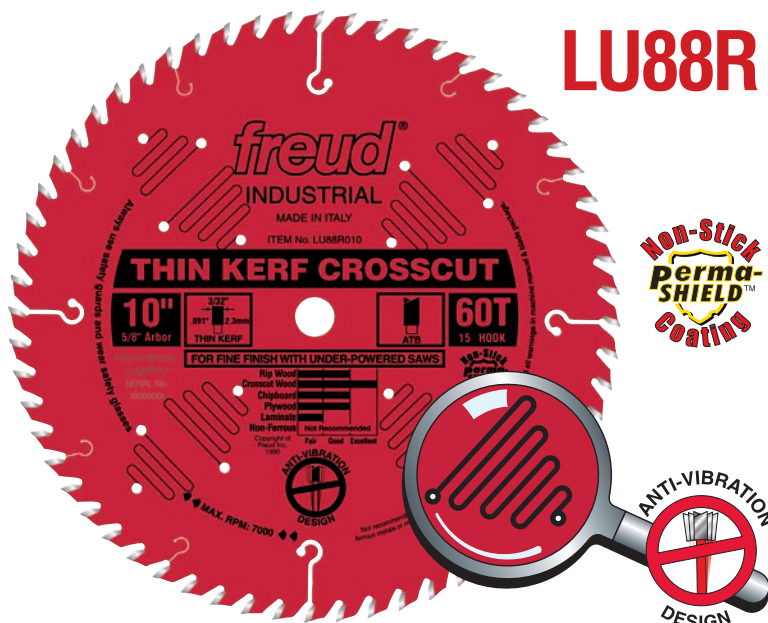


Industrial Thin Kerf Fine Finish Crosscut Blades

LU88R



Features TiCo™ High Density Carbide
Crosscutting Blend For
Maximum Performance



Crosscutting Blades For Fine Finish With Underpowered Saws

Application

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended
CUT QUALITY:	Fair → Good → Excellent

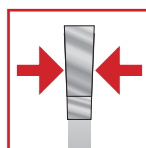
(Not recommended for ferrous metals or masonry)



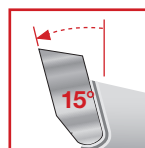
Depth of Cut



This Perma-SHIELD™ coated blade gives new life to underpowered saws and produces smooth crosscuts in hardwoods, softwoods and moldings. Coated blades pull 1/3 less on the saw, which translates into 33% more cutting power. Thin kerf blades remove less material than standard carbide blades, thus requiring less horsepower to produce equally good results.

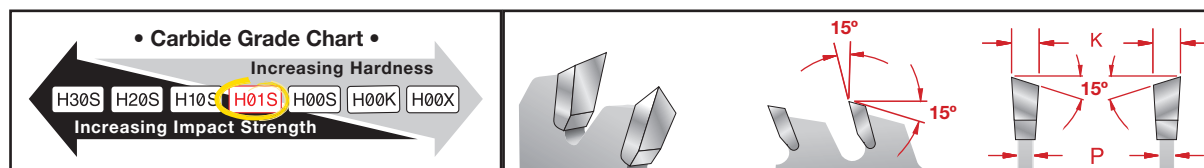


Thin Kerf reduces waste and feeds easier



Positive Hook Angles produce a smoother cut and allow for a faster feed rate

Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU88R008	8"	48 ATB	5/8"	.083	.063
LU88R009	9"	54 ATB	5/8"	.090	.071
LU88R010	10"	60 ATB	5/8"	.090	.071
LU88R012	12"	80 ATB	1"	.094	.071

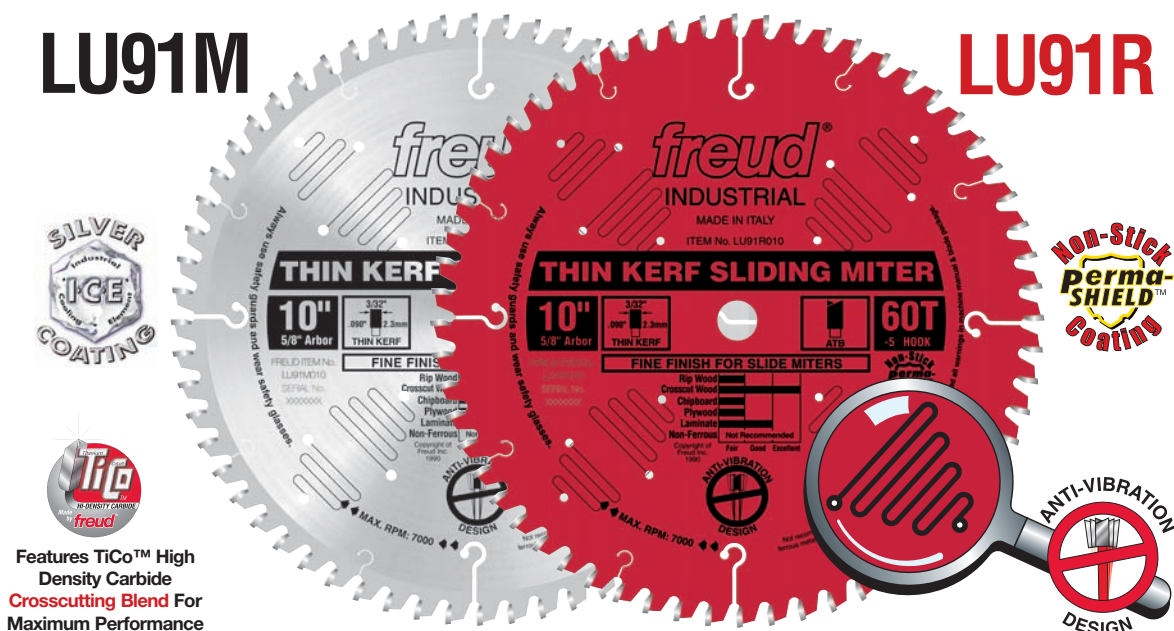
Tips
Techniques

If you experience burning on one side of the cut you should check and adjust the saw's alignment. Consult your saw owner's manual for alignment instructions.

Industrial Thin Kerf Sliding Compound Miter Saw Blades

LU91M

LU91R



Features TiCo™ High Density Carbide Crosscutting Blend For Maximum Performance

Fine Finish Blades For Sliding Miter & Radial Arm Saws

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended
CUT QUALITY:	Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)	

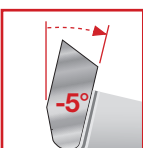


Depth of Cut



This thin kerf industrial blade provides a superior finish cut with sliding compound miter saws. The 5° negative hook angle helps prevent the blade from being too aggressive and pushes the work piece down and towards the fence. Thin kerf blades remove less material than standard carbide blades, thus requiring less horsepower to produce equally good results.

Application

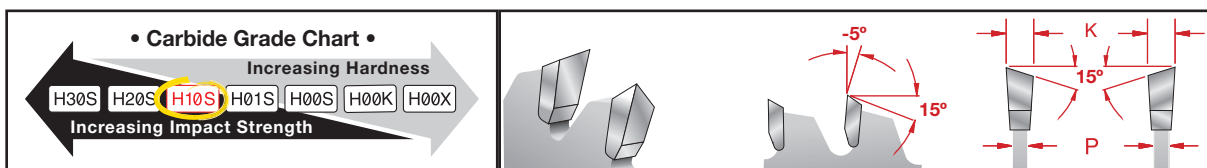


Negative Hook Angle minimizes climbing for better control



Thin Kerf requires less power and allows for faster feed rate

Silver ICE™	Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU91M008	LU91R008	8 1/2"	48 ATB	5/8"	.090	.071
LU91M010	LU91R010	10"	60 ATB	5/8"	.090	.071
LU91M012	LU91R012	12"	72 ATB	1"	.090	.071



For safety and best results when using a miter saw, securely clamp the material before cutting.

Tips
Techniques



Crosscut Blades



SAW BLADES-INDUSTRIAL

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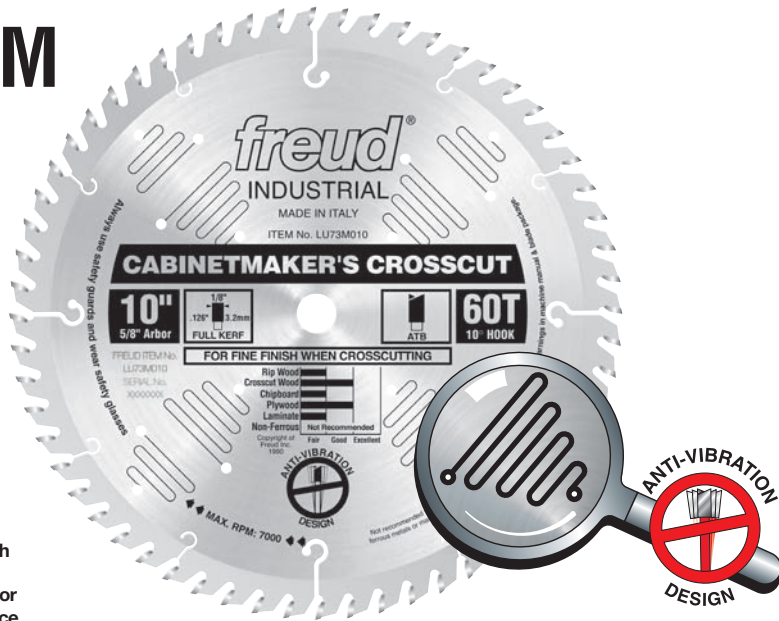


Industrial Cabinetmaker's Crosscut Blades

LU73M



Features TiCo™ High Density Carbide Crosscutting Blend For Maximum Performance



Heavy-Duty Crosscutting Blades Designed For The Industrial Cabinetmaker

Application

Recommended Use & Cut Quality

RIPS WOOD:

CROSSCUTS WOOD:

CHIP BOARD:

PLYWOOD:

LAMINATE:

NON-FERROUS: — Not Recommended —

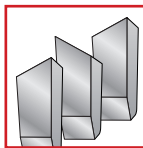
CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)



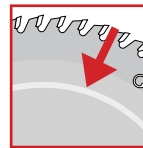
Depth of Cut



This heavy-duty crosscut blade is designed primarily for heavy use in a cabinetmaker's shop. Combining a 10° hook angle and the alternate top bevel tooth grind, this blade provides a good crosscut and long cutting life in hardwood, softwood, plywood, and chipboard. The LU73M series is ideal for cutting a wide variety of materials most commonly used by cabinet makers in thicknesses from 1/2" to 2-3/4" thick.

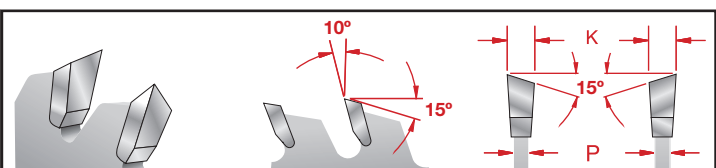
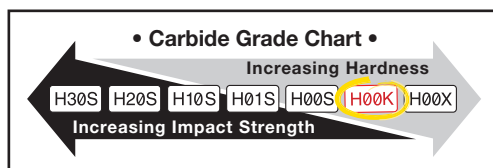


Alternate Top Bevel (ATB) Tooth Design gives quality crosscuts



Precision Tensioning with computer-controlled equipment keeps the blade flat and true while maximizing blade life and performance

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU73M008	8"	48 ATB	5/8"	.126	.087
LU73M009	9"	54 ATB	5/8"	.126	.087
LU73M010	10"	60 ATB	5/8"	.126	.087
LU73M012	12"	72 ATB	1"	.126	.087
LU73M014	14"	84 ATB	1"	.138	.098
LU73M016	16"	96 ATB	1"	.150	.110
LU73M018	18"	108 ATB	1"	.157	.118



Tips Techniques

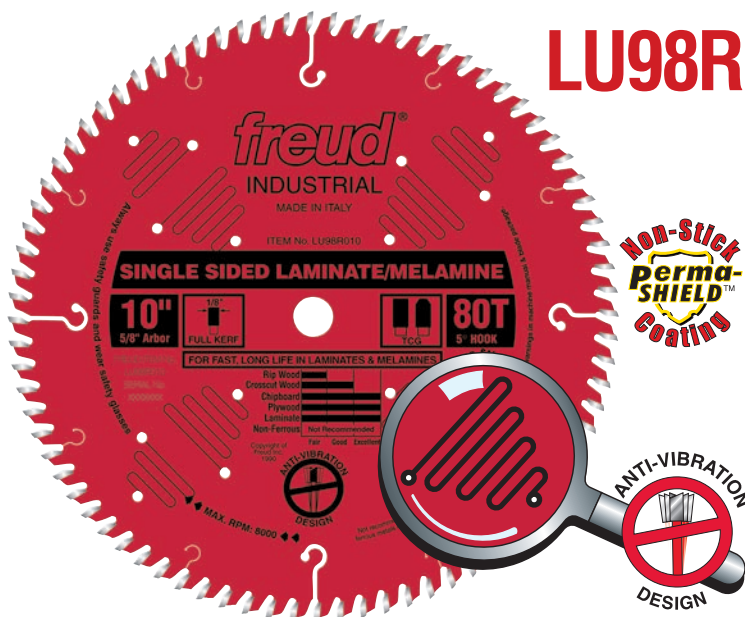
When cutting on a table saw, put the finish side of your work piece facing up. When cutting with a radial arm saw or hand-held saw, put the finish side down. This will reduce splintering.

Industrial Single Sided Laminate/Melamine Blade

LU98R



Features TiCo™ High Density Carbide Laminate Blend For Maximum Performance



Non-Stick
perma-SHIELD™
Coating

ANTI-VIBRATION
DESIGN



Laminate Blades

Long Life, Production Blades For Single-Sided Laminates, Chip Board And Other Manmade Materials

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended
CUT QUALITY:	Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)

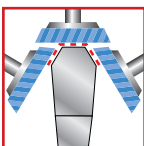


Depth of Cut

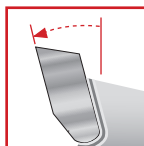


This fast-cutting blade is ideal for a perfect finish on one side of laminates and melamines. The Perma-SHIELD™ coating makes these blades resistant to friction and heat build-up. Coated blades pull 1/3 less on the saw, which translates into 33% more cutting power. The 10° hook angle and a triple chip grind provide fast cuts and long cutting life.

Application

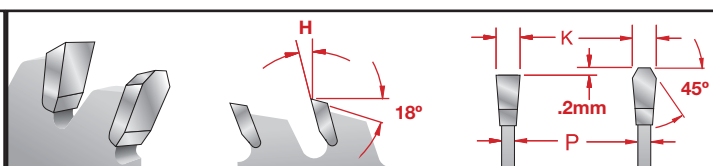
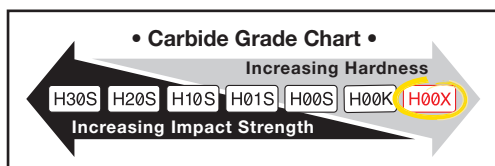


Triple Chip Grind (TCG) Tooth Design with a positive hook angle for long life in production applications



Positive Hook Angle for fast cutting and easy feed

Perma-SHIELD™	Dia.	Teeth	Arbor	Hook Angle(H)	Kerf(K)	Plate(P)
LU98R007	7"	56 TCG	5/8"	5°	.126	.087
LU98R008	8"	64 TCG	5/8"	5°	.126	.087
LU98R009	9"	72 TCG	5/8"	5°	.126	.087
LU98R010	10"	80 TCG	5/8"	5°	.126	.087
LU98R012	12"	96 TCG	1"	5°	.126	.087
LU98R014	14"	108 TCG	1"	7°	.138	.098
LU98R016	16"	120 TCG	1"	10°	.150	.110

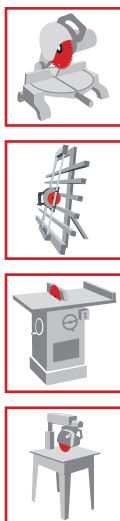


When cutting manmade products, such as laminates, melamines, MDF, and particle board, use a blade with Triple Chip Grind (TCG) for longest blade life.

Tips
Techniques

SAW BLADES-INDUSTRIAL

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Industrial Double Sided Laminate/Melamine Blades

LU97M

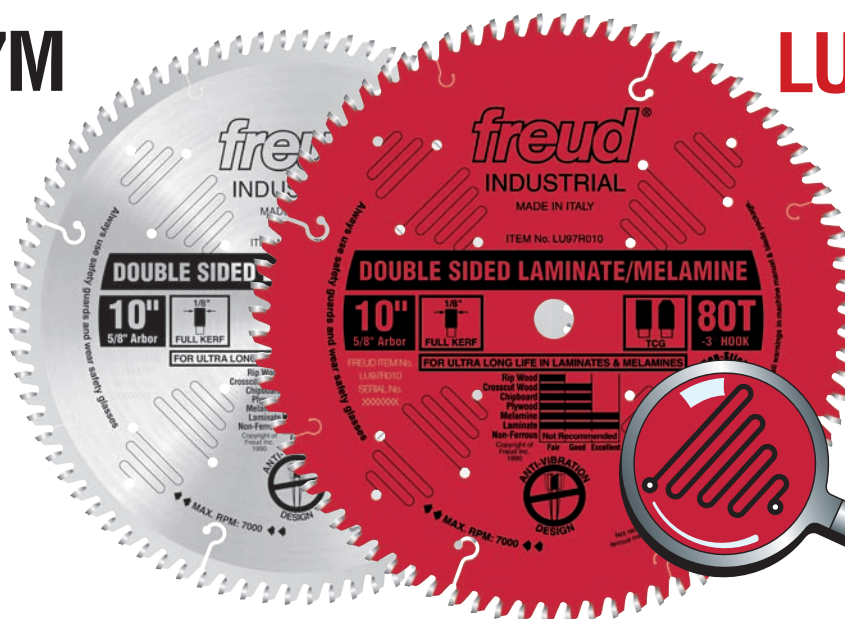


No Scoring
Blade Needed



Features TiCo™ High
Density Carbide
Laminate Blend For
Maximum Performance

LU97R



For Ultra Long Life In Double Sided Manmade Materials

Application

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
MELAMINE:	
LAMINATE:	
NON-FERROUS:	Not Recommended

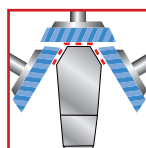
CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)



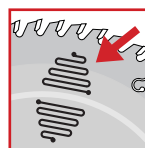
Depth of Cut



Designed to give long life and excellent finish on the top and bottom of laminates, melamine & veneered plywood. The laser-cut anti-vibration design yields the plate acoustically dead. This reduces the sideways movement of the cutting edge to prevent chipping in manmade materials such as laminates. This dramatically extends cutting life and finish. No scoring blades needed with this blade!



Triple Chip Grind (TCG) Tooth Design
with a negative hook angle for
superior life in abrasive man-made
materials



Laser-Cut Anti-Vibration Slots
drastically reduce vibration and
sideways movement in the wood
extending blade life and giving a
crisp, splinter-free flawless finish

Silver ICE™	Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU97M008	LU97R008	8"	64 TCG	5/8"	.126	.087
LU97M010	LU97R010	10"	80 TCG	5/8"	.126	.087
LU97M012	LU97R012	12"	96 TCG	1"	.126	.087
LU97M014	LU97R014	14"	108 TCG	1"	.138	.098

• Carbide Grade Chart •

Increasing Hardness

Increasing Impact Strength

H30S H20S H10S H01S H00S H00K **H00X**

-3°

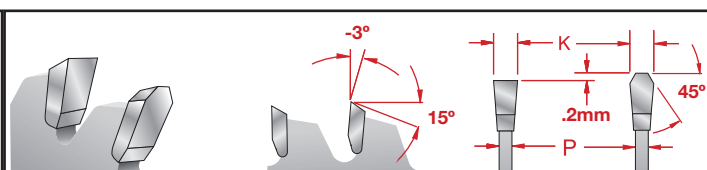
15°

K

.2mm

P

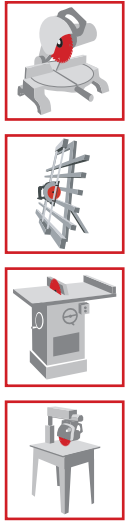
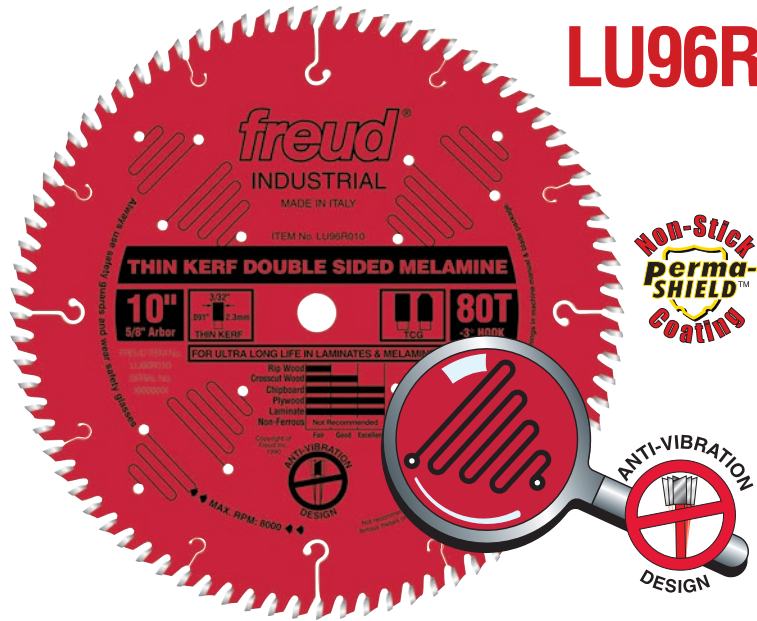
45°



Tips Techniques

Proper blade height is essential to chip-free cuts. If you experience chipping on the bottom of the material, lower the blade slightly. If there is chipping on the top of the material the blade height should be increased slightly.

Industrial Thin Kerf Double Sided Laminate/Melamine



Laminate Blades

For Ultra Long Life In Double Sided Manmade Materials

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
MELAMINE:	
LAMINATE:	
NON-FERROUS:	Not Recommended
CUT QUALITY:	Fair → Good → Excellent

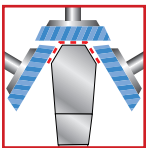
(Not recommended for ferrous metals or masonry)



The LU96R is a thin kerf blade that is designed to give long life and excellent finish on the top and bottom of laminates, melamine & veneered plywood. The laser-cut anti-vibration design yields the plate acoustically dead. This reduces the sideways movement of the cutting edge to prevent chipping in manmade materials such as laminates. This dramatically extends cutting life and finish. No scoring blades needed with this blade!

Application

31

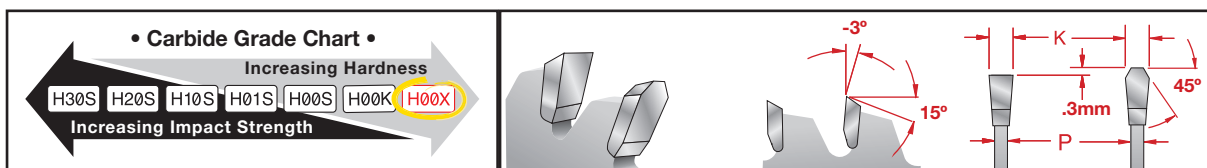


Triple Chip Grind (TCG) Tooth Design with a negative hook angle for superior life in abrasive man-made materials



Thin Kerf requires less power and allows for faster feed rate

Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU96R008	8"	64 TCG	5/8"	.083	.063
LU96R010	10"	80 TCG	5/8"	.091	.071
LU96R012	12"	96 TCG	1"	.091	.071

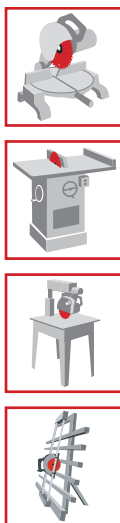


Proper blade height is essential to chip-free cuts. If you experience chipping on the bottom of the material, lower the blade slightly. If there is chipping on the top of the material the blade height should be increased slightly.

Tips
Techniques

SAW BLADES-INDUSTRIAL

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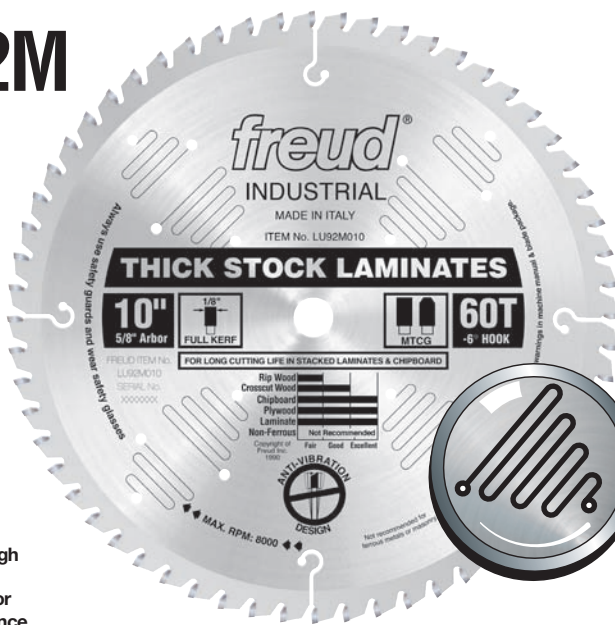


Industrial Thick-Stock Laminate Blades

LU92M



Features TiCo™ High Density Carbide Laminate Blend For Maximum Performance



Long Life Production Blades For Double Sided Laminates And Stacked Chipboard

Application

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended

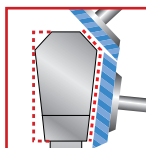
CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)



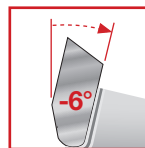
Depth of Cut



This heavy-duty production blade produces an excellent finish on the top and bottom of thick laminates and melamine. The LU92M series is ideal for cutting stacked 3/4" laminates and melamine. Each tooth has a special modified triple chip grind design created by computer simulation to breeze through thick stock and single or double-sided laminates, leaving a chip-free edge.



Modified Triple Chip Grind (MTCG) Tooth Design for long life and chip-free cuts in thick stock manmade materials



Negative Hook Angle minimizes chipping in laminates and melamine

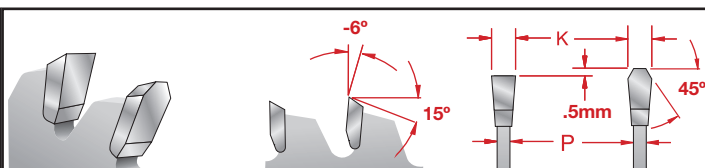
Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU92M008	8"	48 MTCG	5/8"	.126	.087
LU92M009	9"	56 MTCG	5/8"	.126	.087
LU92M010	10"	60 MTCG	5/8"	.126	.087
LU92M012	12"	72 MTCG	1"	.126	.087
LU92M014	14"	84 MTCG	1"	.138	.098

• Carbide Grade Chart •

Increasing Hardness

Increasing Impact Strength

H30S H20S H10S H01S H00S H00K **H00X**



Tips Techniques

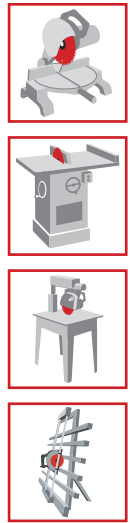
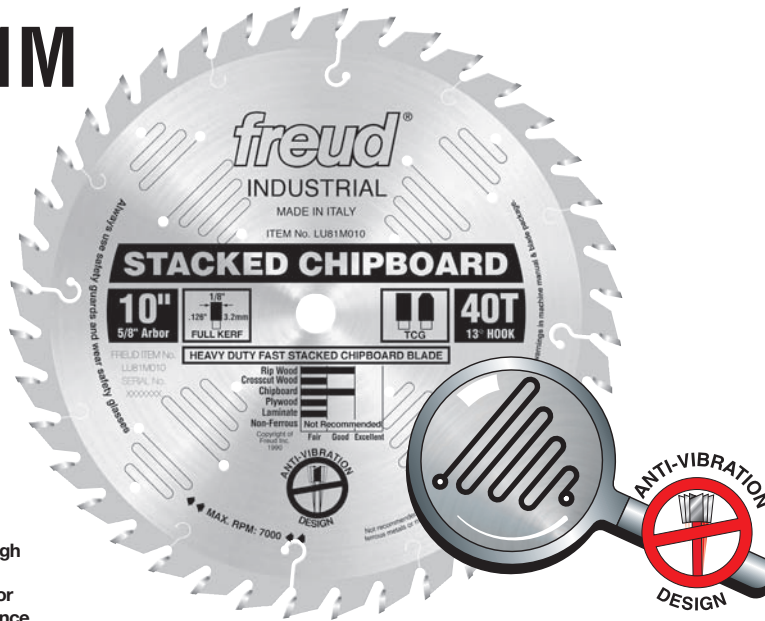
Proper blade height is essential to chip-free cuts. If you experience chipping on the bottom of the material, lower the blade slightly. If there is chipping on the top of the material the blade height should be increased slightly.

Industrial Heavy Duty Stacked Chipboard Blades

LU81M



Features TiCo™ High Density Carbide Laminate Blend For Maximum Performance



Stacked Chipboard Blades

Heavy Duty Fast Stacked Chipboard Blades

Recommended Use & Cut Quality

- RIPS WOOD:
- CROSSCUTS WOOD:
- CHIP BOARD:
- PLYWOOD:
- LAMINATE:
- NON-FERROUS: Not Recommended

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)



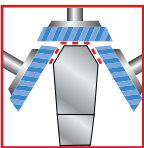
Depth of Cut



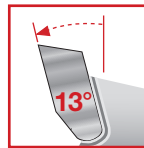
This blade is ideal for sizing sheet goods (chipboard, plywood, laminates, MDF) where speed is more important than a smooth finish or when cutting stacks of material. These blades are best used when cutting plywood and composition material, but they can also be used with hardwood and softwood.

Application

33

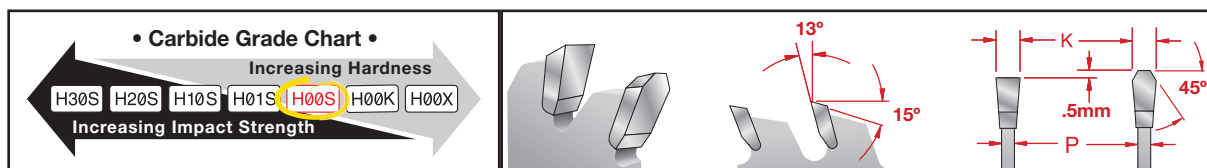


Triple Chip Grind (TCG) Tooth Design offers longer life when cutting abrasive manmade materials



Positive Hook Angle for fast cutting and easy feeding in production applications

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU81M008	8"	32 TCG	5/8"	.126	.087
LU81M010	10"	40 TCG	5/8"	.126	.087
LU81M012	12"	48 TCG	1"	.126	.087
LU81M014	14"	56 TCG	1"	.138	.098
LU81M016	16"	60 TCG	1"	.150	.110



Resin build up can cause a blade to drag in the cut, resulting in shorter blade life, burning in the cut and unnecessary strain on the saw. For best results, be sure the blade is clean before use.

Tips
Techniques

SAW BLADES-INDUSTRIAL

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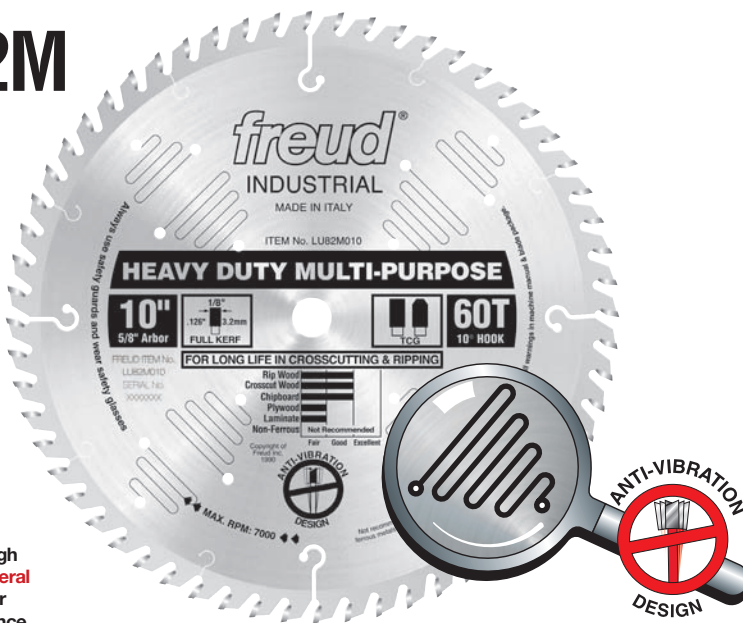


Industrial Heavy Duty Multi-Purpose Blades

LU82M



Features TiCo™ High Density Carbide General Purpose Blend For Maximum Performance



For Long Life In Stacked Chipboard And Manmade Materials

Application

Recommended Use & Cut Quality

RIPS WOOD:

CROSSCUTS WOOD:

CHIP BOARD:

PLYWOOD:

LAMINATE:

NON-FERROUS: Not Recommended

CUT QUALITY: Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)

Crosscutting



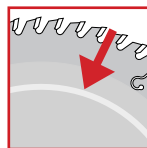
Ripping



This multi-purpose blade will cut stacks of manmade wood products as well as hardwood and softwood up to 2-3/4" thick. The blade's deep gullets and TCG rip and crosscut through hardwoods and softwoods with ease. Although the ideal working range is 1/2" to 2-3/4" thick, thinner or thicker materials may be cut, resulting in some loss of surface finish.



Freud-Made TiCo™ Carbide is durable and chemical-resistant for long life and razor-sharp cuts



Precision Tensioning with computer-controlled equipment keeps the blade flat and true while maximizing blade life and performance

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU82M008	8"	48 TCG	5/8"	.126	.087
LU82M009	9"	56 TCG	5/8"	.126	.087
LU82M010	10"	60 TCG	5/8"	.126	.087
LU82M012	12"	72 TCG	1"	.126	.087
LU82M014	14"	84 TCG	1"	.169	.118
LU82M016	16"	96 TCG	1"	.177	.118

• Carbide Grade Chart •

Increasing Hardness

H30S H20S H10S H01S H00S H00K H00X

Increasing Impact Strength

10°

15°

45°

K

.5mm

P

Tips

Never use oven cleaner or other caustic substances to clean Freud saw blades. To remove pitch buildup on blades, soak overnight in kerosene in a sealed container then scrub with a stiff, nylon bristle brush. Caution: kerosene is flammable. Take necessary precautions to avoid injury from fire.

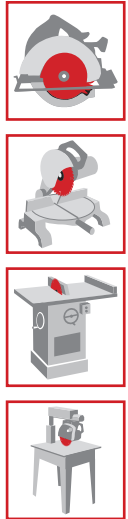
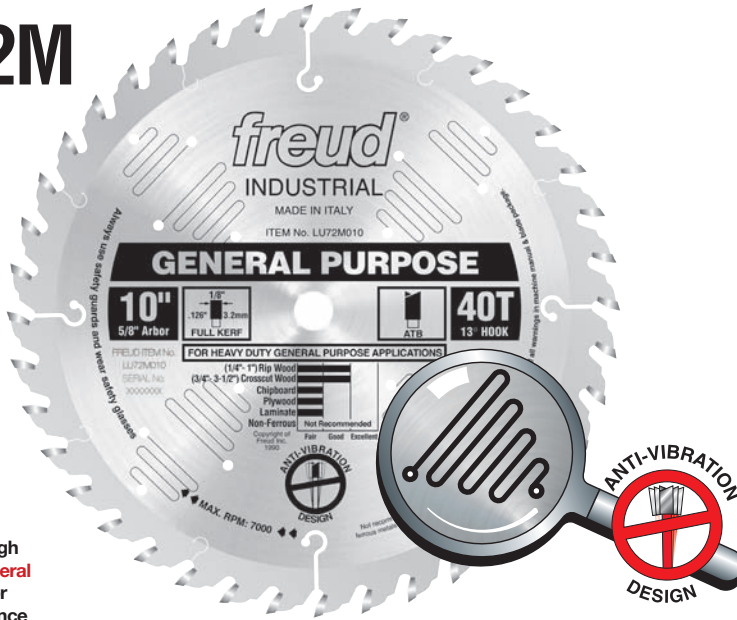
Techniques

Industrial General Purpose Blades

LU72M



Features TiCo™ High Density Carbide **General Purpose Blend** For Maximum Performance



For Heavy-Duty General Purpose Applications

Recommended Use & Cut Quality

RIPS WOOD 1/4" to 1":
CROSSCUTS WOOD 3/4" to 3 1/2":
CHIP BOARD:
PLYWOOD:
LAMINATE:
NON-FERROUS: — Not Recommended —
CUT QUALITY: Fair → Good → Excellent
 (Not recommended for ferrous metals or masonry)

Crosscutting

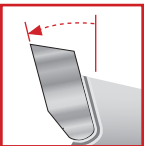
3/4" MIN.
3 1/2" MAX.

Ripping

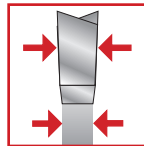
1/4" MIN.
1" MAX.

This heavy-duty blade is good for crosscutting thick hardwoods and softwoods and thinner stock materials. The ideal working range is from 3/4" to 3-1/2" thick for crosscutting, and 1/4" to 1" thick for ripping. Thinner or thicker material may be cut, but some loss of surface finish may occur.

Application



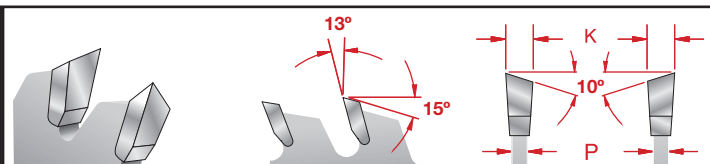
Positive Hook Angle for fast cutting and easy feeding in production applications



Heavy-Duty Thick Kerf and Plate ensure a stable, flat blade for long cutting life

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU72M008	8"	34 ATB	5/8"	.126	.087
LU72M009	9"	36 ATB	5/8"	.126	.087
LU72M010	10"	40 ATB	5/8"	.126	.087
LU72M012	12"	48 ATB	1"	.126	.087
LU72M014	14"	54 ATB	1"	.138	.098
LU72M016	16"	60 ATB	1"	.150	.110
LU72M018	18"	66 ATB	1"	.157	.118
LU72M020	20"	72 ATB	1"	.165	.126

• Carbide Grade Chart •



For best results, set your saw so that one half of a carbide tip protrudes beyond the material to be cut.

Tips
Techniques



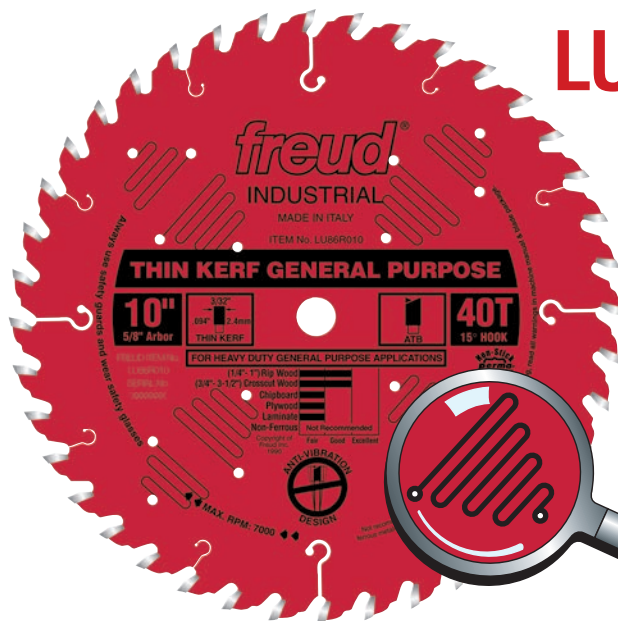


Industrial Thin Kerf General Purpose Blades

LU86R



Features TiCo™ High Density Carbide **General Purpose Blend** For Maximum Performance



For Heavy-Duty General Purpose Applications

Application

Recommended Use & Cut Quality

- RIPS WOOD 1/4" to 1":
- CROSSCUTS WOOD 3/4" to 3 1/2":
- CHIP BOARD:
- PLYWOOD:
- LAMINATE:

NON-FERROUS: — Not Recommended —

CUT QUALITY: Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)

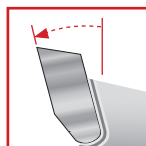
Crosscutting



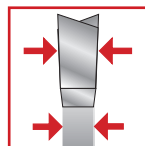
Ripping



This heavy-duty thin kerf blade is good for crosscutting thick hardwoods and softwoods and thinner stock materials. The ideal working range is from 3/4" to 3-1/2" thick for crosscutting, and 1/4" to 1" thick for ripping. Thinner or thicker material may be cut, but some loss of surface finish may occur.



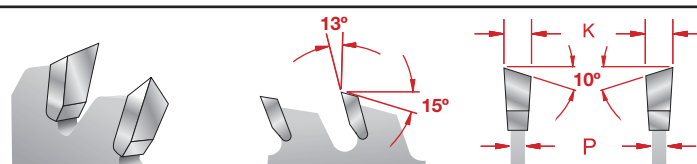
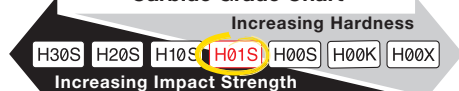
Positive Hook Angle for fast cutting and easy feeding in production applications



Heavy-Duty Thick Kerf and Plate ensure a stable, flat blade for long cutting life

Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU86R008	8"	34 ATB	5/8"	.087	.063
LU86R010	10"	40 ATB	5/8"	.094	.071
LU86R012	12"	48 ATB	1"	.094	.071
LU86R014	14"	54 ATB	1"	.106	.079

• Carbide Grade Chart •

Tips
Techniques

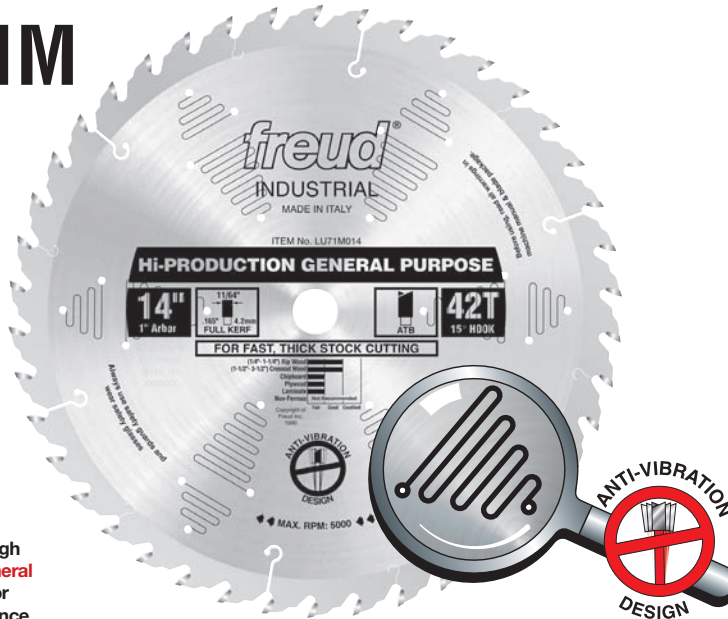
For best results, set your saw so that one half of a carbide tip protrudes beyond the material to be cut.

Industrial High-Production General Purpose Blades

LU71M



Features TiCo™ High Density Carbide **General Purpose Blend** For Maximum Performance



General Purpose/Combination



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SAW BLADES-INDUSTRIAL

freud®

For Fast, Thick Stock Cutting

Recommended Use & Cut Quality

- RIPS WOOD:
- CROSSCUTS WOOD:
- CHIP BOARD:
- PLYWOOD:
- LAMINATE:
- NON-FERROUS: Not Recommended

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)

Crosscutting

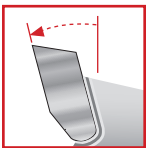
1 1/2" MIN.
3 1/2" MAX.

Ripping

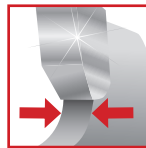
1/4" MIN.
1 1/4" MAX.

This highly aggressive general purpose blade is ideal for a production environment. With its low number of teeth and steep hook angle, this blade can operate at high feed rates. These features also make it the blade of choice when crosscutting extremely thick stock. Use it with dimension stock where speed is more important than surface quality. The ideal working range is from 1/4" to 1-1/4" thick for ripping and 1-1/2" to 3-1/2" thick for crosscutting. Thicker or thinner material may be cut, but some loss of surface finish may occur.

Application

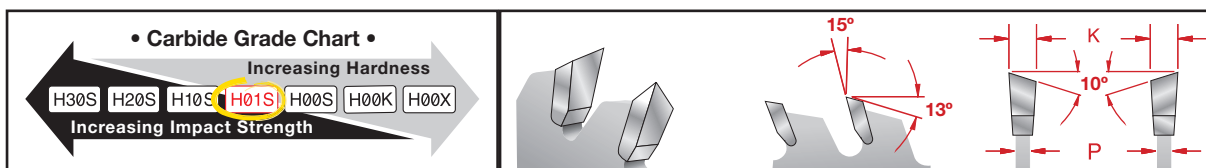


Positive Hook Angle for fast cutting and easy feeding in production applications



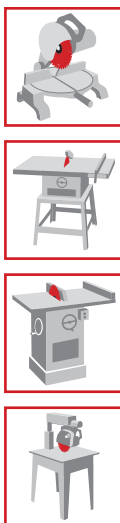
Heavy Duty Thick Plate ensures a stable, flat blade for long cutting life

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU71M014	14"	42 ATB	1"	.165	.118
LU71M016	16"	48 ATB	1"	.177	.118



Maintain a proper feed rate. Feeding too slow causes burning of the material. Feeding too fast can be dangerous and produces a poor dull cut.

Tips
Techniques



LU84M

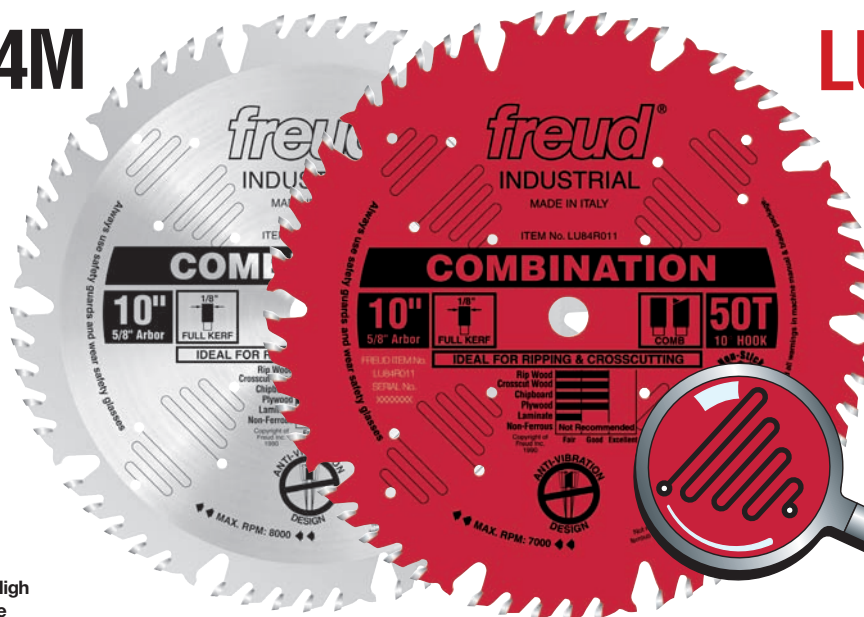


No Stabilizers Needed



Features TiCo™ High Density Carbide Combination Blend For Maximum Performance

Industrial Combination Blades



LU84R



Heavy-Duty Combination Blades

Application

Recommended Use & Cut Quality



NON-FERROUS: — Not Recommended —

CUT QUALITY: Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)

Crosscutting



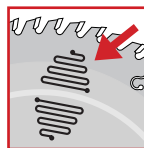
Ripping



In many woodworking shops, one saw must serve multiple purposes. It must rip a piece of 4/4 oak and also crosscut a sheet of 3/4" plywood. The groups of five teeth include one flat tooth for ripping, followed by four alternate top bevel teeth for crosscutting and a large gullet for effective chip clearance. This blade also features laser cut anti-vibration slots, practically eliminating the vibration that resonates in standard blades. With this ultimate combination blade, there is no need for stabilizers.

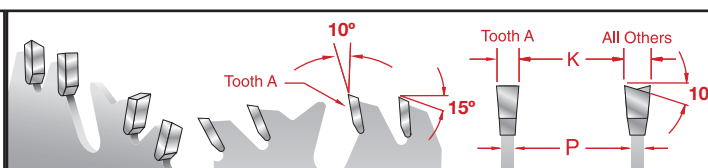
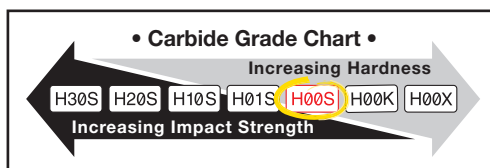


Large Gullets in front of flat top rakers allow for fast ripping and easy chip removal



Laser-Cut Anti-Vibration Slots drastically reduce vibration and sideways movement in the cut extending blade life, and giving a crisp, flawless finish

Silver ICE™	Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU84M008	LU84R008	8"	40 COMB	5/8"	.126	.087
LU84M009	LU84R009	9"	40 COMB	5/8"	.126	.087
LU84M011	LU84R011	10"	50 COMB	5/8"	.126	.087
LU84M012	LU84R012	12"	60 COMB	1"	.126	.087
LU84M014	LU84R014	14"	70 COMB	1"	.157	.118
LU84M016	LU84R016	16"	80 COMB	1"	.157	.118



Tips Techniques

Kickbacks are one of the most dangerous hazards in woodworking. Choose a saw blade with a kickback-reducing design. This design places a chip limiter before each tooth, restricting tooth bite to the maximum safe amount for a more secure work environment.

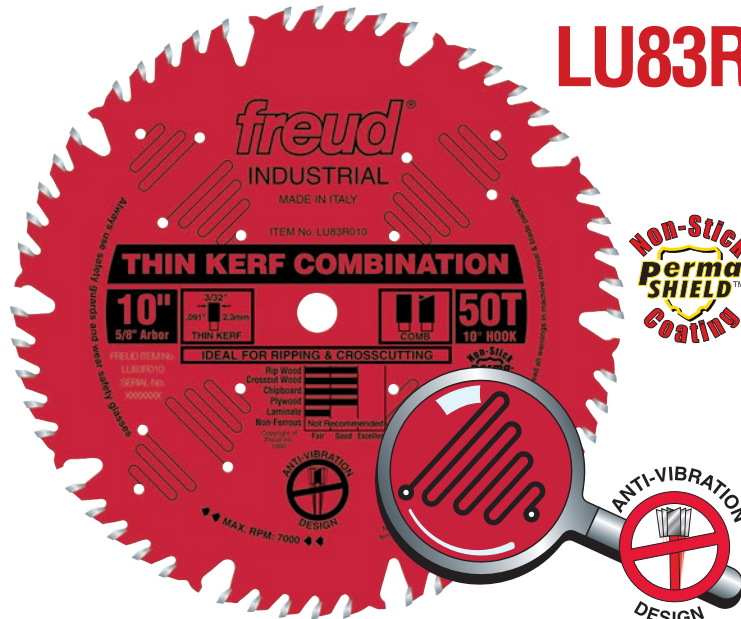
Industrial Thin Kerf Combination Blades

LU83R

No Stabilizers Needed



Features TiCo™ High Density Carbide
Combination Blend For Maximum Performance



Non-Stick
perma-
SHIELD™
Coating

ANTI-VIBRATION
DESIGN



General Purpose/Combination

Thin Kerf Heavy-Duty Combination Blades

Recommended Use & Cut Quality



NON-FERROUS: — Not Recommended —

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)

Crosscutting



Ripping



The ultimate combination blade is now available in a thin kerf design with Freud's LU83R. The groups of five teeth include one flat tooth for ripping, followed by four alternate top bevel teeth for crosscutting and a large gullet for effective chip clearance. This blade also features laser cut anti-vibration slots, practically eliminating the vibration that resonates in standard blades. With this combination blade, there is no need for stabilizers.

Application

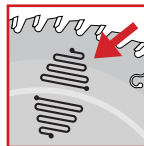
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SAW BLADES-INDUSTRIAL

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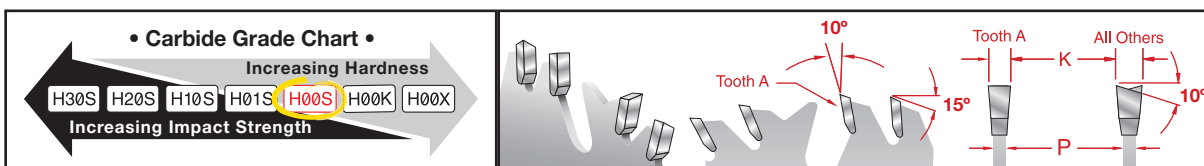


Thin Kerf requires less power and allows for faster feed rate



Laser-Cut Anti-Vibration Slots drastically reduce vibration and sideways movement in the cut extending blade life, and giving a crisp, flawless finish

Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU83R008	8"	40 COMB	5/8"	.083	.063
LU83R010	10"	50 COMB	5/8"	.091	.071
LU83R012	12"	60 COMB	1"	.091	.071
LU83R015	15"	80 COMB	1"	.102	.079



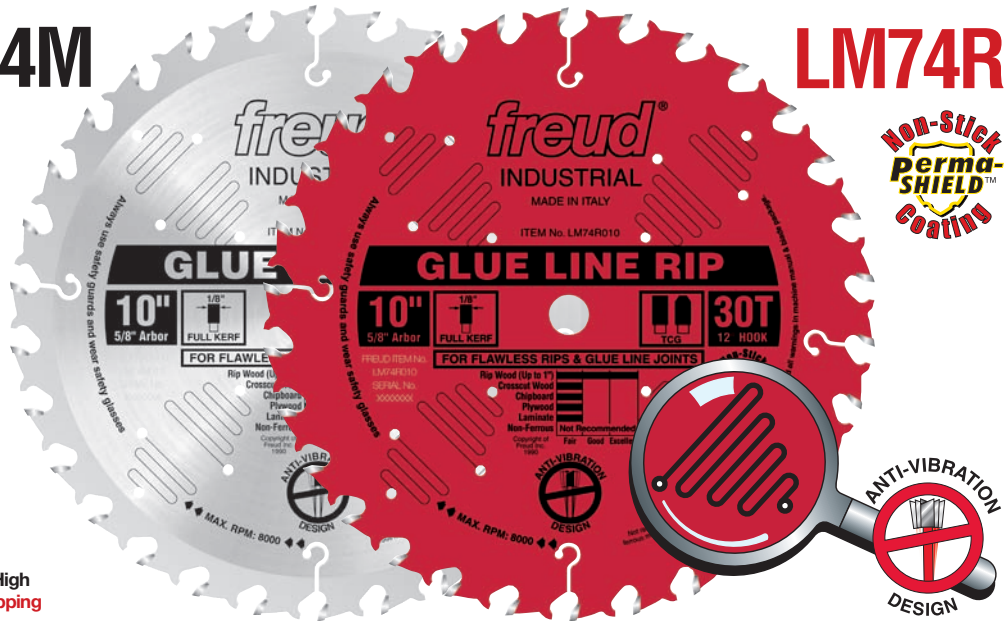
Kickbacks are one of the most dangerous hazards in woodworking. Choose a saw blade with a kickback-reducing design. This design places a chip limiter before each tooth, restricting tooth bite to the maximum safe amount for a more secure work environment.

Tips
Techniques

Industrial Glue Line Ripping Blades

LM74M

LM74R

No Stabilizers
NeededFeatures TiCo™ High
Density Carbide Ripping
Blend For Maximum
Performance

Heavy Duty Glue Line Ripping Blades For Superior Finish

Application

Recommended Use & Cut Quality

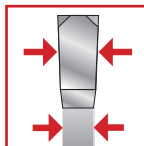
RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)

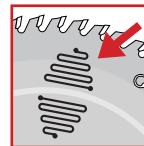
Depth of Cut



This blade's specially designed triple chip tooth design produces extremely smooth, true surfaces for gluing and finish work. There is no need for sanding or jointing after the cut. The ideal working range is from 1/8" to 1" thick. This blade also features laser cut anti-vibration slots, practically eliminating the vibration that resonates in standard blades. With this ultimate ripping blade, there is no need for stabilizers.

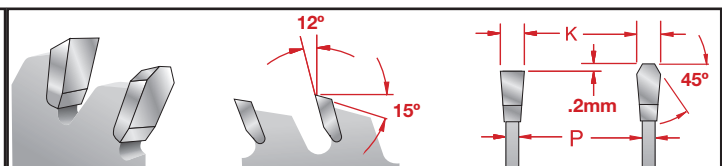
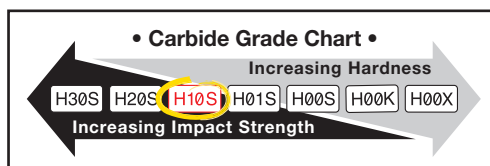


Heavy-Duty Thick Kerf and Plate
ensure a stable, flat blade for long
cutting life



Laser-Cut Anti-Vibration Slots
drastically reduce vibration and
sideways movement in the cut
extending blade life, and giving a
crisp, swirl-free flawless finish

Silver ICE™	Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LM74M008	LM74R008	8"	24 TCG	5/8"	.118	.098
LM74M010	LM74R010	10"	30 TCG	5/8"	.118	.098
LM74M012	LM74R012	12"	40 TCG	1"	.118	.098
LM74M014	LM74R014	14"	44 TCG	1"	.138	.118



Tips
Techniques

For best results, set your saw so that one half of a carbide tip protrudes beyond the material to be cut.

Industrial Heavy-Duty Rip Blades

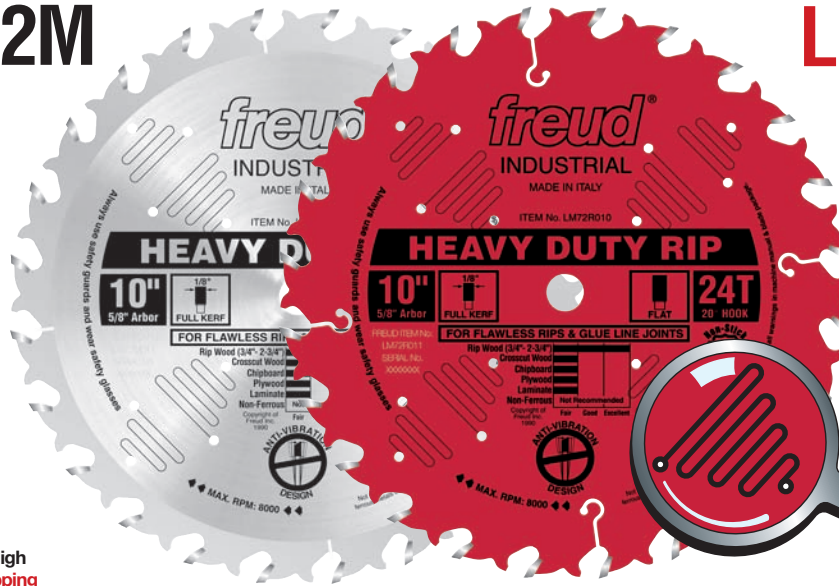
LM72M



No Stabilizers Needed



Features TiCo™ High Density Carbide Ripping Blend For Maximum Performance



LM72R



Ripping Blades

Smooth, Fast Heavy-Duty Ripping

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended
CUT QUALITY:	Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)



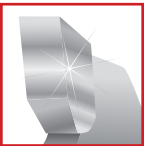
Depth of Cut



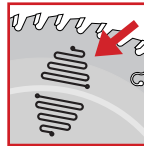
This blade gives smooth, fast rips in hardwoods and softwoods. The combination of a rigid blade body and razor sharp flat top carbide teeth will provide a "glue line" precision cut. These blades are precision balanced and can be used in gang-rip operations. The ideal working range is from 3/4" to 2-3/4" thick. This blade also features laser cut anti-vibration slots, practically eliminating the vibration that resonates in standard blades. With this ultimate ripping blade, there is no need for stabilizers.

Application

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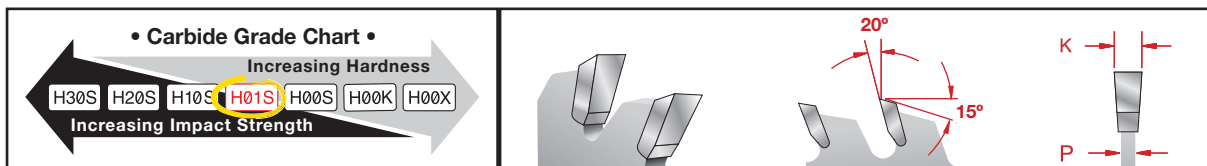


Extra Large, Flat Tooth Design leaves a smooth finish without the need for sanding or jointing



Laser-Cut Anti-Vibration Slots drastically reduce vibration and sideways movement in the cut extending blade life, and giving a crisp, swirl-free flawless finish

Silver ICE™	Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LM72M008	LM72R008	8"	24 FLAT	5/8"	.126	.087
LM72M010	LM72R010	10"	24 FLAT	5/8"	.126	.087
LM72M012	LM72R012	12"	30 FLAT	1"	.169	.118
LM72M014	LM72R014	14"	30 FLAT	1"	.169	.118
LM72M016	LM72R016	16"	36 FLAT	1"	.177	.118



When ripping wood, 3 to 5 teeth should be working in the wood at one time.

Tips
Techniques

SAW BLADES-INDUSTRIAL

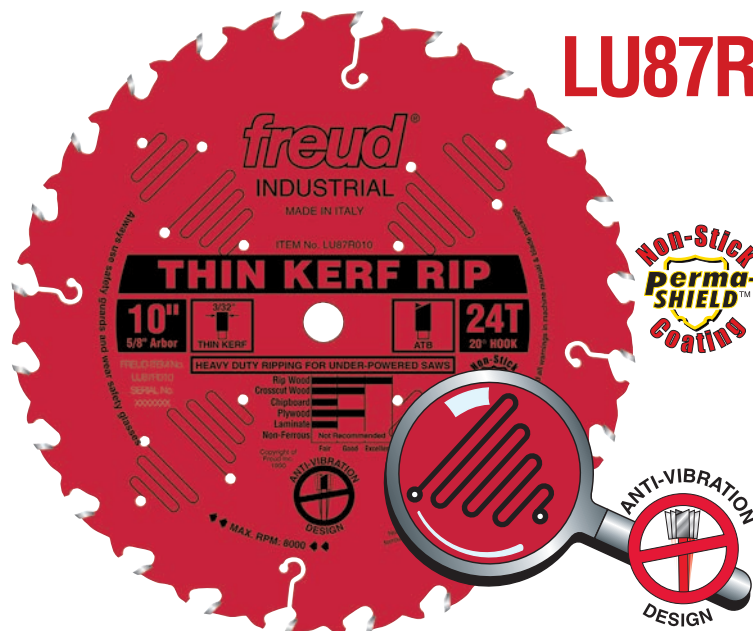
freud®

Industrial Thin Kerf Rip Blades

LU87R



Features TiCo™ High
Density Carbide Ripping
Blend For Maximum
Performance



Heavy-Duty Ripping Blades For Underpowered Saws

Application

Recommended Use & Cut Quality

RIPS WOOD:
CROSSCUTS WOOD:
CHIP BOARD:
PLYWOOD:
LAMINATE:
NON-FERROUS: Not Recommended

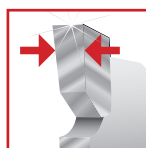
CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)



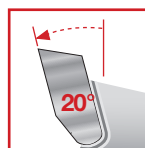
Depth of Cut



This blade gives new life to underpowered table saws and radial arm saws because the thin kerf does not require much horsepower. The Perma-SHIELD™ coating helps this blade pull 1/3 less on the saw, which translates into over 33% more cutting power. The ideal working range is from 3/4" to 2-3/4" thick.

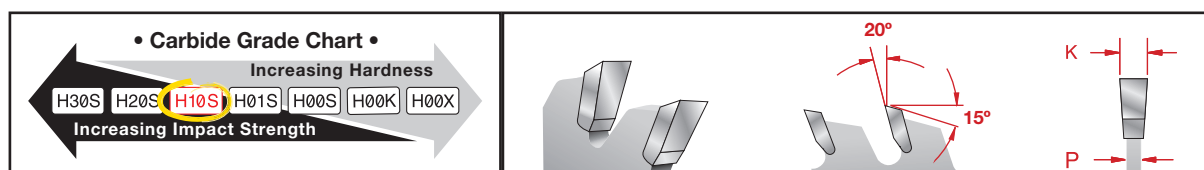


Thin Kerf allows for faster feed rate
and reduced waste



Positive Hook Angle for fast cutting
and easy feeding in ripping
applications

Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU87R008	8"	22 FLAT	5/8"	.087	.063
LU87R009	9"	22 FLAT	5/8"	.094	.071
LU87R010	10"	24 FLAT	5/8"	.094	.071



Tips
Techniques

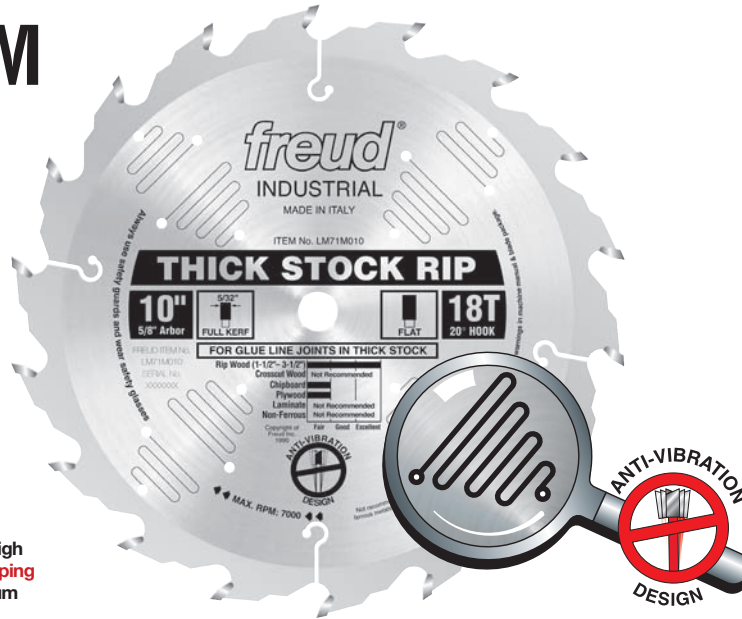
Maintain a proper feed rate. Feeding too slow causes burning of the material.
Feeding too fast can be dangerous and produces a poor dull cut.

Industrial Thick Stock Rip Blades

LM71M



Features TiCo™ High Density Carbide Ripping Blend For Maximum Performance



Ripping Blades



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SAW BLADES-INDUSTRIAL

freud®

For Glue Line Joints In Thick Stock (1 1/2" – 3 1/2")

Recommended Use & Cut Quality

- RIPS WOOD:** **CROSSCUTS WOOD:** ☐ Not Recommended **CHIP BOARD:** **PLYWOOD:** **LAMINATE:** ☐ Not Recommended **NON-FERROUS:** ☐ Not Recommended

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)



Depth of Cut

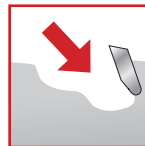


This blade is ideal for high-speed ripping operations in hardwood and softwood. The low tooth count also makes this blade ideal for ripping thick material. It can be used with manual feeding as well as with power feeders in single or gang-ripping operations. The ideal working range is 1-1/2" to 3-1/2" thick. Thinner or thicker material may be cut, but some loss of surface finish may occur.

Application



Heavy-Duty Thick Plate ensures a stable, flat blade for long cutting life in extreme ripping conditions



Large Gullets allow for fast ripping and easy chip removal

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LM71M010	10"	18 FLAT	5/8"	.153	.118
LM71M012	12"	20 FLAT	1"	.165	.118
LM71M014	14"	24 FLAT	1"	.165	.118
LM71M016	16"	28 FLAT	1"	.177	.118

• Carbide Grade Chart •

Increasing Hardness

Increasing Impact Strength

H30S H20S **H10S** H01S H00S H00K H00X

When ripping wood, 3 to 5 teeth should be working in the wood at one time.

Tips
Techniques

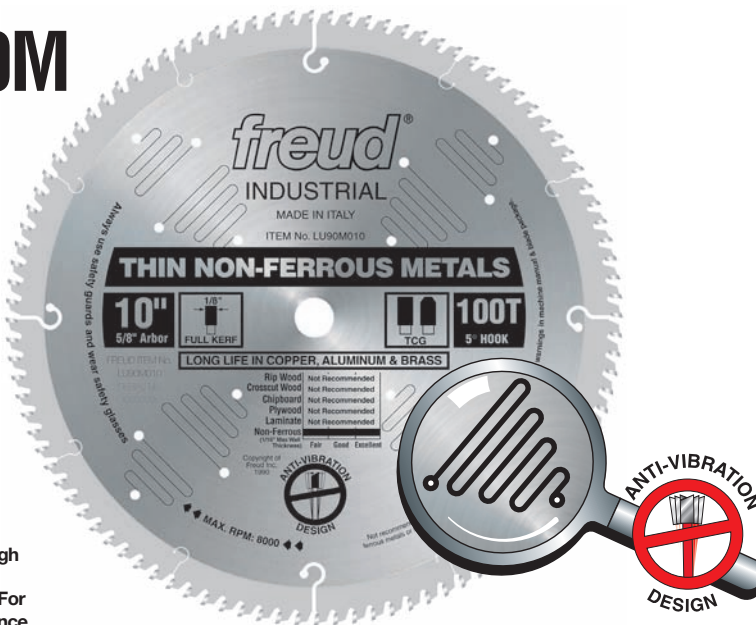


Industrial Thin Stock Non-Ferrous Metal Blades

LU90M



Features TiCo™ High Density Carbide
Non-Ferrous Blend For Maximum Performance



Cutting Thin Aluminum And Other Non-Ferrous Metals

Application

Recommended Use & Cut Quality

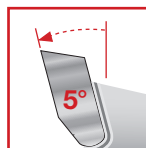
RIPS WOOD:	_____	Not Recommended	_____
CROSSCUTS WOOD:	_____	Not Recommended	_____
CHIP BOARD:	_____	Not Recommended	_____
PLYWOOD:	_____	Not Recommended	_____
LAMINATE:	_____	Not Recommended	_____
NON-FERROUS:	_____		_____

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)

Wall Thickness



This blade produces a smooth, burr-free finish when cutting thin aluminum, brass and other non-ferrous metal extrusions. A high tooth count with a 5° hook angle allows the teeth to slice efficiently through the material without binding. The requirements on the cutting edge greatly differ with nonferrous metals than with cutting wood. With this in mind, Freud formulated a special carbide with high impact strength for this blade. Freud recommends use of a liquid lubricant when cutting non-ferrous materials. This can be accomplished with a spray of WD-40 or other similar type of lubricant every 4 or 5 cuts. Wax sticks are not recommended.

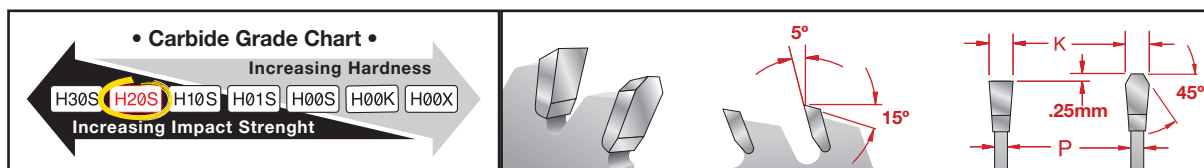


Positive Hook Angles produce a smoother cut with less material distortion and burr free cuts



Freud-Made TiCo™ Carbide specifically designed to cut non-ferrous metals extends tooth life and withstands impact

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU90M010	10"	100 TCG	5/8"	.110	.087
LU90M012	12"	120 TCG	1"	.118	.098

Tips
Techniques

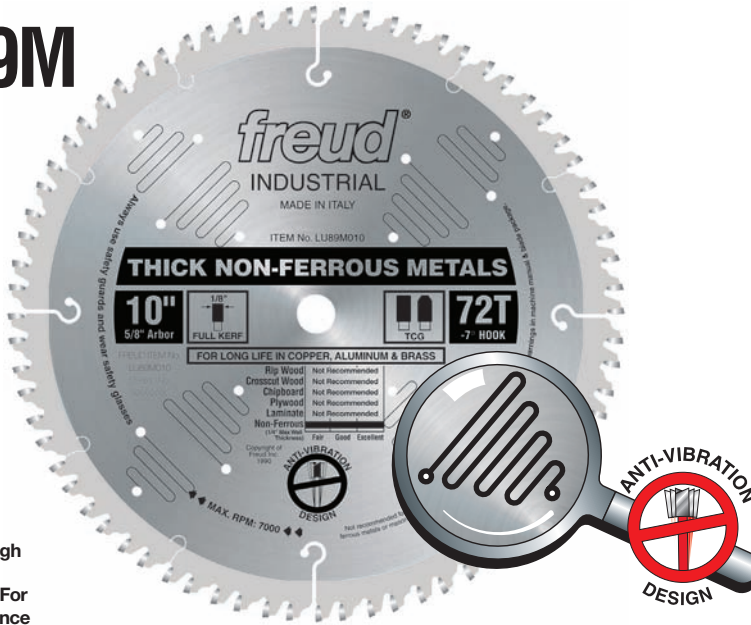
To determine if the metal you wish to cut is non-ferrous, hold the metal next to a magnet. If it attracts the magnet, it is a ferrous metal and should not be cut with a non-ferrous blade.

Industrial Thick Non-Ferrous Metal Blades

LU89M



Features TiCo™ High Density Carbide
Non-Ferrous Blend For Maximum Performance



Specialty Blades

Cutting Thick Non-Ferrous Materials And Aluminum

Recommended Use & Cut Quality

RIPS WOOD:	Not Recommended
CROSSCUTS WOOD:	Not Recommended
CHIP BOARD:	Not Recommended
PLYWOOD:	Not Recommended
LAMINATE:	Not Recommended
NON-FERROUS:	

CUT QUALITY: Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)

Wall Thickness



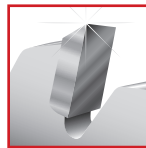
This heavy-duty, non-ferrous metal cutting blade produces an excellent finish. These blades have custom designed gullets to minimize chip build-up and specially formulated carbide for long life. Freud recommends use of a liquid lubricant when cutting. This can be accomplished with a spray of WD-40 or other lubricant every 4 to 5 cuts. Wax sticks are not recommended.

Application

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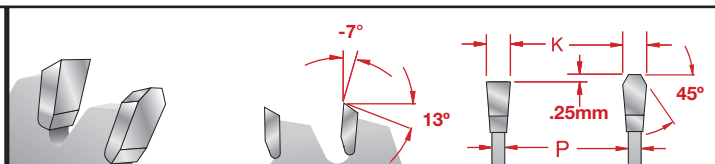
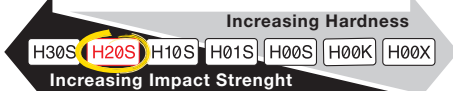
Unique Gullet Design reduces chip build-up, which can cause shoulder damage or breakage



Freud-Made TiCo™ Carbide specifically designed to cut non-ferrous metals extends tooth life

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU89M008	8"	58 TCG	5/8"	.122	.098
LU89M009	9"	64 TCG	5/8"	.122	.098
LU89M010	10"	72 TCG	5/8"	.122	.098
LU89M012	12"	86 TCG	1"	.122	.098
LU89M014	14"	100 TCG	1"	.142	.118
LU89M015	15"	108 TCG	1"	.142	.118
LU89M016	16"	114 TCG	1"	.142	.118

• Carbide Grade Chart •



To determine if the metal you wish to cut is non-ferrous, hold the metal next to a magnet. If it attracts the magnet, it is a ferrous metal and should not be cut with a non-ferrous blade.

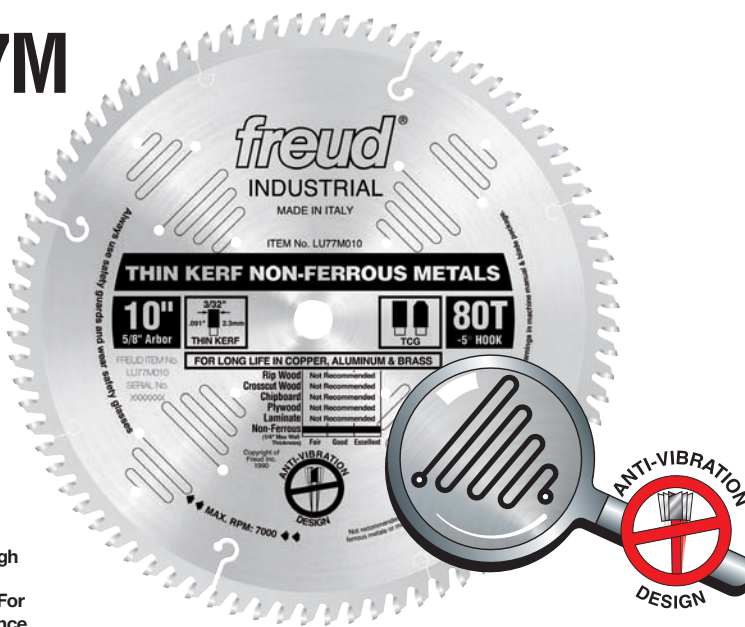
Tips
Techniques

SAW BLADES-INDUSTRIAL

freud®

Industrial Thin Kerf Non-Ferrous Metal Blades

LU77M



Features TiCo™ High Density Carbide
Non-Ferrous Blend For Maximum Performance



Application

Recommended Use & Cut Quality

RIPS WOOD:	Not Recommended
CROSSCUTS WOOD:	Not Recommended
CHIP BOARD:	Not Recommended
PLYWOOD:	Not Recommended
LAMINATE:	Not Recommended
NON-FERROUS:	

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)

Wall Thickness



This thin kerf heavy-duty, non-ferrous metal cutting blade produces an excellent finish. These blades have custom designed gullets to minimize chip build-up and specially formulated carbide for long life. Freud recommends use of a liquid lubricant when cutting. This can be accomplished with a spray of WD-40 or other lubricant every 4 to 5 cuts. Wax sticks are not recommended.



Thin Kerf allows for faster feed rate and reduced waste



Freud-Made TiCo™ Carbide specifically designed to cut non-ferrous metals extends tooth life

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU77M008	8"	64 TCG	5/8"	.083	.063
LU77M010	10"	80 TCG	5/8"	.091	.071
LU77M012	12"	96 TCG	1"	.091	.071
LU77M015	15"	120 TCG	1"	.098	.079

• Carbide Grade Chart •

Increasing Hardness

H30S H20S H10S H01S H00S H00K H00X

Increasing Impact Strenght

Tips
Techniques

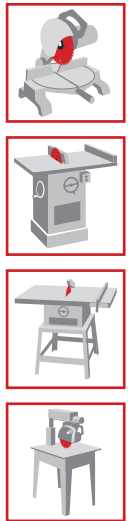
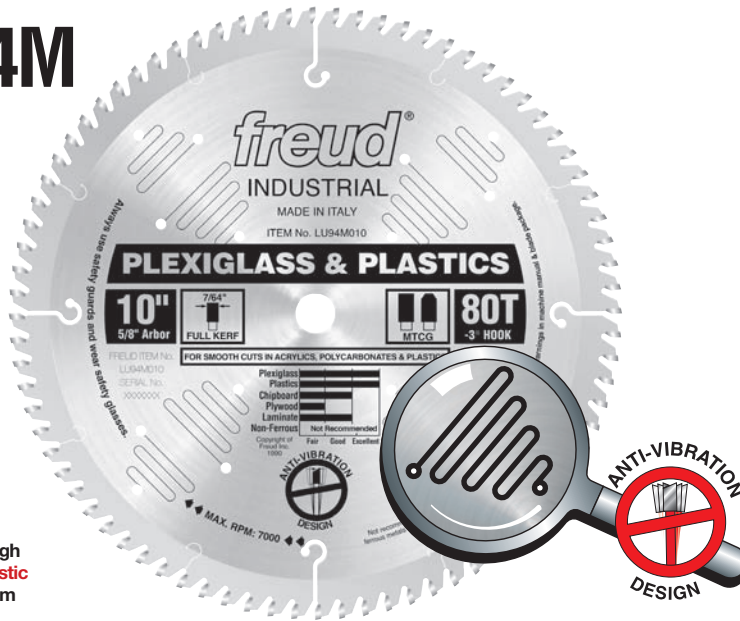
To determine if the metal you wish to cut is non-ferrous, hold the metal next to a magnet. If it attracts the magnet, it is a ferrous metal and should not be cut with a non-ferrous blade.

Industrial Plastic Blades

LU94M



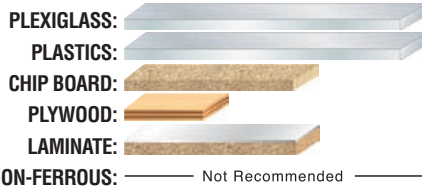
Features TiCo™ High Density Carbide **Plastic Blend** For Maximum Performance



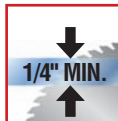
Specialty Blades

Plexiglass And Plastics

Recommended Use & Cut Quality



CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)



Depth of Cut



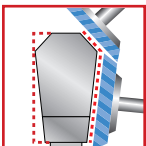
This industrial blade cuts acrylics, polycarbonates and other plastics, leaving a smooth finish without melting. By combining micrograin carbide tips with a specially modified triple chip grind these blades will give a clean smooth cut. These blades produce less heat keeping the cut edge crisp.

Application

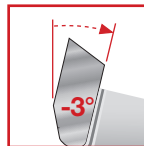
47

SAW BLADES-INDUSTRIAL

freud®

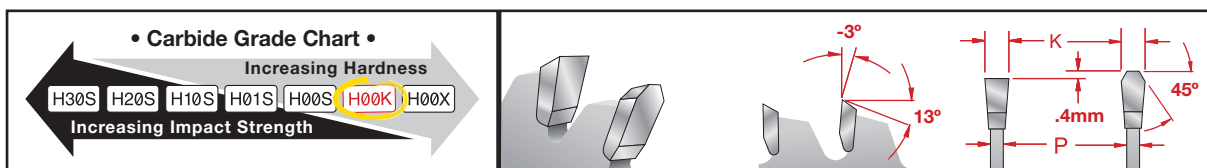


Modified Triple Chip Grind (MTCG) Tooth Design enables material to remain cool while cutting, eliminating melting



Negative Hook Angle produces a superior finish without grabbing the material

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU94M008	8"	64 MTCG	5/8"	.110	.087
LU94M010	10"	80 MTCG	5/8"	.110	.087
LU94M012	12"	96 MTCG	1"	.110	.087
LU94M014	14"	108 MTCG	1"	.110	.087



For best results, set your saw so that the blade is exposed only enough that one half of a carbide tip protrudes beyond the material to be cut.

Tips
Techniques

Industrial Solid Surface Blades

LU95M

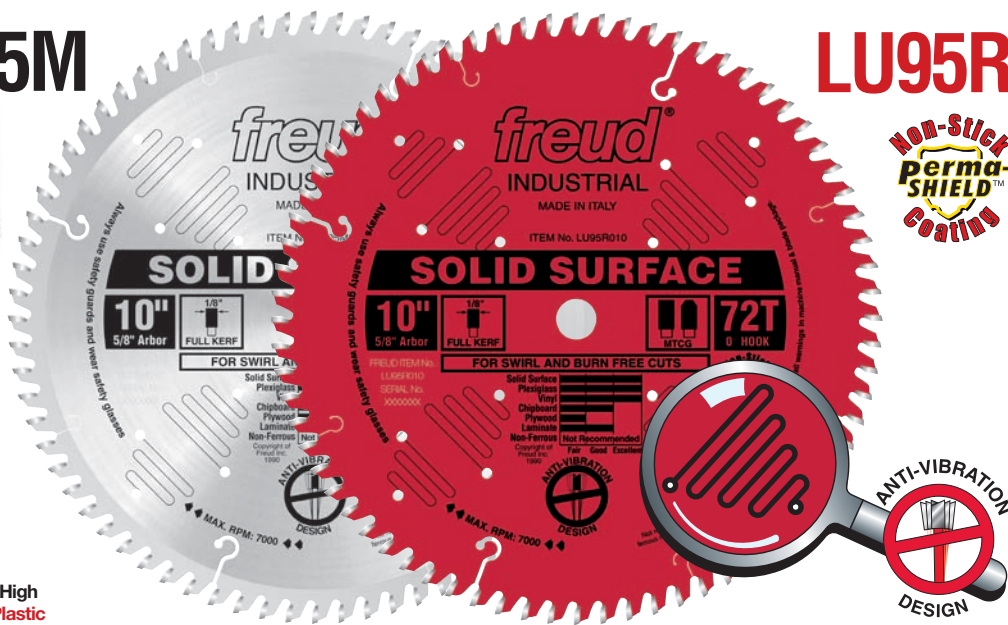
LU95R



No Stabilizers Needed



Features TiCo™ High Density Carbide Plastic Blend For Maximum Performance



Heavy-Duty Solid Surface Blades For Swirl & Burn-Free Cuts

Recommended Use & Cut Quality

SOLID SURFACE:	
PLEXIGLASS:	
VINYL:	
CHIPBOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended

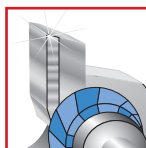
CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)



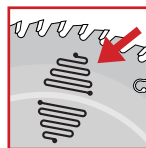
Depth of Cut



This blade features teeth with a specially designed triple chip grind for leaving swirl-free cuts in solid surface materials such as Dupont® Corian®, Wilsonart Gibraltar® and SSV Fountainhead®. The laser-cut anti-vibration slots reduce the sideways movement of the cutting edge against the solid surface material, dramatically extending cutting life. With this ultimate solid surface blade, there is no need for stabilizers.

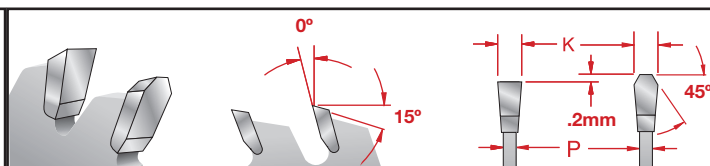
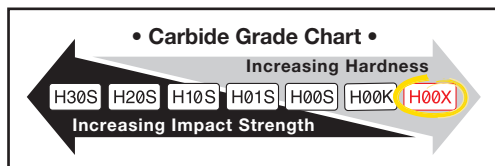


Special Side-Grind Tooth Design enables blade to remain cool while cutting, eliminating melting



Laser-Cut Anti-Vibration Slots drastically reduce vibration and sideways movement in the cut extending blade life, and giving a crisp, swirl-free flawless finish

Silver ICE™	Perma-SHIELD™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
LU95M008	LU95R008	8"	60 MTCG	5/8"	.126	.087
LU95M010	LU95R010	10"	72 MTCG	5/8"	.126	.087
LU95M012	LU95R012	12"	84 MTCG	1"	.126	.087
LU95M014	LU95R014	14"	96 MTCG	1"	.138	.098



Proper blade height on a table saw is one half of the carbide tip higher than the material to be cut.

Avanti Enthusiast Thin Kerf Saw Blades



Avanti Enthusiast Thin
Kerf Saw Blades

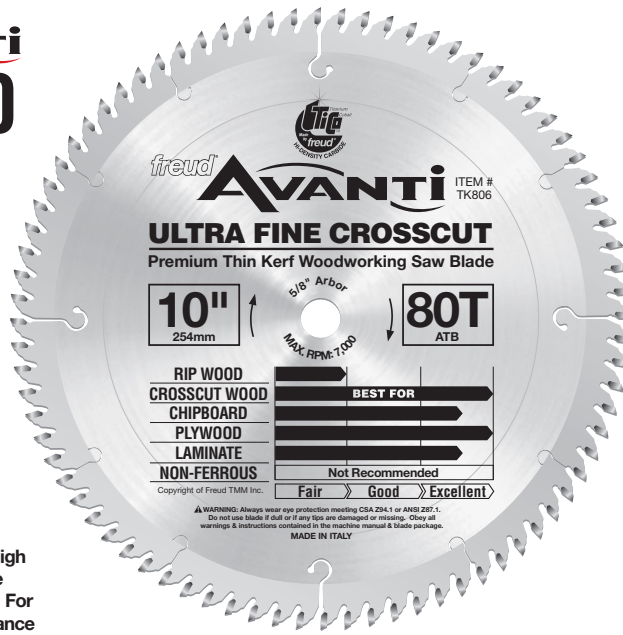
Freud's Thin Kerf (TK) Series of blades provide precise, quality cuts for most every application. The advanced thin kerf design removes less material thereby reducing the strain on your equipment, and increasing the life of your saw. The slim design requires less cutting power from both you and the saw, making it ideal for underpowered saws at the jobsite. A Silver ICE™ coating on all Freud TK blades helps reduce friction, heat build-up and gumming, thus extending the life of the blade by as much as 50 percent.



AVANTI
TK800
Series



Features TiCo™ High
Density Carbide
Crosscutting Blend For
Maximum Performance



Ultra Fine Crosscuts For Velvety Smooth Finish

Application

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended
CUT QUALITY:	

(Not recommended for ferrous metals or masonry)



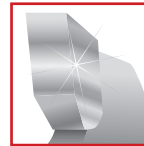
Depth of Cut



This advanced thin kerf design was created for table saws, miter boxes, and radial arm saws. The razor sharp teeth give smooth crosscuts in hardwood and softwood as well as cutting veneered plywood, chipboard, and delicate mouldings practically chip-free. The thin kerf requires less cutting power which gives more control over the cut for safer operation.



Alternate Top Bevel (ATB) Tooth
Design produces splinter-free cuts



Special Carbide Formulation is the perfect mixture of cobalt, tungsten, and titanium designed to maximize cutting life

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
TK806	10"	80 ATB	5/8"	.098	.071
TK807	12"	96 ATB	1"	.110	.071

• Carbide Grade Chart •

Increasing Hardness

H30S H20S H10S H01S H00S **H00K** H00X

Increasing Impact Strength

Thin Kerf Sliding Compound Miter/Radial Saw Blades

AVANTI
TK600
Series



Features TiCo™ High
Density Carbide
Crosscutting Blend For
Maximum Performance



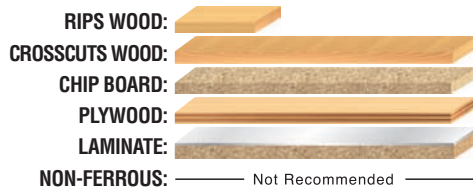
Crosscut Blades



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Sliding Compound Miter Saws & Radial Arm Saws

Recommended Use & Cut Quality



CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)

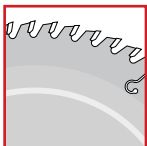


Depth of Cut

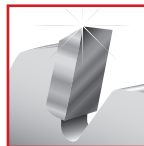


Thin kerf blades are ideal for applications where minimum removal of material or use of an underpowered saw is required. The computer designed, hardened blade body with heat-expansion slots, gives this blade the capability to execute 45 by 45 degree compound miters without burning the wood. Heat-expansion slots help to prevent blade breakage by allowing it to expand during operation when friction-causing heat occurs.

Application

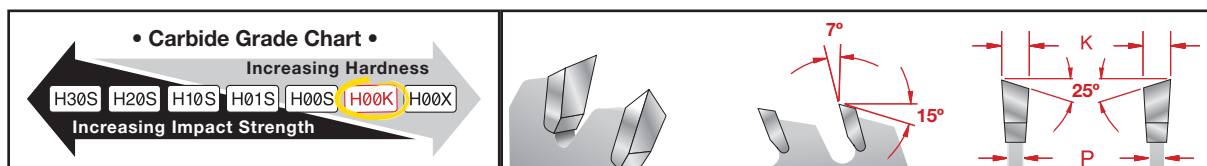


Specially Designed Hook Angle gives a controlled cut and an exceptional finish on the top & bottom of material



Designed and Tuned especially to maximize performance of sliding saws

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
TK604	8 1/2"	60 ATB	5/8"	.087	.063
TK606	10"	60 ATB	5/8"	.087	.063



For safety and best results when using a miter saw, securely clamp the material before cutting.

Tips
Techniques

SAW BLADES-THIN KERF

freud®



AVANTI
TK400
Series



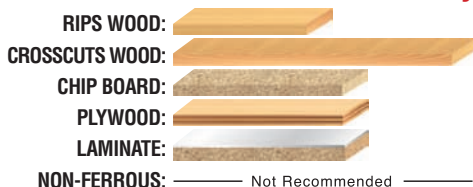
Features TiCo™ High
Density Carbide
Crosscutting Blend For
Maximum Performance



Fine Finish Cut-Off Blade

Application

Recommended Use & Cut Quality



CUT QUALITY: Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)



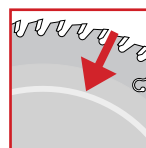
Depth of Cut



This thin kerf saw blade is designed for 10", 12", and 14" portable table saws, radial arm saws, and miter saws, for precise crosscuts in thicker hardwoods and softwoods. Heat-expansion slots help to prevent blade breakage by allowing it to expand during operation where friction-causing heat may occur.

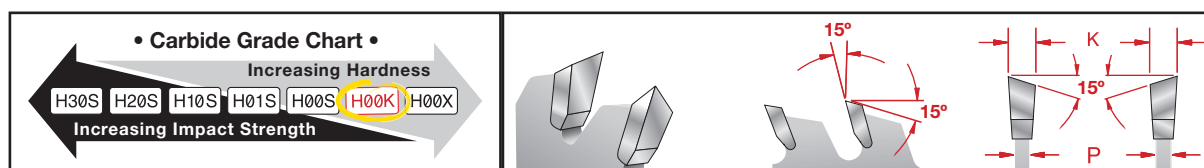


Alternate Top Bevel (ATB) tooth design produces splinter-free cuts



Precision Tensioning with computer-controlled equipment keeps the blade flat and true while maximizing life and performance

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
TK406	10"	60 ATB	5/8"	.098	.071
TK407	12"	80 ATB	1"	.110	.071
TK408	14"	96 ATB	1"	.118	.087



Tips
Techniques

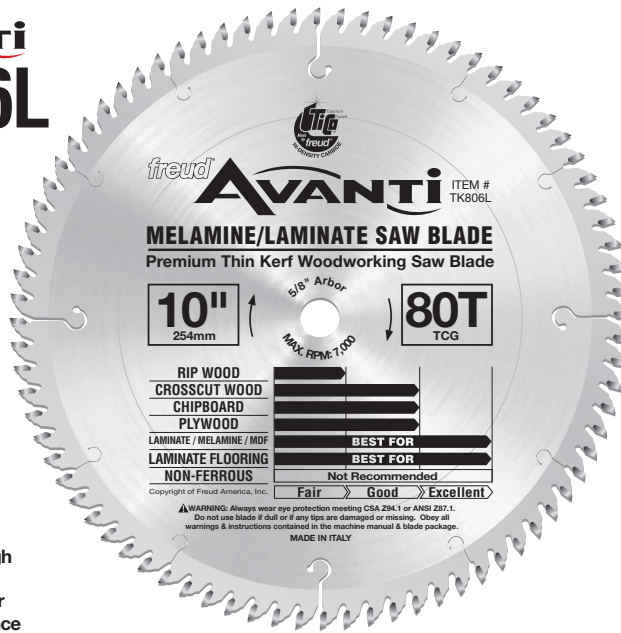
A wooden fence with zero clearance attached to the fence of a miter saw can eliminate "blow out." Consult your saw owner's manual for details.

Thin Kerf Laminate, Melamine & Laminate Flooring Blade

AVANTI
TK806L
Series



Features TiCo™ High
Density Carbide
Laminate Blend For
Maximum Performance



Laminate Blades

Ideal For Cutting Laminate, Melamine, MDF, Laminate Flooring And Any Hard Abrasive Man Made Material

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
MELAMINE:	BEST FOR
LAMINATE:	BEST FOR
MDF:	BEST FOR
LAMINATE FLOORING:	BEST FOR
NON-FERROUS:	Not Recommended
CUT QUALITY:	Fair > Good > Excellent

(Not recommended for ferrous metals or masonry)



Depth of Cut

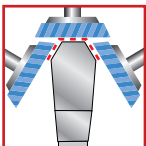


This Thin Kerf Triple Chip Tooth Design is specially designed to cut laminate flooring (Pergo®, Armstrong®, SwiftLock®), double-sided laminates & melamine cleanly, leaving a smooth finish with no tear-out. The TiCo™ Carbide tips are an exclusive formulation manufactured by Freud that is extra hard and durable, and lasts longer by withstanding abrasive materials like laminates. The thin kerf design makes it easy to track a line as well as requires less power both from the user and the saw, making it ideal for portable table saws.

Application



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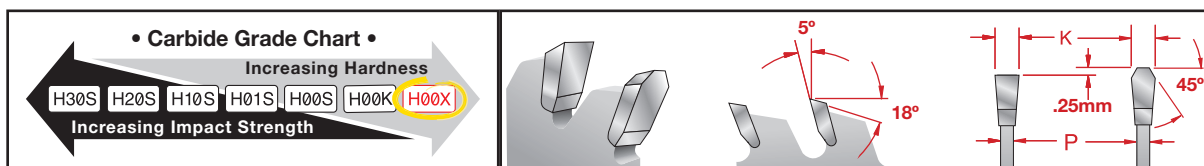


Triple Chip Grind (TCG) Tooth Design for clean, chip free and long life cuts in abrasive materials such as laminates and laminate flooring



Extra Hard, Durable Carbide Formulation is the perfect mixture of cobalt, tungsten, and titanium designed to withstand abrasive materials such as laminates and laminate flooring

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
TK806L	10"	80 TCG	5/8"	.098	.071
TK807L	12"	96 TCG	1"	.110	.071



Proper blade height is essential to chip-free cuts. If you experience chipping on the bottom of the material, lower the blade slightly. If there is chipping on the top of the material the blade height should be increased slightly.

Tips
Techniques

SAW BLADES-THIN KERF

freud®



AVANTI
TK900
Series



Features TiCo™ High
Density Carbide
Combination Blend For
Maximum Performance



Combination Blade For All Materials On Table Saws

Application

Recommended Use & Cut Quality

RIPS WOOD:		
CROSSCUTS WOOD:		3/8" to 1-1/2"
CHIP BOARD:		3/4" to 3-1/2"
PLYWOOD:		
LAMINATE:		
NON-FERROUS:		Not Recommended

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)



Depth of Cut



If you're looking for a blade that does it all, this is the one. Each set of 5 teeth is separated by a large gullet. This large gullet provides the chip removal space required while ripping and the close grouping of teeth within the set provide the smaller bite size required when crosscutting. The Silver I.C.E.™ coating resist corrosion and build-up, and have 2 times more heat resistance and life than conventional uncoated blades. The thin kerf saw blade requires less cutting power from the user and the saw, allowing more control over the cut for safer operation.



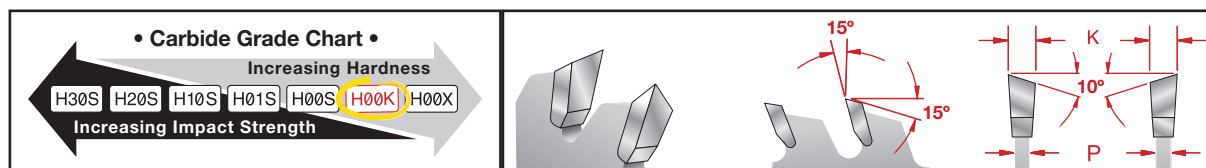
Large Gullets expel chips when ripping and allow for heat expansion



Classic Five Tooth Design helps ensure the blade will perform equally well in crosscutting and ripping

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
TK901	6 1/2"	30 COMB	5/8" <>	.094	.063
TK903	7"-7 1/4"	30 COMB	5/8" <>	.094	.063
TK904	8"-8 1/4"	36 COMB	5/8" <>	.094	.063
TK905	9"	40 COMB	5/8"	.098	.071
TK906	10"	50 COMB	5/8"	.098	.071

<> = Diamond Arbor



Tips
Techniques

Proper blade height on a table saw is one half of the carbide tip higher than the material to be cut.

Thin Kerf General Purpose Blades

AVANTI
TK300
Series



Features TiCo™ High
Density Carbide
Combination Blend For
Maximum Performance



General Purpose/Finishing

General Purpose For Cutting Natural & Manmade Materials

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended

CUT QUALITY: Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)
Top Bar=6 1/2"-8 1/4" & Bottom Bar= 9"-12"



Depth of Cut



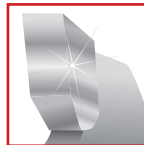
The advanced thin kerf design, using a specially designed, hardened blade body runs truer under load than many other saw blades running freely. Combined with razor sharp carbide teeth this blade cuts plywood and chipboard practically splinter-free as well as crosscutting and ripping hardwood and softwood. The Silver I.C.E.™ coating resist corrosion and build-up, and have 2 times more heat resistance and life than conventional uncoated blades.

Application

55



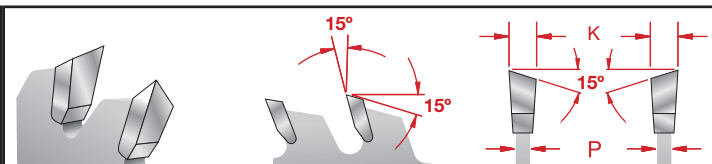
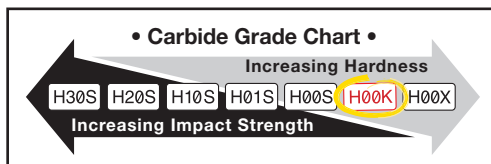
Extra Sharp Positive ATB Tooth Design gives an exceptionally long cutting life in ripping and crosscutting



Special Carbide Formulation is the perfect mixture of cobalt, tungsten, and titanium designed to excel in both ripping and crosscutting applications

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
Finishing Blades					
TK301	6 1/2"	40 ATB	5/8" <>	.094	.063
TK303	7" - 7 1/4"	40 ATB	5/8" <>	.094	.063
TK304	8" - 8 1/4"	40 ATB	5/8" <>	.094	.063
General Purpose Blades					
TK305	9"	40 ATB	5/8"	.098	.071
TK306	10"	40 ATB	5/8"	.098	.071
TK307	12"	44 ATB	1"	.098	.071

<> = Diamond Arbor

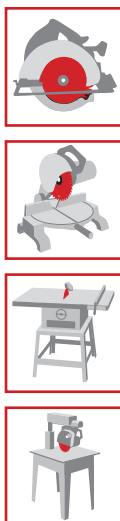


When cutting on a table saw, put the finish side of your work piece facing up. When cutting with a radial arm saw or hand held saw, put the finish side down. This will reduce splintering.

Tips
Techniques

SAW BLADES-THIN KERF

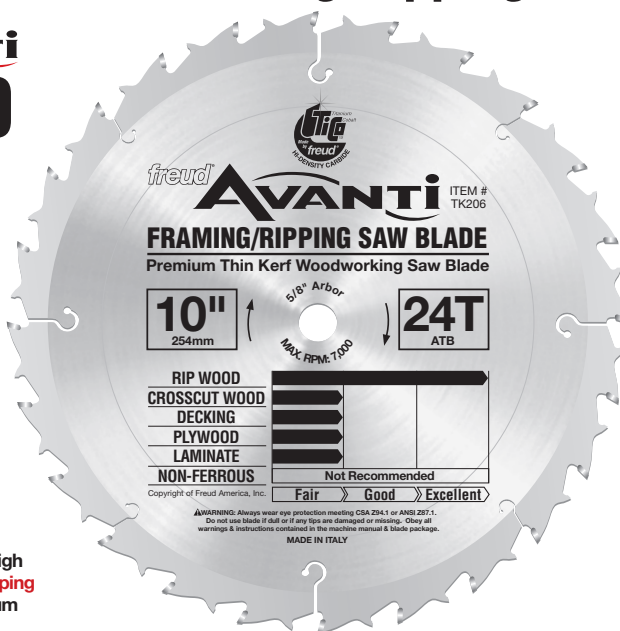
freud®



AVANTI
TK200
Series



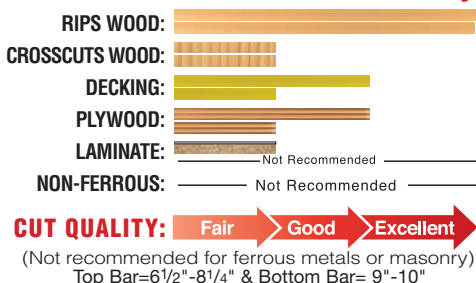
Features TiCo™ High
Density Carbide Ripping
Blend For Maximum
Performance



Ripping And Fast Crosscutting

Application

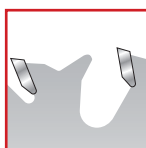
Recommended Use & Cut Quality



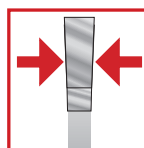
Depth of Cut



This blade cuts rough framing lumber, high quality finish lumber, plywood, OSB and hardboard siding with the smoothest, fastest, and most accurate cut. The Silver I.C.E.™ coating resists corrosion and build-up, and have 2 times more heat resistance and life than conventional uncoated blades. The thin kerf blade requires less cutting power from the user and the saw for better control over the cut. Heat-expansion slots help to prevent blade breakage by allowing it to expand during operation when friction-causing heat occurs.



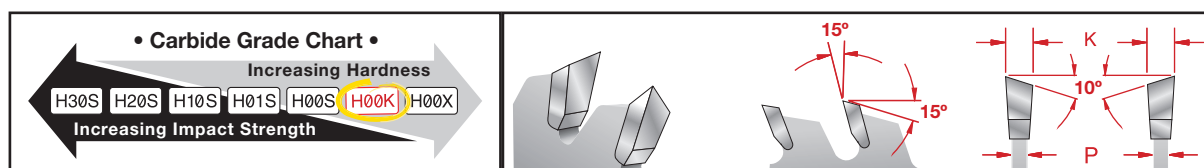
Kickback-Reducing Design restricts tooth bite and helps ensure a safer working environment



Thin Kerf cuts quickly and requires less power making it ideal for a wide range of stock on underpowered saws at the job site

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
TK201	6 1/2"	24 ATB	5/8" <>	.094	.063
TK203	7"-7 1/4"	24 ATB	5/8" <>	.068	.052
TK204	8"-8 1/4"	24 ATB	5/8" <>	.094	.063
TK205	9"	24 ATB	5/8"	.098	.071
TK206	10"	24 ATB	5/8"	.098	.071

<> = Diamond Arbor



Tips
Techniques

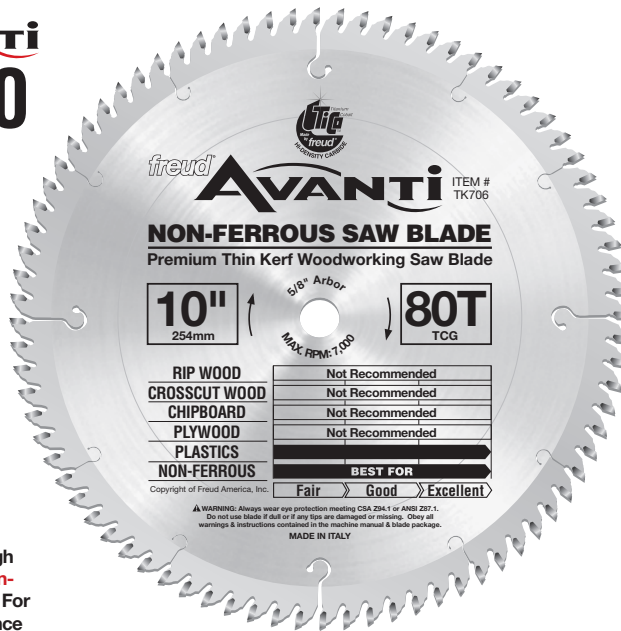
Using a thin kerf blade on a portable saw will reduce the load on the motor. Thin kerf blades allow the motor to run at full RPM yielding better results and longer tool life.

Thin Kerf Non-Ferrous Metal/Plastic Cutting Blades

AVANTI
TK700
Series



Features TiCo™ High Density Carbide **Non-Ferrous Metals Blend** For Maximum Performance



Specialty Blades

Cutting Non-Ferrous Metals

Recommended Use & Cut Quality

RIPS WOOD:	Not Recommended
CROSSCUTS WOOD:	Not Recommended
CHIP BOARD:	Not Recommended
PLYWOOD:	Not Recommended
LAMINATE:	Not Recommended
PLASTICS:	
NON-FERROUS:	BEST FOR

CUT QUALITY: Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)

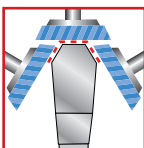
Wall
Thickness



Ideal blade for cutting non-ferrous metals such as copper, aluminum, brass, bronze, and lead. Also, ideal for cutting plastic materials such as pvc, vinyl, acrylic and polycarbonate.

Application

57



Negative Hook Angle and Triple Chip Grind produce superior finish in non-ferrous metals

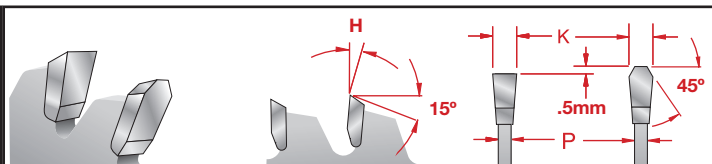
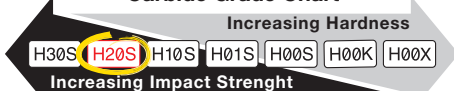


Freud-Made TiCo™ Hi-Density Carbide designed to cut nonferrous metals extends tooth life

Silver ICE™	Dia.	Teeth	Arbor	Hook Angle(H)	Kerf(K)	Plate(P)
TK703	7"-7 1/4"	56 TCG	5/8" <>	-6°	.106	.087
TK706	10"	80 TCG	5/8"	-5°	.091	.071

<> = Diamond Arbor

• Carbide Grade Chart •



To determine if the metal you wish to cut is non-ferrous, hold the metal next to a magnet. If it attracts the magnet, it is a ferrous metal and should not be cut with a non-ferrous blade.

Tips
Techniques

SAW BLADES-THIN KERF

freud®

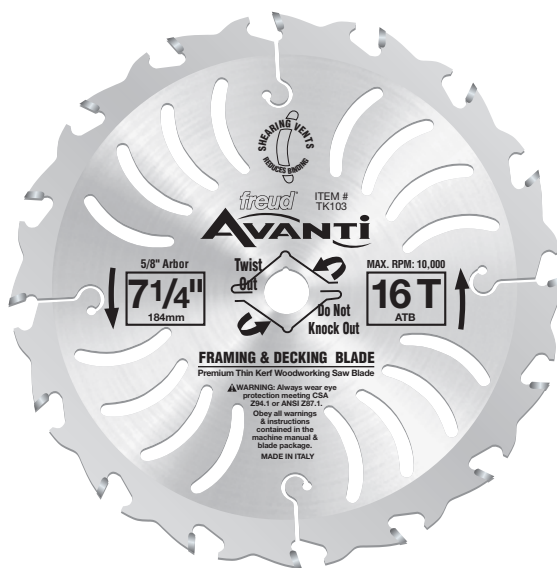


Thin Kerf Decking and Framing Blades

AVANTI TK103



Features TiCo™ High
Density Carbide
Combination Blend For
Maximum Performance



Heavy-Duty Decking And Framing

Application

Recommended Use & Cut Quality



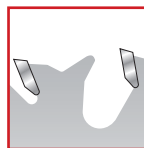
Depth of Cut



This blade is excellent for providing smooth burn-free cuts in pressure treated decking lumber or other framing materials. The unique shear vent design allows for the blade to cut through thick stock wet lumber without binding. The Silver I.C.E.™ coating resists corrosion and build-up, and has 2 times more heat resistance and life than conventional uncoated blades. The 16 teeth on this blade allow for a fast cut while the anti-kickback design reduces the effects of kickbacks associated with overfeeding.



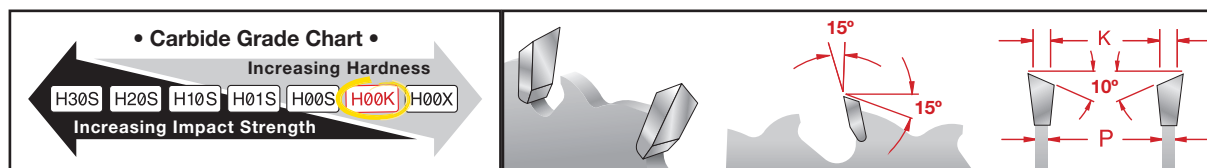
Shear Vent Design minimizes binding in extreme cutting applications



Kickback-Reducing Design restricts tooth bite and helps ensure a safer working environment

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
TK103	7"-7 1/4"	16 ATB	5/8" <>	.068	.052

<> = Diamond Arbor



Tips
Techniques

Maintain a proper feed rate. Feeding too slow causes burning of the material. Feeding too fast can be dangerous and produces a poor dull cut.

Thin Kerf Remodeling Blades

AVANTI
TK500
Series



Features TiCo™ High
Density Carbide
Combination Blend For
Maximum Performance



Decking/Remodeling Blades

Heavy-Duty Remodeling Blades Cut Through Nail-Embedded Material

Recommended Use & Cut Quality

- RIPS WOOD:**
- CROSSCUTS WOOD:**
- CHIP BOARD:**
- PLYWOOD:**
- LAMINATE:** _____ Not Recommended _____
- NON-FERROUS:** _____ Not Recommended _____

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)



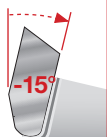
Depth of Cut



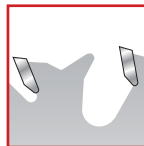
The super strong shoulder design fully supports the carbide to help prevent failure when it comes in contact with hard-to-cut floor nails. The negative angle prevents the tooth from grabbing nails and breaking off. The negative hook angle also means the cross section of the carbide tip is thicker without losing the required 15° relief angle to prevent burning.

Application

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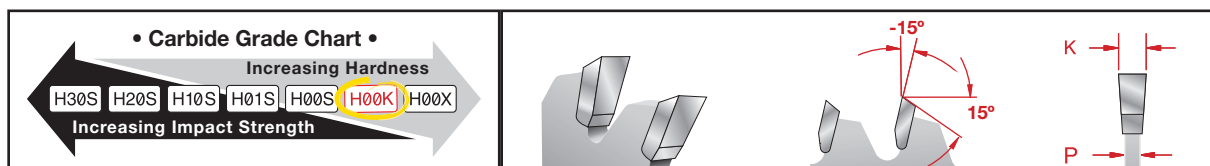
Negative Hook Angle teeth offer extreme durability in nail embedded wood



Large, Specially Designed Kickback-Reducing Shoulders provide controlled cutting in demolition applications

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
TK501	6 1/2"	12 FLAT	5/8" <>	.094	.063
TK503	7"-7 1/4"	14 FLAT	5/8" <>	.094	.063
TK504	8"-8 1/4"	18 FLAT	5/8" <>	.094	.063

<> = Diamond Arbor



Using a thin kerf blade on a portable saw will reduce the load on the motor. Thin kerf blades allow the motor to run at full RPM yielding better results and longer tool life.

Tips
Techniques

SAW BLADES-THIN KERF

freud



Thin Kerf Trim Saw Blade

AVANTI
TK001



Features TiCo™ High
Density Carbide
Combination Blend For
Maximum Performance



Trim Saw Blade For Porter-Cable® And Makita® Saws

Application

Recommended Use & Cut Quality

RIPS WOOD:
CROSSCUTS WOOD:
CHIP BOARD:
PLYWOOD:
LAMINATE:
NON-FERROUS: Not Recommended

CUT QUALITY: Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)



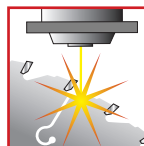
Depth of Cut



This carbide tipped trim blade is the perfect replacement blade for Porter Cable®, Makita® or similar trim saws. Heat-expansion slots help to prevent blade breakage by allowing it to expand during operation where friction-causing heat may occur.



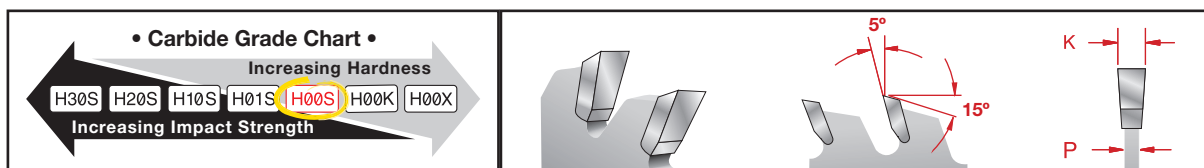
TiCo™ Hi-Density Carbide Tips with Titanium are durable and chemical-resistant for long life and razor-sharp cuts



Laser-Cut Blade Body of high strength steel ensures that the blade will remain flat and true, even after years of use

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
TK001	4 3/8"	36 FLAT	20mm*	.067	.051

* Includes bushing to reduce bore to 3/8"
Porter-Cable® is a Registered Trademark of Black & Decker®
Makita® is a Registered Trademark of Makita Corporation



Tips
Techniques

If you experience burning on both sides of the cut the blade may need to be sharpened or you may be using a blade with too many teeth for the application.

Thin Kerf Cordless Trim Saw Blades

AVANTI
TK002
TK003
TK004



Features TiCo™ High
Density Carbide
Crosscutting Blend For
Maximum Performance



Trim Saw Blades

Trim Saw Blade For DEWALT® And Other Trim Saws Extends Run Time

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	

CUT QUALITY: Fair → Good → Excellent

(Not recommended for ferrous metals or masonry)
Top Bar=TK002, Bottom Bar= TK003, TK004



Depth of Cut



A thin kerf blade with a Silver I.C.E.™ coating is ideal for a cordless trim saw. The coating makes the blade resistant to friction and heat build-up. The thin kerf requires less cutting power allowing the blade to glide through the material. This design combination requires less power from the saw therefore extending the life of the battery. Use the TK002, TK003, and TK004 for the DEWALT® or other similar cordless circular saws.

Application

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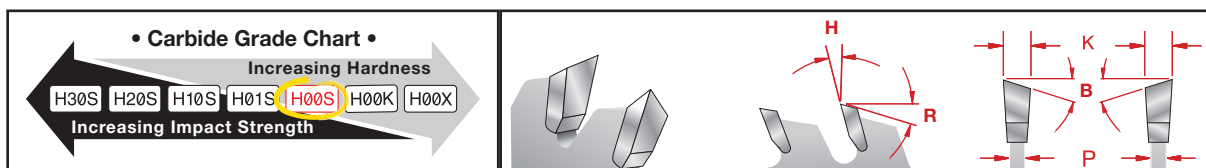
Silver I.C.E.™ Coating resists corrosion and build-up, and have 2 times more heat resistance and life than conventional uncoated blades



TiCo™ Hi-Density Carbide Tips are durable and chemical resistant for long life and razor-sharp cuts

Silver ICE™	Dia.	Teeth	Arbor	Hook Angle(H)	Relief Angle(R)	Bevel Angle(B)	Kerf (K)	Plate (P)
TK002	5-3/8"	16 ATB	10mm	20°	15°	15°	.059	.039
TK003	5-3/8"	24 ATB	10mm	15°	15°	25°	.067	.051
TK004	5-3/8"	30 ATB	10mm	2°	10°	15°	.059	.039

DEWALT® is a Registered Trademark of Black & Decker®



Using a thin kerf blade on a portable saw will reduce the load on the motor. Thin kerf blades allow the motor to run at full RPM yielding better results and longer tool life.

Tips
Techniques

SAW BLADES-THIN KERF

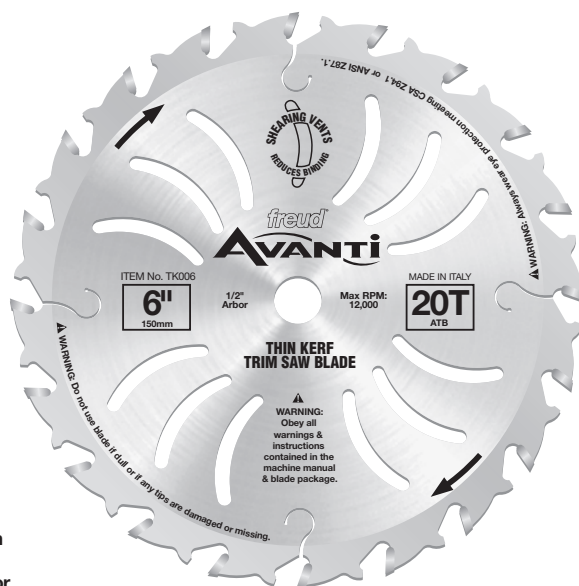
freud®



AVANTI
TK006
TK007



Features TiCo™ High
Density Carbide
Crosscutting Blend For
Maximum Performance



Trim Saw Blades For Extending Run Time On Porter Cable® Saw Boss®

Application

Recommended Use & Cut Quality

RIPS WOOD:	
CROSSCUTS WOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	

CUT QUALITY: Fair → Good → Excellent

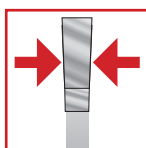
(Not recommended for ferrous metals or masonry)
Top Bar=TK006, Bottom Bar= TK007



Depth of Cut



This small trim blade is designed to meet the specifications of the Porter Cable® Saw Boss®, and other similar trim saws while being manufactured to Freud's high tool standards. Heat-expansion slots help to prevent blade breakage by allowing it to expand during operation when friction-causing heat occurs. The anti-kickback design reduces the effects of kickbacks associated with overfeeding.



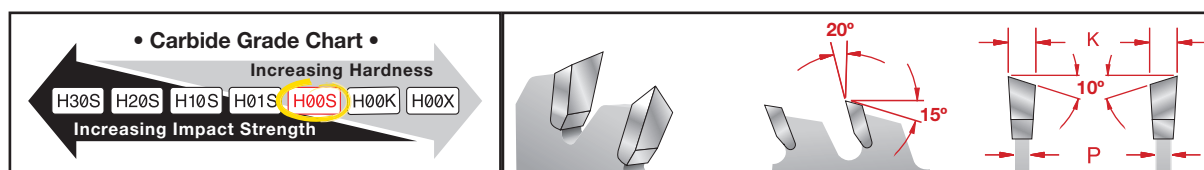
Thin Kerf requires less power,
extending the battery life of cordless
saws and motor life of corded saws



TiCo™ Hi-Density Carbide Tips with Titanium outlast high-speed steel blades that come standard with trim saws

Silver ICE™	Dia.	Teeth	Arbor	Kerf(K)	Plate(P)
TK006	6"	20 ATB	1/2"	.067	.051
TK007	6"	40 ATB	1/2"	.067	.051

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Tips
Techniques

Maintain a proper feed rate. Feeding too slow causes burning of the material.
Feeding too fast can be dangerous and produces a poor dull cut.

Dado Sets & Saw Blade Accessories



Dado Sets

Whether you're a skilled professional or a weekend hobbyist, Freud has a dado for you. The SD608, Freud's Dial-A-Width Dado, has a patented dial system for easy and precise adjustments while offering extremely accurate cuts. The SD300 Series adds a level of safety not found in other manufacturers' dadoes, while the SD200 Series provides the quality of cuts you expect from Freud, at an attractive price.



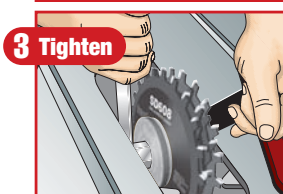
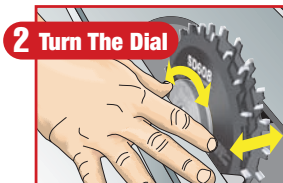
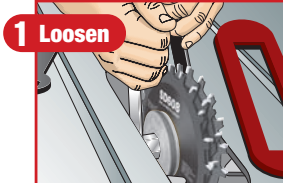
SD600 Series



Features TiCo™ High Density Carbide Crosscutting Blend For Maximum Performance



**NOT A
WOBBLE
DADO!**



Chip Free Dadoes In Veneered Plywoods and Laminates

Application

Recommended Use & Cut Quality

HARDWOOD:	
SOFTWOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)

The Dial-A-Width Dado set performs like a stacked dado, but we have replaced the shims with a patented dial system and with our exclusive Dial hub, ensures accurate adjustments. Each "click" of the dial adjusts the blade by .004". The Dial-A-Width dado set is easy to use, and very precise. For the serious woodworker, there's nothing better.

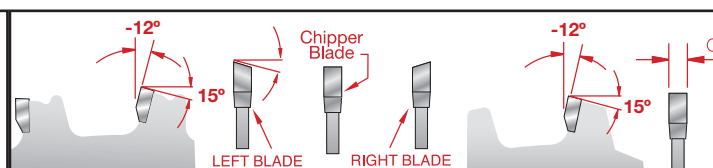
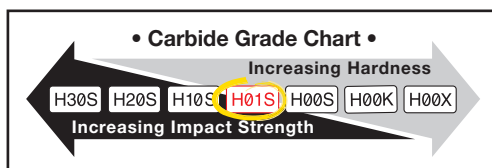
- Adjusts in .004" increments.
- Maximum 29/32" cut width.
- Adjusts easily to right or left operating machines.
- Set includes 2 outside blades, 5 chippers, wrench and carrying case.
- Does not need shims.

Set Includes:



Item	Dia.	Teeth	Arbor	Chippers(C)
SD606	6"	20	5/8"	(4)1/8", (1)3/32"
SD608	8"	24	5/8"	(4)1/8", (1)3/32"

Slot Width	No. Chippers Required 1/8"	No. Chippers Required 3/32"
1/4"	0	0
5/16"	0	0
3/8"	0	1
7/16"	1	0
1/2"	1	1
9/16"	2	0
5/8"	2	1
11/16"	3	0
3/4"	3	1
13/16"	4	0



Tips Techniques

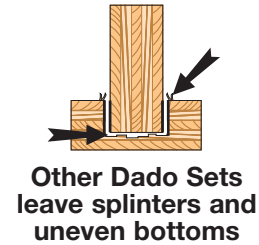
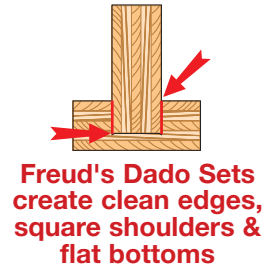
To determine if you need a 6" or 8" dado, first consult your saw owner's manual. Even if the manual states that the saw will accept an 8" dado, using the 6" on most 120v saws will greatly reduce the load on the motor.

Super Dado Sets

SD500
Series



Features TiCo™ High Density Carbide Crosscutting Blend For Maximum Performance



Chip Free Dadoes In Veneered Plywoods And Laminates

Recommended Use & Cut Quality

HARDWOOD:	
SOFTWOOD:	
CHIP BOARD:	
PLYWOOD:	
LAMINATE:	
NON-FERROUS:	Not Recommended

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)

The SD500 Series of dado sets cuts everything from veneered plywoods and laminates to solid wood, chip and splinter-free with a super smooth, flat bottom. The SD500 Series dado sets were the first to include a 3/32" thick chipper and has the flexibility of an adjustable dado to handle today's undersized plywood. This allows the cut width to be adjusted in 1/32" increments and doubles the number of slot widths available. A shim set is also included with the dado set for fine adjustments. Use on all table saws, and radial arm saws for cutting slots, grooves, dadoes, and rabbets in softwood or hardwood.

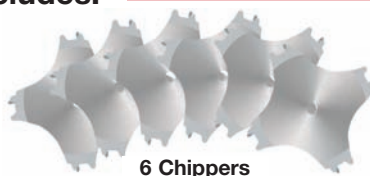
Application

Set Includes:

2 Blades



Shim Set



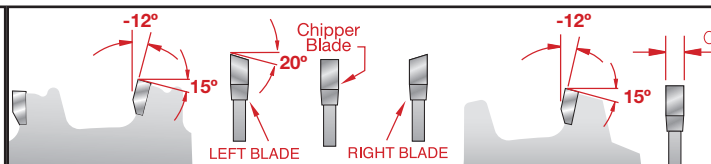
6 Chippers

Caution: Carbide tips should never come into contact with each other. Always use both outside blades and never use chippers alone or with just one outside blade.

Slot Width	No. Chippers Required 1/8	No. Chippers Required 3/32
1/4"	0	0
5/16"	0	0
11/32"	0	1
3/8"	1	0
13/32"	0	1
7/16"	1	0
15/32"	1	1
1/2"	2	0
17/32"	1	1
9/16"	2	0
19/32"	2	1
5/8"	3	0
21/32"	2	1
11/16"	3	0
23/32"	3	1
3/4"	4	0
25/32"	3	1
13/16"	4	0
29/32"	4	1

Item	Dia.	Teeth	Arbor	Chippers(C)
SD506	6"	20	5/8"	(4)1/8", (1)3/32", (1)1/16"
SD508	8"	24	5/8"	(4)1/8", (1)3/32", (1)1/16"

Carbide Grade Chart



For safety and best results, when cutting wide and/or deep dadoes, make several light passes instead of attempting to remove the material in one pass.

Tips
Techniques



Dado Cutter Heads



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SAW BLADES-DADOES

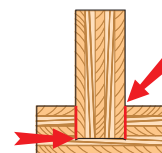
freud®



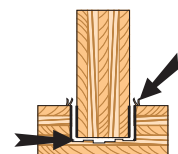
SD300 Series



Features TiCo™ High Density Carbide Crosscutting Blend For Maximum Performance



Freud's Dado Sets create clean edges, square shoulders & flat bottoms

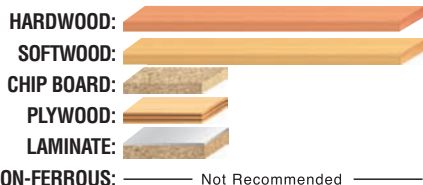


Other Dado Sets leave splinters and uneven bottoms

Safe And Splinter Free Dadoes

Application

Recommended Use & Cut Quality



CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)

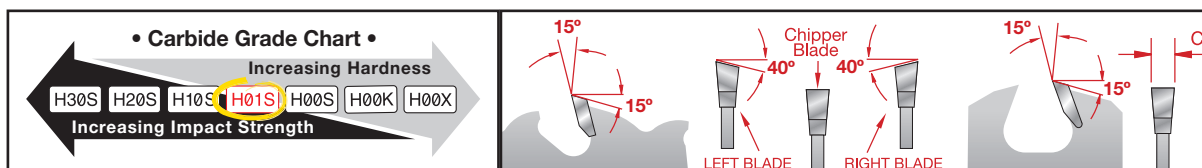
Freud's Safety Dado Sets provide the highest quality results while maintaining a superior level of safety. This stacked dado set with its razor sharp outside blades will produce grooves or rabbets which are flat-bottomed and virtually splinter-free in solid woods. Stacked dado sets are more precise than other styles and with the use of Freud's Shim Set the kerf width can be adjusted by as little as .004" for the correct fit. Use on all table saws, and radial arm saws for cutting slots, grooves, dadoes, and rabbets in softwood or hardwood.

Set Includes:



Item	Dia.	Teeth	Arbor	Chippers(C)
SD306	6"	18	5/8"	(4)1/8", (1)1/16"
SD308	8"	22	5/8"	(4)1/8", (1)1/16"
SD408	8"	40	5/8"	(4)1/8", (1)1/16"
SD310	10"	34	1"	(4)1/8", (1)1/16"
SD312	12"	34	1"	(4)1/8", (1)1/16"

Slot Width	No. Chippers Required 1/8"	No. Chippers Required 1/16"
1/4"	0	0
5/16"	0	1
3/8"	1	0
7/16"	1	1
1/2"	2	0
9/16"	2	1
5/8"	3	0
11/16"	3	1
3/4"	4	0
13/16"	4	1



Tips Techniques

To determine if you need a 6" or 8" dado, first consult your saw owner's manual. Even if the manual states that the saw will accept an 8" dado, using the 6" on most 120v saws will greatly reduce the load on the motor.

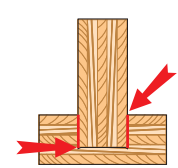


Pro Dado Set

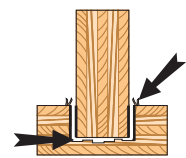
SD200 Series



Features TiCo™ High Density Carbide Crosscutting Blend For Maximum Performance



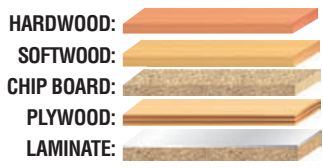
Freud's Dado Sets create clean edges, square shoulders & flat bottoms



Other Dado Sets leave splinters and uneven bottoms

A Stacked Dado For Flat Bottom Grooves and Virtually Splinter-Free Cuts

Recommended Use & Cut Quality



NON-FERROUS: ————— Not Recommended —————

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)

Freud's quality and craftsmanship in a stacked dado set, but at a wobble dado price! The negative hook angles make flat bottom grooves and virtually splinter-free cuts. It has two outside blades with five two wing chippers. This makes it ideal for underpowered saws because it requires less power to feed. All blades and chippers come with Freud's anti-kickback design. This resharpenable set will produce grooves from 1/4" to 13/16" in 1/16" increments. This dado set comes with a shim set and carrying case as well as instructions on how to make basic dado sizes.

Application

Set Includes:

2 Blades



Shim Set



5 Chippers

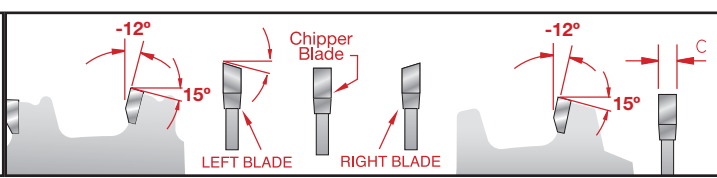
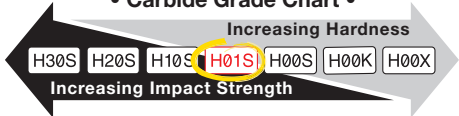


Caution: Carbide tips should never come into contact with each other. Always use both outside blades and never use chippers alone or with just one outside blade.

Item	Dia.	Teeth	Arbor	Chippers(C)
SD206	6"	10	5/8"	(4)1/8", (1)1/16"
SD208	8"	12	5/8"	(4)1/8", (1)1/16"

Slot Width	No. Chippers Required	
	1/8	3/32
1/4"	0	0
5/16"	0	1
3/8"	1	0
7/16"	1	1
1/2"	2	0
9/16"	2	1
5/8"	3	0
11/16"	3	1
3/4"	4	0
13/16"	4	1

Carbide Grade Chart



Use a sacrificial backer board to eliminate blow out at the end of your dado cuts

Tips
Techniques



Box Joint Cutter Set

SBOX8
Series



Features TiCo™ High Density Carbide Crosscutting Blend For Maximum Performance



Set Creates perfect 1/4" & 3/8" Box Joints.

Use On All Table Saws for Cutting Grooves to Create Box Joints in Softwood or Hardwood

Application

Recommended Use & Cut Quality

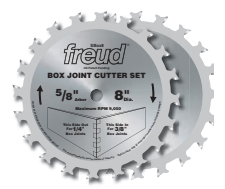
- HARDWOOD:
- SOFTWOOD:
- CHIP BOARD:
- PLYWOOD:
- LAMINATE:
- NON-FERROUS:

CUT QUALITY: Fair → Good → Excellent
(Not recommended for ferrous metals or masonry)

Freud has developed a method of creating perfectly square, flat-bottom box joints, on a table saw without using a dado set or saw blade. The SBOX8 Box Joint Cutter Set makes box joint construction easy, producing strong, accurate joints without shims or awkward adjustments. This patent pending innovation enables users to produce perfectly square, precise box joints quickly and cleanly the very first time—and every time. Includes instructions for making box joints and building a box joint jig.

Set Includes:

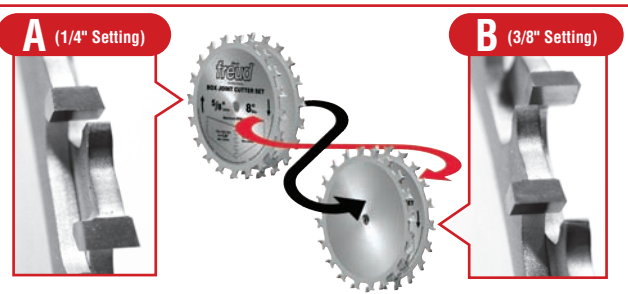
2 Blades



Caution: Carbide tips should never come into contact with each other. Always use both outside blades.

How It Works:

The set is easy to use, simply install the two 8" diameter, 5/8" arbor blades on a table saw with the blades back to back for 1/4" box joints (A), or face to face for 3/8" box joints (B).



Item	Dia.	Teeth	Arbor	Hook Angle	Width of Cut
SBOX8	8"	20	5/8"	20°	1/4" Groove & 3/8" Groove

• Carbide Grade Chart •

Increasing Hardness

← H30S H20S H10S **H01S** H00S H00K H00X →

Increasing Impact Strength

20°

15°

Configuration A

Configuration B

1/4"

3/8"

LEFT BLADE

RIGHT BLADE

Tips
Techniques

Make test cuts and sample joints with your new SBOX8 before using it on your first project. Whenever possible, plan projects to use stock with a width that is an even multiple of either 1/4" or 3/8", resulting in joints with all pins and tails at full width.

Dado Chipper Set-Up & Configuration Guide

Symbol Key

- ✱ Outer Blades
- ◆ Chipper
- ◇ Chipper
- Shim

These charts explain how to set up your dado cutters to achieve your desired width of cut. Complete set-up instructions, safety information and technical specifications are contained in the manual that comes in the dado set.

For ultimate precision and cut quality, this unique stacked dado system allows for quick and easy adjustments without the use of shims—giving flawless flat bottom cuts in hardwoods, softwoods, veneered plywoods and laminates. This chart is applicable for the SD606 and the SD608 Dial-A-Width dado sets.

Set-Up For SD600 Series Dial-A-Width Dado Sets - Cuts Dadoes From 7/32" to 29/32"

Cut Width →	7/32"	1/4"	9/32"	5/16"	11/32"	3/8"	13/32"	7/16"	15/32"	1/2"	17/32"	9/16"	19/32"	5/8"	21/32"	11/16"	23/32"	3/4"	25/32"	13/16"	27/32"	7/8"	29/32"
Left Outside Blade	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱
Right Outside Blade	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱
3/32" Chipper	—	—	—	—	◆	◆	—	—	◆	◆	—	—	◆	◆	—	—	◆	◆	—	—	◆	◆	◆
1/8" Chipper	—	—	—	—	—	—	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
1/8" Chipper	—	—	—	—	—	—	—	—	—	—	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
1/8" Chipper	—	—	—	—	—	—	—	—	—	—	—	—	—	—	◆	◆	◆	◆	◆	◆	◆	◆	◆
1/8" Chipper	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	◆	◆	◆	◆	◆
*Number of Clicks	1	9	16	25	8	16	15	22	8	16	15	22	8	16	15	22	8	16	15	22	8	15	22

* The clicks are from zero on a "zeroed-out" dial. To learn how to zero-out the SD600 series dial refer to the manual that is included with the SD600 series dado sets. Always check the Table Saw manual or consult the manufacturer for the maximum allowable dado width.

The SD500 Super Dado series is available in 6"(SD506) and 8"(SD508). This series gives flawless flat bottom grooves with virtually splinter-free cuts in hardwoods, softwoods, veneered plywoods and laminates. This chart is applicable for the SD506 and the SD508 dado sets.

Set-Up For SD500 Series Dado Sets - Cuts Dadoes From 1/4" to 29/32"

Cut Width →	7/32"	1/4"	9/32"	5/16"	11/32"	3/8"	13/32"	7/16"	15/32"	1/2"	17/32"	9/16"	19/32"	5/8"	21/32"	11/16"	23/32"	3/4"	25/32"	13/16"	27/32"	7/8"	29/32"
Left Outside Blade	N/A	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱
Right Outside Blade	N/A	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱
1/16" Chipper	N/A	—	—	◆	—	—	◆	◆	—	—	◆	◆	—	—	◆	◆	—	—	◆	◆	—	—	◆
3/32" Chipper	N/A	—	—	—	◆	—	◆	—	◆	—	◆	—	◆	—	◆	—	◆	—	◆	—	◆	—	◆
1/8" Chipper	N/A	—	—	—	—	◆	—	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
1/8" Chipper	N/A	—	—	—	—	—	—	—	—	◆	—	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
1/8" Chipper	N/A	—	—	—	—	—	—	—	—	—	—	—	—	◆	—	◆	◆	◆	◆	◆	◆	◆	◆
1/8" Chipper	N/A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	◆	—	◆	◆	◆	◆
0.020" (0.5mm) Shim	N/A	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—
0.012" (0.3mm) Shim	N/A	—	○	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	—
0.008" (0.2mm) Shim	N/A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0.004" (0.1mm) Shim	N/A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

The SD300 series gives superb cuts in softwoods & hardwoods. Available in 6"(SD306), 8"(SD308), 10"(SD310), & 12"(SD312). The SD200 series gives great performance at a great price. Available in 6"(SD206) & 8"(SD208). Cuts; hardwoods, softwoods, chipboard, plywood, & laminates. This chart is applicable for the SD306, SD308, SD310, SD312, SD206, & SD208 dado sets.

Set-Up For SD300 & SD200 Series Dado Sets - Cuts Dadoes From 1/4" to 7/8"

Cut Width →	7/32"	1/4"	9/32"	5/16"	11/32"	3/8"	13/32"	7/16"	15/32"	1/2"	17/32"	9/16"	19/32"	5/8"	21/32"	11/16"	23/32"	3/4"	25/32"	13/16"	27/32"	7/8"	29/32"
Left Outside Blade	N/A	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	N/A
Right Outside Blade	N/A	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	✱	N/A
1/16" Chipper	N/A	—	—	◆	◆	—	—	◆	◆	—	—	◆	◆	—	—	◆	◆	—	—	◆	◆	◆	N/A
1/8" Chipper	N/A	—	—	—	—	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	N/A
1/8" Chipper	N/A	—	—	—	—	—	—	—	—	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	N/A
1/8" Chipper	N/A	—	—	—	—	—	—	—	—	—	—	—	—	◆	◆	◆	◆	◆	◆	◆	◆	◆	N/A
1/8" Chipper	N/A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	◆	◆	◆	◆	◆	N/A
0.020" (0.5mm) Shim	N/A	—	○	—	○	—	○	—	○	—	○	—	○	—	○	—	○	—	○	—	○	○	N/A
0.012" (0.3mm) Shim	N/A	—	○	—	○	—	○	—	○	—	○	—	○	—	○	—	○	—	○	—	○	○	N/A
0.008" (0.2mm) Shim	N/A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	N/A
0.004" (0.1mm) Shim	N/A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	○	N/A





Dado Replacement Parts & Shim Sets



Use Dado Sets components only with the dado set for which they are designed. Never use chippers without both outside blades. SS100 will work with any stacked dado set on table saws or radial arm saws with a 5/8" arbor. SS200 will work with any stacked dado on table saws or radial arm saws with a 1" arbor.

Use on all table saws, and radial arm saws for cutting slots, grooves, dados, and rabbets in softwood or hardwood

Application

Freud dado sets are built to last through many years of sharpening and use. However, accidents like dropping a chipper do happen and Freud offers a full range of replacement parts. All outside blades and chippers are

made to the same exacting standards of quality as the original set. For wider cuts Freud's Precision Shim Set and additional chippers are available.

Precision Shim Sets Outside Number of Each Thickness

Item	Arbor	Dia.	.004	.008	.012	.020
SS100	5/8"	3-5/32"	4	2	2	2
SS200	1"	3-5/32"	4	2	2	2

Replacement Parts For SD606 & SD608 Series

SD600SP	Spring hub assembly bearing & screws
SD600BB	Ball bearing for hub assembly
SD600HUB	Dial hub
SD600FLG	Flange for blade assembly
SD600BTI	Threaded insert for flange
SD600ISC1	Screws for threaded insert
SD600FSC	Screws for flange

Chippers

Item	For	Dia.	Teeth	Arbor	Thickness
SD206C16	SD206	6"	2	5/8"	1/16"
SD206C18	SD206	6"	2	5/8"	1/8"
SD208C16	SD208	8"	2	5/8"	1/16"
SD208C18	SD208	8"	2	5/8"	1/8"
SDIC0616	SD306	6"	2	5/8"	1/16"
SDIC0618	SD306	6"	2	5/8"	1/8"
SDIC0816	SD308	8"	2	5/8"	1/16"
SDIC0818	SD308	8"	2	5/8"	1/8"
SDIC1016	SD310	10"	2	1"	1/16"
SDIC1018	SD310	10"	2	1"	1/8"
SDIC1216	SD312	12"	2	1"	1/16"
SDIC1218	SD312	12"	2	1"	1/8"
SD506C16	SD506	6"	4	5/8"	1/16"
SD506C332	SD506	6"	4	5/8"	3/32"
SD506C18	SD506	6"	4	5/8"	1/8"
SD508C16	SD508	8"	4	5/8"	1/16"
SD508C332	SD508	8"	4	5/8"	3/32"
SD508C18	SD508	8"	4	5/8"	1/8"
SD606C18	SD606	6"	4	5/8"	1/8"
SD606C332	SD606	8"	4	5/8"	3/32"
SD608C18	SD608	8"	4	5/8"	1/8"
SD608C332	SD608	8"	4	5/8"	3/32"

Outside Blades

Item	For	Dia.	Teeth	Arbor	Orientation
SD206OLH	SD206	6"	2	5/8"	Left Side
SD206ORH	SD206	6"	2	5/8"	Right Side
SD208OLH	SD208	8"	2	5/8"	Left Side
SD208ORH	SD208	8"	2	5/8"	Right Side
SDOS06LH	SD306	6"	24	5/8"	Left Side
SDOS06RH	SD306	6"	24	5/8"	Right Side
SDOS08LH	SD308	8"	24	5/8"	Left Side
SDOS08RH	SD308	8"	24	5/8"	Right Side
SDOS10LH	SD310	10"	36	1"	Left Side
SDOS10RH	SD310	10"	36	1"	Right Side
SDOS12LH	SD312	12"	36	1"	Left Side
SDOS12RH	SD312	12"	36	1"	Right Side
SD506OLH	SD506	6"	24	5/8"	Left Side
SD506ORH	SD506	6"	24	5/8"	Right Side
SD508OLH	SD508	8"	24	5/8"	Left Side
SD508ORH	SD508	8"	24	5/8"	Right Side
SD606OLH	SD606	6"	24	5/8"	Left Side
SD606ORH	SD606	6"	24	5/8"	Right Side
SD608OLH	SD608	8"	24	5/8"	Left Side
SD608ORH	SD608	8"	24	5/8"	Righth Side

Calibration & Sanding Disks



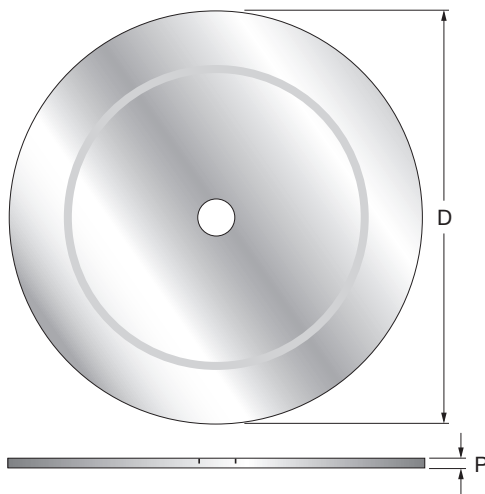
For Sanding and Accurately Aligning Your Saw For Optimal Performance

These Calibration and Sanding Disks are a real time saver for aligning a saw. They are precision ground extra thick for absolute balance and flatness. Simply mount the disk onto the saw and align the disk with a square. Because there are no teeth to get in the way, it will produce a more accurate reading. Then simply remove the disk and mount your blade. Freud Disks will also turn your table saw into a disk sander. Simply mount any

of the adhesive backed Freud Sanding Disks (4 popular grits available) onto the Freud Calibration and Sanding Disk and use as a disk sander. Sanding time will be cut down to practically nothing. These disks will save you time and money.

Application: Use on any table saw, radial arm saw or miter saw.

Item #	Diameter(D)	Plate(P)	Bore
CD008	8"	1/8"	5/8"
CD010	10"	1/8"	5/8"





Adhesive Sanding Disks & Abrasive Cleaning Stick



Strong Durable Sanding Disks For Use With Freud's Calibration & Sanding Disk

Application

Freud's Sanding Disks are an industrial grade perfect for the professional or home woodshop. Backed with premium 100% cotton means these disks won't disintegrate like typical off-the-shelf sandpaper. Industrial aluminum oxide is specially formulated for disk sanding, so that these disks will last through even your toughest project. Freud Sanding Disks are available in 80, 120, 150, and 180 grit and are also sold in combination packs. To use, peel off backing and carefully align disk before pressing into place. If, after heavy use, the disks get clogged with saw dust, Freud's Abrasive Cleaning Stick will restore sanding again in no time. Made from a

special grade of rubber, Freud's Cleaning Sticks clean quickly and efficiently, and will last through a multitude of projects. Simply hold the Cleaning Stick firmly against the clogged disk until all loaded particles have been removed. Disk should be running at its normal operating speed.

Application: Use Sanding Disks on any table saw, radial arm saw or miter saw with Freud's Calibration and Sanding Disks. Clean with Freud's Abrasive Cleaning Stick.

Sanding Disks

Item #	Diameter	Grit	Bore	Quantity
D080	8"	80 grit	5/8"	5 per package
D08120	8"	120 grit	5/8"	5 per package
D08150	8"	150 grit	5/8"	5 per package
D08180	8"	180 grit	5/8"	5 per package
D1008	10"	80 grit	5/8"	5 per package
D10120	10"	120 grit	5/8"	5 per package
D10150	10"	150 grit	5/8"	5 per package
D10180	10"	180 grit	5/8"	5 per package

D08XXX 8" Combination Pack contains 5 each of:
80 grit, 120 grit, 150 grit.

D10XXX 10" Combination Pack contains 5 each of:
80 grit, 120 grit, 150 grit

How to Choose Your Grade:

(8" or 10" disks)

Coarse 80 grit
Medium 120 grit
Fine 150 grit
Extra Fine 180 grit

Cleaning Stick

Item #	Description	Quantity
AC12	Abrasive Cleaning Stick 2" x 2" x 12"	1 per package

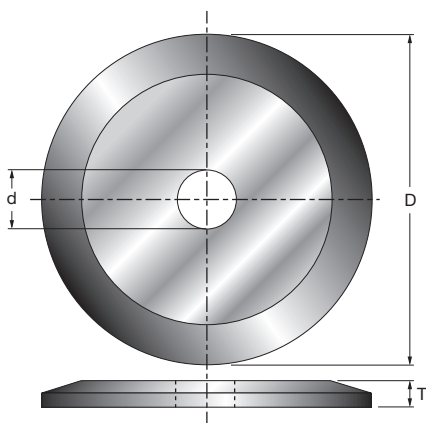


Blade Stabilizers & Stiffeners

For Maximum Saw Blade Performance On Stationary Saws

When making a high precision cut, any amount of rim vibration can mean the difference between a masterpiece and scrap. These sets of saw blade stabilizers are precision machined and balanced to give an added amount of stability. Freud Stabilizer sets not only improve the cut, but make the saw cut quieter, and extend it's cutting life between sharpenings. These Stabilizer sets can be used on blades 7" diameter, and larger. **Stabilizers should only be used on stationary saws and should never be used on hand held portable saws.**

Application



SC Series Stabilizer Sets (2 pieces)

Item #	Arbor(A)	Dia.(D)	Thickness(T)
SC-001	5/8"	3-1/2"	9/32"
SC-002	1"	3-1/2"	9/32"

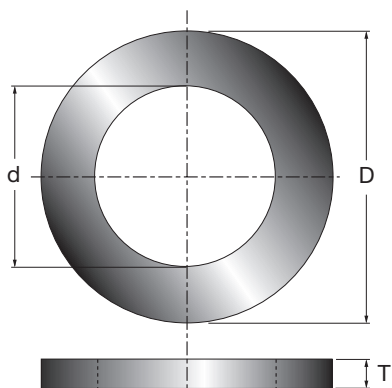


Freud's stiffeners reduce saw blade deflection for a straighter, truer cut. These stiffeners are precision machined from rigid steel

CDS Series Stiffeners

Item #	Dia.(D)	Bore	Usage
CDS001	4"	5/8"	Use with Blade 10" and smaller
CDS002	5"	5/8"	Use with Blade 10" and larger

Saw Blade Bushings



For Reduction In Blade Arbor Size

These precision bushings are designed for reducing the arbor size of Freud and other manufacturers saw blades.

Application

Item Number	Inside Dia.(d)	Outside Dia.(D)	Thickness Inch(T)	Gauge	Item Number	Inside Dia.(d)	Outside Dia.(D)	Thickness Inch(T)	Gauge
BL10M20095	3/8"	20mm	.048	18	BL71MDA9	3/4"	7/8"	.080	14
BL71MAA9	3/8"	1/2"	.048	18	BL71MDB9	3/4"	1"	.080	14
BL71MBA9	1/2"	5/8"	.056	17	BL71MDC9	3/4"	1-1/8"	.104	12
BL71MBB9	1/2"	3/4"	.056	17	BL71MEA9	7/8"	1"	.080	14
BL71MBC9	1/2"	13/16"	.056	17	BL71MFA9	1"	1-1/8"	.092	13
BL71MBD9	1/2"	7/8"	.064	16	BL71MFB9	1"	1-1/4"	.104	12
BL71MBE9	1/2"	1"	.080	14	BL71MFC9	1"	1-3/8"	.104	12
BL71MBF9	1/2"	1-1/8"	.080	14	BL71MFD9	1"	1-1/2"	.116	11
BL71MCA9	5/8"	<>SKIL	.056	17	BL71MFE9	1"	1-3/4"	.128	10
BL71MCB9	5/8"	3/4"	.056	17	BL71MGW9	5/8"	20mm	.064	16
BL71MCC9	5/8"	13/16"	.056	17	BL71MHA9	25mm	30mm	.092	13
BL71MCD9	5/8"	7/8"	.064	16	BL71MIA9	1"	30mm	.092	13
BL71MCE9	5/8"	1"	.080	14	BL71MLA9	5/8"	30mm	.092	13
BL71MCF9	5/8"	1-1/4"	.092	13	BL71MNA9	20mm	1"	.080	14



Router Bits

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Serious woodworkers choose serious accessories. They choose Freud. An industry leader for over 50 years, the Freud name equals quality, precision and craftsmanship. Freud router bits feature Freud made TiCo™ Hi-Density Carbide for maximum cutting life. And Freud bits are individually balanced, giving a cut above the rest. So when you're looking for a serious router bit, look for the Freud red.

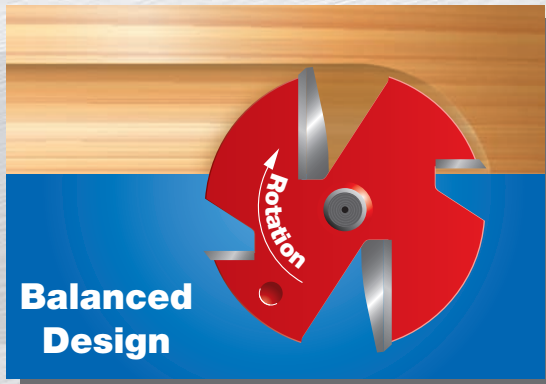
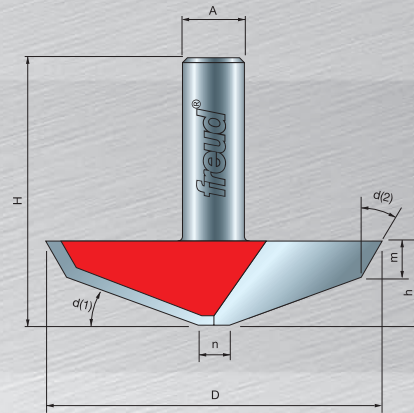
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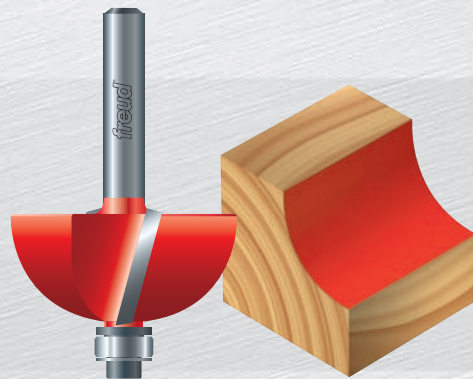
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Router Bits: Technical Information

Glossary Of Terms

Anti-Kickback Limitor

The projection at the front of the gullet which limits the maximum tooth bite to the safe limit for the bit design reducing the effects of kickback.

Brazing

The method used to attach the carbide tips to the bit body. Both the carbide tip and the body are heated above the melting point of the silver layers of the brazing foil forming a strong bond between the parts.

Gullet

The cut out area in the body in front of each carbide tip for chip removal.

Hook Angle

The angle the face of the carbide tip makes with a line projecting radially from the center of the shank.

Relief Angle

The angle the tip of the carbide tooth makes away from the cutting edge to a line tangent to the bit circumference.

Shear Angle

The angle that the cutting edge makes with a line parallel to the shank of the bit.

Shank

The precision ground, cylindrical part of the bit that is held in the router collet.

Solid Carbide Bit

A router bit formed entirely of carbide, including the shank, body and cutting edge. Found primarily in small diameter and spiral router bits.

Pilot Bearing

The part of the bit designed to guide the bit and control the depth of cut. Often used to rout the edges of irregularly shaped objects and for following templates.

Rail And Stile (Cope And Stick) Bits

Used to produce frames for panel doors. The stile or stick cut refers to the profiled inner edge of the frame and either a groove to accept a panel or a rabbet for glass. The rail or cope cut is the mating glue joint produced on the ends of the rails.

Round Nose (Core Box) Bits

End cutting bits that will plunge cut and produce decorative, fluted grooves.

Flush Trim (Pattern) Bits

Straight cutting bits that include a pilot bearing that is the same diameter as the cutter. Often used for laminate work and template routing.

Spiral Bits

Special straight cutting bits that are formed with helical flutes for more efficient chip ejection. The helical shape of the flutes also results in shear angles that produce a smoother surface finish.

Compression Bits

Straight cutting bits that combine both down shear angles and up shear angles for excellent finish on both the top and bottom of the cut.

Raised Panel Bits

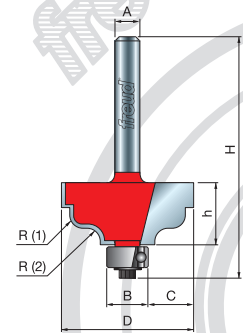
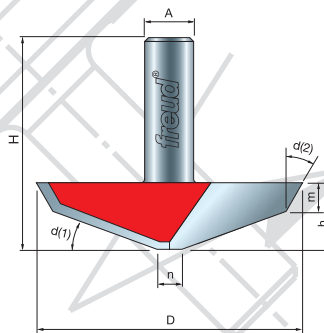
Produce a decorative profile on the edge of a wood panel while reducing the edge thickness to fit into the groove of a stile and rail frame.

Back Cutters

Secondary cutters used in combination with raised panel bits to create double-sided panels that are in the same plane with both the front and back of the stile and rail frame.

Key Router Bit Dimensions

A- Shank Diameter	h- Carbide Height
B- Bearing Diameter	m- Minor Height
C- Cutting Depth	n- Small Diameter
D- Overall Diameter	d- Angle
H- Overall Height	R- Radius



SUGGESTED ROUTER SPEEDS

CUTTING DIAMETER (D)		MAXIMUM R.P.M.
Up To	1" (25.4 mm)	24,000
1" (25.4 mm)	To 1-1/4" (31.75 mm)	18,000
1-1/4" (31.75 mm)	To 2-1/4" (57.15 mm)	16,000
2-1/4" (57.15 mm)	To 3-1/2" (88.9 mm)	12,000

IMPORTANT NOTE: Do not exceed the maximum speed marked on the tool

Router Bits: Technical Information

Freud has a complete range of bits that offer high quality, long working life and less friction when cutting.

Cut Quality Testing

A router bit's performance depends on two main factors; it's cutting quality and it's life span. We performed comparison tests on Freud router bits, with particular focus on cutting life and finish.

Straight router bits with identical dimensions (cutting diameter 1/2", shank diameter 1/2", 2 flute) were mounted on a CNC router. We then routed a number of 1/4" deep grooves on a chipboard-melamine coated panel.

The final evaluation was based on the number of chips on the melamine coating and averaging the first and the last 33 routed feet.

Initially, all router bits performed in a similar way but as the number of routed feet increased, Freud router bits performed superior to the other bits (please refer to the graphically represented test results below for more details and information).

Freud has a complete range of bits that offer high quality, long working life and less friction when cutting.

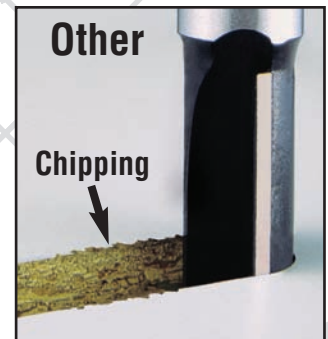
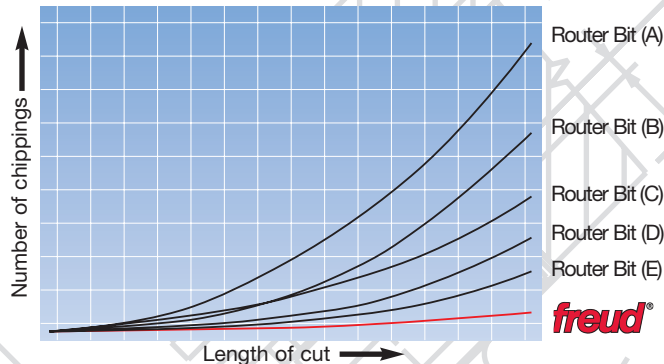
Perma-SHIELD® Coating

Each bit features high grade steel, TiCo™ Hi-Density Carbide Tips, and the exclusive red Perma-SHIELD® coating. Perma-SHIELD® coating reduces friction and heat build up, helps prevent the adhesion of resins, and protects the bit from corrosion.

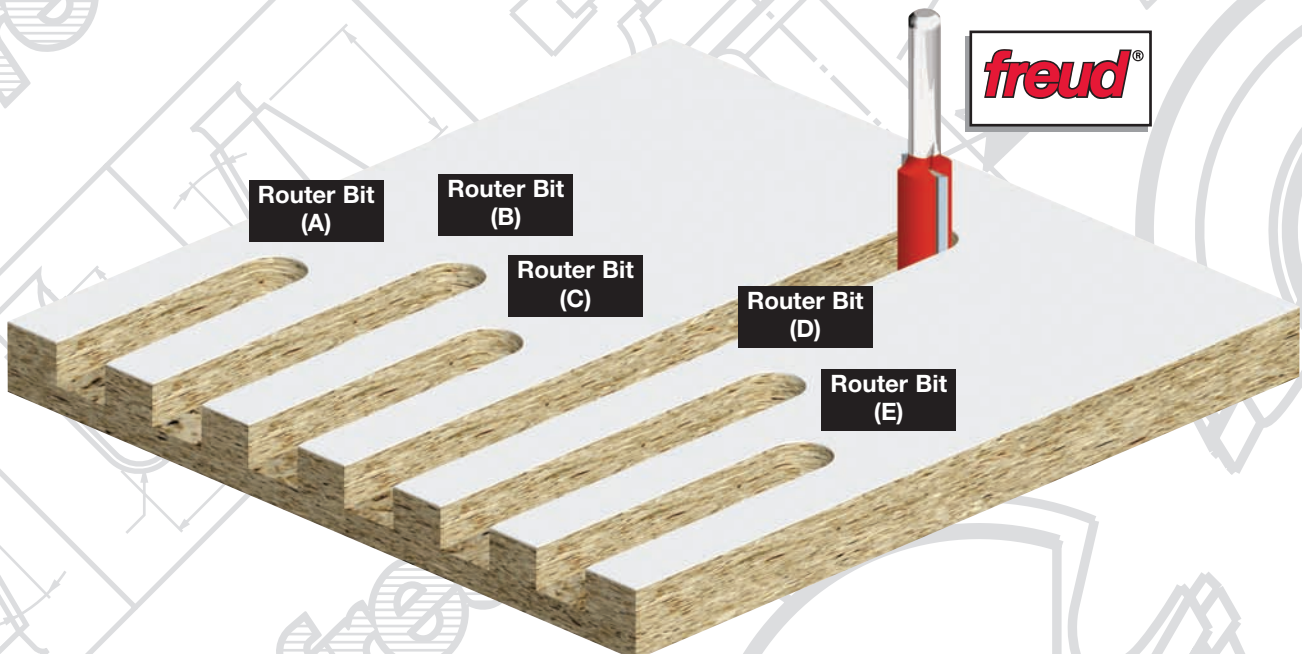


Computer Designed Hook Angles

The accuracy of the hook angle ensures that the bit can provide a top cutting finish whereas the peculiar inclination of the clearance angle on the tip's bottom allows easy and precise boring.

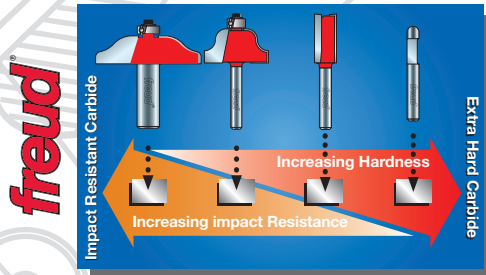


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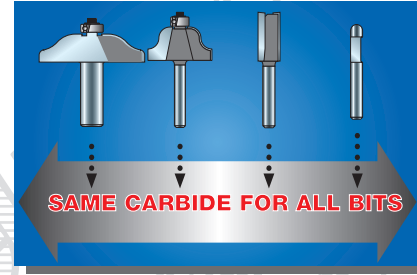
freud®

Freud—Router Bits Features And Benefits



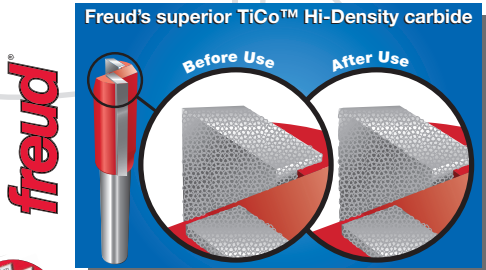
Unique Carbide Formulations for Each Application Maximize Finish & Life

Using the correct carbide formulation for each application is extremely important when it comes to maximizing a router bit's performance. For example, an extremely hard carbide formulation is required to maintain a sharp edge when cutting laminates. Alternately, a softer carbide or impact-resistant carbide is ideal for large profile cutting such as Panel Bits.



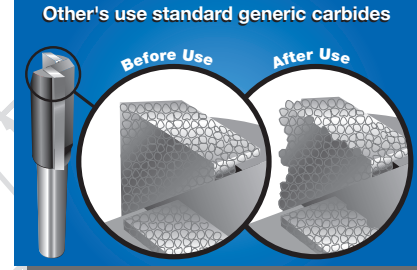
Others Use The Same Carbide For All Applications

Most manufacturers create router bits with standard off-the-shelf carbide, which is not specifically designed for wood cutting applications. These carbides will not be able to maintain the proper tooth geometry or sharp edge. After a few hours of use, these standard carbides might not show imperfections; however, without the proper carbide formulation, material finish and cutting life will suffer.



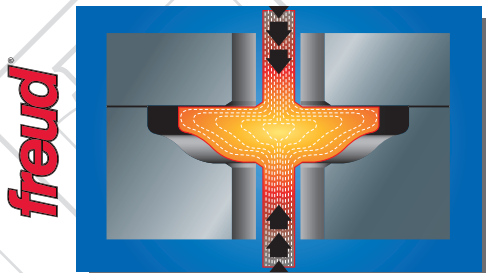
Superior TiCo™ Hi-Density Carbide Provides Longer Cutting Life

Freud's premium quality TiCo™ hi-density carbide allows for a sharper edge that gives a better finish with a dramatically longer cutting life. And, since the grains are much smaller and more dense there is not as dramatic a loss to the cutting edge, so wear occurs much more slowly.



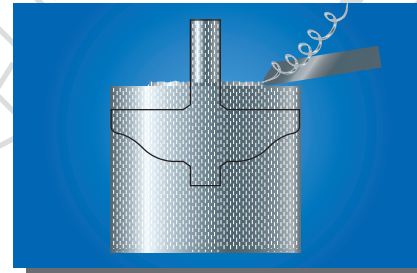
Standard Off-The-Shelf Carbide

Most manufacturers create router bits with standard off-the-shelf carbide, which is normally formulated for metal cutting. These carbides will not be able to maintain the proper sharp edge. After a few cuts, these standard carbides might not show imperfections; however, without the proper carbide formulation, material finish and cutting life will suffer.



Heat-Forged Design for Superior Strength

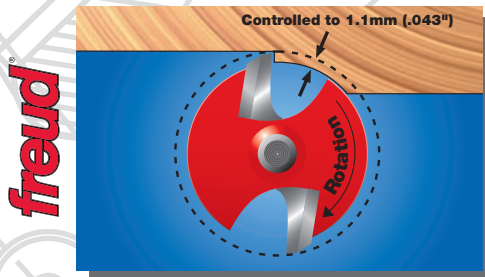
To create a strong, large diameter router bit, Freud uses a heat-forged manufacturing process. During this process, a high grade steel bar is heated up, forged to the desired shape, then turned down to a precise router bit body. This method produces a radial grain orientation to ensure maximum strength and durability. (This heat-forged process is known for producing high-strength components that require exceptionally high quality standards, such as automobile crank shafts).



Others Use Inferior Manufacturing Techniques

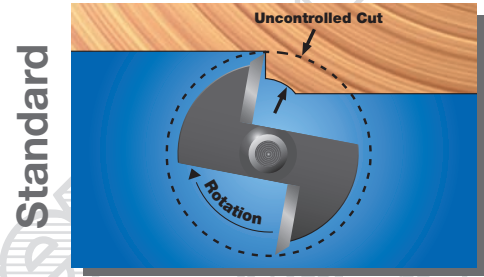
Most manufacturers employ techniques on their large diameter router bits such as turning down cold steel or die casting. These methods produce weaker, less durable router bits that are prone to breakage.

Freud—Router Bits Features And Benefits



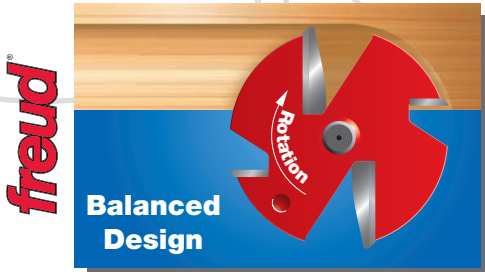
Kickback-Reducing Design Promotes Safety

Kickbacks are one of the most dangerous hazards in woodworking. This happens so quickly that it can be impossible to react before injury occurs. Freud's kickback-reducing shoulder design restricts the tooth bite to 1.1 mm., reducing the effects of kickback from overfeeding. This design contributes to a safer working environment.



Standard Router Bit Designs Are Prone To Dangerous Kick-Backs

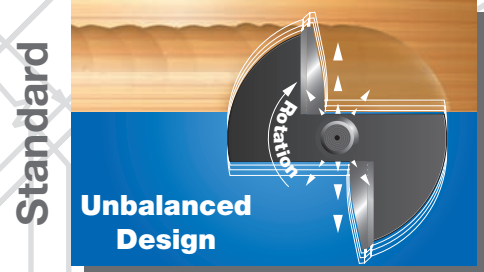
Standard router bit designs do not include a kickback reducing shoulder. The bits do not have extra support behind the cutting flute. This limitation allows the bit to take large bites out of the material and produces uncontrolled, rough cuts particularly when operating at lower speeds.



Balanced Design

Computer Balancing Prevents Chattering And Vibration

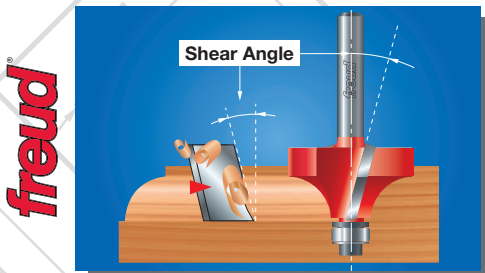
All Freud router bits are computer balanced to ensure vibration-free cuts. The balancing takes place on special computer-controlled equipment that determines the exact location where material needs to be removed. After material removal, the equipment rechecks the router bit to ensure the bit is perfectly balanced.



Unbalanced Design

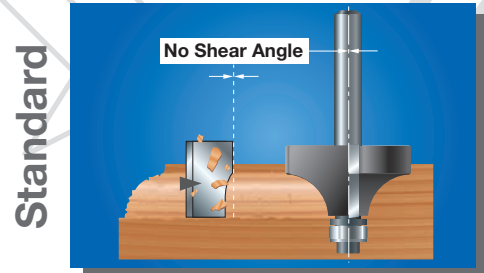
Unbalanced Router Bits Cause Chattering And Vibration

A router bit that is even slightly out of balance will vibrate and chatter while cutting, and it can be extremely dangerous if it is far out of balance. An unbalanced router bit can also create unnecessary rework costing quality of work, time and money.



Shear Angle Design Produces Superior Finish






















The shear angle is the angle that the cutting edge makes with the shank of the bit. Freud carbide tips are angled to slice through the wood fibers similar in principle to using a hand plane at an angle to the direction of the motion. This slicing action becomes even more important when cutting across the grain. Freud's high shear angle bits leave a cross grain cut that requires virtually no sanding.



Standard Router Bits Have Little Or No Shear Angle

Bits without shear or with too little shear chop the wood and are more likely to produce tear-out and chatter marks. In addition, not having the proper shear angle causes premature wearing of the carbide and puts more strain on the router.

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Industrial Router Bits

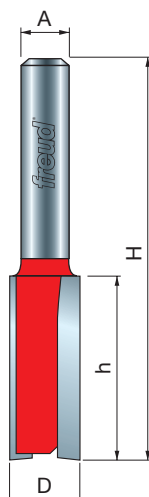
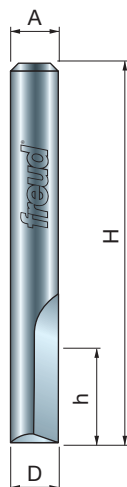
Serious woodworkers choose serious accessories. They choose Freud. The Freud name equals quality, precision and craftsmanship. Freud router bits feature TiCo™ Hi-Density Carbide for maximum cutting life and are individually balanced; providing a cut above the rest. When you're looking for a serious router bit, look for Freud red.



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Double Flute



Double Flute Straight Bits

Application: General stock removal with a smooth finish

- Freud straight bits cut smoother than other bits because of the precise shear and hook angles. End of bit relief allows for fast plunging.
- Cuts all composite materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

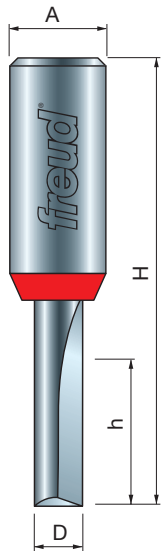
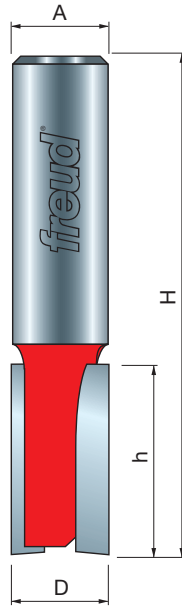
Item Number	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
04-096*	1/16"	1/4"	1/4"	1-5/8"
04-098*	3/32"	3/8"	1/4"	1-5/16"
04-100*	1/8"	3/8"	1/4"	1-3/4"
04-101*	5/32"	5/8"	1/4"	1-1/2"
04-102*	3/16"	1/2"	1/4"	2"
04-103*	3/16"	5/8"	1/4"	2"
04-104*	1/4"	1/2"	1/4"	2"
04-105*	1/4"	5/8"	1/4"	2"
04-106*	1/4"	3/4"	1/4"	2-1/4"
04-107*	1/4"	7/8"	1/4"	2-1/4"
04-108*	1/4"	1"	1/4"	2-1/2"
04-109*	1/4"	7/8"	1/4"	2-7/8"
04-110*	1/4"	1"	1/4"	2-7/8"
04-112	9/32"	1"	1/4"	2"
04-118	5/16"	1"	1/4"	2-1/2"
04-120	3/8"	7/8"	1/4"	1-7/8"
04-124	3/8"	1"	1/4"	2-1/2"
04-126	3/8"	1-1/4"	1/4"	2-11/16"
04-129	7/16"	1"	1/4"	2-1/2"
04-130	1/2"	3/4"	1/4"	2-1/4"
04-131	1/2"	7/8"	1/4"	1-7/8"
04-132	1/2"	1"	1/4"	2-1/8"
04-133	1/2"	1-1/4"	1/4"	2-3/4"
04-134	9/16"	3/4"	1/4"	2-1/8"
04-136	5/8"	3/4"	1/4"	2-1/8"
04-137	5/8"	1-1/4"	1/4"	2-3/4"
04-138	11/16"	3/4"	1/4"	2-1/8"
04-140	3/4"	3/4"	1/4"	2-1/8"
04-144	1-3/16"	3/4"	1/4"	2"
04-148	7/8"	3/4"	1/4"	2"
04-152	1"	3/4"	1/4"	2"
04-156	1"	1-1/8"	1/4"	2-9/16"
08-106	1/4"	3/4"	3/8"	2"
08-124	3/8"	1"	3/8"	2-1/4"
08-132	1/2"	1"	3/8"	2-1/2"
08-136	5/8"	1"	3/8"	2-1/4"
08-152	3/4"	1"	3/8"	2-1/4"
08-166	7/8"	1"	3/8"	2-1/4"
12-096	15/64"	3/4"	1/2"	2-13/32"
12-100	1/4"	3/4"	1/2"	2-3/8"
12-102	1/4"	7/8"	1/2"	2-7/8"
12-106	5/16"	1"	1/2"	2-3/4"
12-108	3/8"	1"	1/2"	2-5/8"
12-110	3/8"	1-1/4"	1/2"	2-7/8"
NEW 12-112**	13/32"	1"	1/2"	2-5/8"
12-113	7/16"	1-1/4"	1/2"	3-1/4"
12-115	7/8"	1-1/4"	1/2"	2-3/4"
12-116	1/2"	1"	1/2"	2-5/8"
12-118	1/2"	1-1/4"	1/2"	2-7/8"
12-122	1/2"	1-1/2"	1/2"	3-1/8"
12-124	1/2"	1-1/2"	1/2"	4-1/4"
12-128	1/2"	2"	1/2"	4-1/8"
12-130	1/2"	2-1/2"	1/2"	4-3/8"
12-134	9/16"	1-1/4"	1/2"	2-7/8"
12-136	5/8"	1"	1/2"	2-1/2"
12-138	5/8"	1-1/4"	1/2"	2-1/2"
12-140	5/8"	1-1/2"	1/2"	3"
12-142	5/8"	2"	1/2"	4"

* Solid Carbide

**New bit for use with Porter-Cable® Dovetail Jig #4212

(Continued)

Double Flute Straight Bits



Item Number	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
12-148	1-1/16"	1-1/4"	1/2"	3"
12-152	3/4"	1"	1/2"	2-1/2"
12-154	3/4"	1-1/4"	1/2"	3"
12-156	3/4"	1-1/2"	1/2"	3"
12-158	3/4"	2"	1/2"	3-1/2"
12-162	1-3/16"	1-1/4"	1/2"	3"
12-168	7/8"	1-1/4"	1/2"	3"
12-172	1"	1-1/4"	1/2"	3"
12-178	1-1/8"	1-1/2"	1/2"	3"
12-182	1-1/4"	1-1/2"	1/2"	2-7/8"
12-186	1-3/8"	1-1/4"	1/2"	3"
12-190	1-1/2"	1-1/4"	1/2"	3"
12-194	1-3/4"	1-1/4"	1/2"	3"

Undersized Plywood Bits

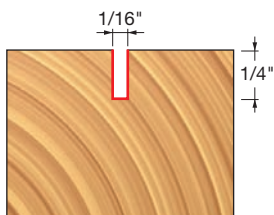
04-111*	7/32"	3/4"	1/4"	2"
04-127	1-5/32"	3/4"	1/4"	2"
04-128	1-5/32"	7/8"	1/4"	2-3/8"
12-114	1-5/32"	1-1/4"	1/2"	2-7/8"
12-135	1-9/32"	1-1/4"	1/2"	2-7/8"
12-150	2-3/32"	1-1/4"	1/2"	2-7/8"

Metric Version

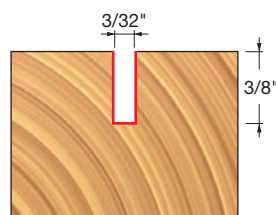
04-502*	2mm	5/32"	1/4"	1-1/2"
04-508*	3mm	5/16"	1/4"	1-3/4"
04-512*	5mm	1-5/32"	1/4"	2"
04-516	10mm	3/4"	1/4"	1-7/8"
04-520	10mm	1-1/4"	1/4"	2-3/8"
04-524	12mm	3/4"	1/4"	2-1/64"
04-528	12mm	1-1/4"	1/4"	2-3/8"
04-532	15mm	3/4"	1/4"	2-1/4"
04-536	15mm	1-1/4"	1/4"	2-5/8"
04-540	16mm	3/4"	1/4"	2-1/4"
04-544	16mm	1-1/4"	1/4"	2-5/8"
04-548	18mm	3/4"	1/4"	2"
04-552	20mm	3/4"	1/4"	2"
12-518	10mm	1"	1/2"	2-1/2"
12-520	10mm	1-1/4"	1/2"	2-3/4"
12-526	12mm	1"	1/2"	2-1/2"
12-530	12mm	1-1/4"	1/2"	2-3/4"
12-542	16mm	1"	1/2"	2-1/2"
12-544	16mm	1-1/4"	1/2"	2-3/4"

* Solid Carbide

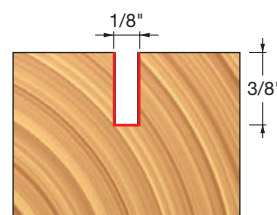
**New bit for use with Porter-Cable® Dovetail Jig #4212



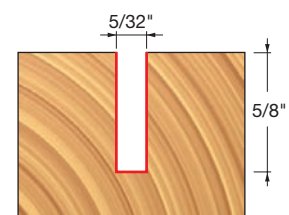
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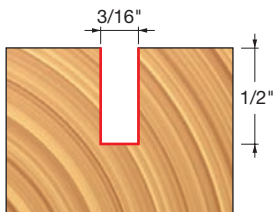
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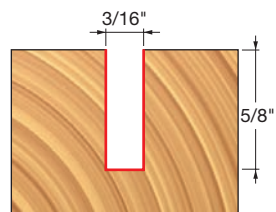
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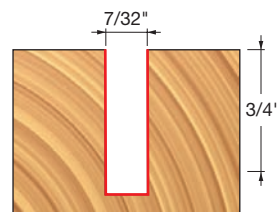
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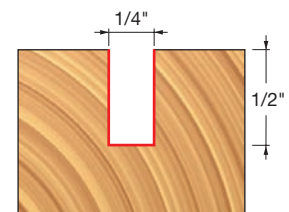
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04-103



04-111



04-104

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



Straight, Spiral & Trim Bits



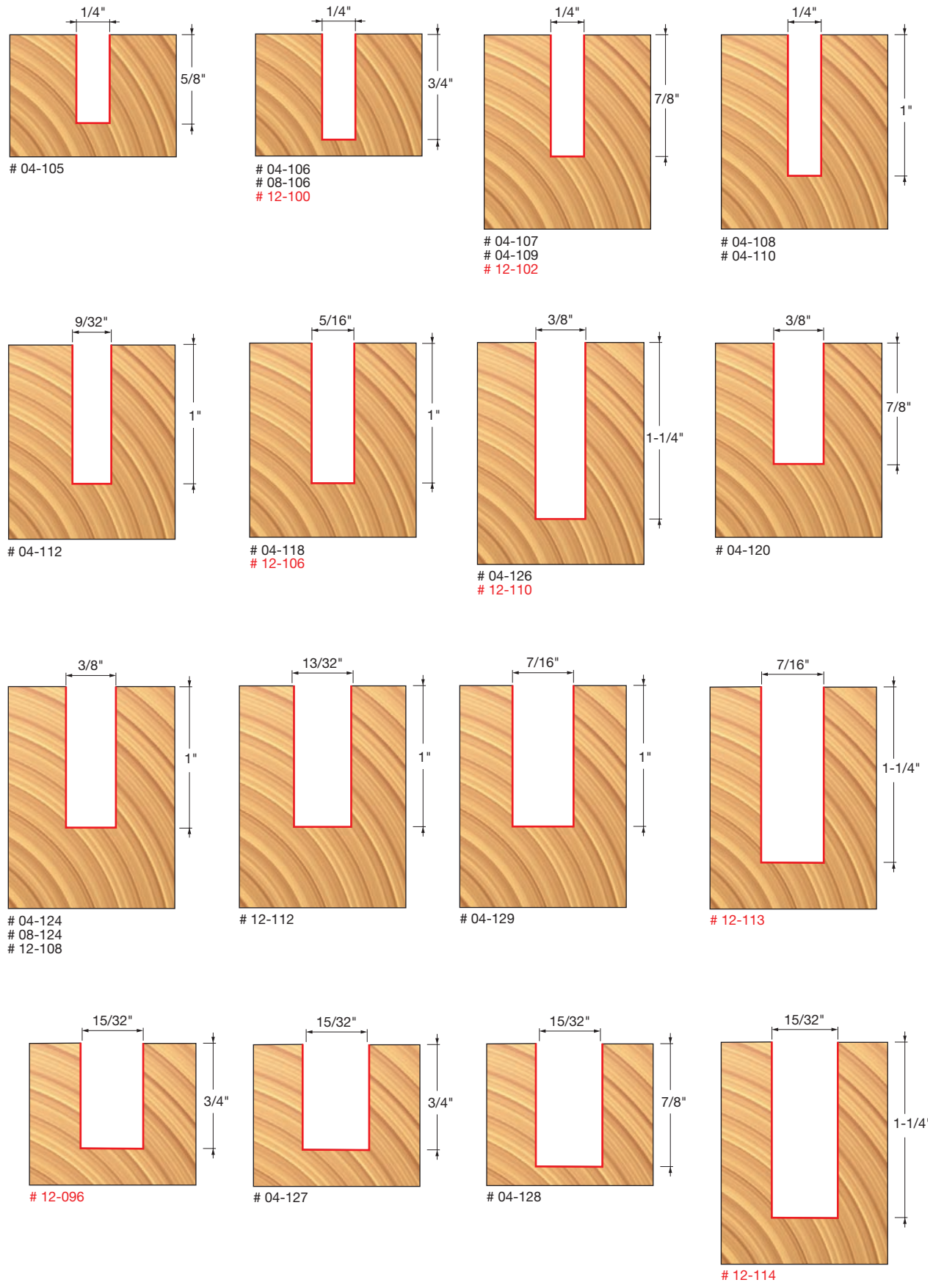
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ROUTER BITS & SETS

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(Continued) Double Flute Straight Bits



(Continued)

Double Flute Straight Bits

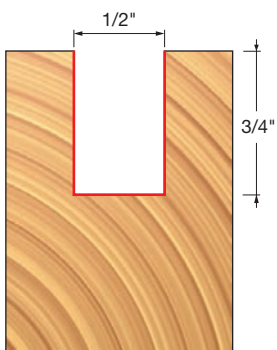


Straight, Spiral & Trim Bits

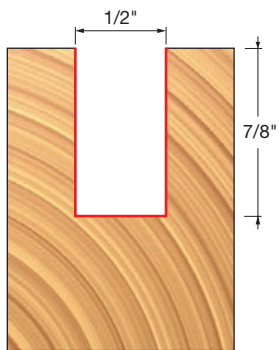


ROUTER BITS & SETS

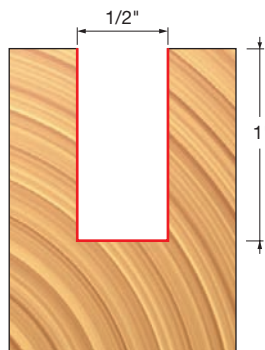
freud®



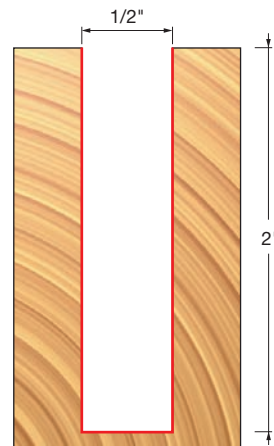
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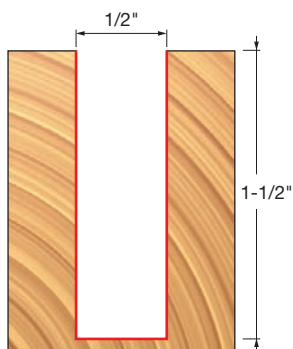
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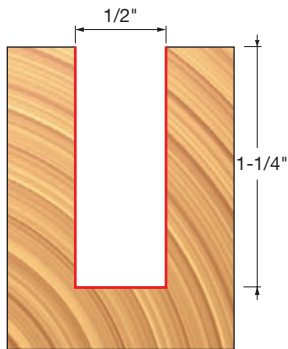
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08-132
12-116



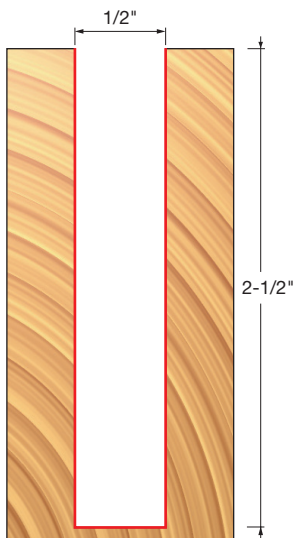
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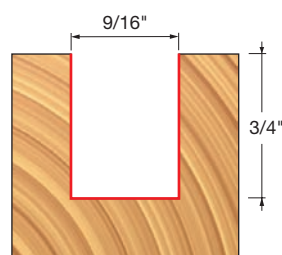
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12-124



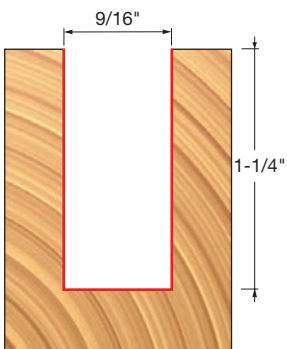
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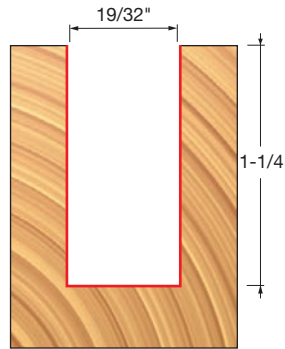
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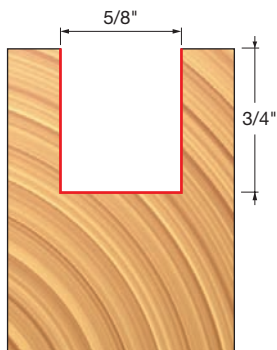
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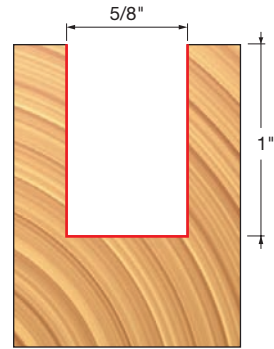
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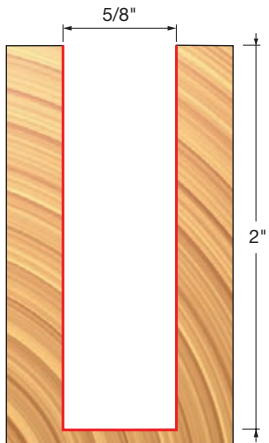
12-135



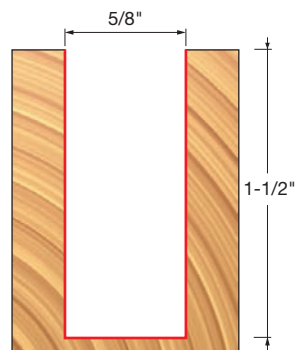
04-136



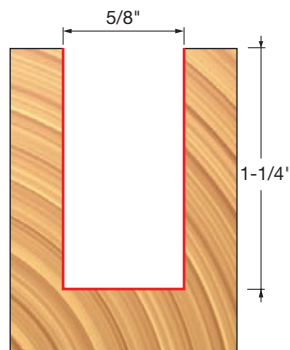
08-136
12-136



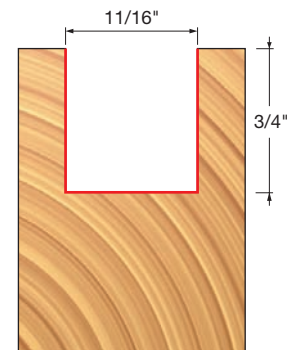
12-142



12-140



04-137
12-138



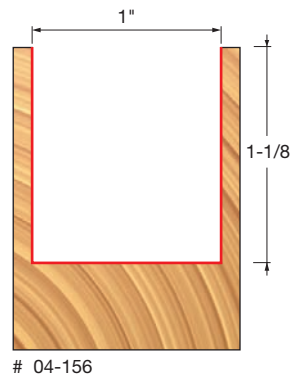
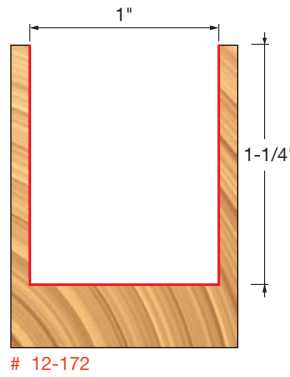
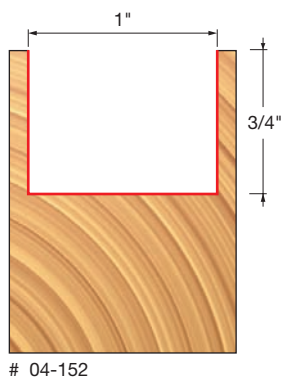
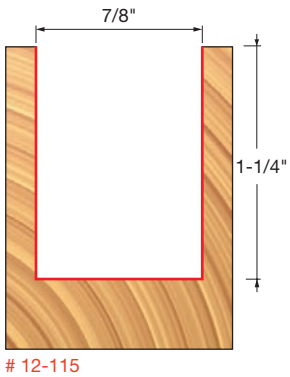
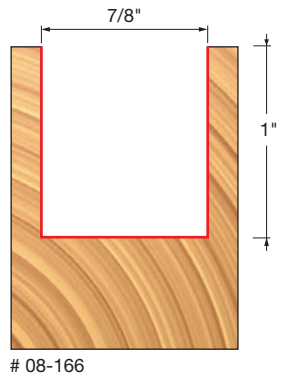
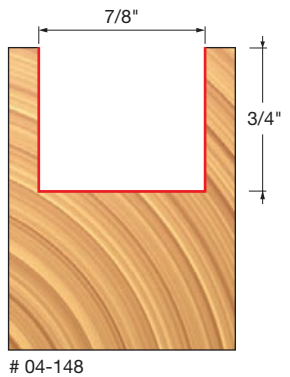
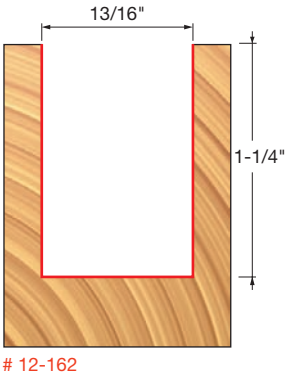
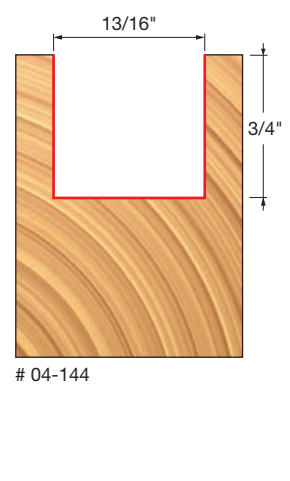
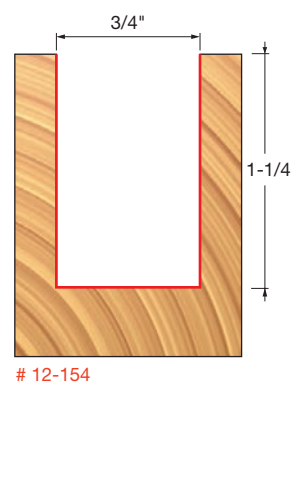
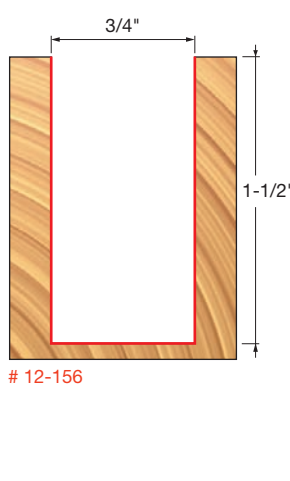
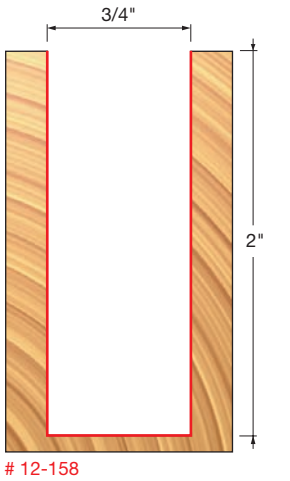
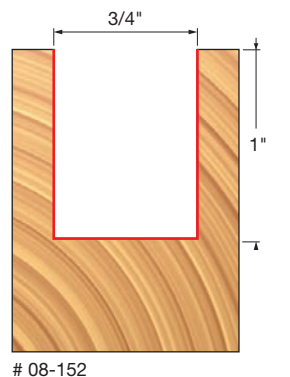
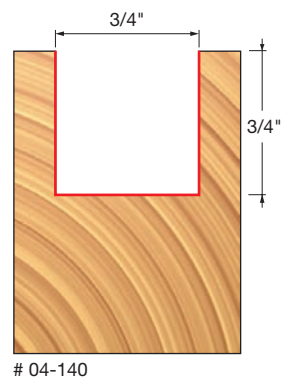
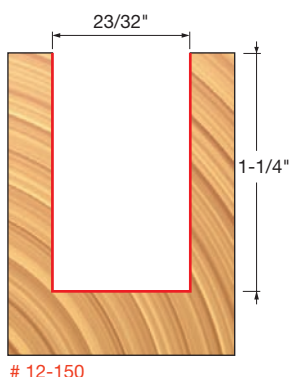
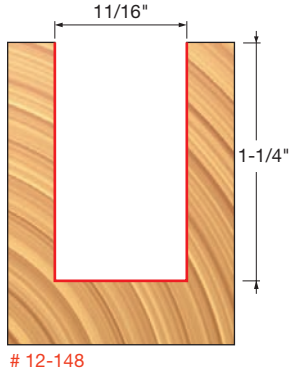
04-138

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



(Continued) Double Flute Straight Bits



(Continued)

Double Flute Straight Bits



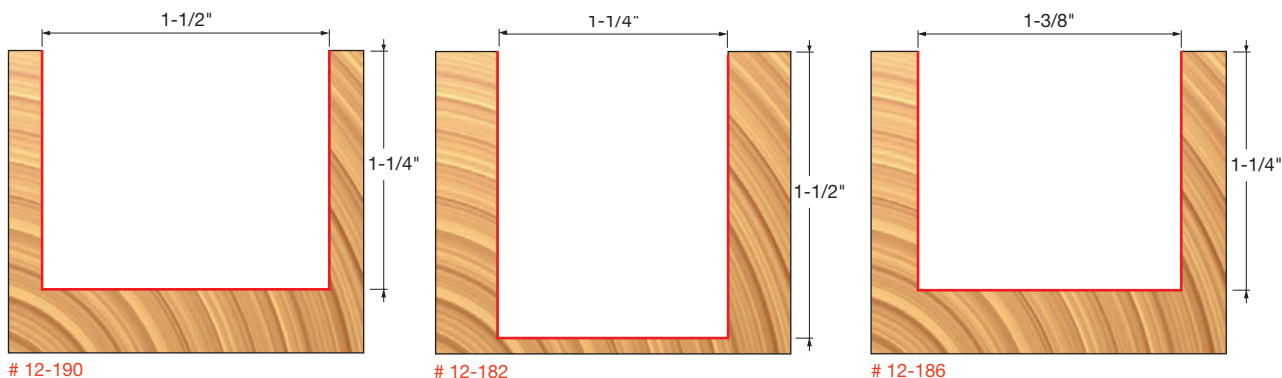
Straight, Spiral & Trim Bits



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ROUTER BITS & SETS

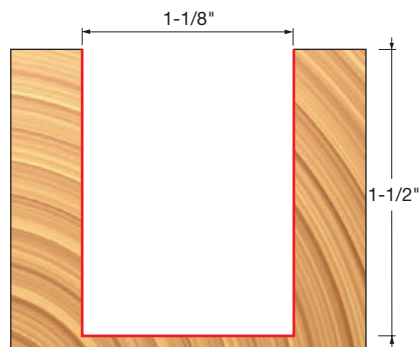
freud®



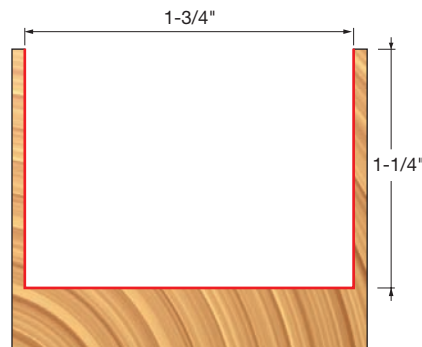
12-190

12-182

12-186

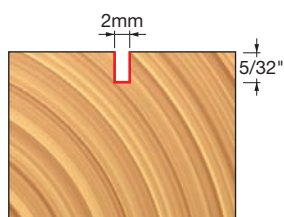


12-178

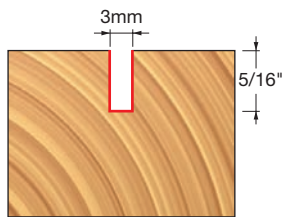


12-194

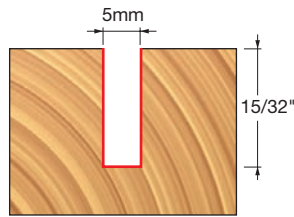
(Metric)



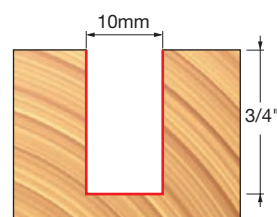
04-502 metric



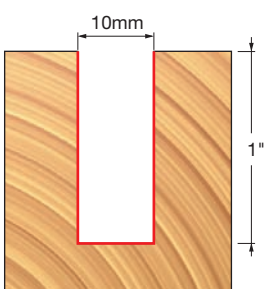
04-508 metric



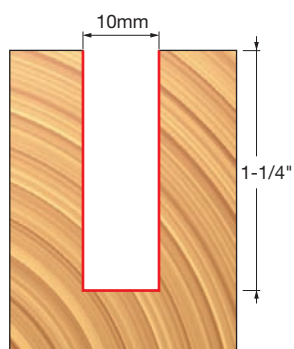
04-512 metric



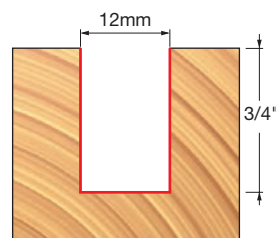
04-516 metric



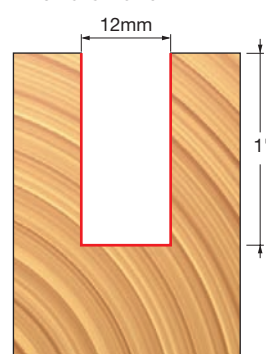
12-518 metric



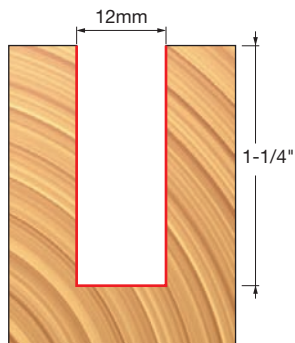
04-520 metric
12-520 metric



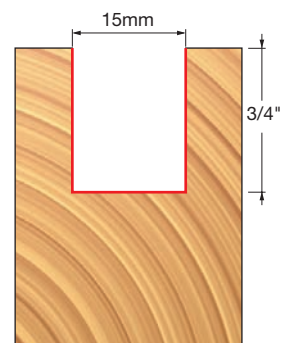
04-524 metric



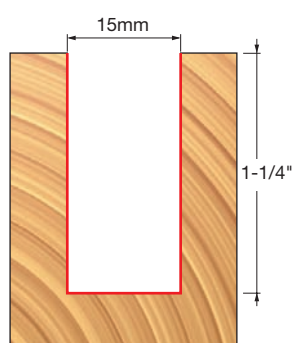
12-526 metric



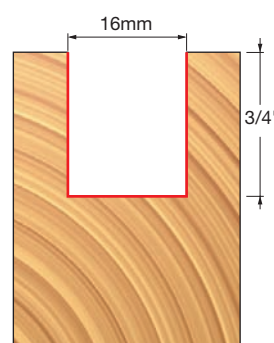
04-528 metric
12-530 metric



04-532 metric



04-536 metric



04-540 metric

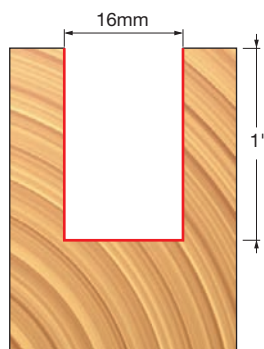
Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale

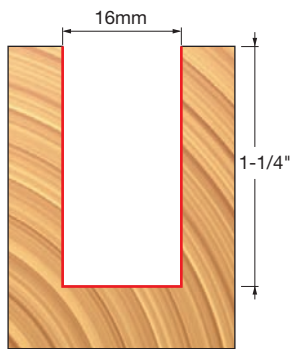
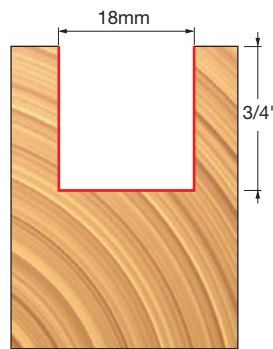


(Continued)

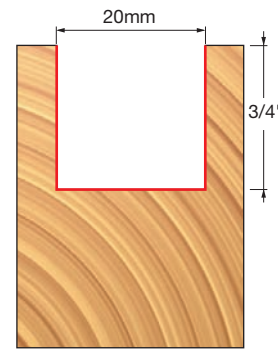
Double Flute Straight Bits



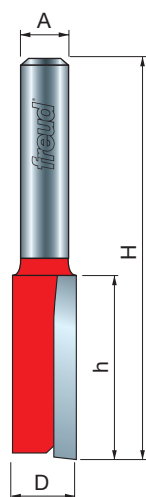
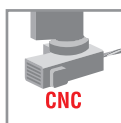
12-542 metric

# 04-544 metric
12-544 metric

04-548 metric



04-552 metric



Single Flute



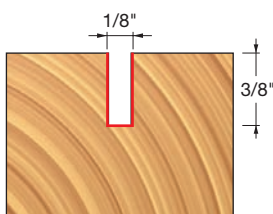
Single Flute Straight Bits

Application: General stock removal at fast feed rates

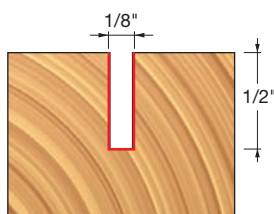
- This single flute Freud bit was designed for high production work with maximum chip clearance for fast feed rates.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
03-112*	1/8"	3/8"	1/4"	1-1/2"
03-116*	1/8"	1/2"	1/4"	2"
03-120*	1/8"	5/8"	1/4"	2"
03-124*	3/16"	3/8"	1/4"	1-1/2"
03-128*	3/16"	1/2"	1/4"	2"
03-132*	1/4"	1/2"	1/4"	2"
03-136*	1/4"	3/4"	1/4"	2-1/2"
03-140*	1/4"	1-1/2"	1/4"	2-1/2"
03-144*	1/4"	1"	1/4"	3"
03-148	5/16"	3/4"	1/4"	2-1/2"
03-152	5/16"	1"	1/4"	2-1/2"
03-156	3/8"	1-1/4"	1/4"	2-7/8"
05-136	1/4"	3/4"	3/8"	2-3/4"
05-160	3/8"	1-1/4"	3/8"	2-7/8"
05-164	1/2"	1"	3/8"	2-1/2"
11-136	1/4"	1/2"	1/2"	2-1/2"
11-152	5/16"	1"	1/2"	2-7/8"
11-158	3/8"	1"	1/2"	3"
11-160	3/8"	1-1/4"	1/2"	3"
11-164	1/2"	1"	1/2"	2-7/16"
11-168	1/2"	1-1/4"	1/2"	2-7/8"
11-172	1/2"	1-1/2"	1/2"	3-1/8"
11-176	1/2"	2"	1/2"	4-1/8"
11-180	1/2"	2-1/2"	1/2"	4-3/8"
11-184	9/16"	1-1/4"	1/2"	2-1/2"
11-188	5/8"	1-1/4"	1/2"	2-1/2"

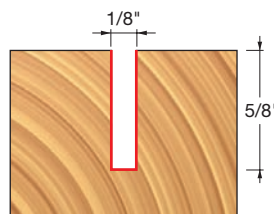
* Solid Carbide



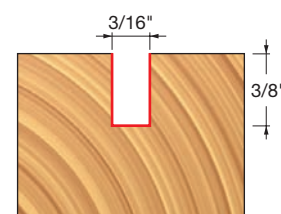
03-112



03-116



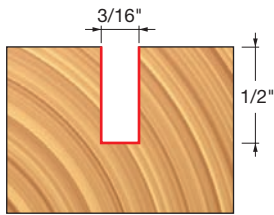
03-120



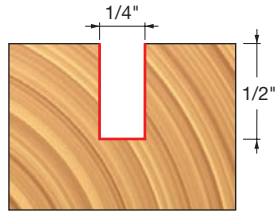
03-124

(Continued)

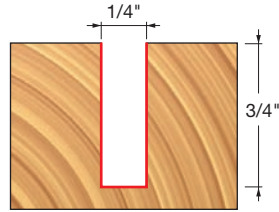
Single Flute Straight Bits



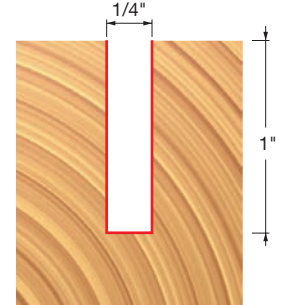
03-128



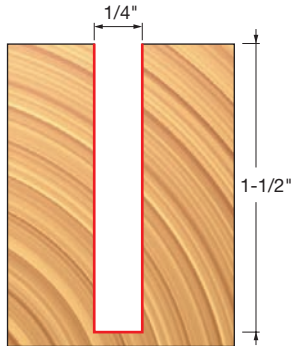
03-132



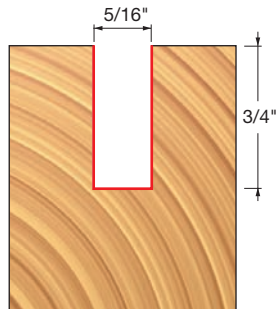
03-136
05-136
11-136



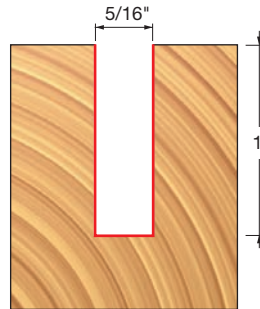
03-144



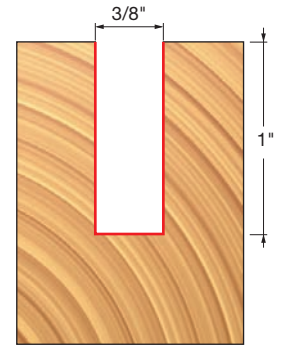
03-140



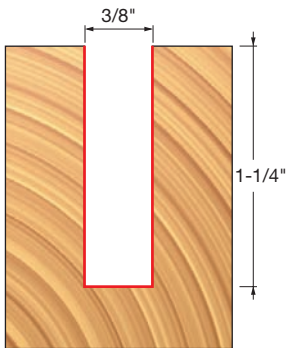
03-148



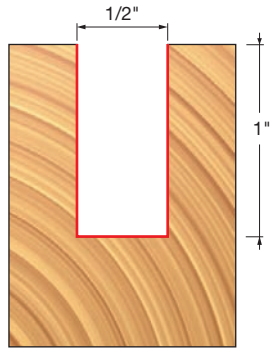
03-152
11-152



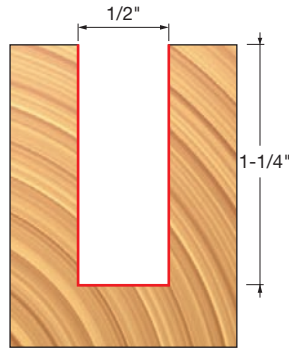
11-158



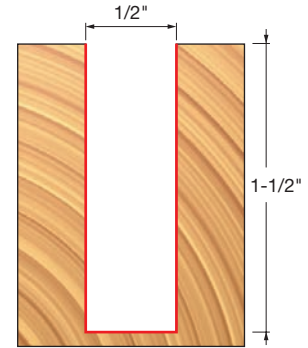
03-156
05-160
11-160



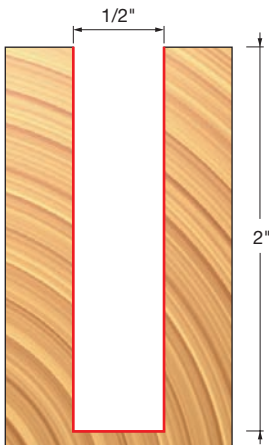
05-164
11-164



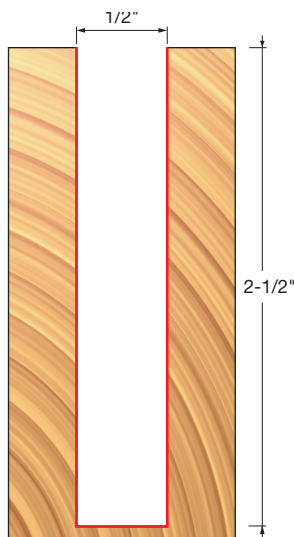
11-168



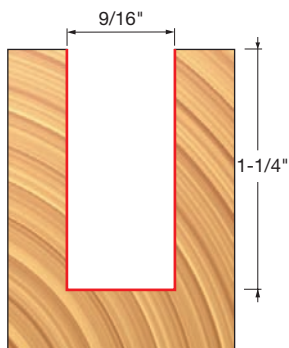
11-172



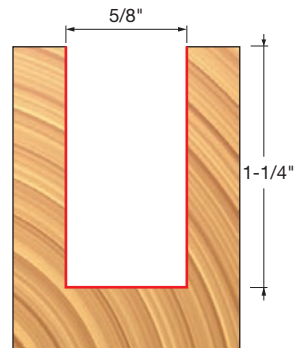
11-176



11-180



11-184



11-188

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



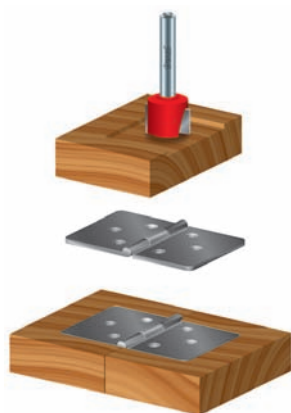
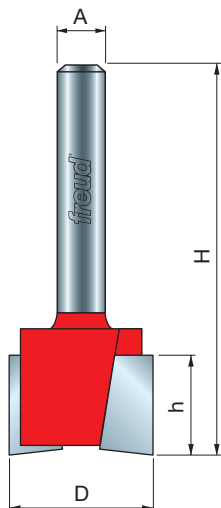
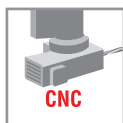
Straight, Spiral & Trim Bits



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ROUTER BITS & SETS

freud®



Mortising Bits

Application: Down shear works to eliminate splintering ideal for hinges, mortises, and dadoses

- Freud's Mortising Bits are designed with deep center gullets for maximum material removal without chip loading.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

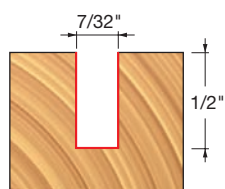
Item Number	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
16-096	11/32"	1/2"	1/4"	2"
16-098	15/32"	1/2"	1/4"	2"
16-100	1/2"	1/2"	1/4"	2"
16-102	5/8"	1/2"	1/4"	2"
16-103	23/32"	1/2"	1/4"	1-3/4"
16-104	3/4"	1/2"	1/4"	2"
16-106	1-1/4"	29/64"	1/4"	2-1/8"
NEW 16-094**	7/32"	1/2"	1/2"	2-1/4"
NEW 16-107**	11/32"	1/2"	1/2"	2-1/4"
16-108	1-1/4"	1/2"	1/2"	2-3/8"
NEW 16-109**	15/32"	1/2"	1/2"	2-1/4"
16-110	1/2"	1/2"	1/2"	2-3/8"
16-116**	23/32"	3/8"	1/2"	2-1/8"
16-118	3/4"	3/8"	1/2"	2-1/8"
16-122	1"	3/8"	1/2"	2-9/32"
16-128	1-1/2"	5/8"	1/2"	2-17/32"

Top Bearing Mortising-Dado Bits

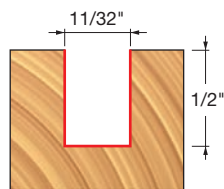
16-500	1/2"	3/4"	1/4"	2-7/16"
16-502	5/8"	3/4"	1/4"	2-7/16"
16-504	3/4"	3/4"	1/4"	2-7/16"
16-510	3/4"	3/8"	1/4"	2-3/32"
NEW 16-560*	1/2"	5/16"	1/4"	2-7/16"
16-520	3/4"	3/8"	1/2"	2-3/32"
16-522	1-1/4"	15/64"	1/2"	2"
16-523	1-1/4"	1/2"	1/2"	2-1/4"
16-524	1-1/4"	5/8"	1/2"	2-3/8"
16-528	1-1/2"	5/8"	1/2"	2-1/2"

* Overall bearing diameter is 5/8"

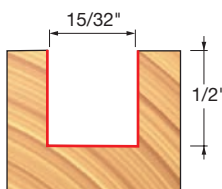
**Downshear bits for routing plywood grooves



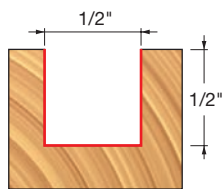
16-094



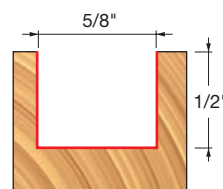
16-096
16-107



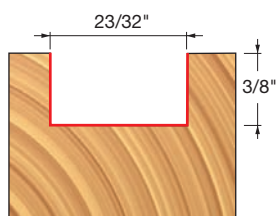
16-098
16-109



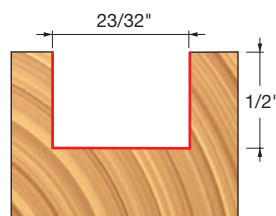
16-100
16-110



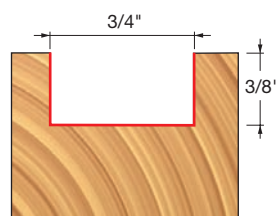
16-102



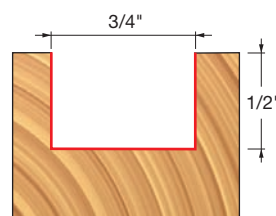
16-116



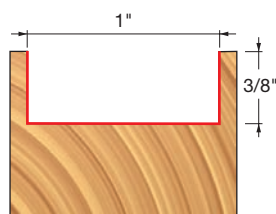
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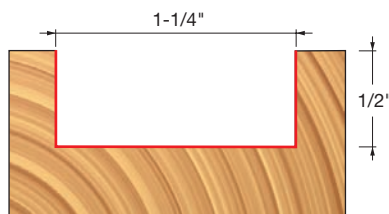
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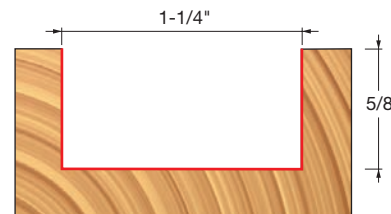
16-104



16-122



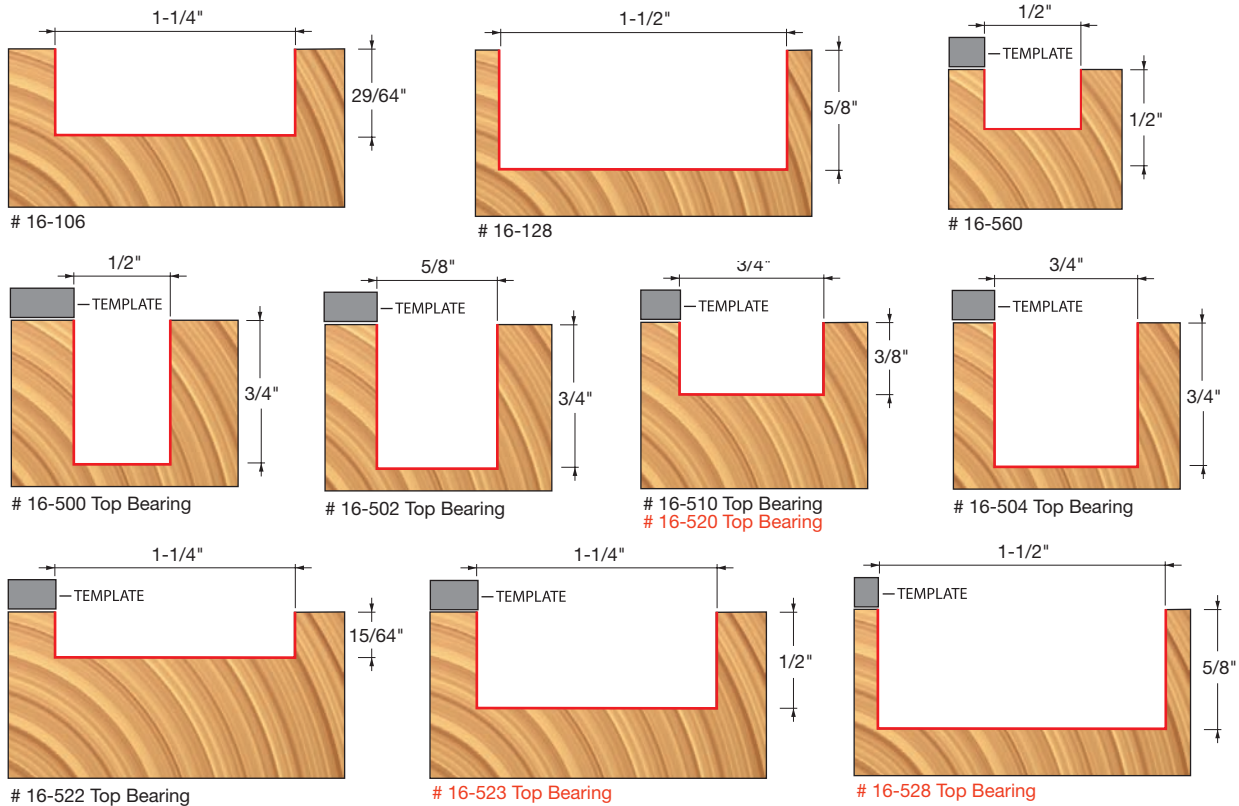
16-108



16-524 Top Bearing

(Continued)

Mortising Bits

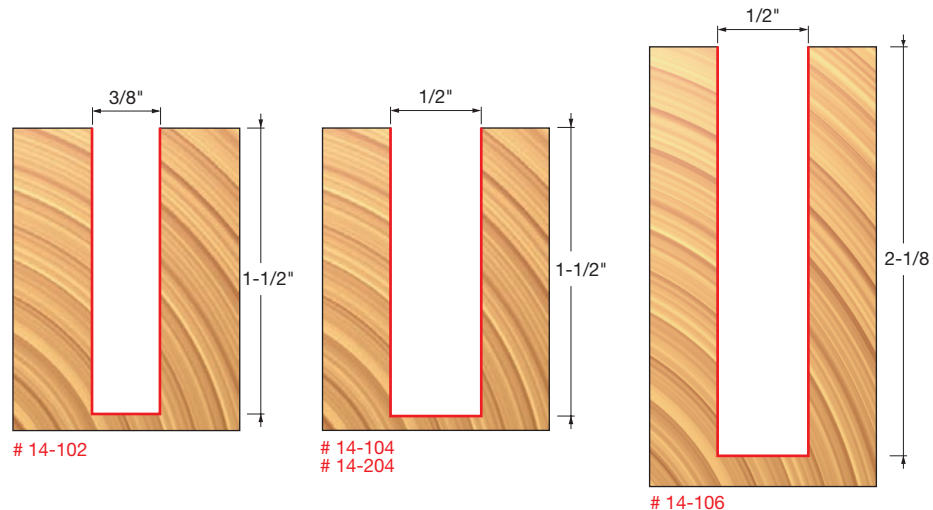
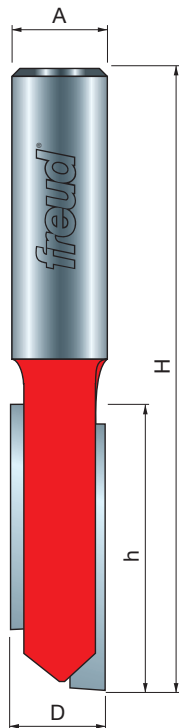


Stagger Bits

Application: Smooth, fast cutting in thick materials

- These bits combine the balance of a double fluted bit with the speed and versatility of a single flute tool.
- #14-204 compression bit has opposing shears for an exceptionally clean edge on both the top and bottom of the cut.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
14-102	3/8"	1-1/2"	1/2"	3-1/4"
14-104	1/2"	1-1/2"	1/2"	3-1/4"
14-106	1/2"	2-1/8"	1/2"	4"
14-204	1/2"	1-1/2"	1/2"	3-3/16"



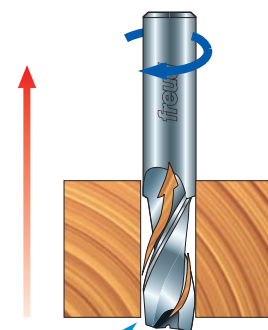
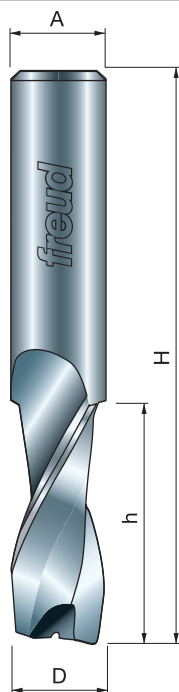
Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale





CNC



Better Finish



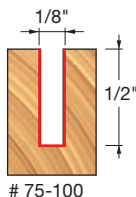
Up Spiral Bits

Application: Cutting mortises and routing deep blind holes

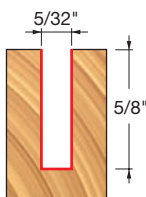
- Freud's solid carbide up spiral bits combine effective chip removal with a cut that can't be matched by standard straight bits. Ideal for production settings.
- Excellent for grooves and dados in all composite materials, plywoods, hardwoods and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
Double Flute				
75-100*	1/8"	1/2"	1/4"	2"
75-101*	3/16"	3/4"	1/4"	2"
75-102*	1/4"	1"	1/4"	2-1/2"
75-103*	1/4"	3/4"	1/4"	2"
75-104*	5/16"	1"	1/2"	3"
NEW 75-105*	3/8"	1-1/8"	3/8"	3"
75-106*	3/8"	1-1/4"	1/2"	3"
75-108*	1/2"	1-1/4"	1/2"	3"
75-109*	1/2"	2"	1/2"	4"
NEW 75-110*	1/2"	1-5/8"	1/2"	3-1/2"
75-202*	5/32"	5/8"	1/4"	2"
Triple Flute				
75-306*	3/8"	1-1/4"	1/2"	3"
75-308*	1/2"	2"	1/2"	4"

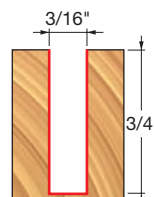
* Solid Carbide



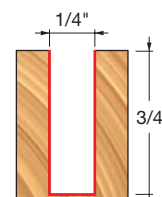
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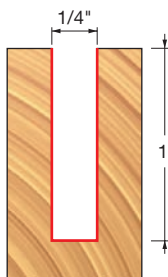
75-202



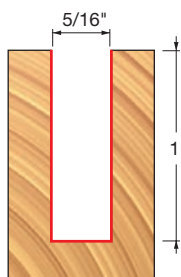
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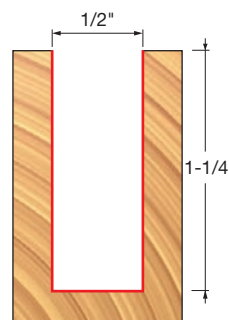
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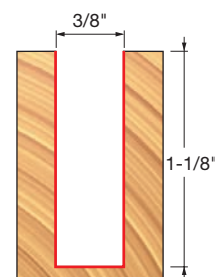
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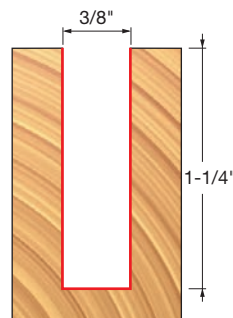
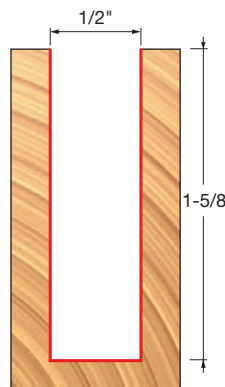
75-104



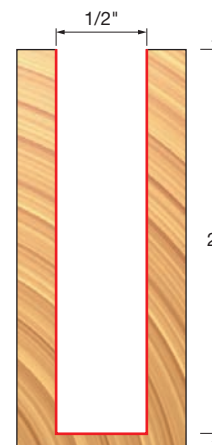
75-108



75-105

# 75-106
75-306

75-110

# 75-109
75-308

All Profile Drawings 1:1 Scale

Red Item Numbers Indicate 1/2" Shank

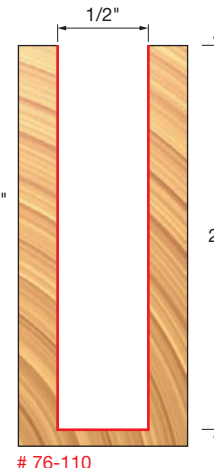
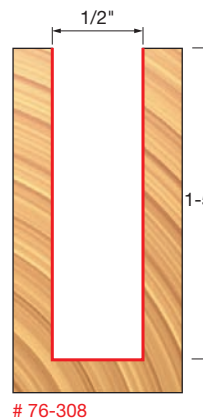
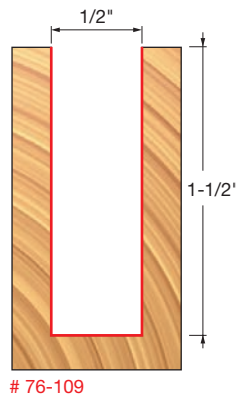
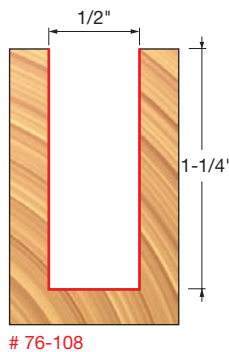
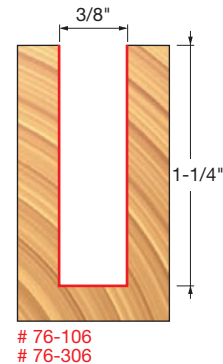
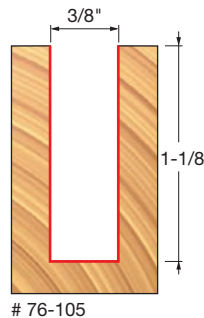
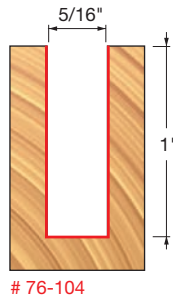
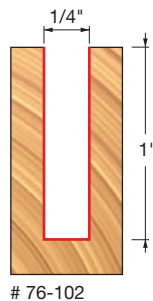
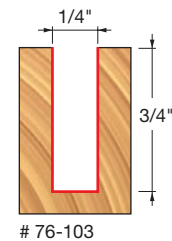
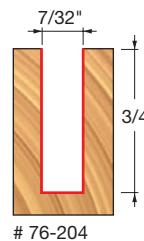
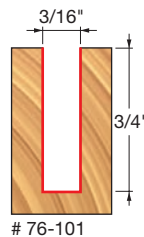
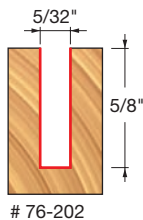
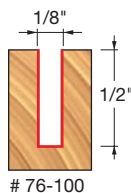
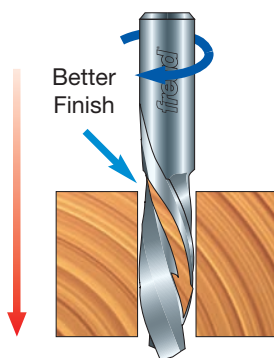
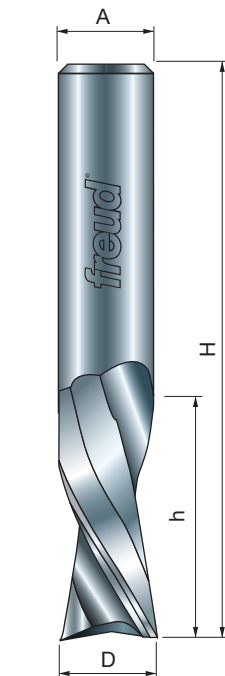
Down Spiral Bits

Application: Grooves and dados in single-sided veneers and laminates

- Freud's solid carbide down spiral bits are ideal for smooth, chip-free routing where chip removal is not a problem.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

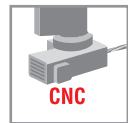
Item Number	Overall Dia.(D)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
Double Flute				
76-100*	1/8"	1/2"	1/4"	2"
76-101*	3/16"	3/4"	1/4"	2"
76-102*	1/4"	1"	1/4"	2-1/2"
76-103*	1/4"	3/4"	1/4"	2"
76-104*	5/16"	1"	1/2"	2-1/2"
NEW 76-105*	3/8"	1-1/8"	3/8"	3"
76-106*	3/8"	1-1/4"	1/2"	3"
76-108*	1/2"	1-1/4"	1/2"	3"
76-109*	1/2"	1-1/2"	1/2"	3-1/2"
76-110*	1/2"	2"	1/2"	4"
76-202*	5/32"	5/8"	1/4"	2"
76-204*	7/32"	3/4"	1/4"	2"
Triple Flute				
76-306*	3/8"	1-1/4"	1/2"	3"
NEW 76-308*	1/2"	1-5/8"	1/2"	4"

* Solid Carbide



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



CNC



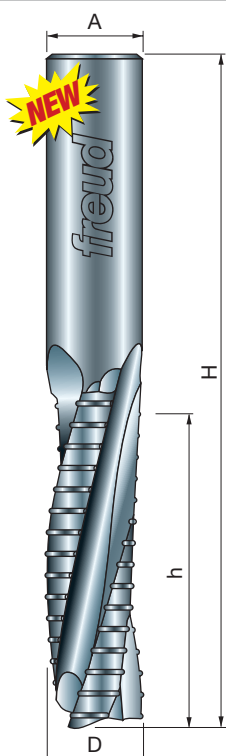
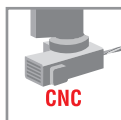
Straight, Spiral & Trim Bits



93

ROUTER BITS & SETS

freud®



Chipbreaker Up Spiral Bits

Application: Fast cuts in hard, dense materials such as composites, hardwood and hardwood plywood

- Chipbreaker edges are ideal for fast cutting applications in hard materials.
- Upcut spirals provide smooth finish on bottom surface, and pull chips out of the kerf.
- Routs melamine and veneer as well as solid hardwoods and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
Double Flute				
NEW 75-510*	1/2"	1-5/8"	1/2"	3-1/2"
Triple Flute				
NEW 75-608*	1/2"	1-1/8"	1/2"	3"
NEW 75-610*	1/2"	1-5/8"	1/2"	3-1/2"

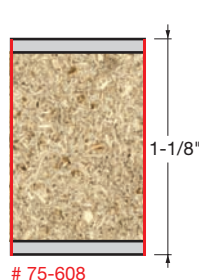
* Solid Carbide



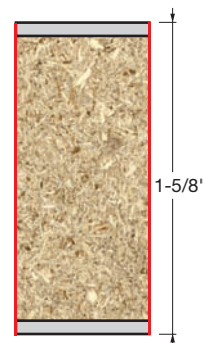
Double Flute



Triple Flute



75-608



75-510
75-610

Chipbreaker Down Spiral Bits

Application: Fast cuts in hard, dense materials such as composites, hardwood and hardwood plywood

- Chipbreaker edges are ideal for fast cutting applications in hard materials.
- Downcut spirals provide smooth finish on the top surface of panels.
- Routs melamine and veneer as well as solid hardwoods and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
Double Flute				
NEW 76-510*	1/2"	1-5/8"	1/2"	3-1/2"
Triple Flute				
NEW 76-608*	1/2"	1-1/8"	1/2"	3"
NEW 76-610*	1/2"	1-5/8"	1/2"	3-1/2"

* Solid Carbide



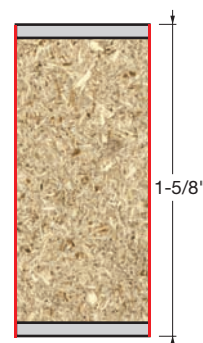
Double Flute



Triple Flute



76-608



76-510
76-610



Chipbreaker Double Compression Spirals

Application: Fast cuts in hard, dense materials such as composites, hardwood and hardwood plywood

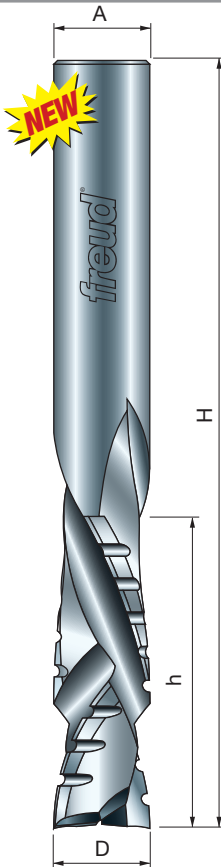
- Chipbreaker edges are ideal for fast cutting applications in hard materials.
- Combination of up and down shear flutes eliminates chipping on both sides of double sided panels.
- Routs melamine and veneer as well as solid hardwoods and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
NEW 77-610*	1/2"	1-5/8"	1/2"	4"

* Solid Carbide



CNC



77-610

O-Flute Up Spiral Bits

Application: Smooth finish on solid surface and plastics such as ABS, UHMW, acrylic, nylon and polycarbonate

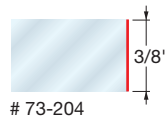
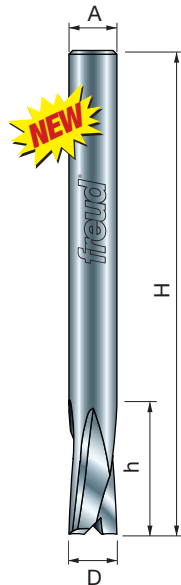
- O-Flute design delivers cooler cuts in plastic to avoid melting.
- Upcut spiral clears chips fast and provides perfect bottom surface.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
NEW 73-204*	1/4"	3/8"	1/4"	2-1/2"
NEW 73-206*	1/4"	3/4"	1/4"	2-1/2"
NEW 73-210*	3/8"	1"	3/8"	3"
NEW 73-214*	1/2"	1-1/8"	1/2"	3-1/2"

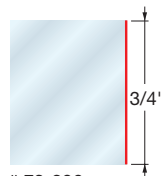
* Solid Carbide



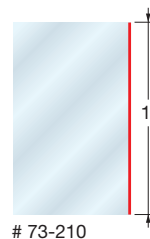
CNC



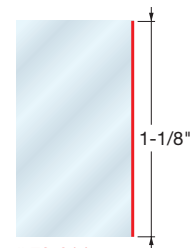
73-204



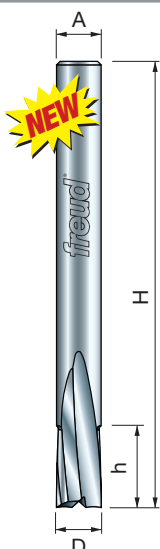
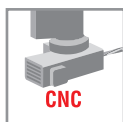
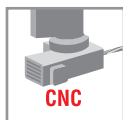
73-206



73-210



73-214



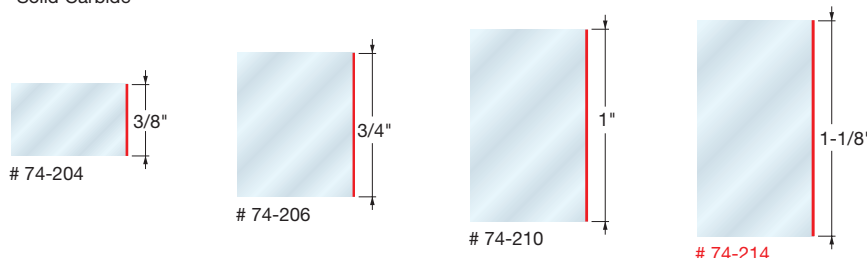
O-Flute Down Spiral Bits

Application: Smooth finish on solid surface and plastics such as ABS, UHMW, acrylic, nylon and polycarbonate

- O-Flute design delivers cooler cuts in plastic to avoid melting.
- Downcut spiral provides perfect top surface.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

	Item Number	Overall Dia.(D)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
NEW	74-204*	1/4"	3/8"	1/4"	2-1/2"
NEW	74-206*	1/4"	3/4"	1/4"	2-1/2"
NEW	74-210*	3/8"	1"	3/8"	3"
NEW	74-214*	1/2"	1-1/8"	1/2"	3-1/2"

* Solid Carbide



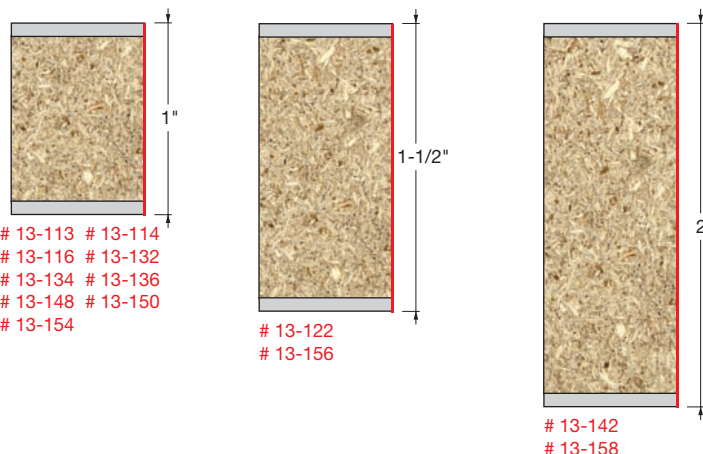
Super Hook Straight Bits (CNC-Only)

Application: Extra fine finish and remarkable life in melamine and other composites as well as plywood, hardwood and softwood

- Up to 4 times the life* of conventional straight bits in melamine and other abrasive composites.
- Beautiful finish on laminated surfaces.
- Unique geometry delivers the best life and finish.
- For use in CNC routers only!

	Item Number	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
NEW	13-113	7/16"	1"	1/2"	2-3/4"
NEW	13-114	15/32"	1"	1/2"	2-3/4"
NEW	13-116	1/2"	1"	1/2"	2-3/4"
NEW	13-122	1/2"	1-1/2"	1/2"	3"
NEW	13-128	1/2"	2"	1/2"	3-3/4"
NEW	13-132	17/32"	1"	1/2"	2-3/4"
NEW	13-134	9/16"	1"	1/2"	2-3/4"
NEW	13-136	5/8"	1"	1/2"	2-3/4"
NEW	13-142	5/8"	2"	1/2"	3-3/4"
NEW	13-148	11/16"	1"	1/2"	2-3/4"
NEW	13-150	23/32"	1"	1/2"	2-3/4"
NEW	13-154	3/4"	1"	1/2"	2-3/4"
NEW	13-156	3/4"	1-1/2"	1/2"	3"
NEW	13-158	3/4"	2"	1/2"	3-3/4"

* Measured using a CNC router in controlled comparison of cuts in melamine.



All Profile Drawings 1:1 Scale

Red Item Numbers Indicate 1/2" Shank

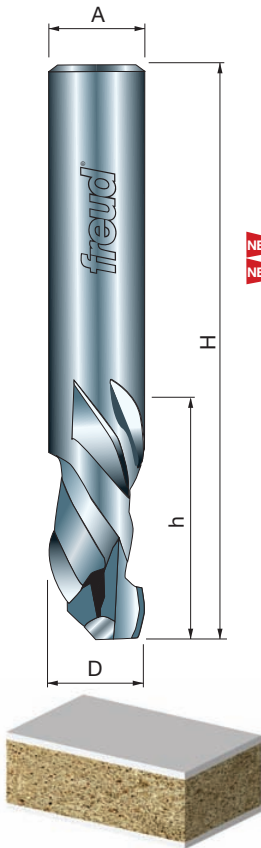
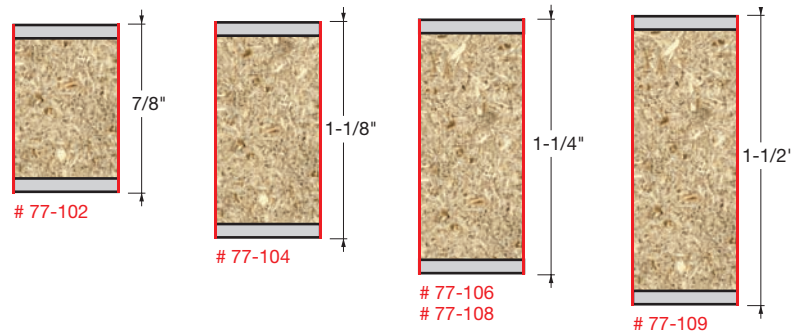
Single Compression Bit

Application: Fast, chip-free routing in 2-sided veneers and laminates

- Combination of up and down shear flutes eliminate chipping on both sides of double-sided veneers or laminated materials.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
NEW 77-102*	1/4"	7/8"	1/4"	2-1/2"
NEW 77-104*	3/8"	1-1/8"	3/8"	3"
77-106*	3/8"	1-1/4"	1/2"	3"
77-108*	1/2"	1-1/4"	1/2"	3"
77-109*	1/2"	1-1/2"	1/2"	3-1/2"

* Solid Carbide



CNC

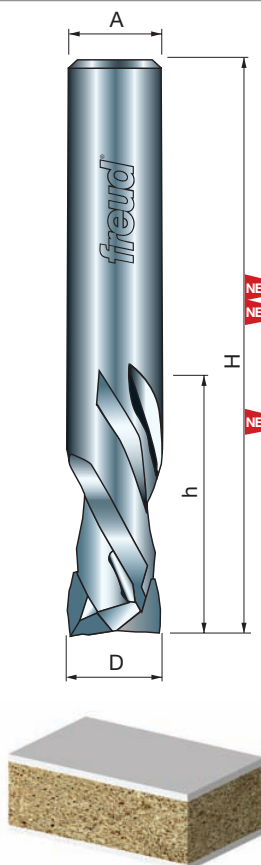
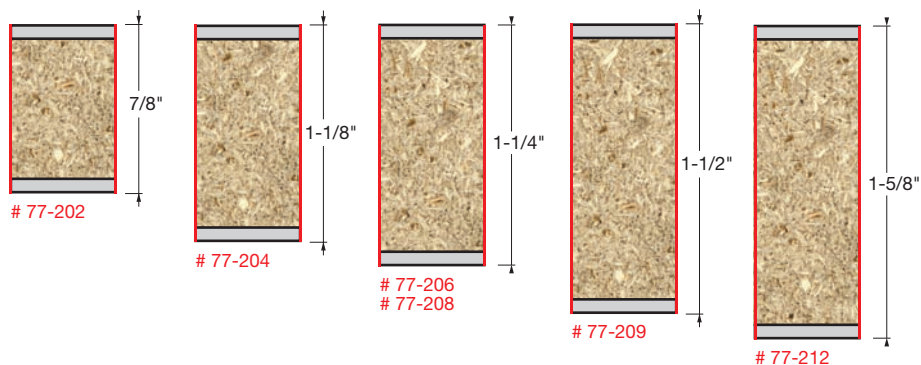
Double Compression Bits

Application: Fine finish, chip-free routing in double-sided veneers and laminates

- Combination of up and down shear flutes eliminate chipping on both sides of double-sided veneers or laminated materials for a fine finish.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
NEW 77-202*	1/4"	7/8"	1/4"	2-1/2"
NEW 77-204*	3/8"	1-1/8"	3/8"	3"
77-206*	3/8"	1-1/4"	1/2"	3"
77-208*	1/2"	1-1/4"	1/2"	3"
77-209*	1/2"	1-1/2"	1/2"	3-1/2"
NEW 77-212*	1/2"	1-5/8"	1/2"	4"

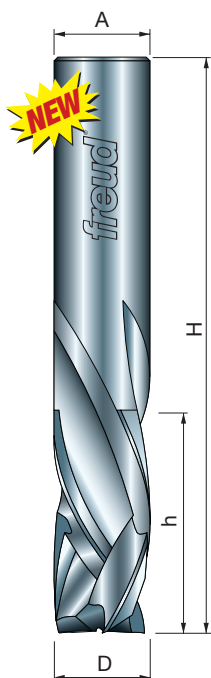
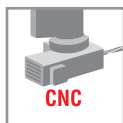
* Solid Carbide



CNC

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale

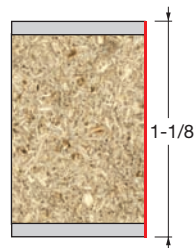


Triple Compression Bit

Application: Ultra fine finish and fast cuts in double sided veneers, laminates and solid hardwood and softwood

- Perfect finish on both top and bottom surface of panels.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.
- When used in a CNC, the triple flute design allows very fast feed rates and high RPM.

Item Number	Overall Dia.(D)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
NEW 77-308*	1/2"	1-1/8"	1/2"	3"
* Solid Carbide				



77-308

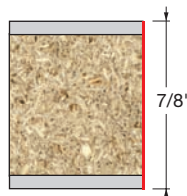
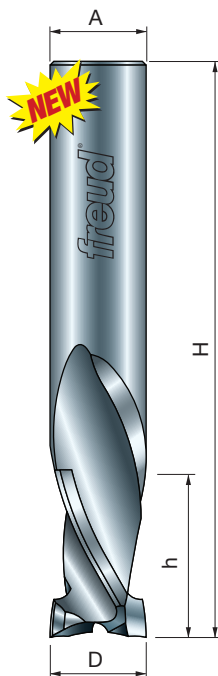
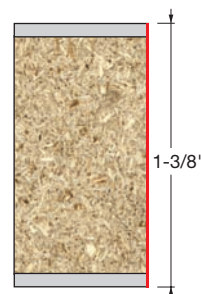
Mortise Compression Spiral Bits

Application: Mortises or grooves with a perfect top surface, or through-cuts in thin double sided veneers and laminates

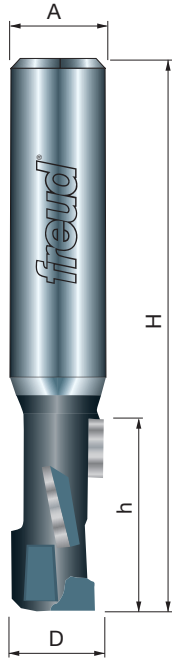
- Shorter up shear length allows bit to be used for grooves and mortises without chipping top surface.
- Also ideal for through cuts in double sided sheets that are 5/8" thick or less.
- Combination of up and down shear flutes eliminates chipping on both sides of double sided panels.
- Routs melamine, veneer plywood and other double sided materials, as well as hardwoods and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.
- Double flute spirals are for extra clean cuts at faster feed rates.

Item Number	Overall Dia.(D)	Carbide Height(h)	Upcut Length	Shank Dia.(A)	Overall Length(H)
Single Flute					
NEW 77-408*	1/2"	7/8"	13/64"	1/2"	3"
NEW 77-410*	1/2"	1-3/8"	13/64"	1/2"	3-1/2"
Double Flute					
NEW 77-508*	1/2"	7/8"	13/64"	1/2"	3"
NEW 77-510*	1/2"	1-3/8"	13/64"	1/2"	3-1/2"

* Solid Carbide

# 77-408
77-508# 77-410
77-510

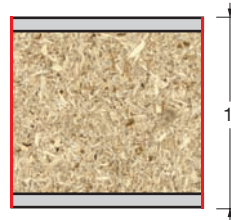
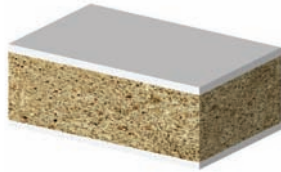
Diamond Compression Bits



Application: Fast, chip-free cutting in double-sided laminates

- Diamond-impregnated tips provide extreme durability and multiple up shear and down shear wings offer fast, chip-free cutting in manmade materials.
- Ideal for manmade, abrasive materials such as MDF and particleboard as well as composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

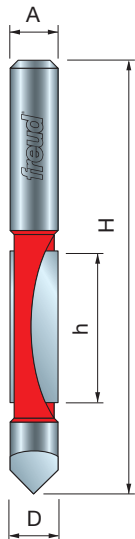
Item Number	Overall Dia.(D)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
78-116	1/2"	1"	1/2"	2-7/8"
78-136	5/8"	1"	1/2"	2-7/8"



78-116
78-136



Panel Pilot Bits

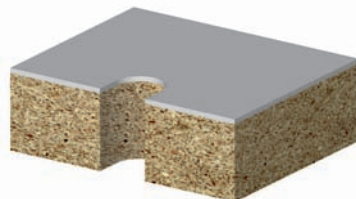


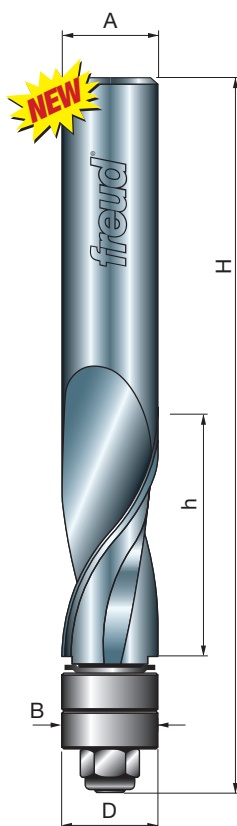
Application: Template work & cutting openings in paneling, siding, etc.

- Freud's Panel Pilot Bits will outlast high-speed steel bits many times before sharpening. The drill through point allows self-starting, and the pilot acts as a guide for template work.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on portable routers for template work.

Item Number	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Number of Flutes	Overall Length(H)
26-100	1/4"	3/4"	1/4"	1	2-1/4"
26-104	1/2"	1-1/4"	1/2"	1	3-3/4"
28-100	3/8"	1"	1/4"	2	3"
28-104	1/2"	1-1/4"	1/2"	2	3-3/4"
70-100*	1/4"	1/4"	1/4"	1	1-5/8"

* Solid Carbide



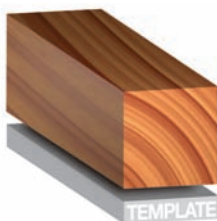


Flush Trim Upcut Spiral Bits

Application: Perfect for any flush trim or pattern application, especially in abrasive materials like melamine or solid surface

- Freud's solid carbide spiral flush trim bits feature a special TiCo™ carbide blend that delivers extremely long life in wood or abrasive materials.
- Upcut spiral design clears chips fast.
- Continuous spiral cutting action produces a super-smooth cut.
- Use in hand-held or table-mounted routers.

Item Number	Overall Dia.(D)	Bearing Dia. (B)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
NEW 75-508	1/2"	1/2"	1-1/4"	1/2"	3-3/4"
NEW 75-509	1/2"	1/2"	2"	1/2"	4-3/4"

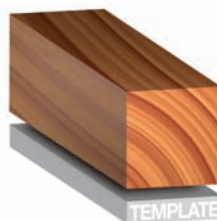
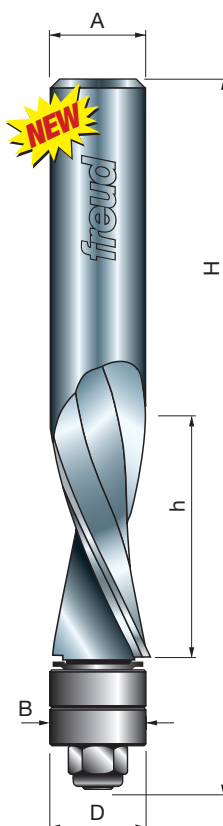


Flush Trim Downcut Spiral Bits

Application: Perfect for any flush trim or pattern application, especially in abrasive materials like melamine or solid surface

- Downcut spiral design produces an extra-clean top edge on delicate surfaces.
- Freud's solid carbide spiral flush trim bits feature a special TiCo™ carbide blend that delivers extremely long life in wood or abrasive materials.
- Continuous spiral cutting action produces a super-smooth cut.
- Use in hand-held or table mounted routers

Item Number	Overall Dia.(D)	Bearing Dia. (B)	Cutting Length(h)	Shank Dia.(A)	Overall Length(H)
NEW 76-508	1/2"	1/2"	1-1/4"	1/2"	3-3/4"
NEW 76-509	1/2"	1/2"	2"	1/2"	4-3/4"





Downshear Helix Flush Trim Bits

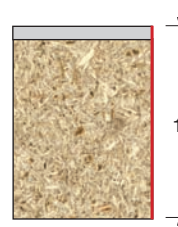
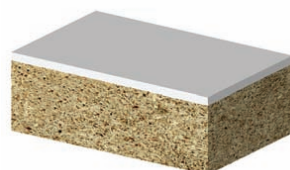
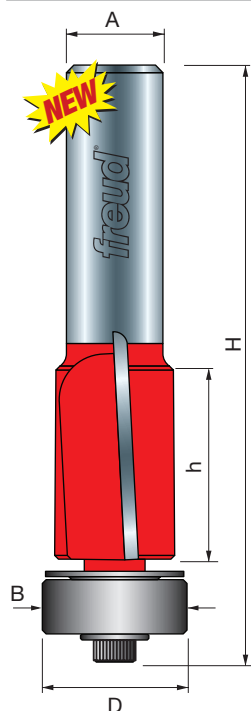


Application: Trimming laminate counter tops and doing pattern work

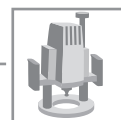
- Downshear cutting angle produces a slicing action for chip-free, splinter-free cuts on the top surface of laminates and veneers.
- The shear action also delivers easier, smooth cuts in thick materials.
- The 3/4" diameter body and full 1" or 2" cutting length provide the stability and cutting capacity for thick stock or for routing multiple parts with a template.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on portable or table-mounted routers for template work.

	Item Number	Overall Dia.(D)	Bearing Dia. (B)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
NEW	42-202	3/4"	3/4"	1"	1/2"	3-1/8"
NEW	*42-310	3/4"	3/4"	1"	1/2"	3"
NEW	42-204	3/4"	3/4"	2"	1/2"	4-1/8"

*Includes new flush bearing design with no protruding screw.



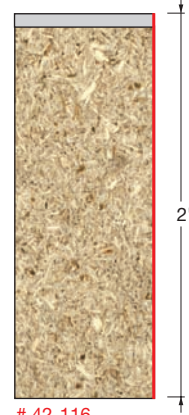
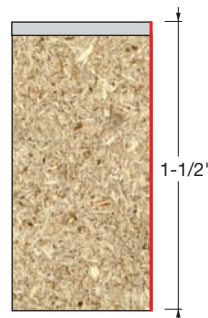
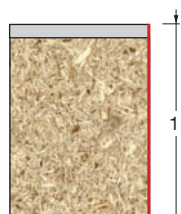
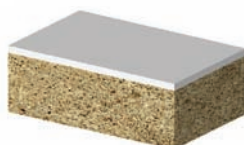
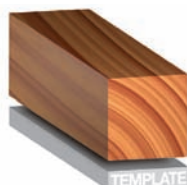
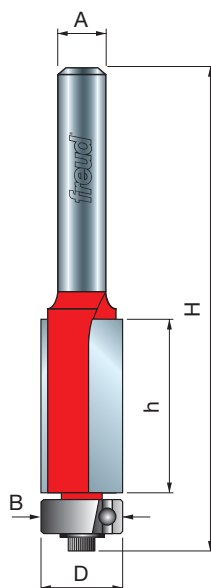
Bearing Flush Trim Bits



Application: Trimming laminate counter tops and doing pattern work

- These are the bits to rely on for a smooth, burn-free cut. Two flutes provide faster cutting and three flutes yield a superior finish.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on portable or table-mounted routers.

	Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Number of Flutes	Shank Dia.(A)	Overall Length(H)
	42-080	7/8"	7/8"	1"	2	1/4"	3"
	42-090	3/4"	3/4"	1"	2	1/4"	2-15/16"
	42-100	3/8"	3/8"	1"	2	1/4"	2-13/16"
	42-102	3/8"	3/8"	1/2"	2	1/4"	2-5/16"
	42-104	1/2"	1/2"	1"	2	1/4"	2-13/16"
	42-106	1/2"	1/2"	1/2"	2	1/4"	2-1/8"
	42-108	1/2"	1/2"	1"	2	3/8"	2-15/16"
	42-109	1/2"	1/2"	1/2"	2	1/2"	2-7/8"
	42-110	1/2"	1/2"	1"	2	1/2"	3-1/4"
	42-114	1/2"	1/2"	1-1/2"	2	1/2"	3-5/8"
	42-116	1/2"	1/2"	2"	2	1/2"	4-3/8"
	42-118	3/4"	3/4"	1"	2	1/2"	3-1/4"
	44-100	1/2"	1/2"	1"	3	1/4"	2-13/16"
	44-102	1/2"	1/2"	1/2"	3	1/4"	2-1/8"
	44-104	1/2"	1/2"	1"	3	1/2"	3-1/4"
	44-108	1/2"	1/2"	1-1/2"	3	1/2"	3-5/8"



Red Item Numbers Indicate 1/2" Shank

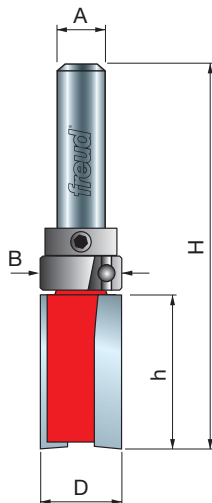
All Profile Drawings 1:1 Scale



Top Bearing Flush Trim Bits

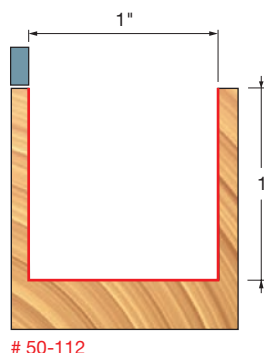
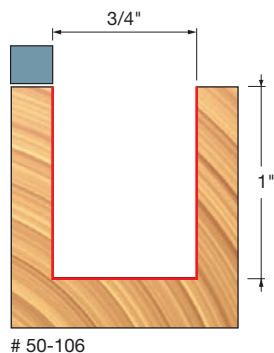
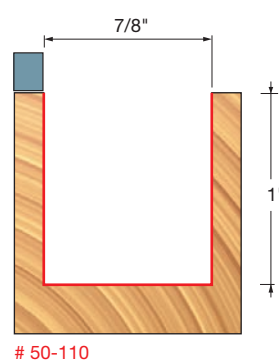
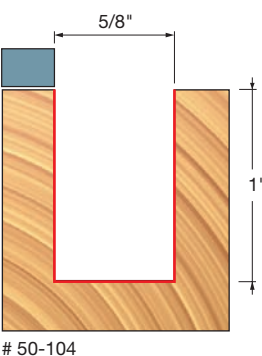
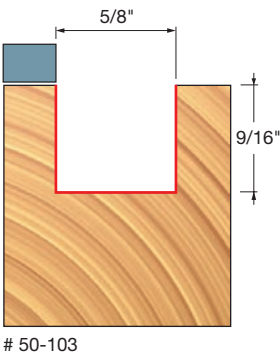
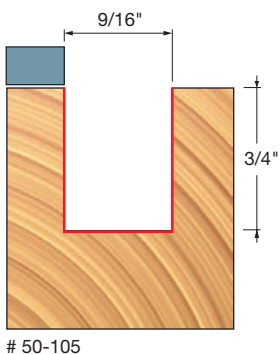
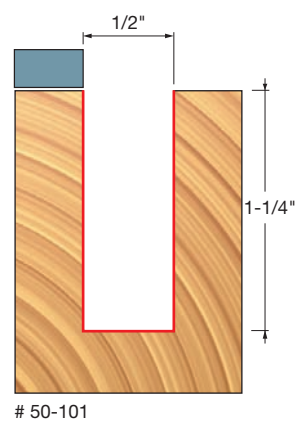
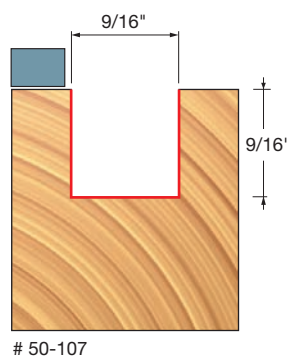
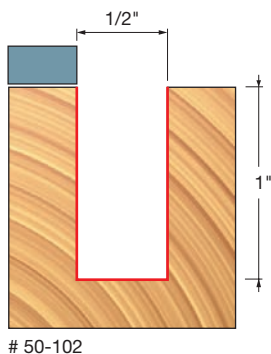
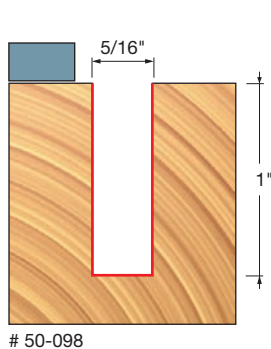
Application: Template work and lettering

- The top mounted bearings on these bits make them ideal for lettering and other template work where the work piece is being grooved or routed out.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



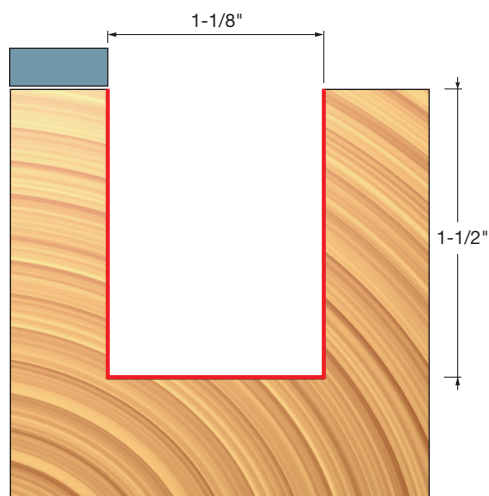
Item Number	Overall Dia.(D)	Bearing Dia. (B)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
50-098*	5/16"	1/2"	1"	1/4"	2-23/32"
50-101	1/2"	1/2"	1-1/4"	1/4"	2-1/2"
50-102	1/2"	1/2"	1"	1/4"	2-5/8"
50-103	5/8"	5/8"	9/16"	1/4"	2-1/4"
50-104	5/8"	5/8"	1"	1/4"	2-5/8"
50-105	9/16"	9/16"	3/4"	1/4"	2-5/16"
50-106	3/4"	3/4"	1"	1/4"	2-5/8"
50-107	9/16"	5/8"	9/16"	1/4"	2-5/16"
50-110	7/8"	7/8"	1"	1/2"	2-13/16"
50-112	1"	1"	1"	1/4"	2-3/4"
50-122	1-1/8"	1-1/8"	1-1/2"	1/2"	3-3/8"
50-126	1-1/4"	1-1/4"	1-1/2"	1/2"	3-3/8"
50-130	1-1/2"	1-1/2"	1-3/4"	1/2"	3-3/4"
50-138	2"	2"	2"	1/2"	4"

* This bit has an oversized bearing to work for various jigs.

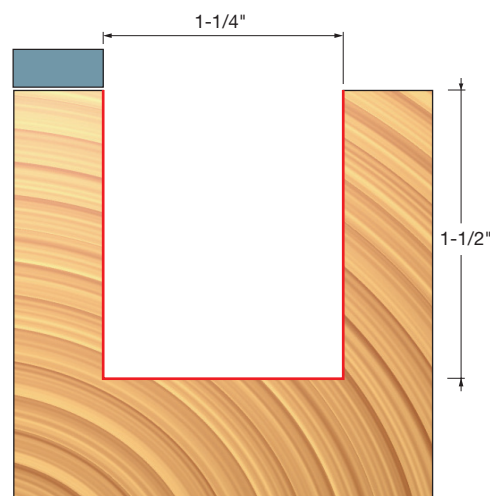




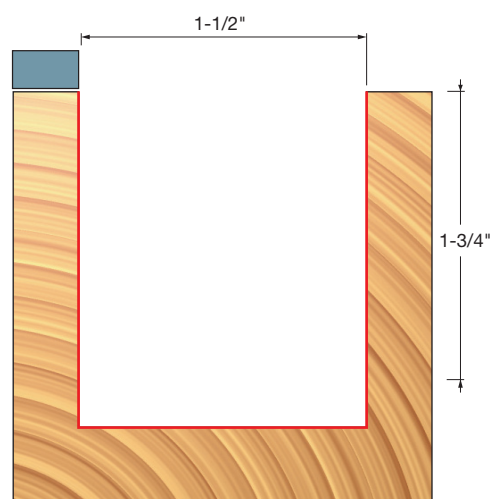
(Continued) Top Bearing Flush Trim Bits



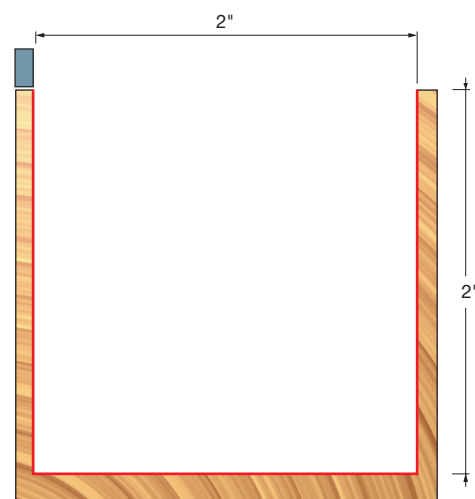
50-122



50-126



50-130

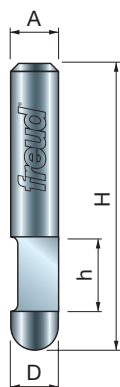
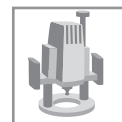


50-138

Solid Carbide Flush Trim Bits

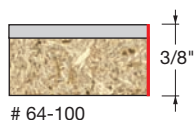
Application: Cutting plastic laminate quickly and cleanly

- Solid micrograin carbide extends the cutting life and the self-piloting feature eliminates the expense and upkeep of a ball bearing assembly.
- Cuts all plastic laminates.
- Use on portable routers and laminate trimmers for trimming plastic laminate.

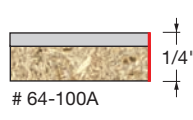


Item Number	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
64-100*	1/4"	3/8"	1/4"	11/2"
Bulk Pack (100Pieces)				
64-100A*	1/4"	1/4"	1/4"	11/2"

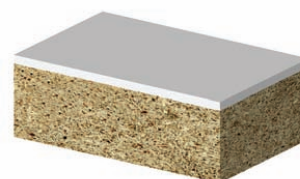
* Solid Carbide

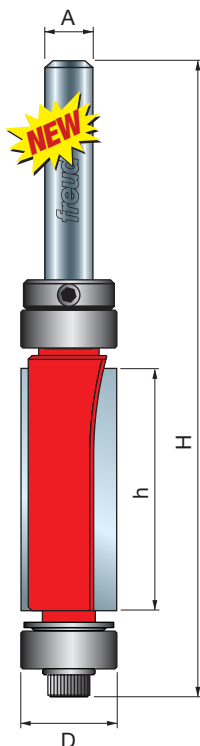


64-100



64-100A





Top & Bottom Bearing Flush Trim Bit

Application: Trimming laminate counter tops and doing pattern work

- Double bearing design allows you to choose the cutting direction that best suits your work piece.
- Freud's Top & Bottom Bearing Bits let you rout half the curve in one direction, flip the work piece over and rout the other half in the opposite direction without repositioning your pattern.
- Perfect for templates placed above or below the work piece, or to trim laminates or veneer perfectly flush with countertops, shelving and other projects.
- Cuts all hardwoods, softwoods, plastic laminates and veneered plywood.
- Use on hand-held routers, laminate trimmers, and table-mounted portable routers.

	Item Number	Overall Dia.(D)	Bearing Dia. (B)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
NEW	50-501	1/2"	1/4"	1-1/4"	1/4"	3-5/16"
NEW	50-509	3/4"	3/4"	1-5/8"	1/2"	3-7/8"



50-501



50-509

Bevel Trim Bits

Application: Cutting bevels in plastic laminates for a clean, finished edge

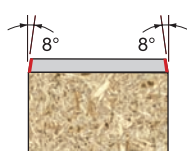
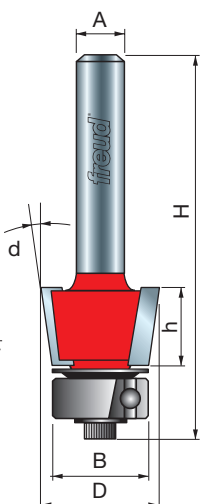
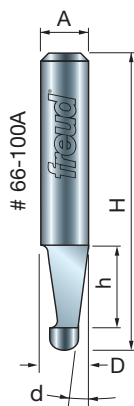
- The 41 Series Bits provide a range of bevels from 8 degrees to 45 degrees and feature a ball bearing guide.
- The 66-100 solid carbide bit creates a 7-degree bevel and includes a self-piloting feature that eliminates the expense and upkeep of a ball bearing assembly.
- Cuts all plastic laminates.
- Use on Hand-held routers, table-mounted portable routers, and laminate trimmers for trimming plastic laminate.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
41-102	19/32"	1/2"	9/32"	15°	1/4"	1-7/8"
41-104	19/32"	1/2"	9/32"	25°	1/4"	1-7/8"
41-106	31/32"	1/2"	1/4"	45°	1/4"	1-7/8"
41-108	25/32"	3/8"	29/64"	25°	1/4"	1-15/16"
41-110	9/16"	1/2"	13/32"	8°	1/4"	2"
66-100*	1/4"	3/16"	1/4"	7°	1/4"	1-1/2"

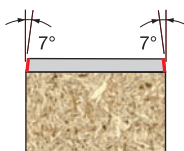
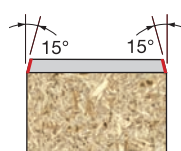
Bulk Pack (100 Pieces of #66-100)

66-100A*	1/4"	3/16"	1/4"	7°	1/4"	1-1/2"
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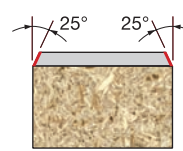
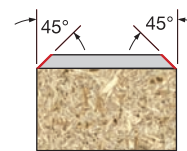
* Solid Carbide



41-110

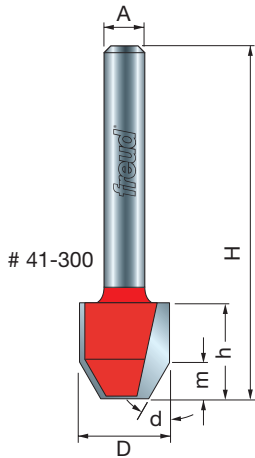
# 66-100
66-100A

41-102

# 41-108
41-104

41-106

Flush & Bevel Trim Bits

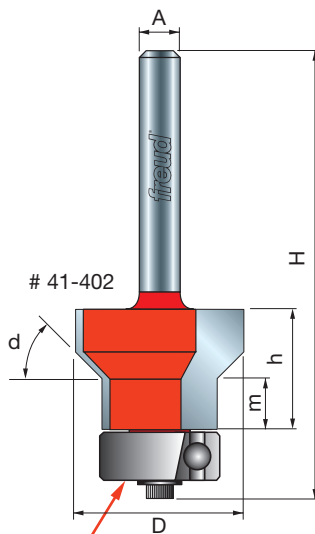


Application: Trimming plastic laminate with straight or bevel edge on a router equipped with a guide system

- Bit 41-402 is self-guided and comes with two bearings that spread wear evenly on the cutting edge and allow the bit to straight trim or create a 45° bevel.
- Cuts all plastic laminates.
- Use on hand-held routers, table-mounted portable routers, and laminate trimmers equipped with a guiding system.

Item Number	Overall Dia.(D)	Carbide Height(h)	Minor Height(m)	Angle (d)	Shank Dia.(A)	Overall Length(H)
41-300	15/32"	1/2"	3/16"	30°	1/4"	1-25/32"
41-402	7/8"	5/8"	39/64"	45°	1/4"	2-1/4"
68-100*	1/4"	3/8"	11/64"	7°	1/4"	1-1/2"

* Solid Carbide

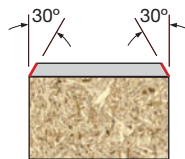
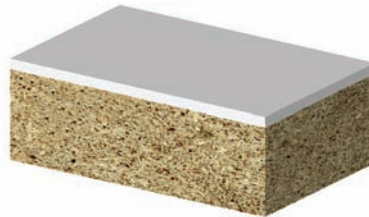
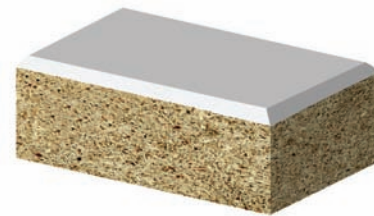
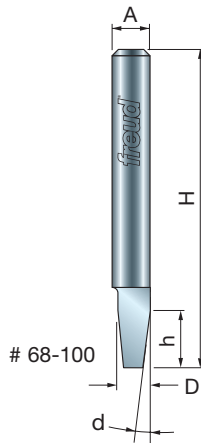


Bearing For
Straight Cut
62-112

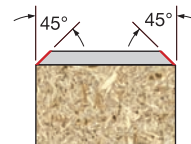


Bearing For
Bevel Cut
62-106

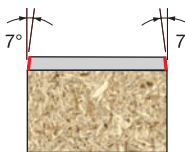
* Bearing is also used to spread wear over cutting edge



41-300



41-402 with
bearing #62-112

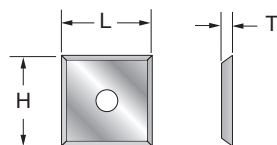
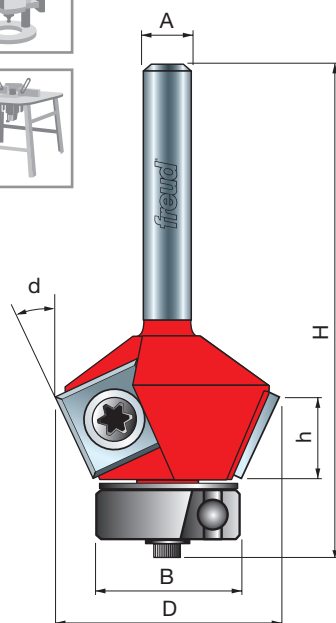


68-100



41-402
68-100
41-300 with
bearing #62-106





Replacement Cutter

Insert Bevel Trim Bits

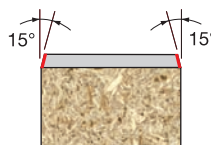
Application: Creating a clean, beveled edge for plastic laminate

- Replacement throwaway knives (CG01MBA3) can be rotated for multiple cutting edges so you always have sharp edge.
- Cuts all plastic laminates.
- Use on hand-held routers, laminate trimmers, and table-mounted portable routers.

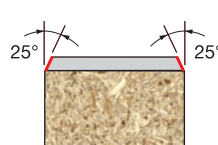
Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
43-204	15/16"	3/4"	29/64"	15°	1/4"	2-1/4"
43-208	1-1/8"	3/4"	7/16"	25°	1/4"	2-1/4"
43-212	1-11/64"	3/4"	13/32"	30°	1/4"	2-5/16"
43-216	1-23/64"	3/4"	15/64"	45°	1/4"	2-5/8"

Replacement Cutters

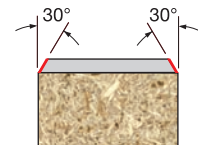
Item Number	Length (L)	Height (H)	Thickness (T)	Number of Cutting Edges
CG01MBA3	12mm	12mm	1.5mm	4



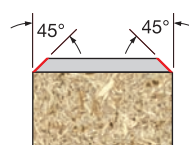
43-204



43-208



43-212



43-216



Insert Flush Trim Bits

Application: Creating a clean, beveled edge for plastic laminate

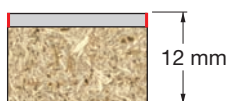
- Replacement throwaway knives (CG12) can be rotated for multiple cutting edges so you always have sharp edge.
- Cuts all plastic laminates.
- Use on hand-held routers, laminate trimmers, and table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia. (B)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
43-106	3/4"	3/4"	12mm	1/4"	2"
43-108	3/4"	3/4"	30mm	1/4"	2-3/4"
43-128	3/4"	3/4"	30mm	1/2"	2-3/4"

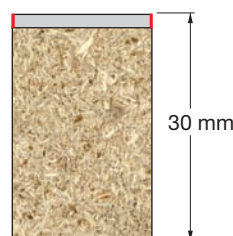
Replacement Cutters

Item Number	Length (L)	Height (H)	Thickness (T)	Number of Cutting Edges
CG01MBA3*	12mm	12mm	1.5mm	4
CG01MEA3*	12mm	30mm	1.5mm	2

*Replacement Cutters: CG01MBA3 = 43-106 and CG01MEA3 = 43-108, 43-128

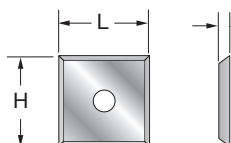
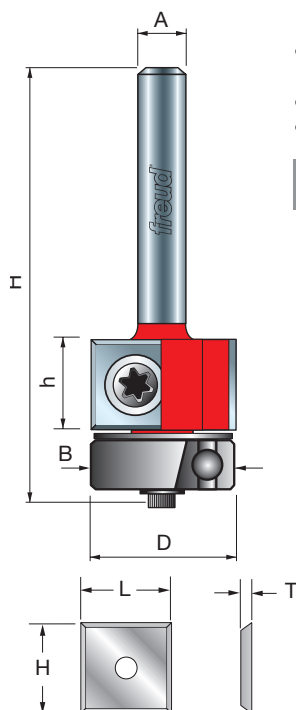
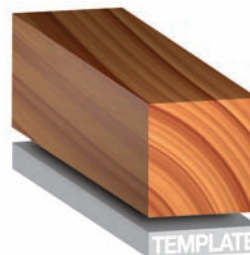


43-106



43-108

43-128



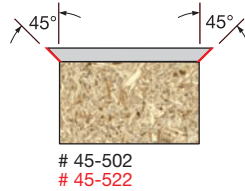
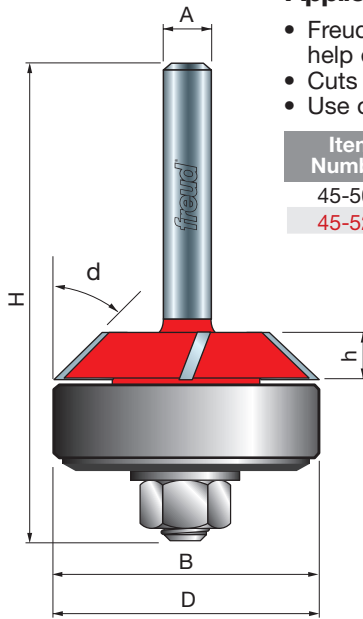
Replacement Cutter

Laminate Miter Joint Bits

Application: Producing 45° miter joints in the edge of laminated surfaces

- Freud's Laminate Miter Joint Bits cut plastic laminates quickly and cleanly and help eliminate the dark line often seen on the edge of counter tops.
- Cuts all plastic laminates.
- Use on hand-held routers or table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
45-502	1-3/8"	1-3/8"	1/4"	45°	1/4"	2-3/8"
45-522	1-3/8"	1-3/8"	1/4"	45°	1/2"	2-3/8"

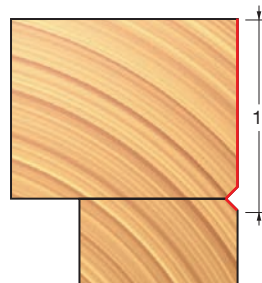
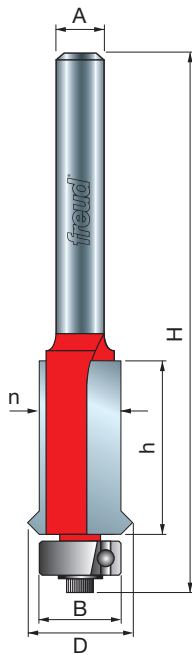


Flush Trim "V" Groove Bits

Application: Trimming laminated countertops and cabinets

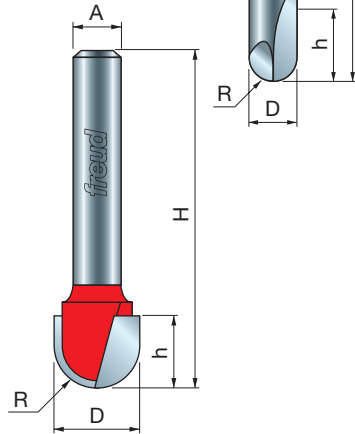
- Adds small, decorative "V" groove while bringing a cabinet frame flush with the front of the cabinet, or trimming a laminated top.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on portable or table-mounted routers.

Item Number	Overall Dia.(D)	Small Dia.(n)	Bearing Dia.(B)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
48-102	5/8"	1/2"	1/2"	1"	1/4"	2-13/16"
48-112	5/8"	1/2"	1/2"	1"	1/2"	3-1/4"



48-102
48-112





Round Nose Bits

Application: Fluted millwork, signs and decorative veining

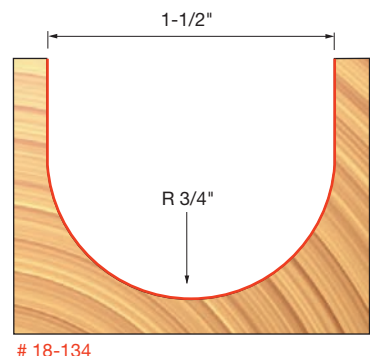
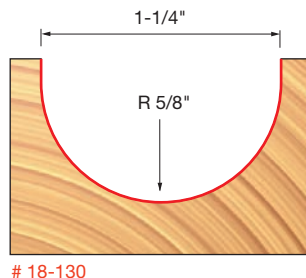
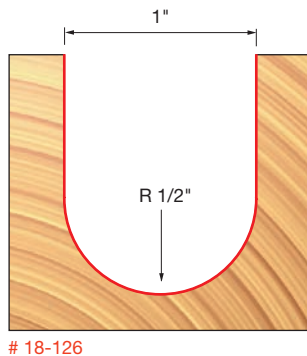
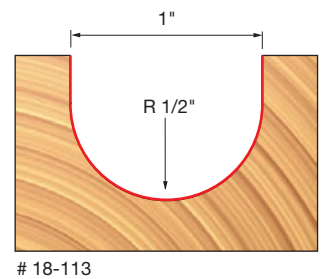
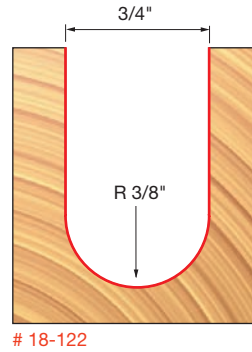
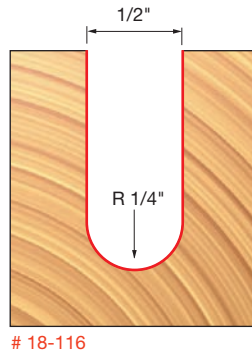
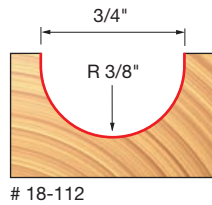
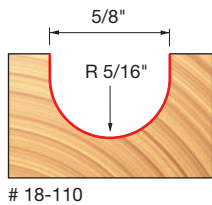
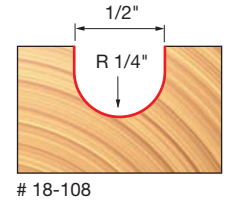
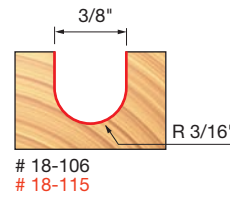
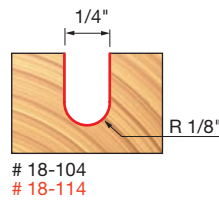
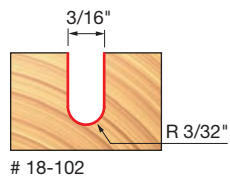
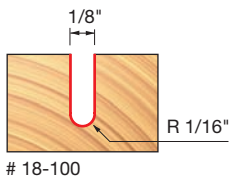
- Add a personal touch to cabinet doors, drawer fronts, and fluted millwork, or use these bits to engrave wood signs.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
18-100*	1/8"	3/8"	1/16"	1/4"	2"
18-102*	3/16"	3/8"	3/32"	1/4"	2"
18-104*	1/4"	3/8"	1/8"	1/4"	2"
18-106	3/8"	3/8"	3/16"	1/4"	1-13/16"
18-108	1/2"	3/8"	1/4"	1/4"	1-13/16"
18-110	5/8"	7/16"	5/16"	1/4"	2"
18-112	3/4"	7/16"	3/8"	1/4"	2"
18-113	1"	3/4"	1/2"	1/4"	2-3/16"
18-114	1 1/4"	3/8"	1/8"	1/2"	2-1/4"
18-115	3/8"	3/8"	3/16"	1/2"	2-1/4"
18-116	1/2"	1-1/8"	1/4"	1/2"	2-13/16"
18-122	3/4"	1-1/4"	3/8"	1/2"	2-13/16"
18-126	1"	1-1/4"	1/2"	1/2"	2-13/16"
18-130	1-1/4"	3/4"	5/8"	1/2"	2-13/16"
18-134	1-1/2"	1-1/4"	3/4"	1/2"	2-3/4"
18-138	2"	1-1/4"	1"	1/2"	2-3/4"

Top Bearing Round Nose Bits

18-508	1/2"	23/64"	1/4"	1/4"	2-1/4"
18-510	5/8"	7/16"	5/16"	1/4"	2-11/32"
18-512	3/4"	7/16"	3/8"	1/4"	2-11/32"
18-522	3/4"	1-1/4"	3/8"	1/2"	2-27/32"

* Solid Carbide

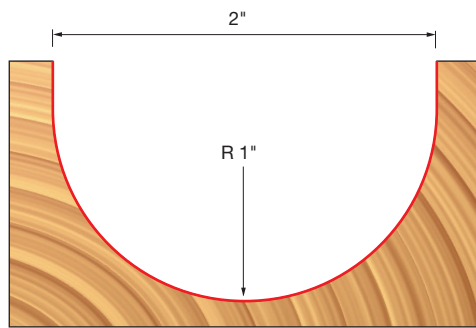


All Profile Drawings 1:1 Scale

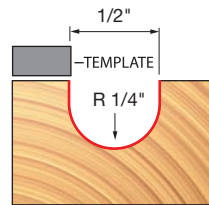
Red Item Numbers Indicate 1/2" Shank

(Continued)

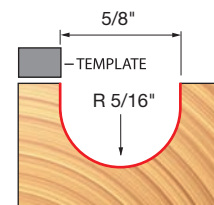
Round Nose Bits



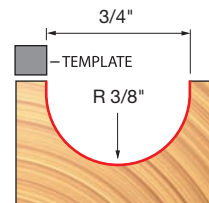
18-138



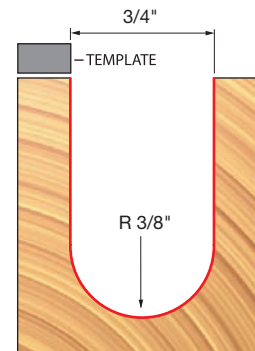
18-508 Top Bearing



18-510 Top Bearing



18-512 Top Bearing

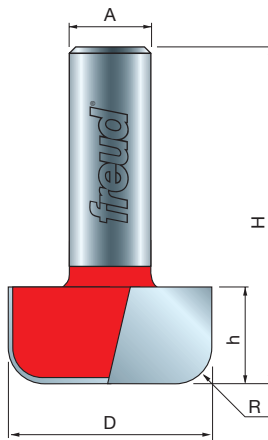


18-522 Top Bearing

Dish Carving Bits

Application: Trays, coasters, and signs

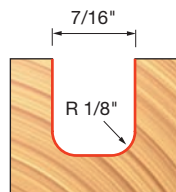
- This bit is designed to remove large amounts of wood. Excellent for making trays, coasters, and raised-letter signs.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.



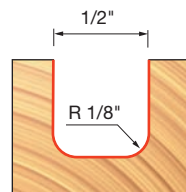
Item Number	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
19-102	7/16"	1/2"	1/8"	1/4"	2"
19-104	1/2"	1/2"	1/8"	1/4"	2-1/8"
19-106	3/4"	5/8"	1/4"	1/4"	1-7/8"
19-126	3/4"	5/8"	1/4"	1/2"	2-5/8"
99-026	1-1/4"	19/32"	1/4"	1/2"	2-1/16"

Top Bearing Dish Carving Bits

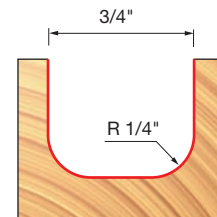
19-506	3/4"	5/8"	1/4"	1/4"	2-5/16"
19-576	3/4"	5/8"	1/4"	1/2"	2-5/8"
19-578	1-1/8"	5/8"	1/4"	1/2"	2-5/8"



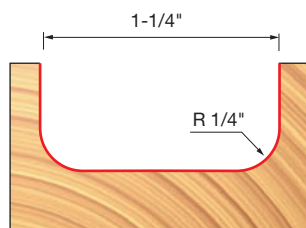
19-102



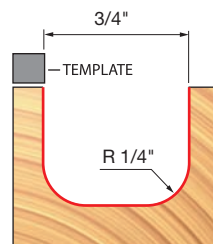
19-104



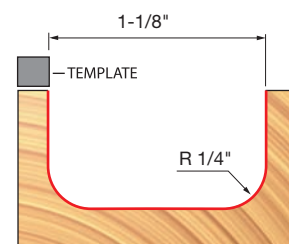
19-126
19-106



99-026



19-506 Top Bearing
19-576 Top Bearing

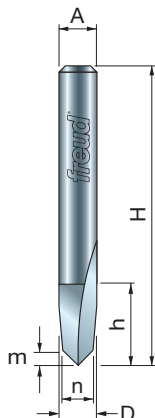


19-578 Top Bearing



CNC





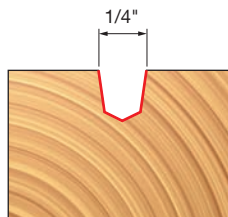
"V" Veining Bit

Application: Intricate designs in furniture and millwork

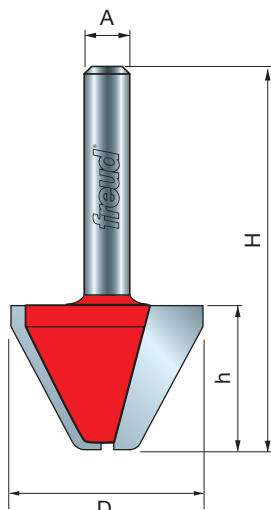
- This solid carbide bit will produce an attractive double "V" to accent furniture, cabinet doors and millwork.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Small Dia.(m)	Carbide Height(h)	Minor Height(m)	Shank Dia.(A)	Overall Length(H)
70-102*	1/4"	3/16"	7/32"	3/64"	1/4"	1-1/2"

* Solid Carbide



70-102

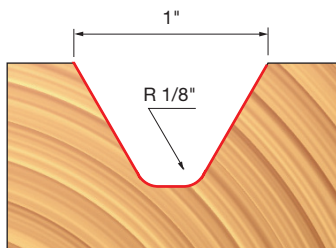


Lettering Bits

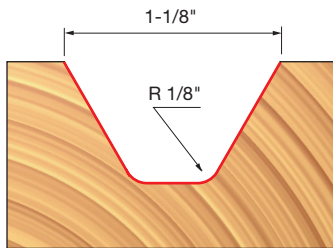
Application: 60-degree angle for relief lettering

- Ideal for creating letters for signs, these bits produce a 60° angle for highly readable relief lettering. The flattened end removes excess material between letters quickly.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

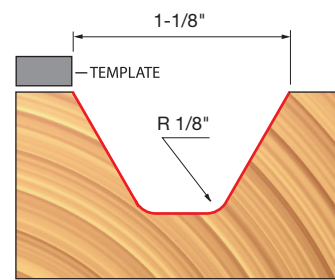
Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
20-172	1"	—	3/4"	1/8"	1/4"	2"
20-174	1-1/8"	—	3/4"	1/8"	1/2"	2-1/4"
Top Bearing Lettering Bit						
20-574	1-1/8"	1-1/8"	3/4"	1/8"	1/2"	2-13/32"



20-172



20-174

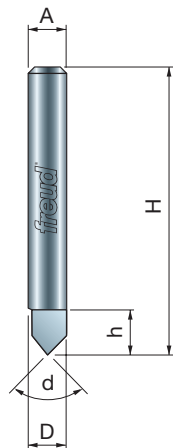
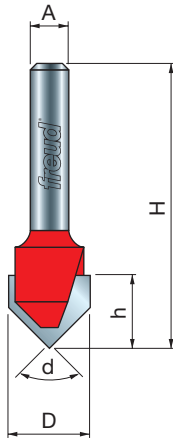


20-574 Top Bearing

"V" Grooving Bits

Application: Engraving, decorative accents and signs

- Ideal for making signs and adding decorative accents to furniture and plaques, Freud's "V" grooving bits are designed to cut deep or shallow "V" grooves.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

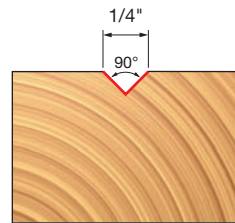


Item Number	Overall Dia.(D)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
20-100	1/4"	1/4"	90°	1/4"	1-1/2"
20-102	3/8"	5/16"	90°	1/4"	1-3/4"
20-104	1/2"	7/16"	90°	1/4"	1-3/4"
20-106	5/8"	1/2"	90°	1/2"	2-1/4"
20-107	3/8"	1/2"	90°	1/2"	2-1/4"
20-108	3/4"	1/2"	90°	1/2"	2-1/4"
20-109	1/2"	1/2"	90°	1/2"	2-1/4"
20-110	7/8"	5/8"	90°	1/2"	2-1/4"
20-112	1"	5/8"	90°	1/2"	2-1/2"
20-116	1-1/2"	1"	90°	1/2"	3"
20-120	2"	1-1/4"	90°	1/2"	2-7/8"
20-152*	1/2"	1/2"	60°	1/4"	2"
20-154*	5/8"	17/32"	60°	1/4"	1-15/16"

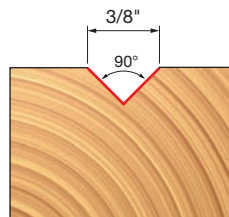
Top Bearing Bits

20-502	1/2"	7/16"	90°	1/4"	2-1/4"
20-508	3/4"	5/8"	90°	1/2"	2-1/4"

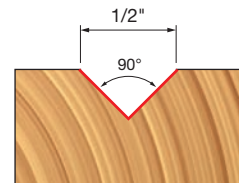
* Solid Carbide



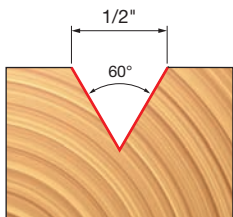
20-100



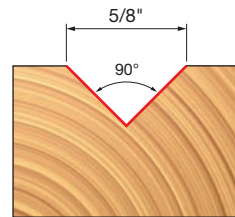
20-102
20-107



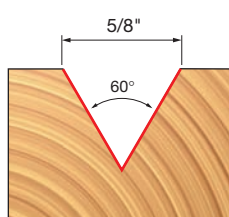
20-104
20-109



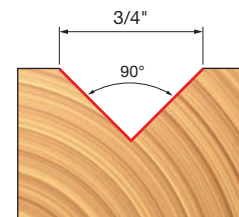
20-152



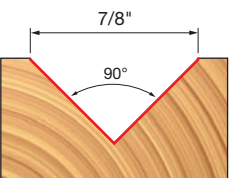
20-106



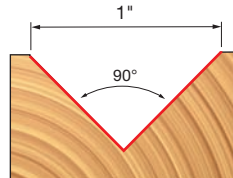
20-154



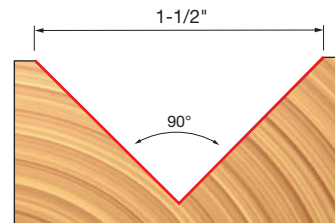
20-108



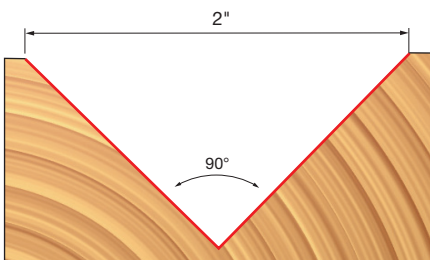
20-110



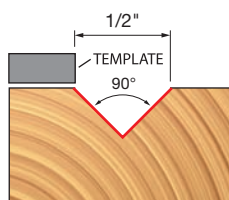
20-112



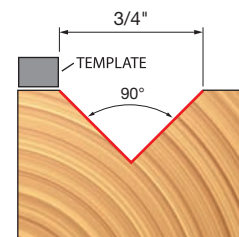
20-116



20-120



20-502 Top Bearing



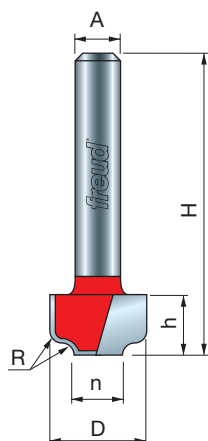
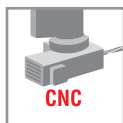
20-508 Top Bearing

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



CNC

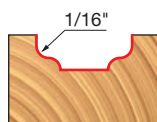


Ogee Groove Bits

Application: Decorative grooves and edges in furniture

- Freud's standard ogee groove bits create beautiful decorative grooves in molding and furniture, or use them with an edge guide to produce an ogee edge profile.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

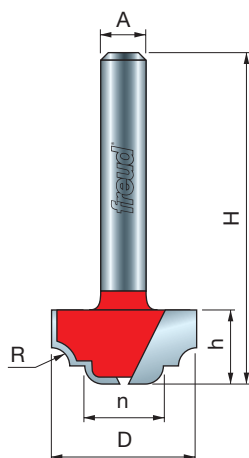
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Radius (R)	Shank Dia.(A)	Overall Length(H)
39-152	1/2"	1/4"	5/16"	1/16"	1/4"	1-9/16"
39-154	7/8"	3/8"	13/32"	1/8"	1/4"	1-11/16"



39-152



39-154

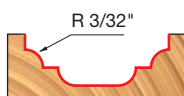


Cove & Bead Groove Bits

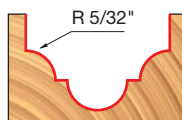
Application: Ornamental edge profiles and grooves

- Produce beautiful decorative grooves in molding and furniture with these bits or use them with an edge guide to create decorative edge profiles.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

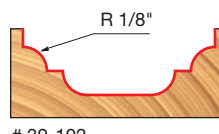
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Radius (R)	Shank Dia.(A)	Overall Length(H)
39-100	3/4"	9/16"	3/8"	3/32"	1/4"	1-5/8"
39-101	3/4"	5/16"	1/2"	5/32"	1/4"	1-3/4"
39-102	1"	3/4"	1/2"	1/8"	1/4"	1-3/4"
39-112	1-1/4"	25/32"	1/2"	5/32"	1/2"	2"



39-100



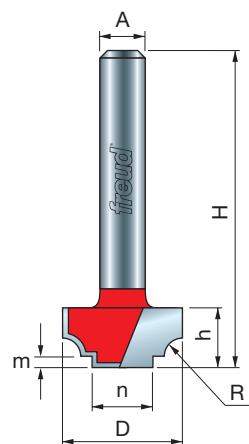
39-101



39-102



39-112

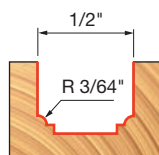


Classical Beading Groove Bits

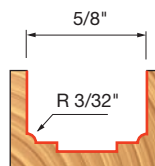
Application: Elaborate design for furniture and moldings

- The simple bead and flat bottom design created by these bits adds depth to any surface, including molding and furniture.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

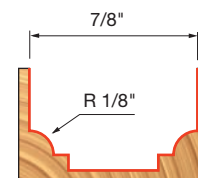
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
39-302	1/2"	21/64"	3/8"	3/64"	3/64"	1/4"	1-5/8"
39-304	5/8"	5/16"	3/8"	3/64"	3/32"	1/4"	1-5/8"
39-306	7/8"	15/32"	29/64"	5/64"	1/8"	1/4"	1-23/32"



39-302



39-304

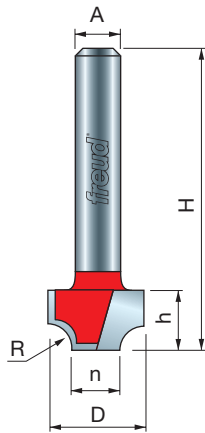


39-306

Ovolo Bits

Application: French Provincial style furniture

- These bits create decorative grooves in molding and furniture, including the attractive groove in French Provincial style doors and cabinets.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.



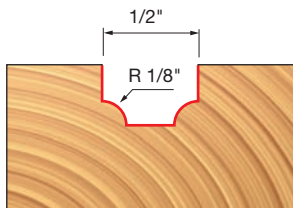
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Radius (R)	Shank Dia.(A)	Overall Length(H)
39-202	1/2"	1/4"	5/16"	1/8"	1/4"	1-3/4"
39-204	7/8"	1/2"	1/2"	3/16"	1/4"	1-3/4"
39-205	7/8"	1/4"	5/8"	1/4"	1/4"	2"
39-206	1"	1/2"	1/2"	1/4"	1/4"	1-3/4"
39-208	1-1/4"	1/2"	9/16"	3/8"	1/4"	1-13/16"
39-210	1-1/2"	1/2"	3/4"	1/2"	1/4"	2"
39-226	1"	1/2"	1/2"	1/4"	1/2"	2"
39-228	1-1/4"	1/2"	9/16"	3/8"	1/2"	2-1/16"
39-230	1-1/2"	1/2"	3/4"	1/2"	1/2"	2-1/4"
39-232	1-3/4"	1/2"	7/8"	5/8"	1/2"	2-3/8"
39-234	2"	1/2"	1"	3/4"	1/2"	2-1/2"
39-236	2-1/4"	1/2"	11/8"	7/8"	1/2"	2-5/8"
39-252	1-1/8"	1/2"	1-7/32"	1/4"	1/2"	2-23/32"
39-238	2-1/2"	1/2"	1-5/16"	1"	1/2"	2-13/16"

Top Bearing Bits

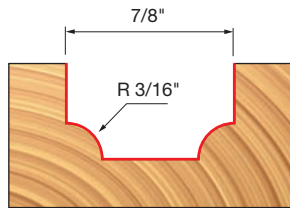
39-578	1-1/4"	1/2"	9/16"	3/8"	1/2"	2-5/16"
39-580	1-1/2"	1/2"	3/4"	1/2"	1/2"	2 1/2"



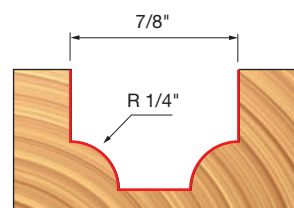
CNC



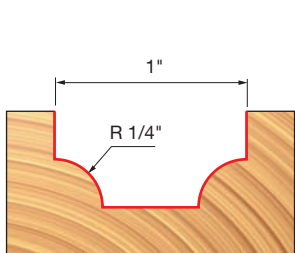
39-202



39-204

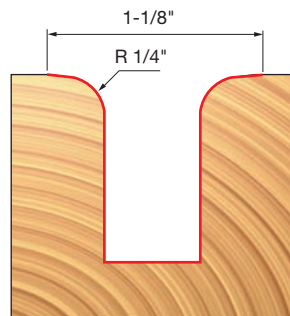


39-205

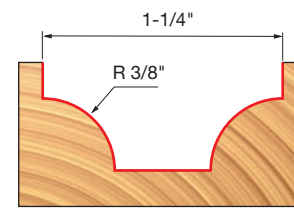


39-206

39-226

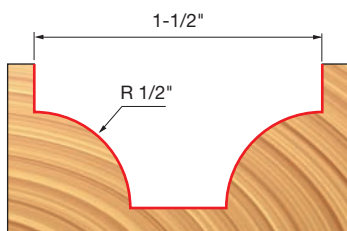


39-252



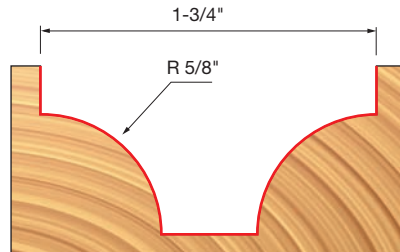
39-208

39-228

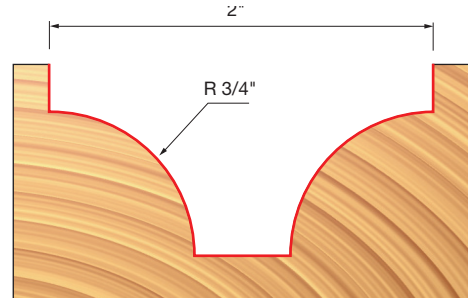


39-210

39-230



39-232

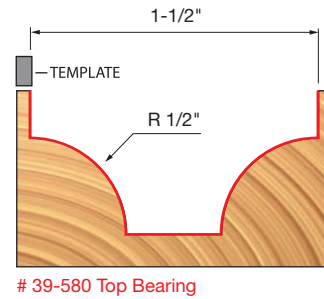
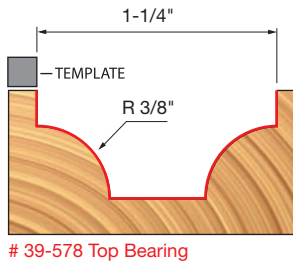
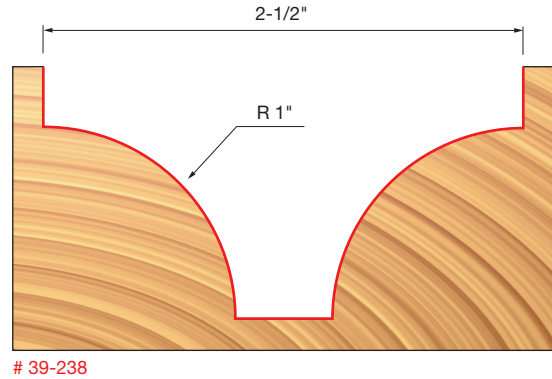
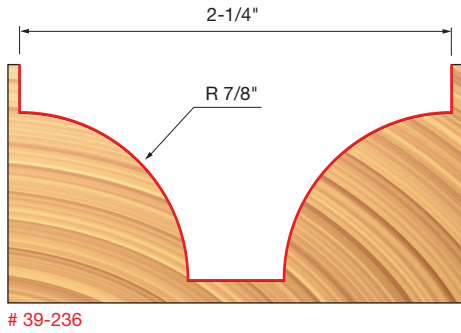


39-234

Red Item Numbers Indicate 1/2" Shank

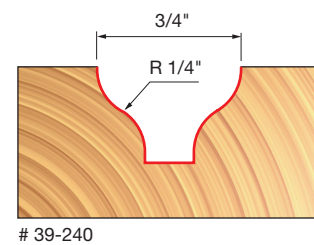
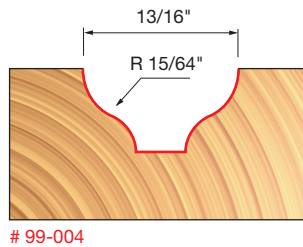
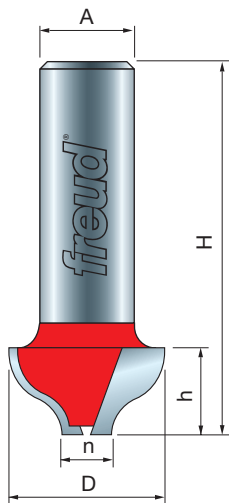
All Profile Drawings 1:1 Scale



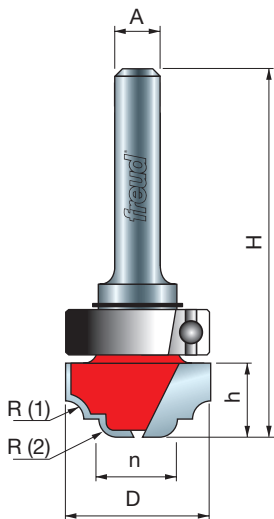
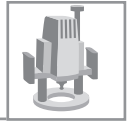
(Continued) **Ovolo Bits****Standard Ogee Groove Bits****Application: Traditional accents for furniture and moldings**

- This standard ogee groove bit accents any project with a slight, decorative groove and it can produce a decorative edge when used with an edge guide.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
99-004	13/16"	1/4"	29/64"	15/64"	1/2"	1-15/16"
39-240	3/4"	1/4"	1/2"	1/4"	1/4"	1-3/4"



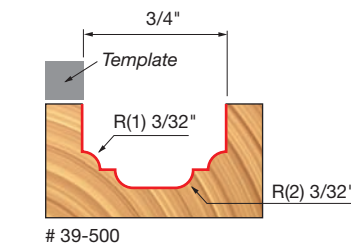
Top Bearing Classical Cove & Bead Groove Bits



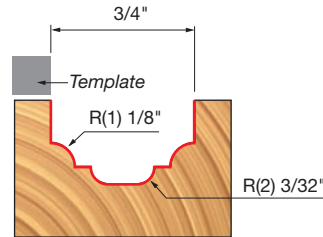
Application: Template work, decorative edges and elaborate grooves

- These bits produce a cove and bead groove with a flat bottom to add depth to furniture or millwork, and they can also create a decorative edge profile.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

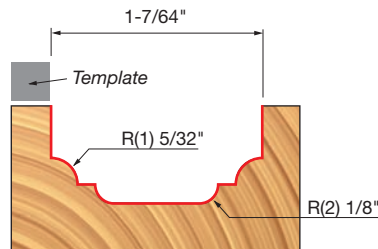
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
39-500	3/4"	13/32"	7/16"	3/32"	3/32"	1/4"	2-1/8"
39-502	3/4"	1/4"	7/16"	1/8"	3/32"	1/4"	2-1/8"
39-504	1-7/64"	21/32"	1/2"	5/32"	1/8"	3/8"	2-1/4"
39-506	1-3/8"	27/32"	9/16"	3/16"	5/32"	3/8"	2-7/16"



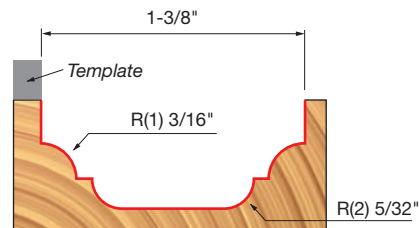
39-500



39-502

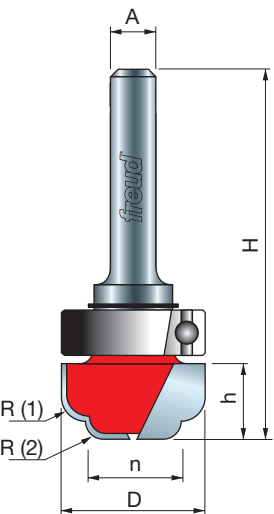


39-504



39-506

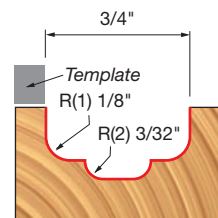
Top Bearing Double Cove Groove Bits



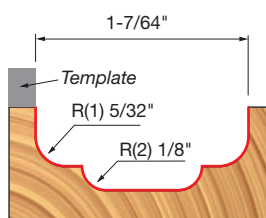
Application: Template work, decorative edges and elaborate grooves

- Use these bits to create two graceful coves that soften and add character to furniture and millwork, or to produce a decorative edge profile.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

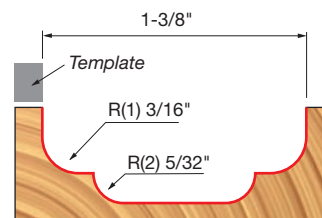
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
39-512	3/4"	11/32"	3/8"	1/8"	3/32"	1/4"	2-1/16"
39-514	1-7/64"	5/8"	7/16"	5/32"	1/8"	3/8"	2-3/16"
39-516	1-3/8"	27/32"	1/2"	3/16"	5/32"	3/8"	2-5/16"



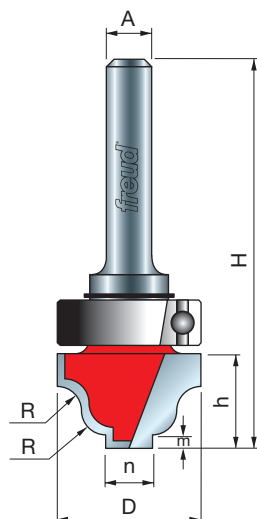
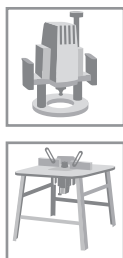
39-512



39-514



39-516

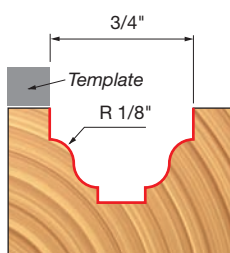


Top Bearing Fillet Ogee Groove Bits

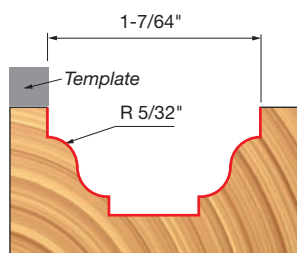
Application: Template work, decorative edges and elaborate grooves

- These bits produce symmetrical ogee profile ending in a fillet. The flat bottom of the groove can create the illusion of panel construction, and they can also be used to create a decorative edge.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

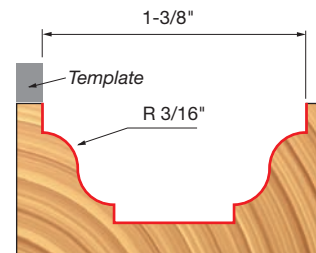
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Radius (R)	Shank Dia.(A)	Overall Length(H)
39-522	3/4"	1/4"	1/2"	5/32"	1/8"	1/4"	2-3/16"
39-524	1-7/64"	15/32"	9/16"	5/32"	5/32"	3/8"	2-1/4"
39-526	1-3/8"	5/8"	5/8"	5/32"	3/16"	3/8"	2-7/16"



39-522

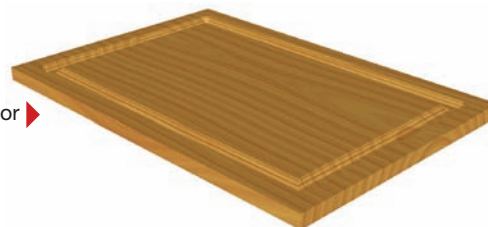


39-524



39-526

Example of Cabinet Door ▶

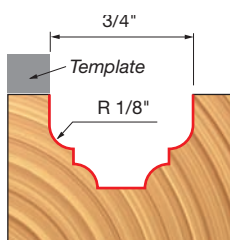


Top Bearing Cove & Bead Groove Bit

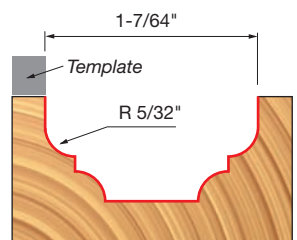
Application: Template work, decorative edges and elaborate grooves

- Create a traditional cove and bead profile that includes a flat bottom, creating the illusion of panel construction. These bits can also be used to create a decorative edge profile.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

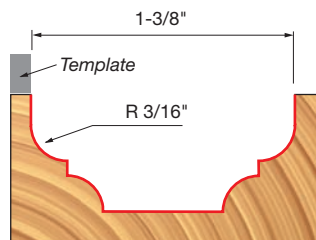
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
39-532	3/4"	1/4"	31/64"	5/64"	1/8"	1/4"	2-3/16"
39-534	1-7/64"	31/64"	35/64"	5/64"	5/32"	3/8"	2-5/16"
39-536	1-3/8"	5/8"	39/64"	5/64"	3/16"	3/8"	2-7/16"



39-532

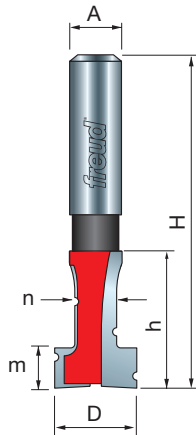


39-534



39-536

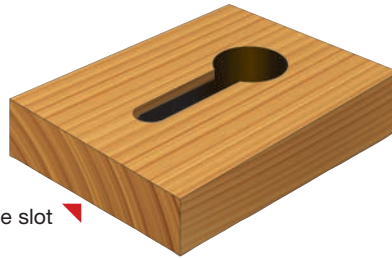
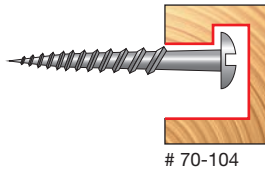
Key Hole Bit



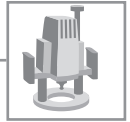
Application: Key holes for hanging plaques and shelves

- The large diameter end bores holes to allow nail or screw heads to enter the slot, and the smaller diameter allows room for the shank of the nail or screw.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Shank Dia.(A)	Overall Length(H)
70-104	25/64"	3/16"	7/16"	1/4"	1/4"	1-5/8"



Example of Key Hole slot

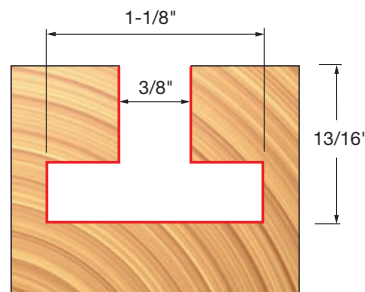
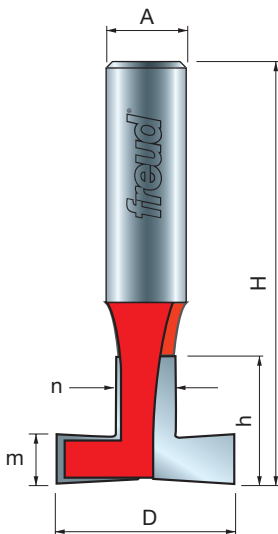


T-Slotting Cutter Bits

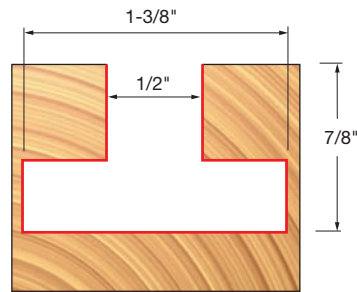
Application: Slotted wall displays

- Build your own sturdy, attractive, slotted wall to display items from garden tools and power tools to toys – hanging by a hook.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

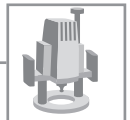
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Shank Dia.(A)	Overall Length(H)
52-522	1-1/8"	3/8"	13/16"	5/16"	1/2"	2-1/2"
52-524	1-3/8"	1/2"	7/8"	3/8"	1/2"	2-1/2"

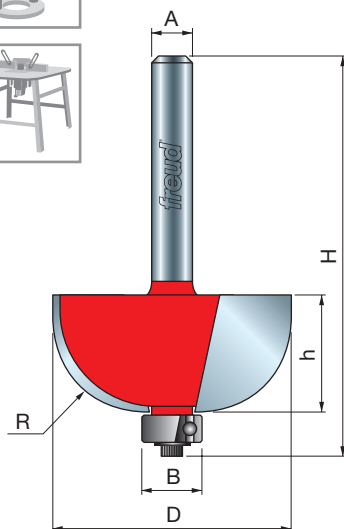
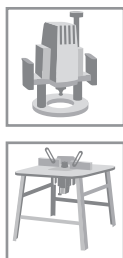


52-522



52-524



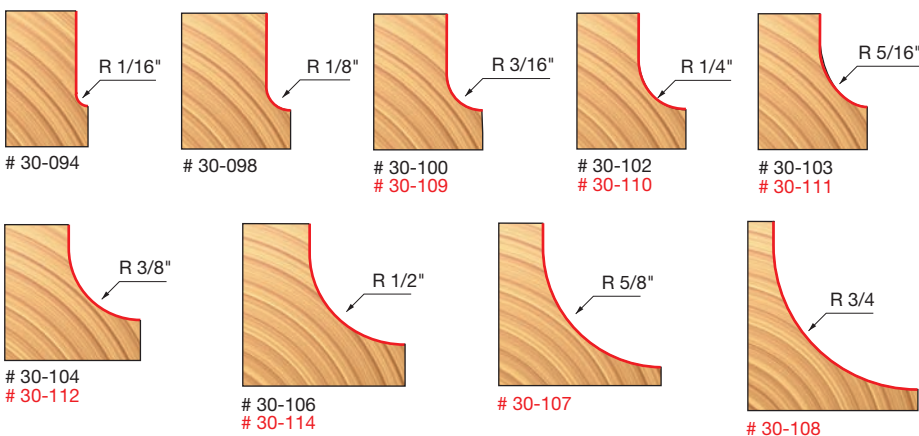


Cove Bits

Application: Smooth, decorative edging and inverted radii

- Create smooth, classic cove profiles with Freud cove bits, which have a shear angle that slices wood similar to the way a craftsman uses a hand plane.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
30-094	1/2"	3/8"	1/2"	1/16"	1/4"	2-3/16"
30-098	5/8"	3/8"	1/2"	1/8"	1/4"	2-3/16"
30-100	3/4"	3/8"	1/2"	3/16"	1/4"	2-3/16"
30-102	7/8"	3/8"	1/2"	1/4"	1/4"	2-3/16"
30-103	1-1/8"	1/2"	1/2"	5/16"	1/4"	2-3/16"
30-104	1-1/4"	1/2"	1/2"	3/8"	1/4"	2-3/16"
30-106	1-1/2"	1/2"	5/8"	1/2"	1/4"	2-3/16"
30-107	1-3/4"	1/2"	3/4"	5/8"	1/2"	2-1/2"
30-108	2"	1/2"	7/8"	3/4"	1/2"	2-5/8"
30-109	7/8"	1/2"	1/2"	3/16"	1/2"	2-1/2"
30-110	1"	1/2"	1/2"	1/4"	1/2"	2-1/2"
30-111	1-1/8"	1/2"	1/2"	5/16"	1/2"	2-1/2"
30-112	1-1/4"	1/2"	1/2"	3/8"	1/2"	2-1/2"
30-114	1-1/2"	1/2"	5/8"	1/2"	1/2"	2-1/2"

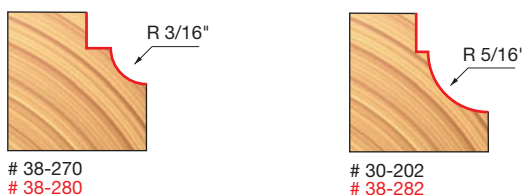


Cove & Fillet Bits

Application: Traditional design for furniture and millwork

- This bit produces a smooth cove with a small fillet at the top, a profile found in many traditional pieces of furniture and millwork.
- By simply raising the bit, you can create a standard cove profile.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
30-202	1-1/4"	1/2"	19/32"	5/16"	1/4"	2-3/16"
38-270	1-1/8"	1/2"	1/2"	3/16"	1/4"	2-3/16"
38-280	1-1/8"	1/2"	1/2"	3/16"	1/2"	2-1/2"
38-282	1-1/4"	1/2"	19/32"	5/16"	1/2"	2-1/2"



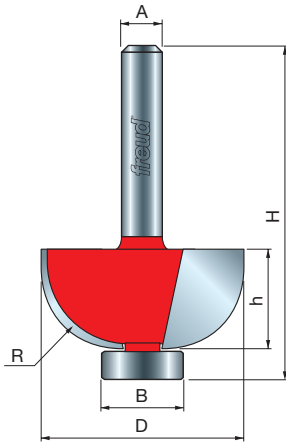


Cove Bits with Steel Pilots

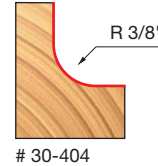


Application: More versatile method to produce edging and inverted radii

- Produce a classical cove profile, or remove the steel pilot to add the versatility of routing grooves or deeper coves. Freud's upward shear angle gives a more efficient smoother cut.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
30-400	3/4"	1/2"	33/64"	3/16"	1/4"	2"
30-404	1 1/4"	1/2"	7/16"	3/8"	1/4"	2"

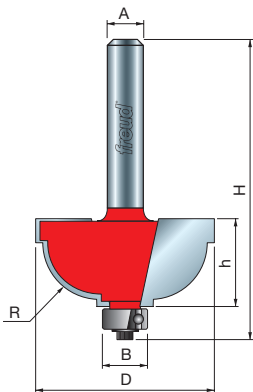


Classical Cove Bits

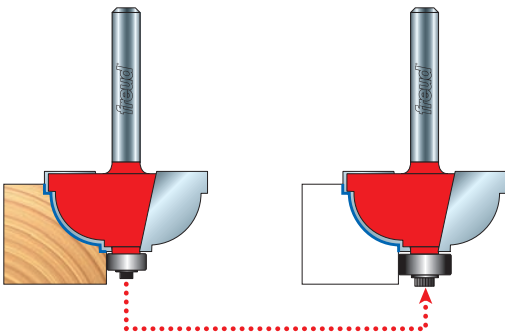


Application: Attractive detail for millwork and furniture

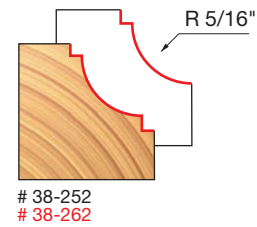
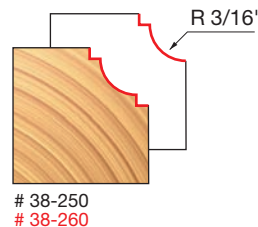
- Enhance traditional furniture and millwork by adding an attractive cove profile with a small fillet at the top and bottom.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

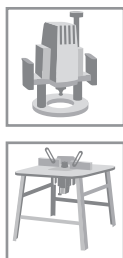


Item Number	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
38-250	1-1/8"	1/2"	3/16"	1/4"	2-3/16"
38-252	1-1/4"	19/32"	5/16"	1/4"	2-3/16"
38-260	1-1/8"	1/2"	3/16"	1/2"	2-1/2"
38-262	1-1/4"	1-3/8"	5/16"	1/2"	2-1/2"



By simply ordering the 1/2" Ball Bearing #62-104 and the step washer #62-313 you will be able to obtain a different profile.

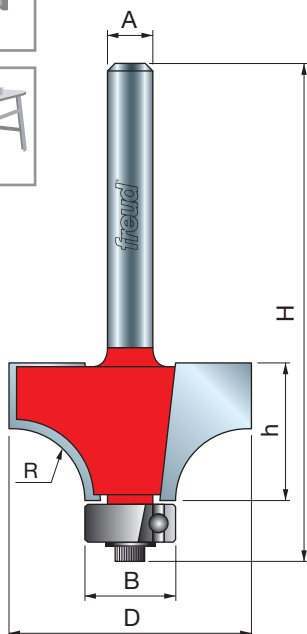




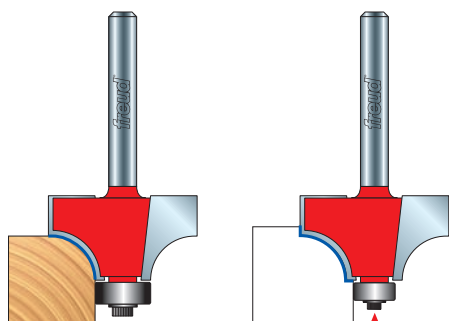
Rounding Over Bits

Application: Soften furniture edges and create decorative beads

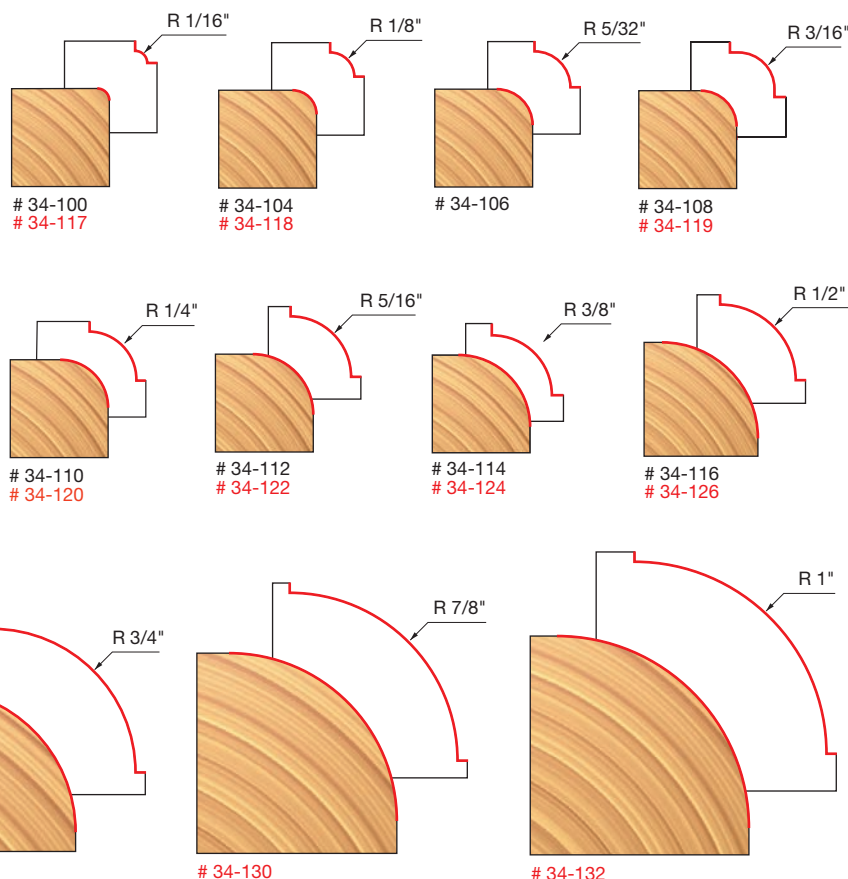
- Use rounding over bits to soften furniture edges. For beading work, equip the bits with a Freud 62-102 bearing and 62-311 step washer.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
34-100	5/8"	1/2"	1/2"	1/16"	1/4"	2-3/16"
34-104	3/4"	1/2"	1/2"	1/8"	1/4"	2-3/16"
34-106	13/16"	1/2"	1/2"	5/32"	1/4"	2-3/16"
34-108	7/8"	1/2"	1/2"	3/16"	1/4"	2-3/16"
34-110	1"	1/2"	1/2"	1/4"	1/4"	2-3/16"
34-112	1-1/8"	1/2"	1/2"	5/16"	1/4"	2-3/16"
34-114	1-1/4"	1/2"	5/8"	3/8"	1/4"	2-3/16"
34-116	1-1/2"	1/2"	3/4"	1/2"	1/4"	2-1/2"
34-117	5/8"	1/2"	1/2"	1/16"	1/2"	2-1/2"
34-118	3/4"	1/2"	1/2"	1/8"	1/2"	2-1/2"
34-119	7/8"	1/2"	1/2"	3/16"	1/2"	2-1/2"
34-120	1"	1/2"	1/2"	1/4"	1/2"	2-1/2"
34-122	1-1/8"	1/2"	1/2"	5/16"	1/2"	2-1/2"
34-124	1-1/4"	1/2"	5/8"	3/8"	1/2"	2-5/8"
34-126	1-1/2"	1/2"	3/4"	1/2"	1/2"	2-3/4"
34-127	1-3/4"	1/2"	7/8"	5/8"	1/2"	2-7/8"
34-128	2"	1/2"	1"	3/4"	1/2"	2-7/8"
34-130	2-1/4"	1/2"	1-1/4"	7/8"	1/2"	3-1/8"
34-132	2-1/2"	1/2"	1-1/4"	1"	1/2"	3-1/8"
34-134	2-3/4"	1/2"	1-3/8"	1-1/8"	1/2"	3-1/4"
34-136	3"	1/2"	1-1/2"	1-1/4"	1/2"	3-3/8"
34-138	3-1/4"	1/2"	1-9/16"	1-3/8"	1/2"	3-3/8"
34-140	3-1/2"	1/2"	1-3/4"	1-1/2"	1/2"	3-5/8"

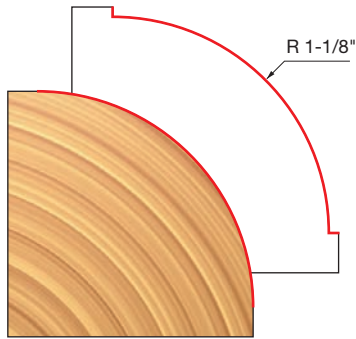


By simply ordering the 3/8" Ball Bearing #62-102 and 3/8" Step Washer #62-311 you will be able to obtain a different profile.

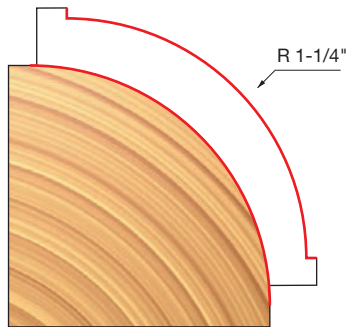


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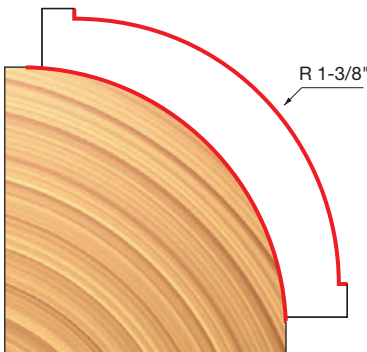
Rounding Over Bits



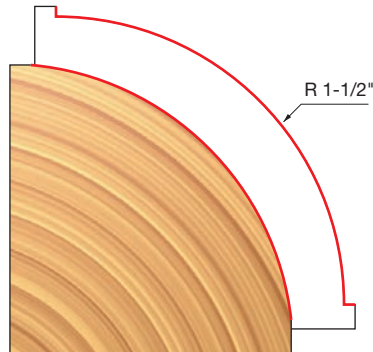
34-134



34-136



34-138



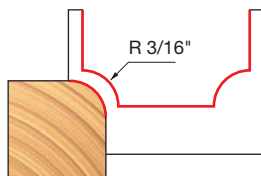
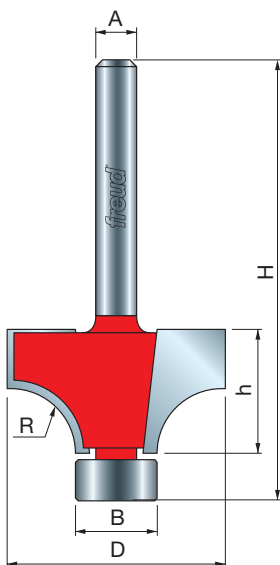
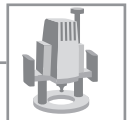
34-140

Rounding Over Bits with Steel Pilots

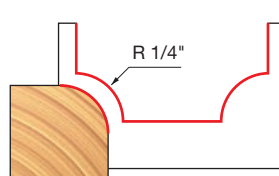
Application: Soften furniture edges or produce beaded grooves

- Rounding Over Bits soften the edges of furniture or remove the solid steel pilots to produce traditional beaded grooves.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

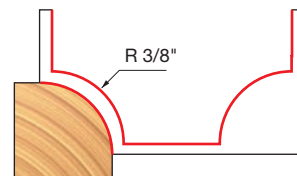
Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
34-208	7/8"	1/2"	1/2"	3/16"	1/4"	2"
34-210	1"	1/2"	33/64"	1/4"	1/4"	2"
34-214	1 1/4"	1/2"	45/64"	3/8"	1/4"	2"



34-208



34-210

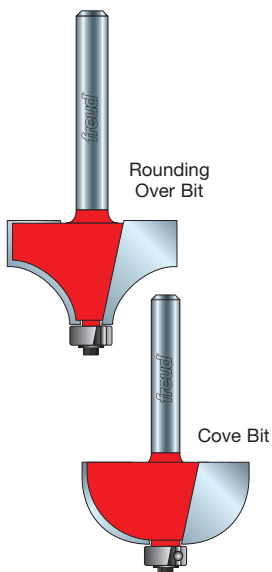


34-214

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



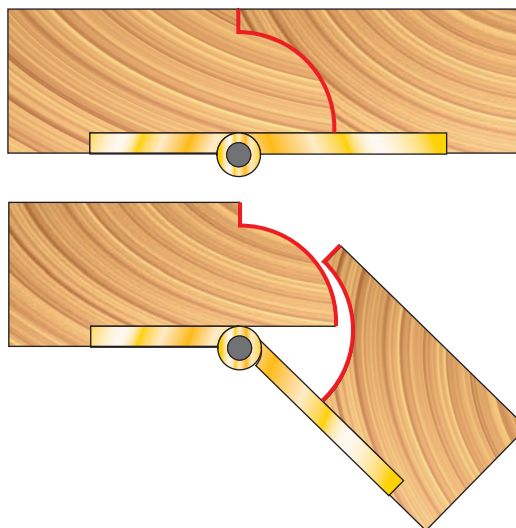


Drop-Leaf Table Bit Set

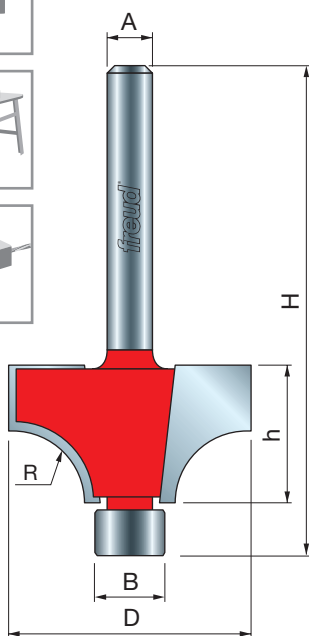
Application: Mating edge profiles for drop-leaf tables

- Produce the special mating edge profiles for drop-leaf tables with this set, which includes one rounding over bit and one cove bit.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Set Item Number	Table Top Thickness	Bit Item #	Rounding Over Bit Item #	Shank Dia.
33-106	3/4"	30-106	34-116	1/4"
33-116	3/4"	30-114	34-126	1/2"



Example of Drop-Leaf with Hinge

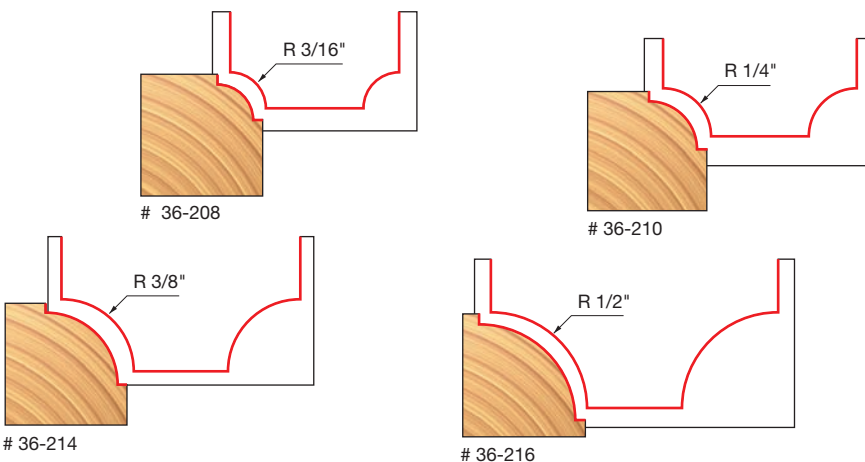


Beading Bit with Steel Pilots

Application: Attractive profile for furniture and millwork

- These beading bits create an attractive bead profile for furniture and millwork. Remove the steel pilots to produce a traditional beaded groove.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

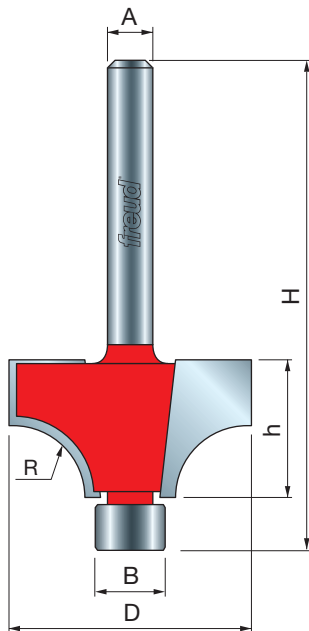
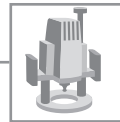
Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
36-208	7/8"	3/8"	1/2"	3/16"	1/4"	2"
36-210	1"	3/8"	3-3/64"	1/4"	1/4"	2"
36-214	1-1/4"	3/8"	4-5/64"	3/8"	1/4"	2"
36-216	1-1/2"	3/8"	4-9/64"	1/2"	3/8"	2-1/2"



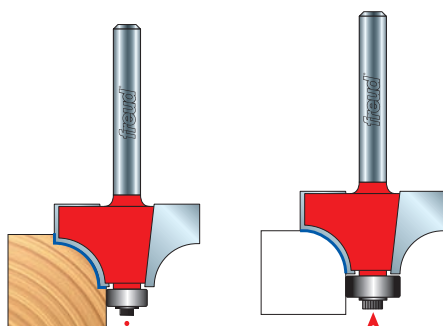
Beading Bits

Application: Decorative edges and rounded edges

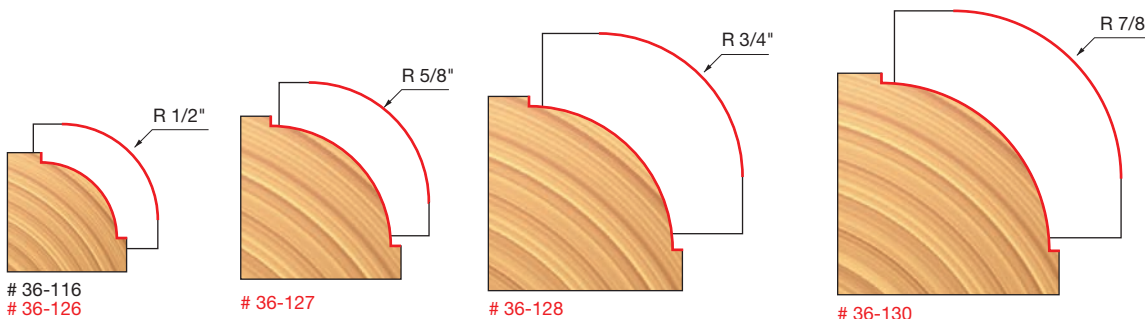
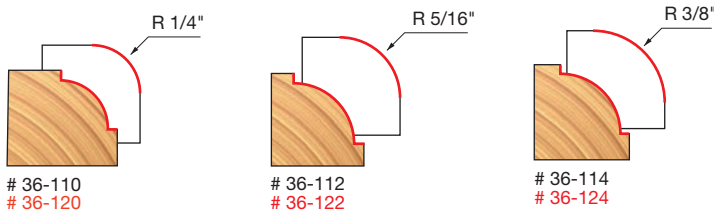
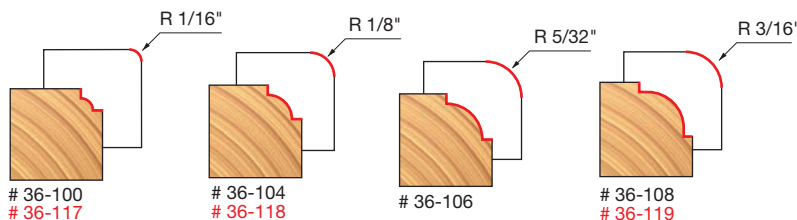
- Add an attractive bead profile to furniture and millwork with Freud beading bits. For rounding over work, add a Freud 62-104 bearing and 62-313 step washer.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
36-100	5/8"	3/8"	1/2"	1/16"	1/4"	2-3/16"
36-104	3/4"	3/8"	1/2"	1/8"	1/4"	2-3/16"
36-106	13/16"	3/8"	1/2"	5/32"	1/4"	2-3/16"
36-108	7/8"	3/8"	1/2"	3/16"	1/4"	2-3/16"
36-110	1"	3/8"	1/2"	1/4"	1/4"	2-3/16"
36-112	1-1/8"	3/8"	1/2"	5/16"	1/4"	2-3/16"
36-114	1-1/4"	3/8"	5/8"	3/8"	1/4"	2-3/16"
36-116	1-1/2"	3/8"	3/4"	1/2"	1/4"	2-1/2"
36-117	5/8"	3/8"	1/2"	1/16"	1/2"	2-1/2"
36-118	3/4"	3/8"	1/2"	1/8"	1/2"	2-1/2"
36-119	7/8"	3/8"	1/2"	3/16"	1/2"	2-1/2"
36-120	1"	3/8"	1/2"	1/4"	1/2"	2-1/2"
36-122	1-1/8"	3/8"	1/2"	5/16"	1/2"	2-1/2"
36-124	1-1/4"	3/8"	5/8"	3/8"	1/2"	2-5/8"
36-126	1-1/2"	3/8"	3/4"	1/2"	1/2"	2-3/4"
36-127	1-3/4"	3/8"	7/8"	5/8"	1/2"	2-7/8"
36-128	2"	3/8"	1"	3/4"	1/2"	2-7/8"
36-130	2-1/4"	3/8"	1-1/4"	7/8"	1/2"	3-1/8"
36-132	2-1/2"	3/8"	1-1/4"	1"	1/2"	3-1/8"
36-134	2-3/4"	3/8"	1-3/8"	1-1/8"	1/2"	3-1/4"
36-136	3"	3/8"	1-1/2"	1-1/4"	1/2"	3-3/8"
36-138	3-1/4"	3/8"	1-9/16"	1-3/8"	1/2"	3-3/8"
36-140	3-1/2"	3/8"	1-3/4"	1-1/2"	1/2"	3-5/8"



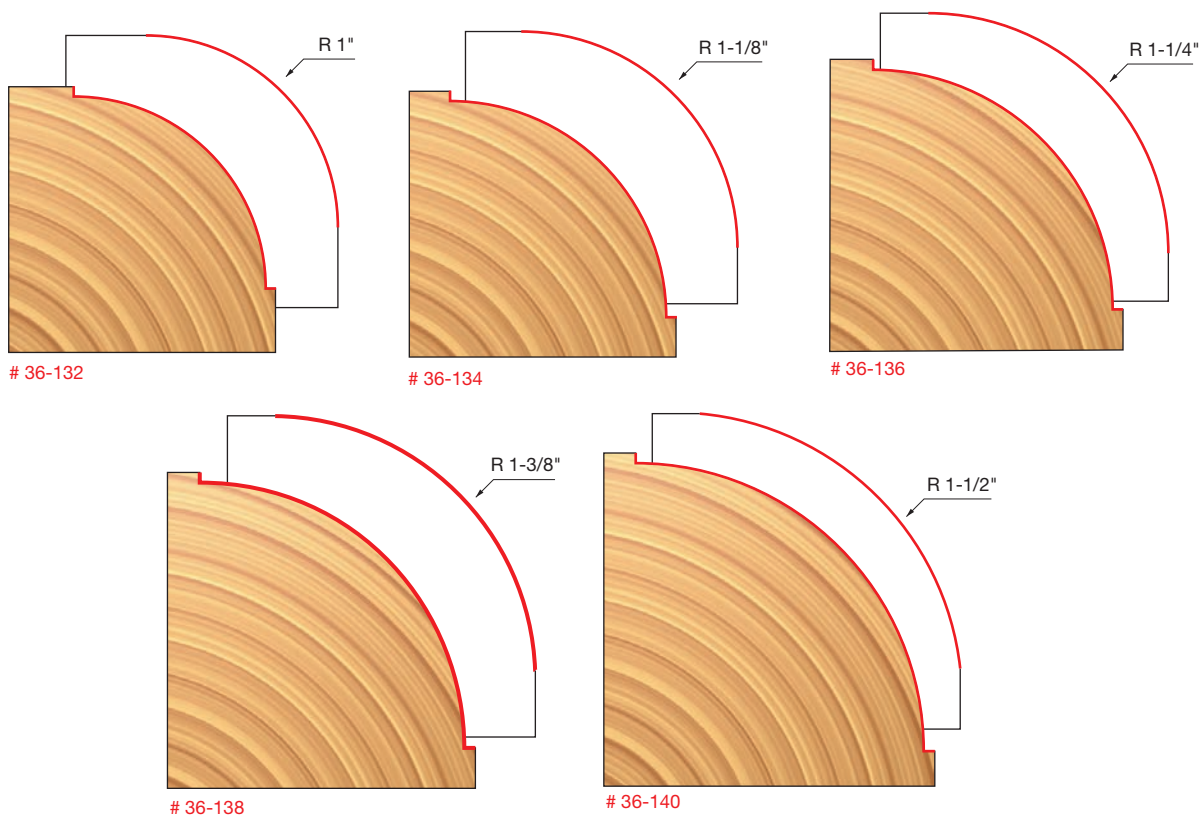
By simply ordering the 1/2" Ball Bearing #62-104 and 1/2" Step Washer #62-313 you will be able to obtain a different profile.





(Continued)

Beading Bits

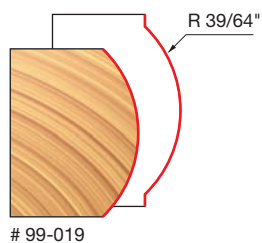
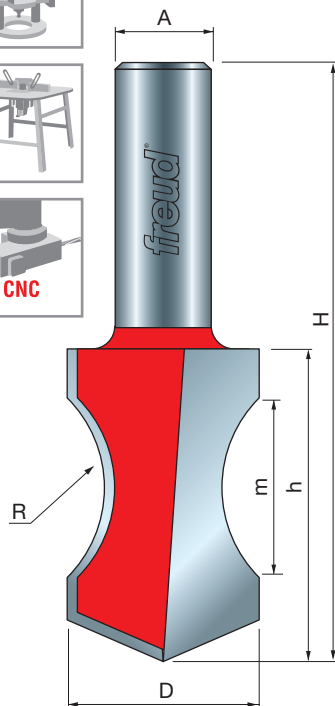
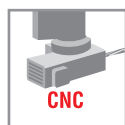


Convex Edge Bit

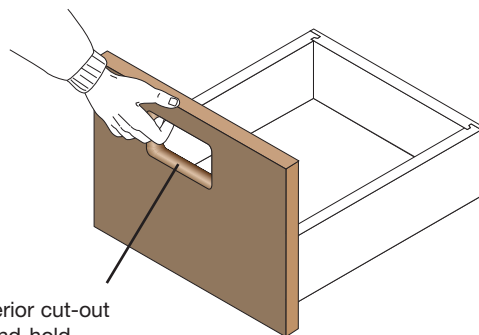
Application: Shallow bull nose profile for edging

- This bit creates a soft, gently rounded edge on any project or use this bit to plunge route internal cut-outs for use as hand-holds.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Minor Height(m)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
99-019	1"	1-5/8"	7/8"	39/64"	1/2"	3-1/16"



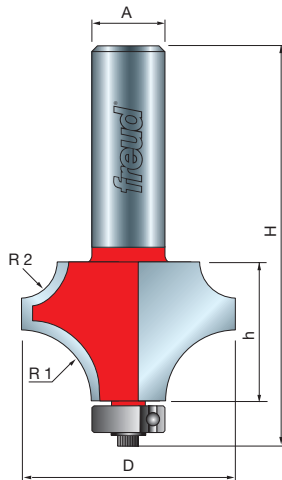
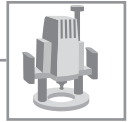
Example of interior cut-out for use as a hand-hold.



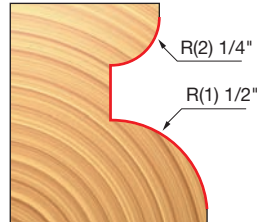
Combination Rounding Over Bit

Application: Decorative moldings and furniture edges

- Ideal for creating new molding profiles, this bit combines two of Freud's most popular bits into one: a 1/4" rounding over bit and a 1/2" rounding over bit.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Item Number	Overall Dia.(D)	Carbide Height(h)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
99-044	1-31/64"	1"	9/32"	1/2"	1/4"	1/2"	2-13/16"



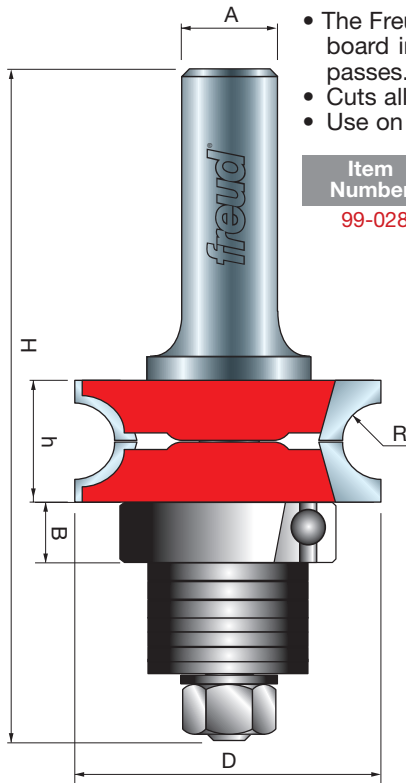
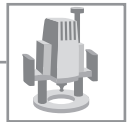
99-044



Variable Corner Round Bit

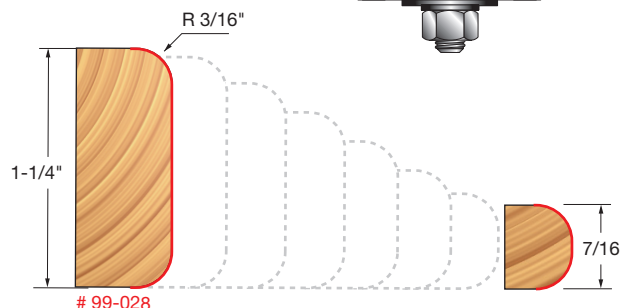
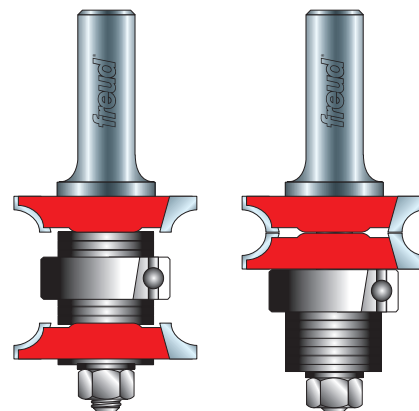
Application: Rounding two edges in one pass

- The Freud variable corner round bit saves you time by rounding both edges on a board in one pass, rather than using standard rounding over bits that require two passes. Works with stock from 7/16" to 1-1/4" thick.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Item Number	Overall Dia.(D)	Bearing Height(B)	Carbide Height(h)	Minor Height(m)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
99-028	1-19/32"	5/16"	1-7/64"	7/16"-1-1/4"	3/16"	1/2"	3-1/2"

By simply reconfiguring the shims and bearing you can cut the different thicknesses of stock

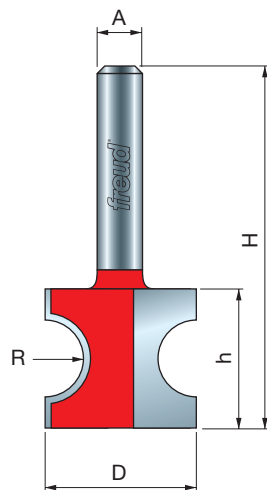


99-028

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



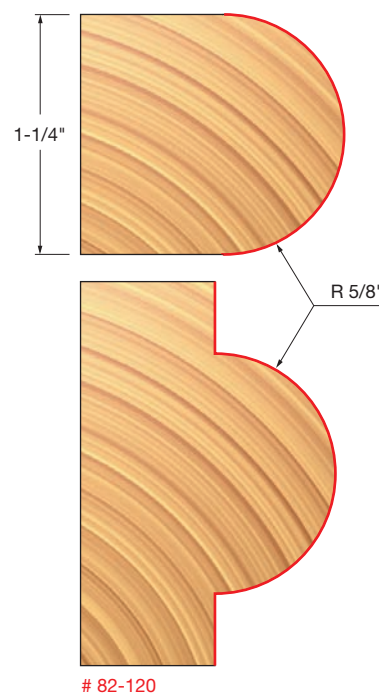
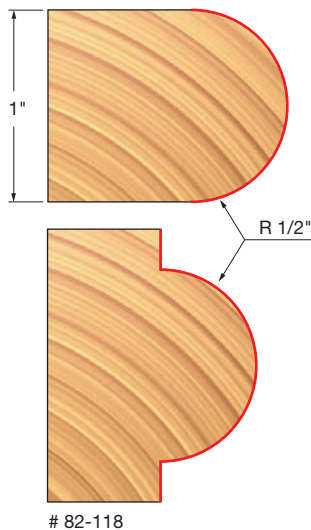
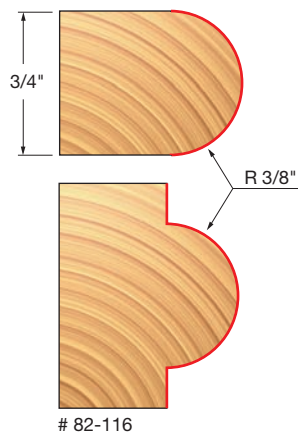
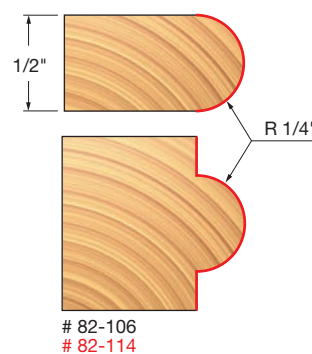
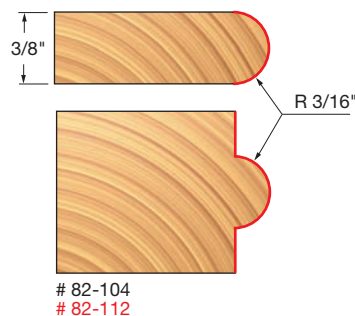
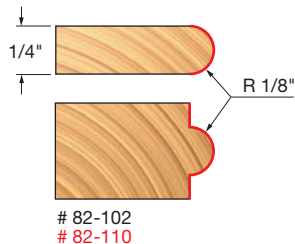
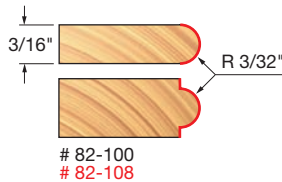


Half Round Bits

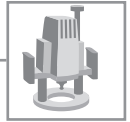
Application: Bull nose profile for furniture and moldings

- Produce a fully rounded edge on dimensional lumber or create an attractive half-round profile on furniture and moldings with this bit. Guiding device must be used.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
82-100	11/16"	7/16"	3/32"	1/4"	1-13/16"
82-102	3/4"	1/2"	1/8"	1/4"	1-7/8"
82-104	7/8"	27/32"	3/16"	1/4"	2-1/8"
82-106	1"	29/32"	1/4"	1/4"	2-1/4"
82-108	11/16"	7/16"	3/32"	1/2"	2-1/16"
82-110	3/4"	1/2"	1/8"	1/2"	2-5/32"
82-112	7/8"	27/32"	3/16"	1/2"	2-3/8"
82-114	1"	29/32"	1/4"	1/2"	2-9/16"
82-116	1-29/64"	1-11/64"	3/8"	1/2"	2-13/16"
82-118	1-13/16"	1-27/64"	1/2"	1/2"	2-7/8"
82-120	2"	2"	5/8"	1/2"	3-1/2"



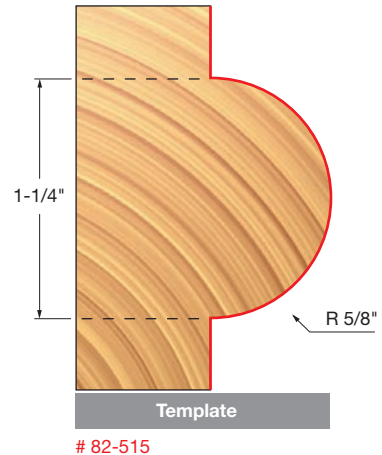
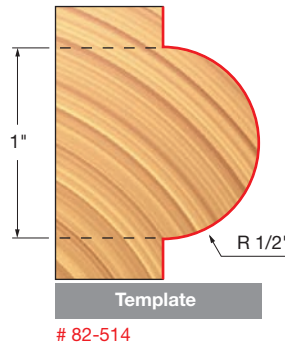
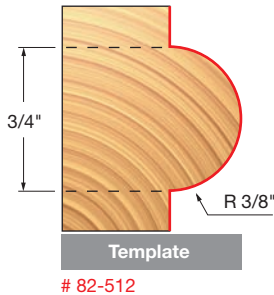
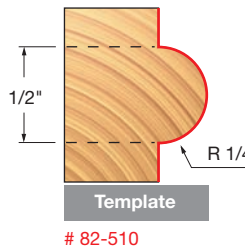
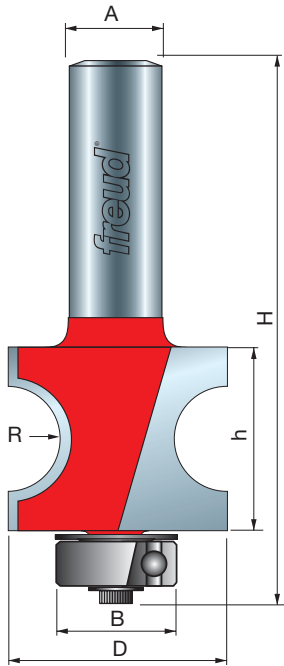
Half Round Bits with Bearings



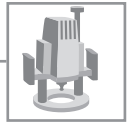
Application: Versatile rounded edge for furniture and moldings

- These bits produce a fully rounded edge on dimensional lumber or an attractive half round profile on furniture and moldings. Comes with ball bearing guide for template work.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
82-510	1-5/32"	5/8"	1"	1/4"	1/2"	2-7/8"
82-512	1-3/8"	5/8"	1-5/16"	3/8"	1/2"	3-1/4"
82-514	1-3/4"	3/4"	1-19/32"	1/2"	1/2"	3-3/4"
82-515	2"	3/4"	2"	5/8"	1/2"	3-13/16"



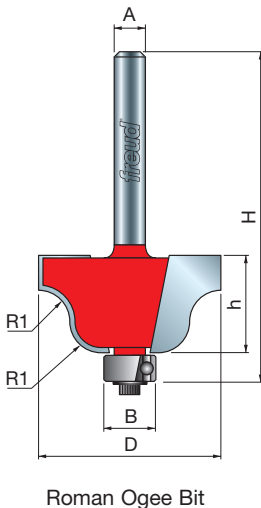
Decorative Edge Bits



Application: Decorative edging for cabinets, molding and furniture

- Add distinctive design to cabinets, furniture, plaques, and millwork with these decorative edging bits.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Minor Height(m)	Shank Dia.(A)	Overall Length(H)
Roman Ogee Bits								
38-100	1-1/16"	3/8"	1/2"	5/32"	-	-	1/4"	2-3/16"
38-102	1-3/8"	3/8"	23/32"	1/4"	-	-	1/4"	2-3/8"
38-104	1-1/16"	3/8"	1/2"	5/32"	-	-	1/2"	2-3/8"
38-106	1-3/8"	3/8"	23/32"	1/4"	-	-	1/2"	2-9/16"
Ogee Bits								
38-152	1-1/4"	1/2"	1/2"	3/16"	-	-	1/4"	2-1/8"
38-154	1-1/2"	1/2"	5/8"	1/4"	-	-	1/4"	2-3/16"
99-006	1-1/2"	1/2"	21/32"	21/64"	-	-	1/2"	2-1/2"
38-172	1-1/8"	1/2"	21/32"	21/64"	-	-	1/2"	2-1/4"
Ogee Fillet Bits								
38-202	1-1/4"	3/8"	1/2"	3/16"	-	-	1/4"	2-1/8"
38-204	1-1/2"	3/8"	5/8"	1/4"	-	-	1/4"	2-3/16"
38-222	1-1/8"	3/8"	1/2"	5/32"	-	-	1/2"	2-1/4"
38-224	1-1/2"	3/8"	3/4"	1/4"	-	-	1/2"	2-1/2"
Classical Roman Ogee Bits								
38-402	1-1/4"	1/2"	19/32"	1/8"	-	15/64"	1/4"	2-3/16"
99-005	1-3/8"	1/2"	9/16"	3/16"	-	7/32"	1/2"	2-7/16"

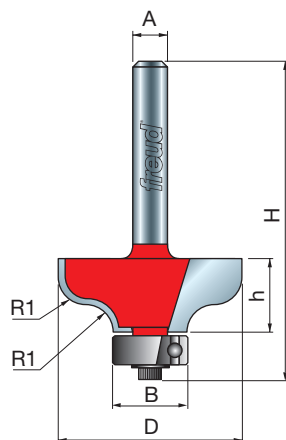


Roman Ogee Bit

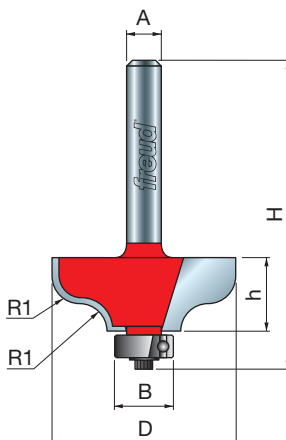


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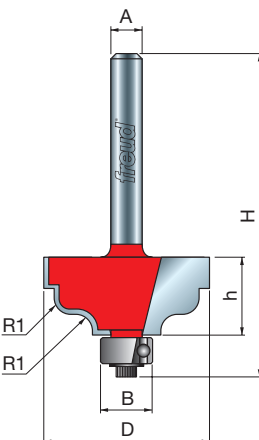
Decorative Edge Bits



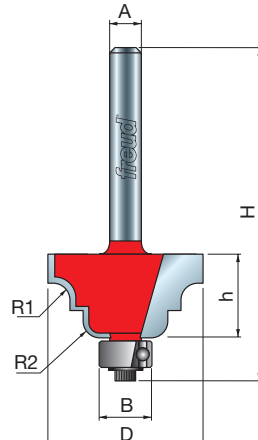
Ogee Bit



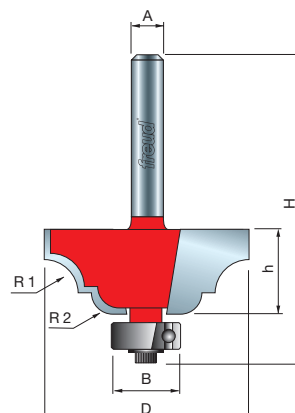
Ogee Fillet Bit



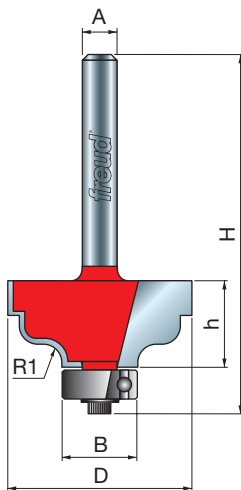
Double Fillet Ogee Bit



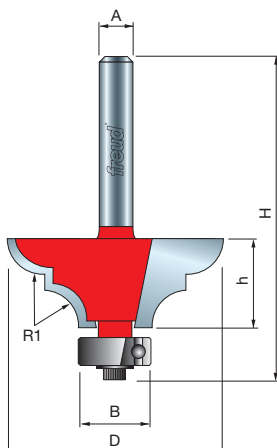
Cove & Bead Bit



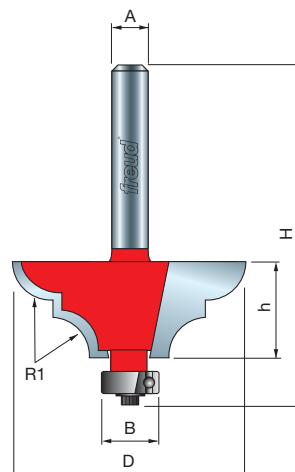
Classical Cove & Bead Bit



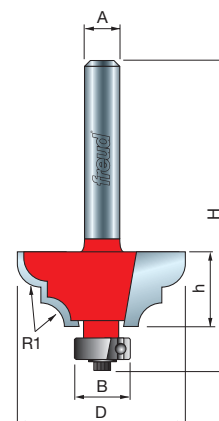
Classical Roman Ogee Bit



Classical Bold Cove & Round Bit



Classical Bold Cove & Bead Bit



Classical Cove & Round Bits

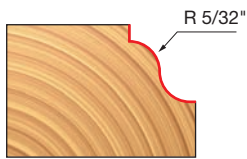
Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Minor Height(m)	Shank Dia.(A)	Overall Length(H)
Double Fillet Ogee Bit								
38-452	1-1/4"	3/8"	19/32"	1/8"	—	—	1/4"	2-3/16"
99-003	1-3/8"	3/8"	9/16"	11/64"	—	—	1/2"	2-5/16"
Cove & Bead Bits								
38-302	1-5/32"	3/8"	5/8"	1/8"	—	7/32"	1/4"	2-3/16"
38-304	1-9/16"	3/8"	23/32"	1/4"	—	7/32"	1/4"	2-5/16"
38-312	1-5/32"	3/8"	5/8"	1/8"	—	7/32"	1/2"	2-9/16"
38-314	1-9/16"	3/8"	23/32"	1/4"	—	7/32"	1/2"	2-3/4"
99-009	1-3/8"	3/8"	9/16"	13/64"	—	7/32"	1/2"	2-3/8"
Classical Cove & Bead Bits								
38-352	1-1/2"	1/2"	5/8"	1/4"	5/32"	—	1/4"	2-1/4"
38-362	1-1/2"	1/2"	5/8"	1/4"	5/32"	—	1/2"	2-1/2"
Classical Bold Cove & Round Bits								
38-502	1-1/4"	1/2"	7/16"	3/16"	—	—	1/4"	2-1/16"
38-504	1-1/2"	1/2"	11/16"	1/4"	—	—	1/4"	2-1/2"
Classical Bold Cove & Bead Bits								
38-522	1-1/4"	3/8"	7/16"	3/16"	—	—	1/4"	2-1/16"
38-524	1-1/2"	3/8"	11/16"	1/4"	—	—	1/4"	2-5/16"
Classical Cove & Round Bits								
38-602	1-1/8"	1/2"	1/2"	5/32"	—	5/64"	1/4"	2-5/16"
38-612	1-1/8"	1/2"	1/2"	5/32"	—	5/64"	1/2"	2-9/16"
38-613	1-3/8"	1/2"	3/4"	1/4"	3/16"	5/64"	1/4"	2-1/4"
38-614	1-3/8"	1/2"	11/16"	1/4"	3/16"	5/64"	1/2"	2-3/4"
38-622	1-1/8"	3/8"	1/2"	5/32"	—	5/64"	1/4"	2-5/16"
38-632	1-1/8"	3/8"	1/2"	5/32"	—	5/64"	1/2"	2-9/16"
38-713	1-3/8"	3/8"	3/4"	1/4"	3/16"	5/64"	1/4"	2-1/4"

All Profile Drawings 1:1 Scale

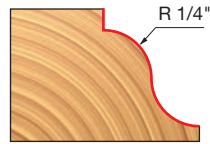
Red Item Numbers Indicate 1/2" Shank

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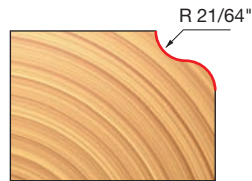
Decorative Edge Bits



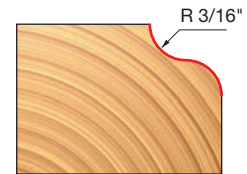
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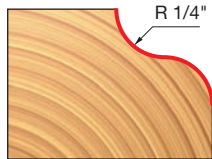
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38-106



38-172



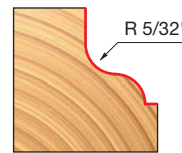
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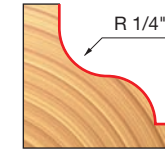
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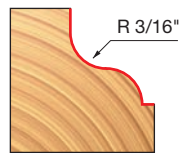
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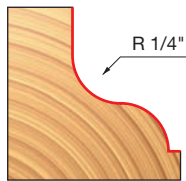
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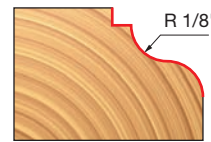
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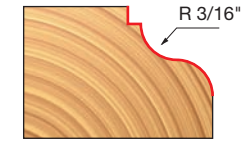
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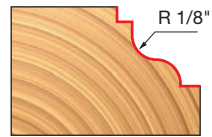
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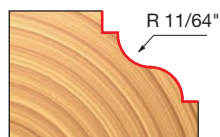
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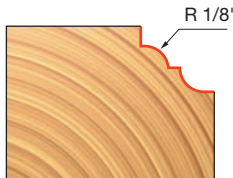
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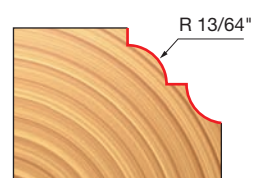
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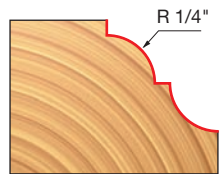
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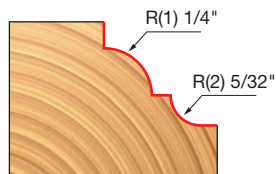
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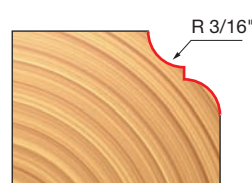
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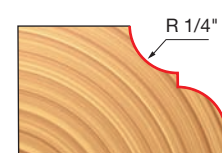
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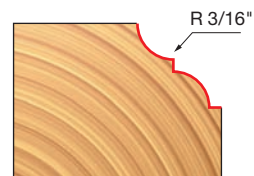
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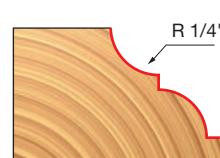
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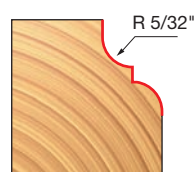
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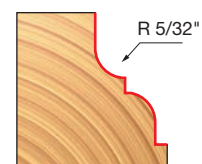
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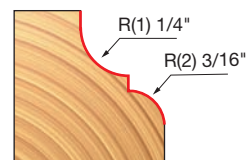
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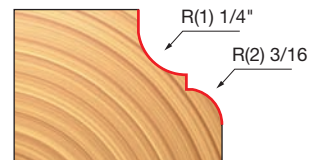
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38-612



38-622
38-632



38-614

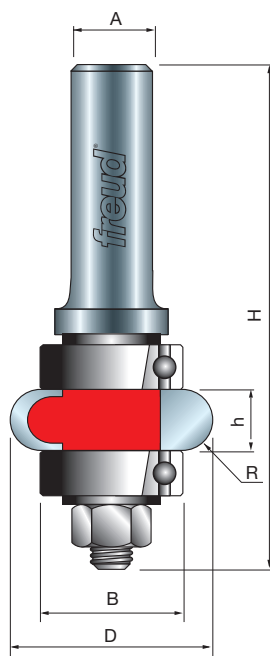


38-613



38-713



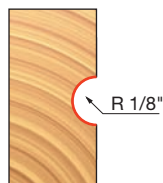


Flute Bits

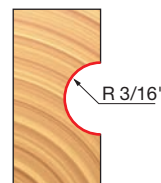
Application: Chippendale style furniture

- These bits include double bearings to create a fluted design for chair legs and moldings. Ideal for the production of Chippendale style furniture.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
99-029	11/8"	7/8"	7/8"	1/8"	1/2"	3"
99-030	11/4"	7/8"	7/8"	3/16"	1/2"	3"



99-029



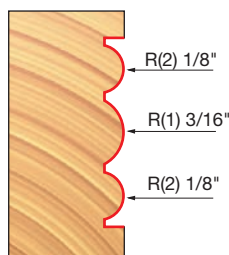
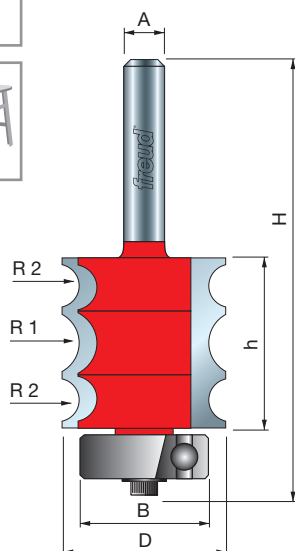
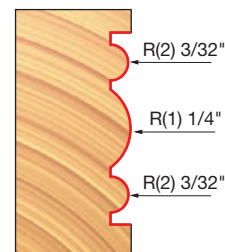
99-030

Triple Beading Bits

Application: Ornate multiple beads for decorative molding

- Create three beads in one pass for decorative molding and furniture with these bits from Freud.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
80-558	15/16"	3/4"	1"	3/16"	1/8"	1/4"	2-5/8"
80-564	15/16"	3/4"	1"	1/4"	3/32"	1/4"	2-5/8"
80-578	15/16"	3/4"	1"	3/16"	1/8"	1/2"	2-3/4"
80-584	15/16"	3/4"	1"	1/4"	3/32"	1/2"	2-3/4"

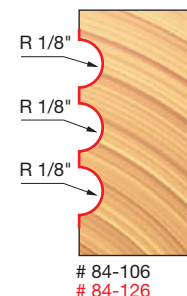
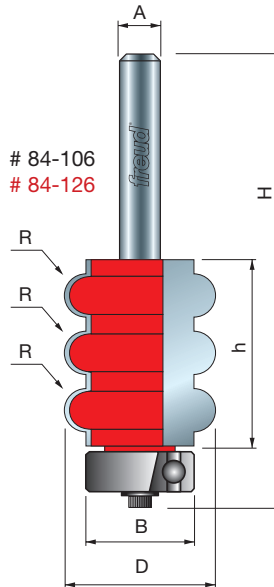
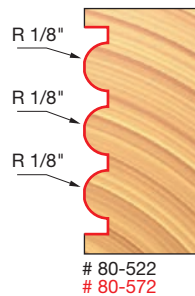
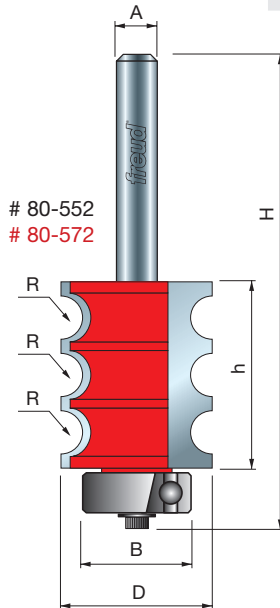
# 80-558
80-578# 80-564
80-584

Triple Beading & Fluting Bits

Application: Columns, posts and decorative moldings

- Enhances moldings and furniture with multiple beads and fluting.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
80-552	7/8"	5/8"	1-5/64"	1/8"	1/4"	2-3/4"
80-572	7/8"	5/8"	1-5/64"	1/8"	1/2"	3-1/8"
84-106	7/8"	5/8"	1-5/64"	1/8"	1/4"	2-5/8"
84-126	7/8"	5/8"	1-5/64"	1/8"	1/2"	3"

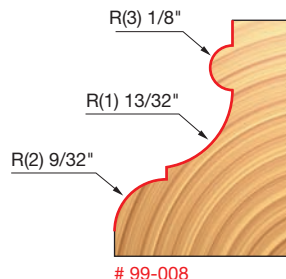
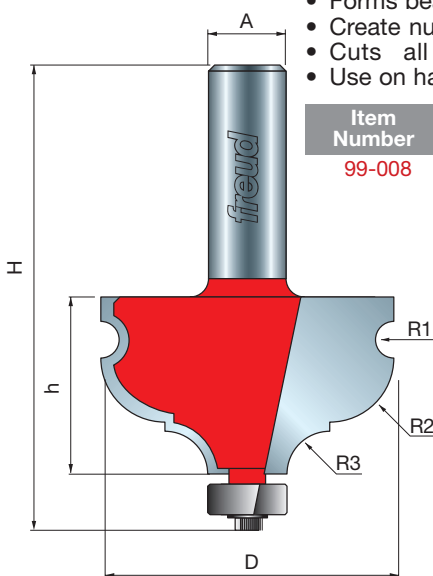


Bold Classical Bit

Application: Chair rails and other decorative millwork

- Forms beautiful wainscot and panel moldings.
- Create numerous molding profiles by using various bearings and multiple passes.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Small Radius(R3)	Shank Dia.(A)	Overall Length(H)
99-008	1-3/4"	1-1/8"	13/32"	9/32"	1/8"	1/2"	3"



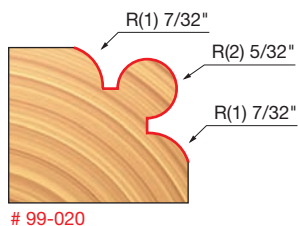
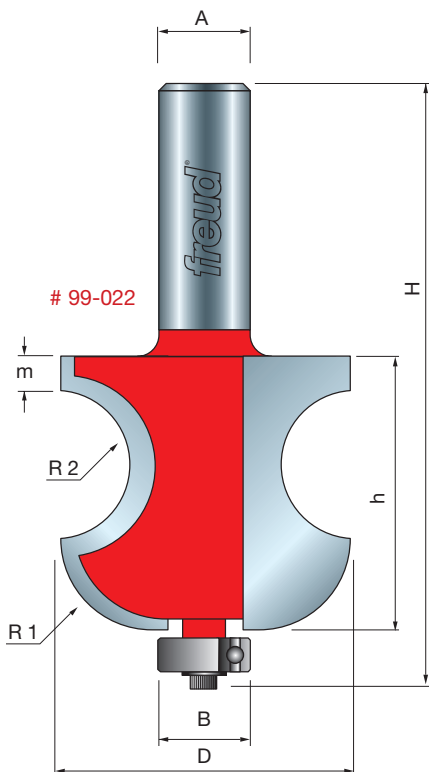


Corner Beading Bits

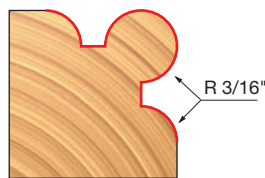
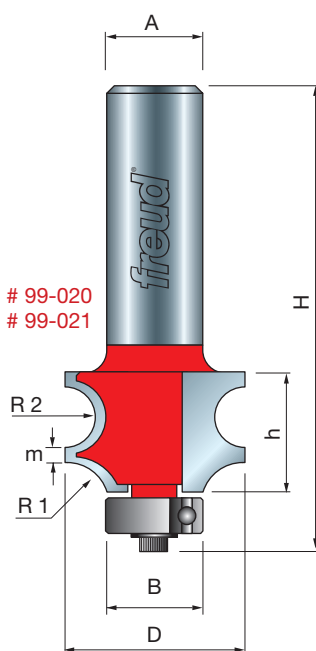
Application: Beams, posts, railings and fine furniture

- Adds an attractive bead to beams, posts, railings, and millwork.
- Ideal for accenting square table legs.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

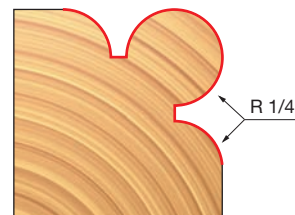
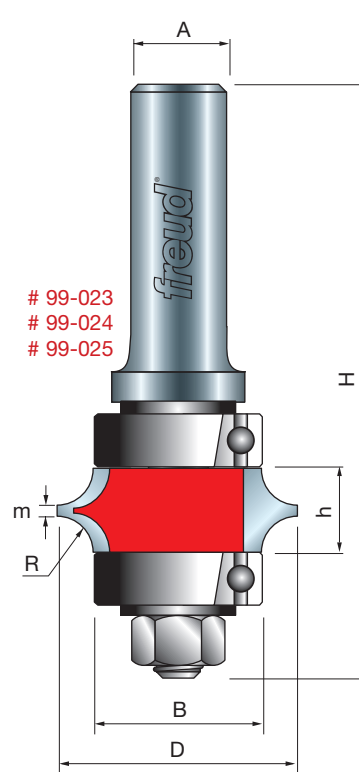
Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Minor Height(m)	Shank Dia.(A)	Overall Length(H)
99-020	15/16"	1/2"	5/8"	7/32"	5/32"	5/64"	1/2"	2-1/2"
99-021	1-1/4"	1/2"	1-15/32"	3/8"	—	9/64"	1/2"	3-3/8"
99-022	1-37/64"	1/2"	1-1/2"	15/32"	25/64"	15/64"	1/2"	3-3/8"
99-023	1-5/8"	7/8"	53/64"	3/8"	—	5/64"	1/2"	3-7/16"
99-024	1-3/8"	7/8"	37/64"	1/4"	—	5/64"	1/2"	3-3/16"
99-025	1-1/4"	7/8"	1/2"	3/16"	—	1/8"	1/2"	3-1/8"



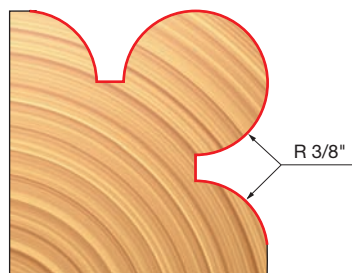
99-020



99-025



99-024

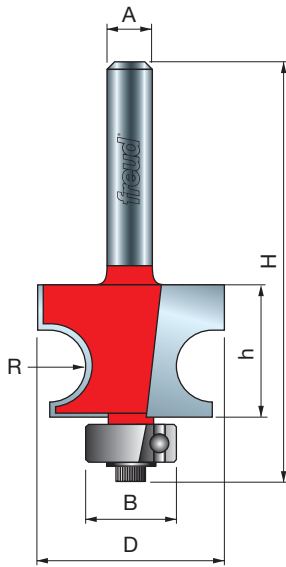
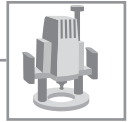
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99-023

99-022

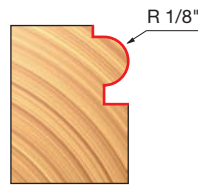
Traditional Beading Bits

Application: Matching moldings in historic homes

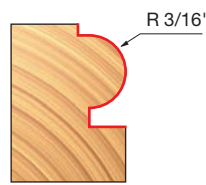
- Forms a single bead with a square shoulder.
- Commonly used by remodelers to match base moldings in historic homes.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



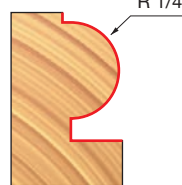
Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
80-102	1"	1/2"	9/16"	1/8"	1/4"	2-3/16"
80-104	1-1/4"	1/2"	11/16"	3/16"	1/4"	2-5/16"
80-106	1-1/8"	1/2"	7/8"	1/4"	1/4"	2-3/8"
80-108	1-3/8"	1/2"	3/4"	9/32"	1/4"	2-3/8"
80-122	1"	1/2"	9/16"	1/8"	1/2"	2-7/16"
80-124	1-1/4"	1/2"	11/16"	3/16"	1/2"	2-9/16"
80-126	1-1/8"	1/2"	7/8"	1/4"	1/2"	2-5/8"
80-128	1-3/8"	1/2"	3/4"	9/32"	1/2"	2-5/8"
80-130	1-9/16"	1/2"	1"	3/8"	1/2"	2-7/8"



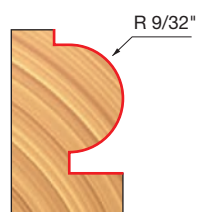
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80-122



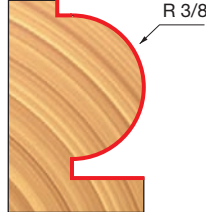
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80-124



80-106
80-126



80-108
80-128



80-130

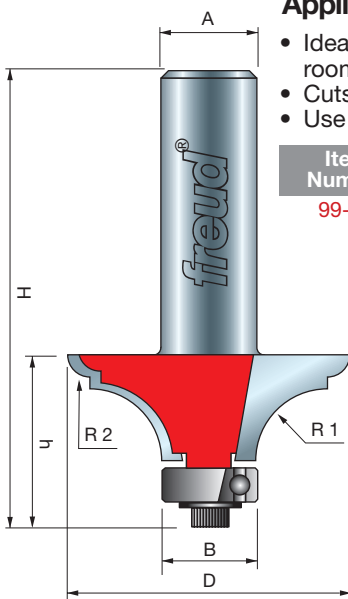
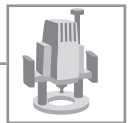
Example of profile ▼



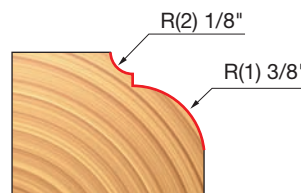
Table Top Classical Bit

Application: Ornamental edge for tables and desks

- Ideal for enhancing the beauty of the wood found in occasional and dining room tables.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
99-010	1-1/2"	1/2"	9/16"	3/8"	1/8"	1/2"	2-1/2"



99-010

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



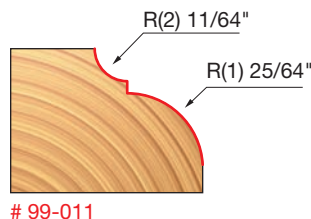
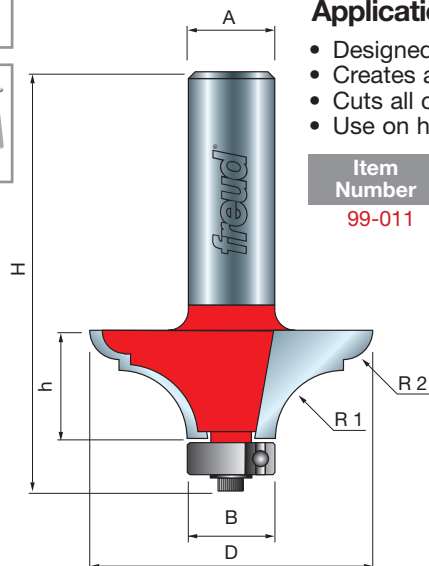


Table Top Classical Bold Bit

Application: Decorative edge for tables and desks

- Designed with sharp curves to generate a strong, uplifting edge.
- Creates a bold effect on furniture of all types.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
99-011	1-5/8"	1/2"	5/8"	25/64"	11/64"	1/2"	2-1/2"

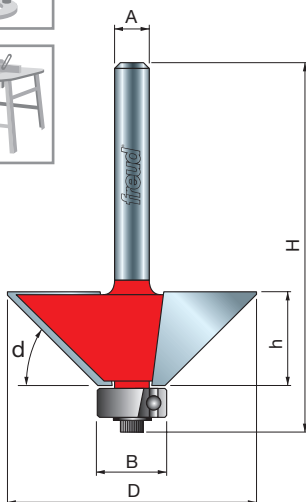


Chamfer Bits

Application: For multiple-sided projects, joinery, and easing edges

- Creates a uniform chamfer on the edge of any work piece to add character, while retaining crisp geometric lines.
- #40-094 makes 16-sided pieces and #40-098 makes 12-sided pieces.
- Chamfer size easily adjusts by changing the height of the bit.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
40-094	7/8"	1/2"	1"	11-1/4°	1/2"	2-3/4"
40-098	1"	1/2"	1"	15°	1/2"	1"
40-100	23/32"	1/2"	1/2"	15°	1/4"	2-3/16"
40-101	1-1/4"	1/2"	7/8"	22-1/2°	1/2"	2-5/8"
40-102	15/16"	1/2"	1/2"	25°	1/4"	2-3/16"
40-104	1-11/32"	1/2"	1/2"	45°	1/4"	2-3/16"
40-106	1-3/4"	1/2"	5/8"	45°	1/4"	2-3/16"
40-114	1-3/4"	1/2"	5/8"	45°	1/2"	2-9/16"
40-118	2-1/2"	1/2"	1"	45°	1/2"	2-7/8"
40-202	1-11/32"	1/2"	3/4"	30°	1/4"	2-1/4"
40-206	1-11/32"	1/2"	3/4"	30°	1/2"	2-3/4"



40-094



40-100



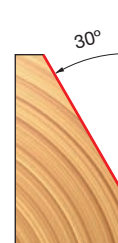
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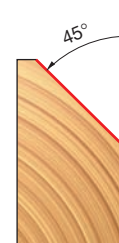
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40-102



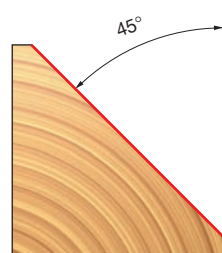
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40-206



40-104



40-106
40-114



40-118

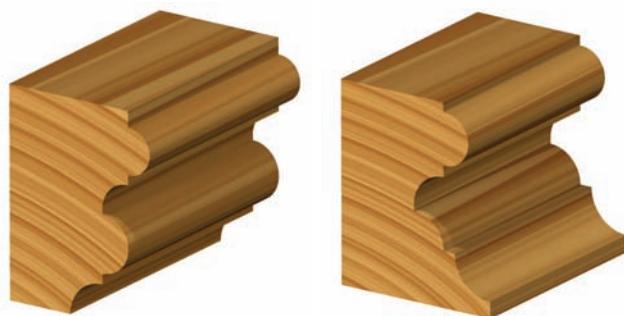
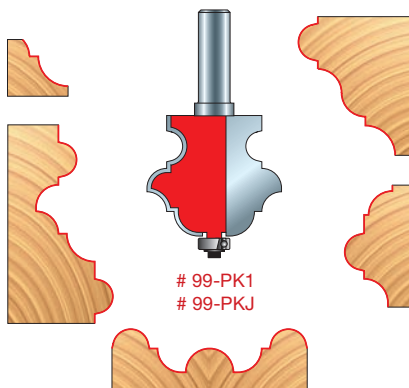
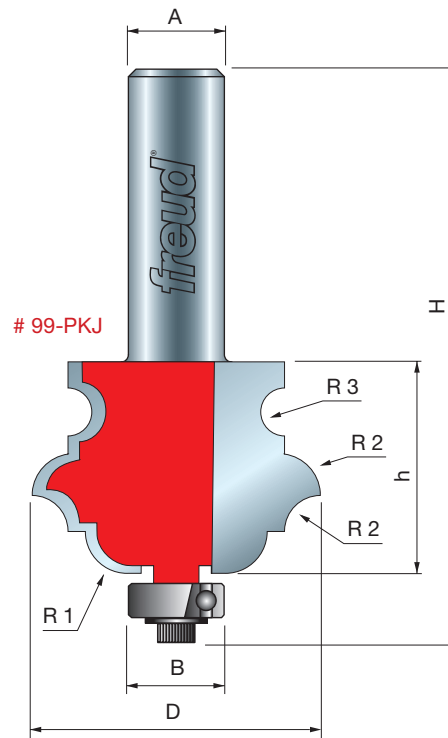
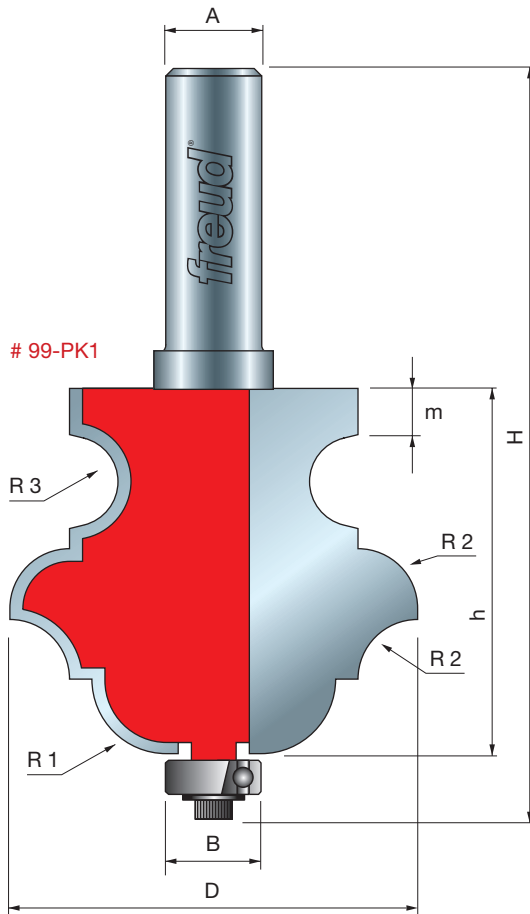


Multi-Profile Bits

Application: One bit produces numerous designs for face, corner and crown molding

- Thick carbide tips and a sturdy 1/2" shank allow you to produce countless molding profiles.
- Produce an endless number of profile designs by varying the height and fence settings and making multiple passes.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Small Radius(R3)	Shank Dia.(A)	Overall Length(H)
99-PKJ	1-1/2"	—	1-7/64"	—	7/32"	3/16"	1/8"	1/2"	3"
99-PK1	2-5/32"	—	1-59/64"	—	25/64"	5/16"	15/64"	1/2"	4"
99-PK2	1-1/4"	1-3/32"	51/64"	5/64"	3/8"	5/64"	—	1/2"	2-1/4"
99-PK3	1-1/4"	1-3/32"	29/32"	5/64"	3/8"	5/64"	—	1/2"	2-7/16"
99-PK7	2-33/64"	1-7/32"	1-51/64"	3/32"	1/4"	3/16"	—	1/2"	3-1/2"



▲ Examples of multi-profiles ▲

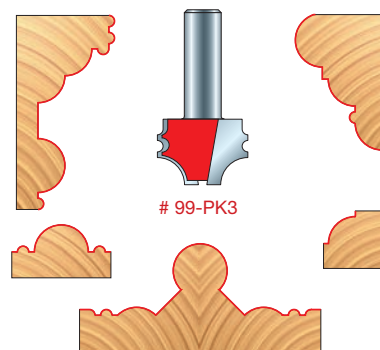
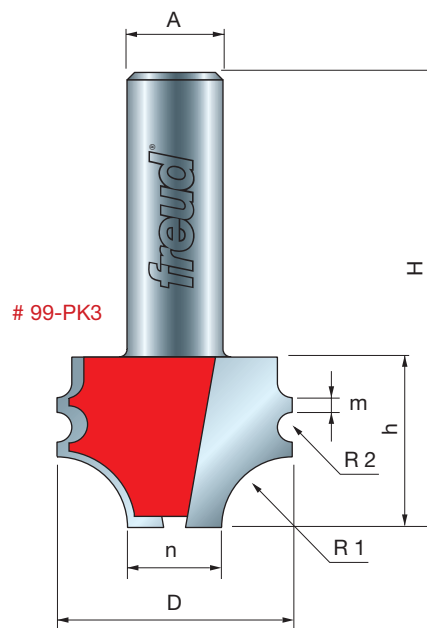
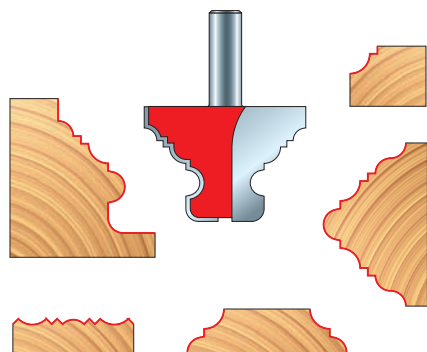
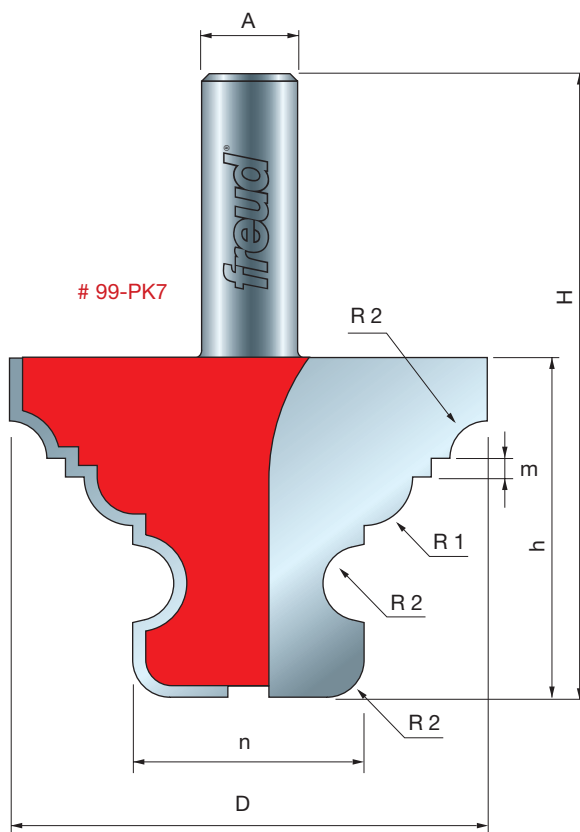
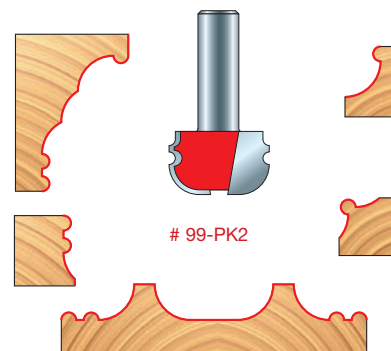
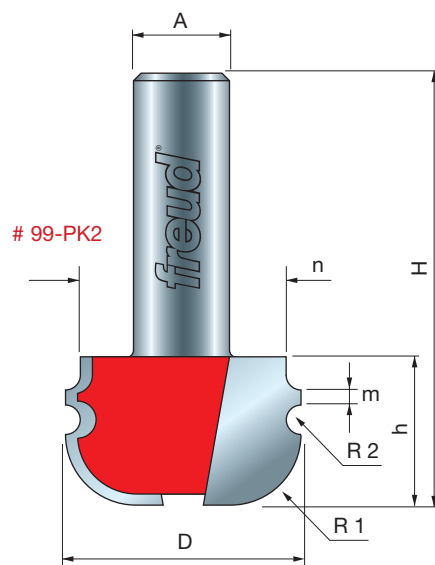
Red Item Numbers Indicate 1/2" Shank





(Continued)

Multi-Profile Bits





New Architectural Molding Series Bits



Freud's new series of architectural molding router bits is ideal for renovators, remodelers, or woodworkers who need to mill a perfect match to standard molding designs. Besides matching the most common molding profiles, these bits provide the flexibility to mill casing, chair rail, base cap, brick molding and more from precisely the right wood species required by the project. That means professionals and homeowners can save the cost of ordering expensive custom-milled molding for special projects, and save the time and aggravation of searching from lumber yard to lumber yard for the right shape, style and species.

Brick Molding Bit



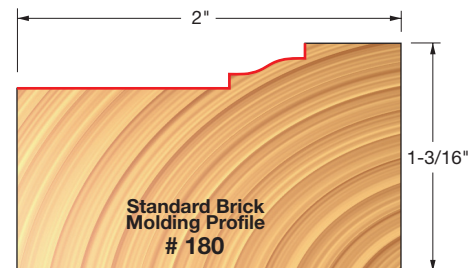
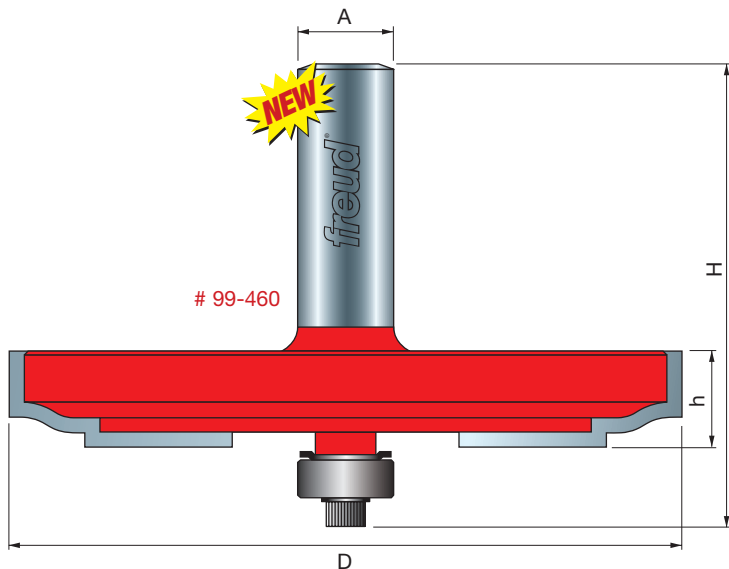
Architectural Molding Series

Application: Creates industry standard Brick Molding profile #180

- Mill straight or arched molding to fit windows, doors or arched openings.
- Features Freud's patented 2+2 technology for extra-clean cuts in crossgrain applications.
- Use with hardwood or softwood to mill stain grade molding.
- Use with table-mounted portable routers.

Note: For best results make two or more passes

Item Number	Profile Design	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
NEW 99-460	Brick Molding #180	3-1/2"	1/2"	1/2"	3"





Casing Bits

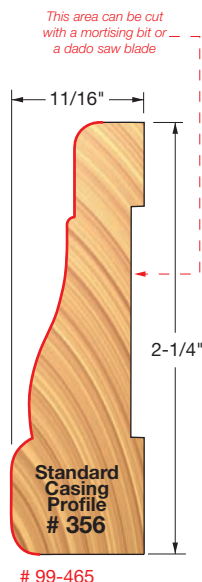
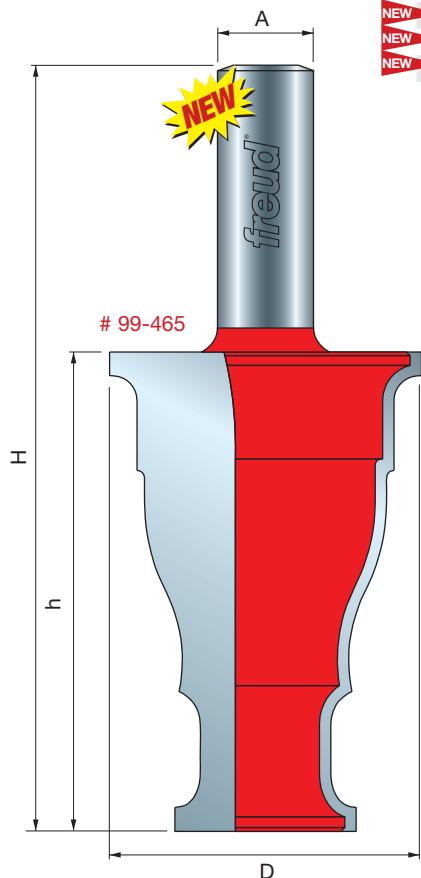
Application: Creates industry standard casing profiles #356, #366, #376, and #445

- Perfectly match four standard door casing designs with your choice of wood.
- Add elegant detail to doors, windows, built-ins and many other projects.
- Use with hardwood or softwood to mill stain grade molding.
- Use with table mounted, CNC or automatic routers.

Note: For best results make two or more passes.

Architectural Molding Series

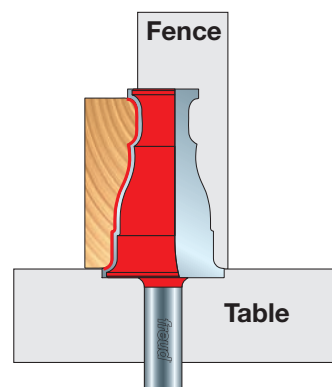
	Item Number	Profile Design	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
NEW	99-465	Casing #356	1-5/8"	2-1/2"	1/2"	4"
NEW	99-466	Casing #366	1-1/2"	1-13/16"	1/2"	3-9/32"
NEW	99-467	Casing #376	1-5/8"	1-15/16"	1/2"	3-7/16"
NEW	99-468	Casing #445	1-1/2"	2-7/8"	1/2"	4-3/8"



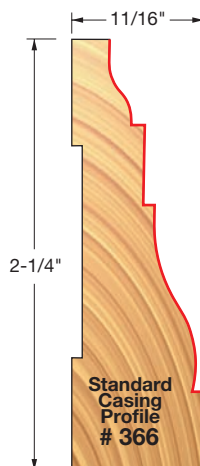
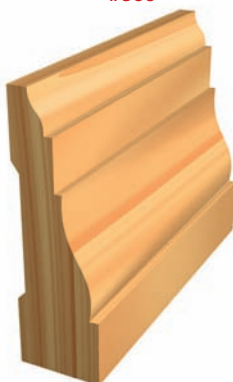
Creates Standard Casing Profile #356



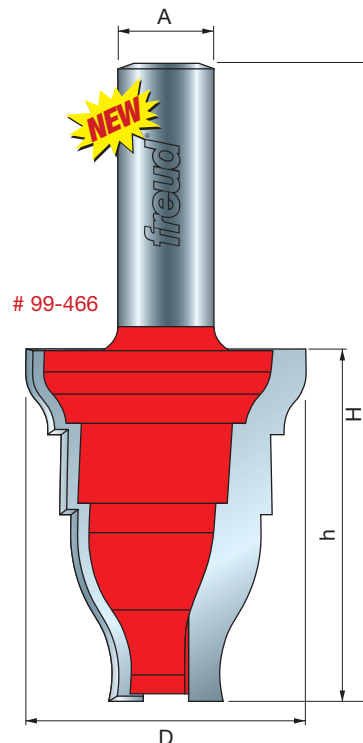
Routing Technique for all casing profiles



Creates Standard Casing Profile #366



99-466



(Continued)

Casing Bits



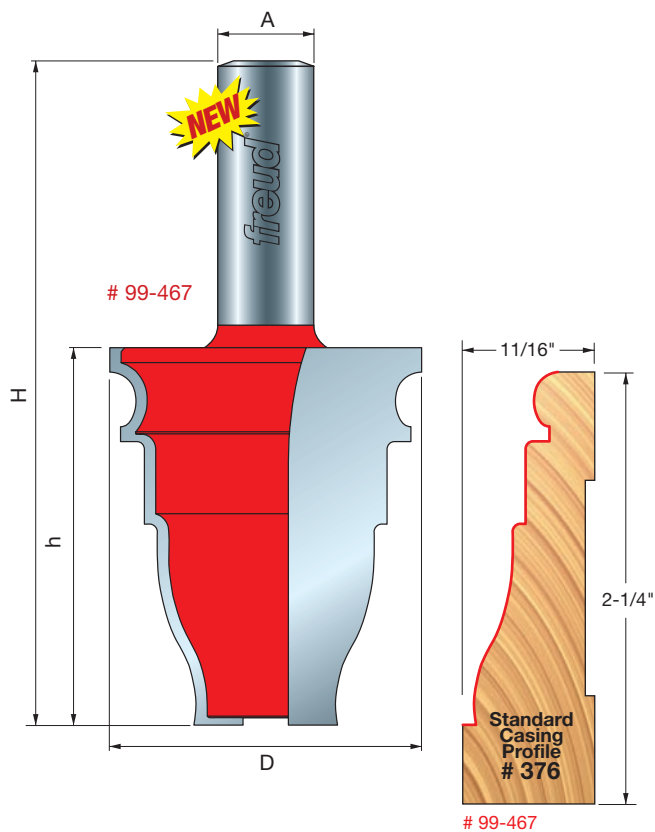
Architectural Millwork Bits



ROUTER BITS & SETS

freud®

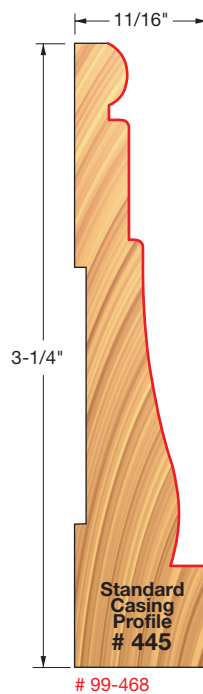
139



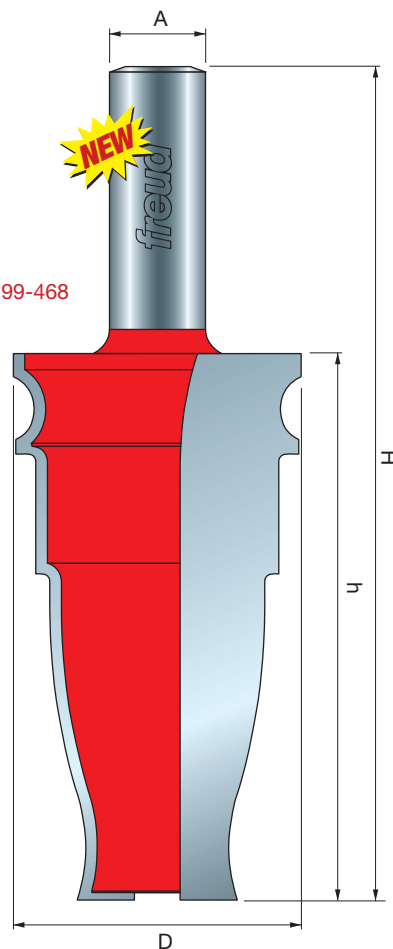
Creates Standard
Casing Profile
#376



Creates Standard
Casing Profile
#445



99-468



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



Architectural Molding Series

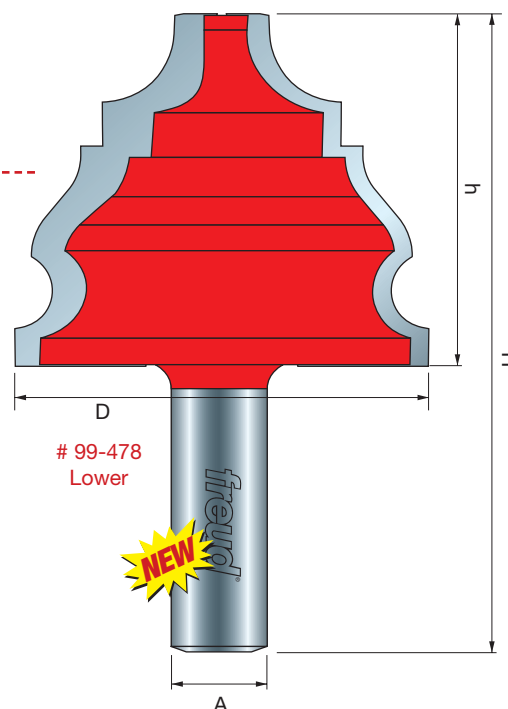
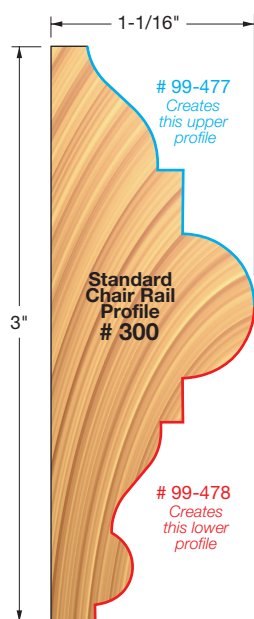
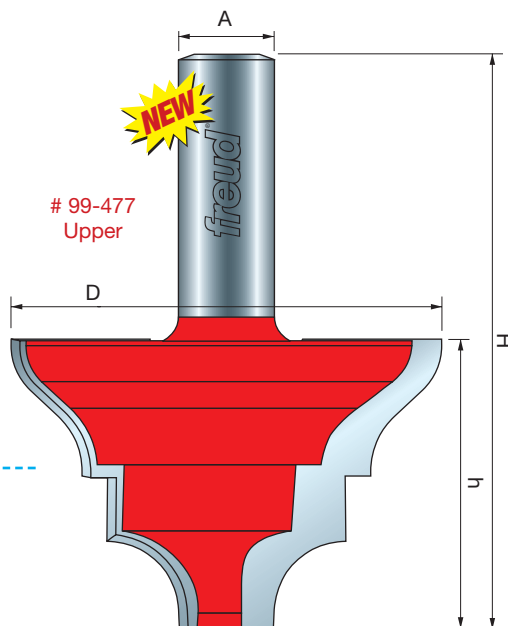
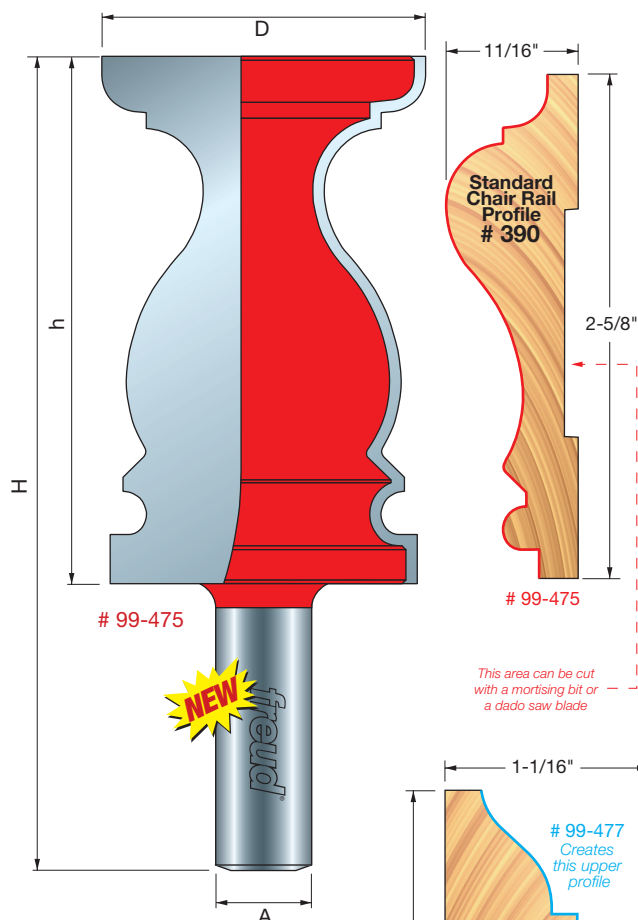
Chair Rail Bits

Application: Creates standard decorative chair rail profiles as well as beautiful panel moldings

- Chair Rail adds a beautiful horizontal detail to any room in the home or office.
- Choose your favorite wood, and perfectly match two very popular chair rail designs.
- Use with hardwood or softwood to mill stain grade molding.
- Bits for chair #300 can also be used by themselves for other profiles.
- Use with table mounted, CNC or automatic routers.

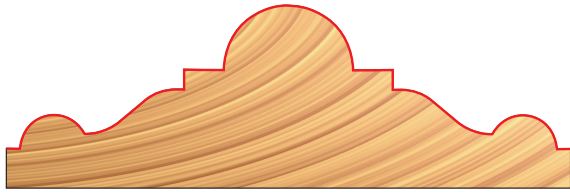
Note: For best results make two or more passes.

	Item Number	Profile Design	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
NEW	99-475	Chair Rail #390	1-11/16"	2-3/4"	1/2"	4-1/4"
NEW	99-477	Chair #300, upper	2-1/4"	1-1/2"	1/2"	3"
NEW	99-478	Chair #300, lower	2-3/16"	1-13/16"	1/2"	3-5/16"

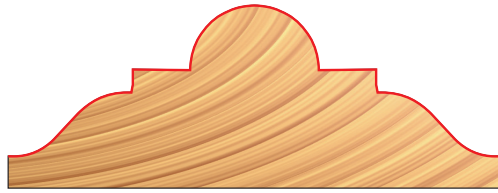


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Chair Rail Bits

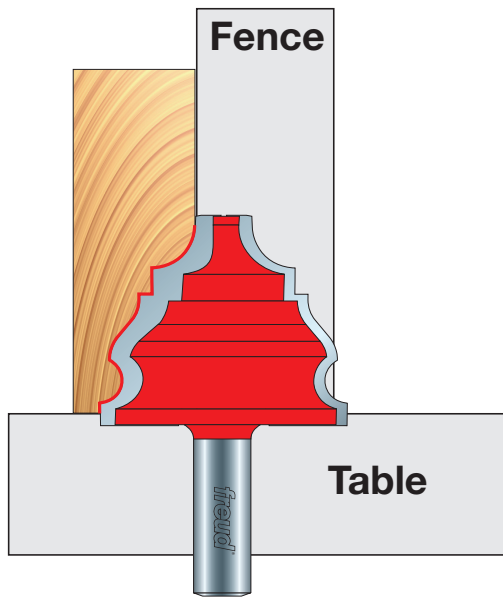


99-478 Also creates this profile

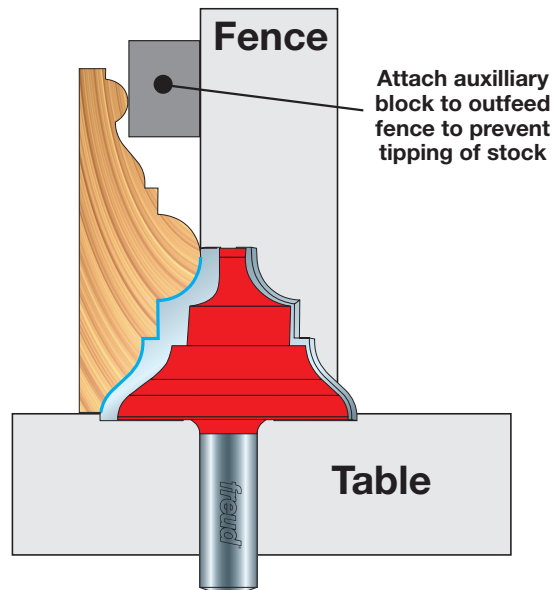


99-477 Also creates this profile

First Cut Using Bit #99-478



Second Cut Using Bit #99-477



99-475
(not to scale)



99-477 & # 99-478
(not to scale)

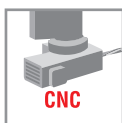


99-478
(not to scale)



99-477
(not to scale)





Architectural Molding Series

Base and Cap Bits

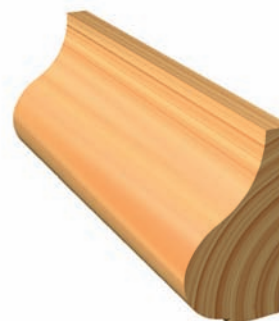
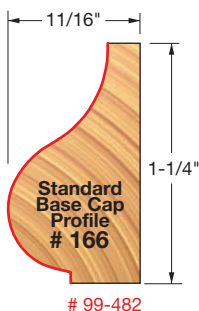
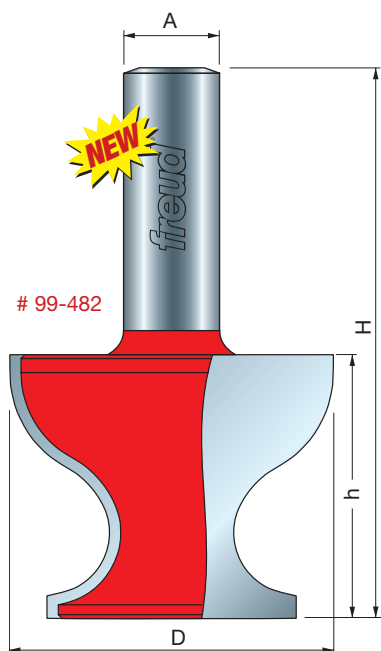
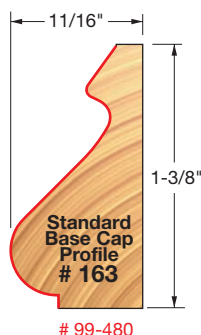
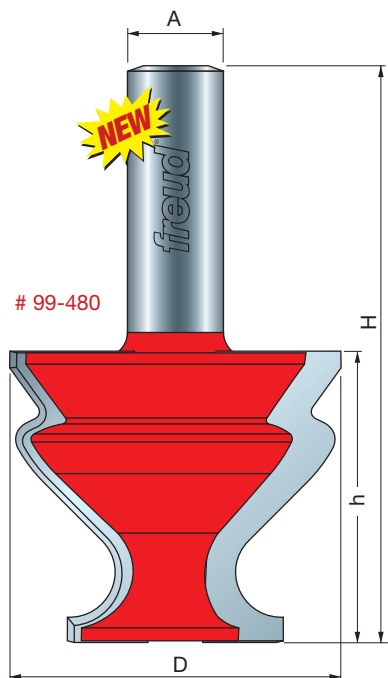
Application: Mill base or traditional "mop" boards in any width

- Ideal for renovators who need to match old, extra-high base moldings.
- Bits can be used to rout base cap only, or to profile the edge of wide base molding.
- Choose your favorite wood to suit the room.
- Use with hardwood or softwood to mill stain grade molding.
- Use with table mounted, CNC or automatic routers.

Note: For best results make two or more passes.

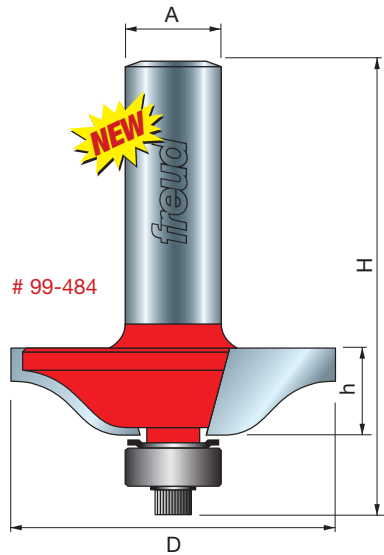
	Item Number	Profile Design	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
NEW	99-480	Base Cap #163	1-3/4"	1-1/2"	1/2"	3"
NEW	99-482	Base Cap #166	1-11/16"	1-1/2"	1/2"	2-7/8"
NEW	99-484	Base Molding*	1-11/16"	15/32"	1/2"	2-3/8"

* Base molding bit routs a variety of standard base profiles, including 618, 620, 622, 623, and 624.

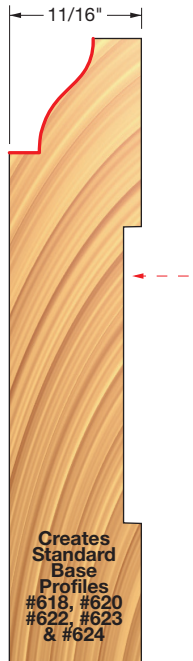


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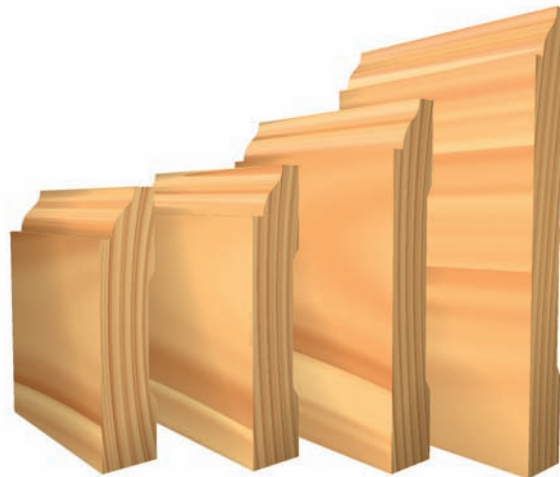
Base and Cap Bits



This area can be cut
with a mortising bit or
a dado saw blade



99-484





Architectural Molding Series

Beadboard Bit System

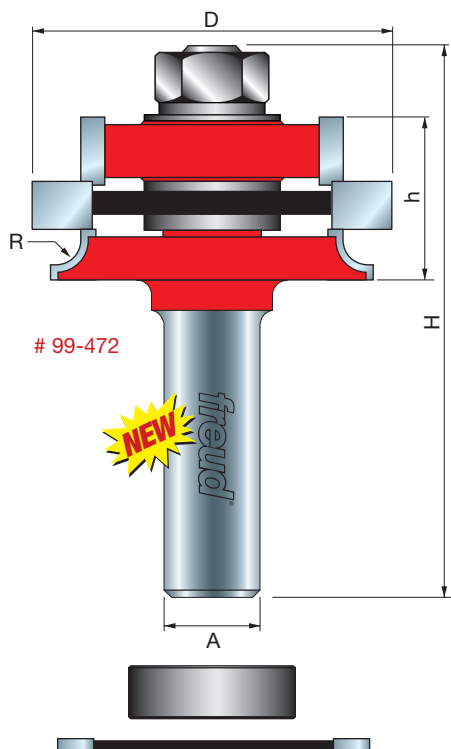
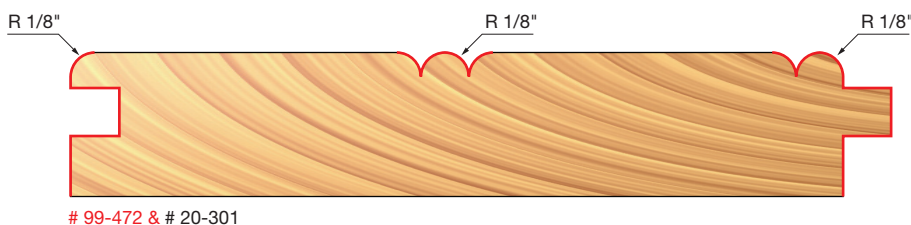
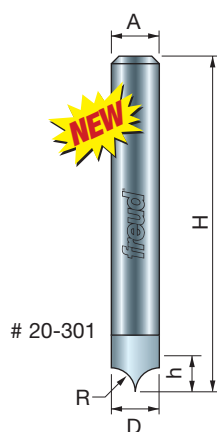
Application: Create beautiful wainscoting, paneling, back panels for bookcases, and much more

Freud's new Beadboard Tongue and Groove System mills perfect beadboard in a variety of thicknesses from 3/8" to 3/4", and in almost any width. Mill beadboard from any hardwood or softwood, and use it to create a beautiful effect as wainscoting, wall or ceiling paneling, cabinet and bookcase backs, and more. The tongue and groove bits includes two slot cutters: use the 1/4" cutter to mill a 1/4" thick tongue and groove for 1/2" to 3/4" stock, or switch to the 1/16" cutter for thinner material. Once the tongue and groove joints are complete, use the solid carbide Radius V-Groove Bit to complete the beadboard design.

- Mills traditional beadboard in a variety of thicknesses and widths.
- Includes two slot cutters to rout either 1/4" or 1/16" tongue & groove joints.
- Use with any hardwood or softwood to match your project or décor.
- Use only with a table mounted router and fence.

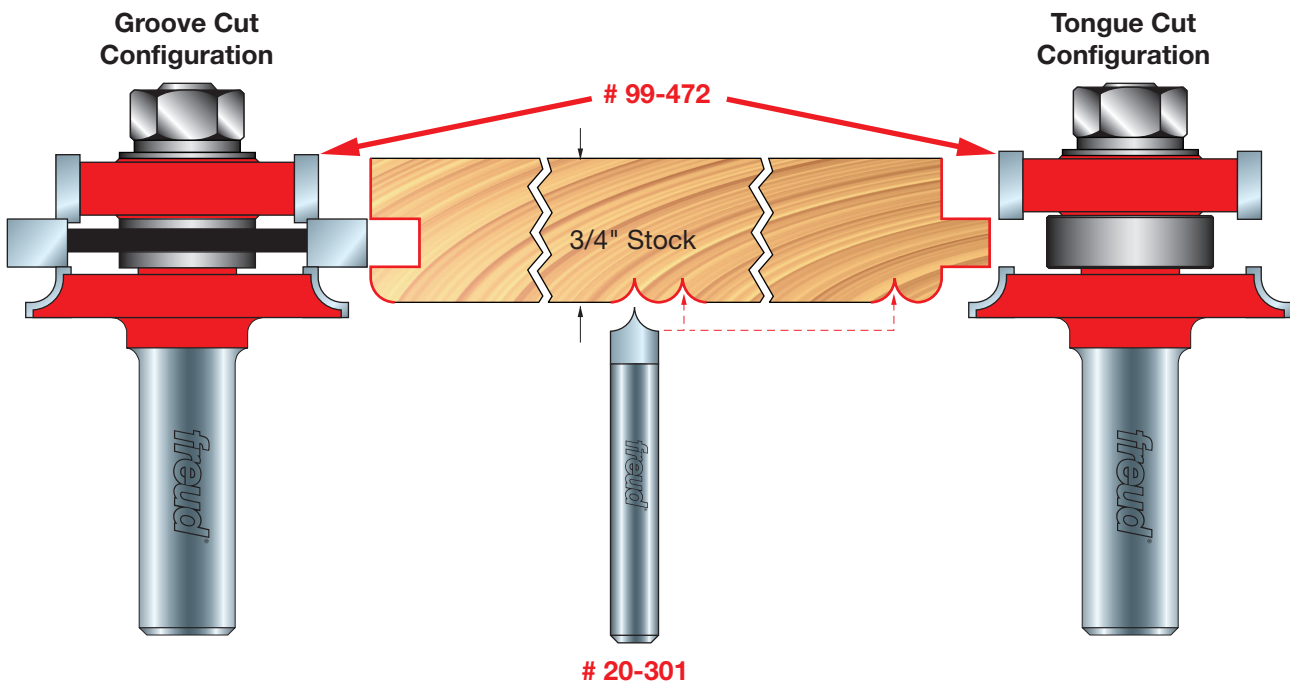
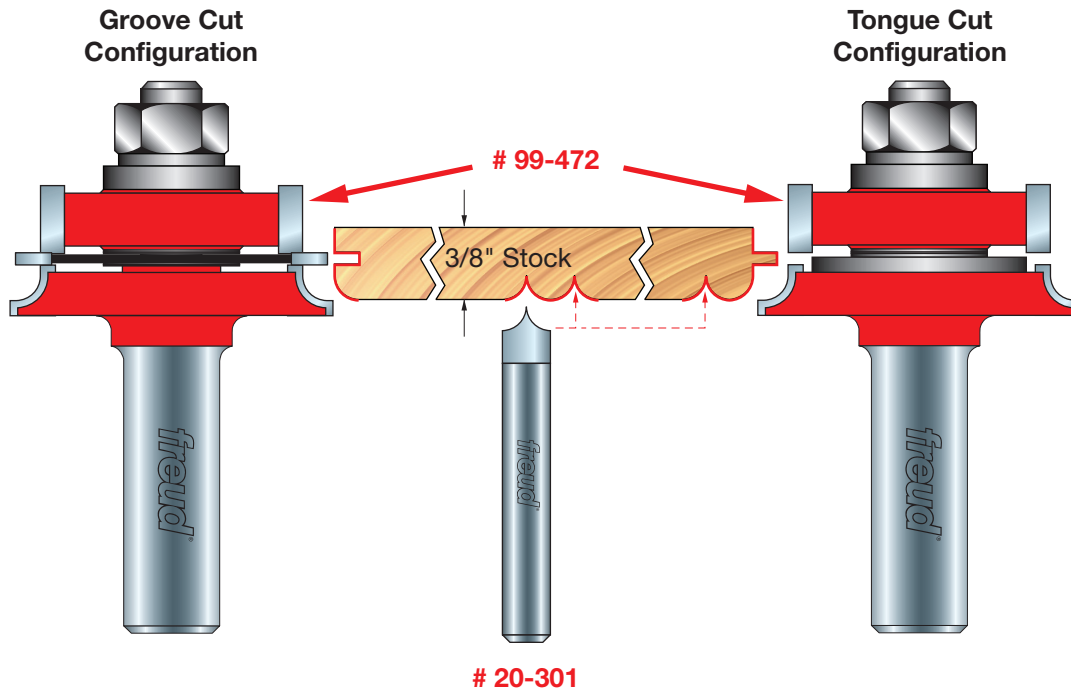
Item Number	Description	Overall Dia.(D)	Carbide Height(h)	Radius (R)	Shank Dia.(A)	Overall Length(H)
NEW 20-301*	Radius V Groove Bit	1/4"	3/16"	1/8"	1/4"	1-3/4"
NEW 99-472	Beadboard Tongue & Groove Bit	1-7/8"	13/16"	1/8"	1/2"	2-7/8"

* Solid Carbide



(Continued)

Beadboard Bit System



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



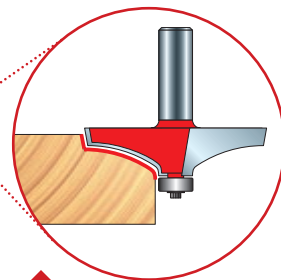
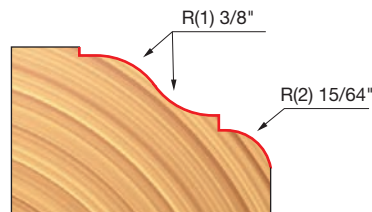
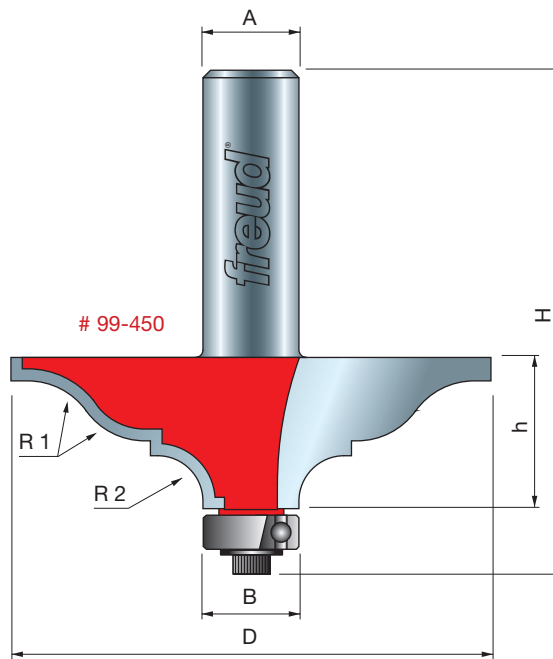
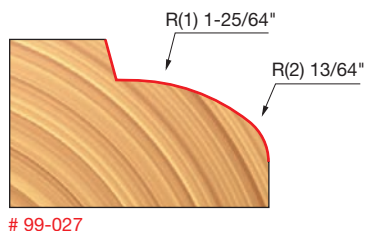
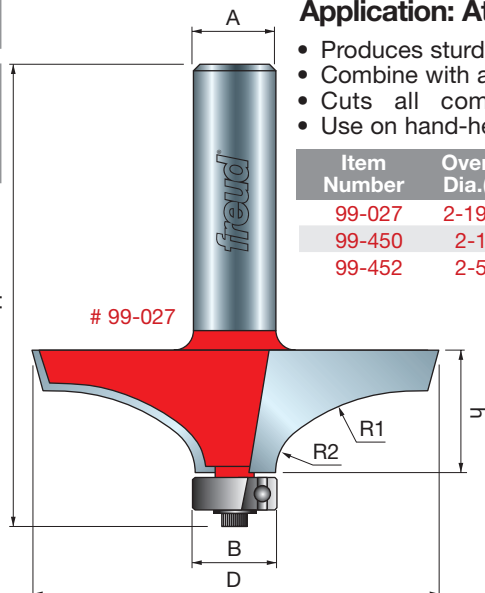


Table Edge & Handrail Bits

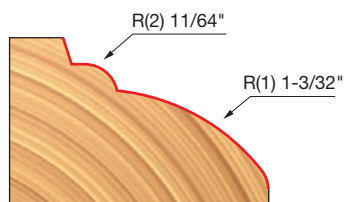
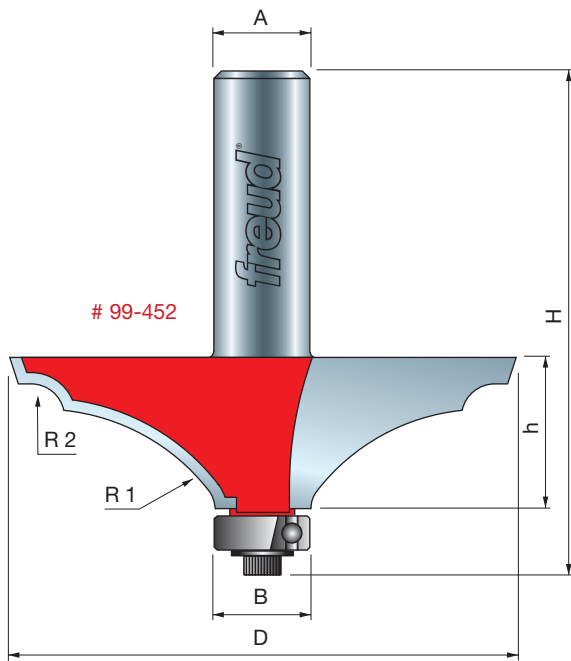
Application: Attractive edging of tables, plaques and handrails

- Produces sturdy, attractive handrails for staircases.
- Combine with another rail profile to create a custom railing design.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

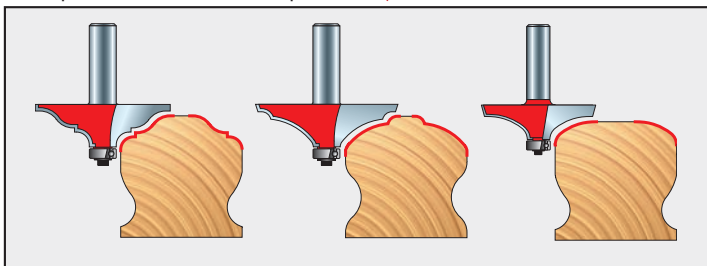
Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
99-027	2-19/32"	1/2"	23/32"	1-25/32"	13/64"	1/2"	2-5/8"
99-450	2-1/2"	1/2"	25/32"	3/8"	15/64"	1/2"	2-3/4"
99-452	2-5/8"	1/2"	25/32"	1-3/32"	11/64"	1/2"	2-3/4"



Example of table edge profile



Examples of various handrail profiles ▼

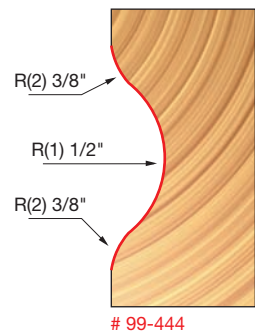
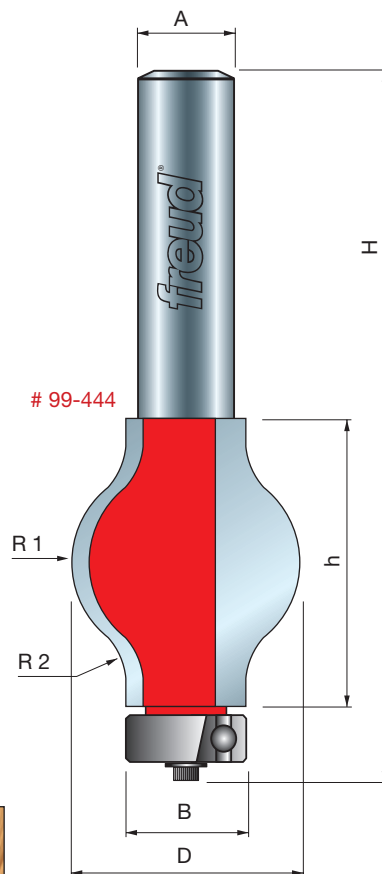
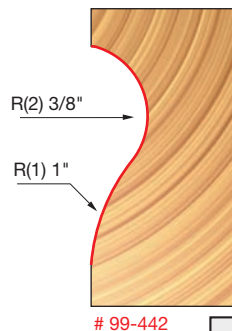
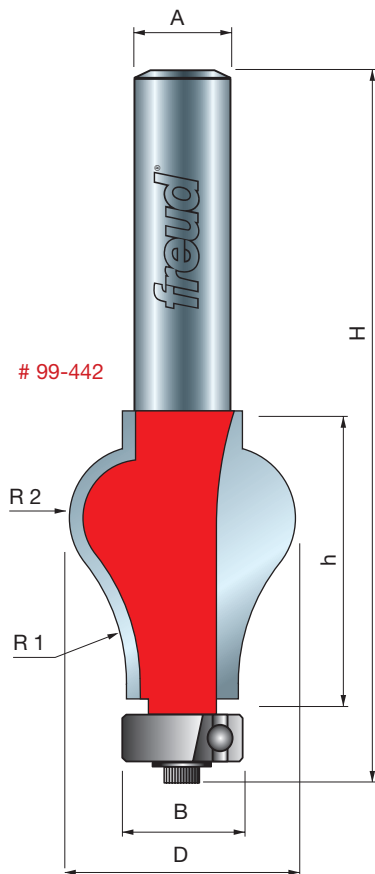
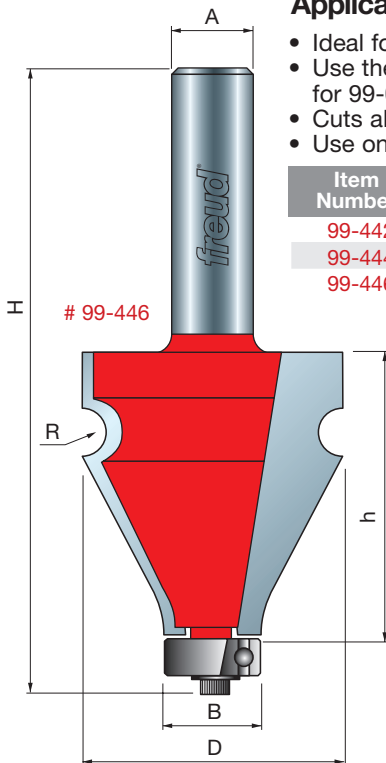
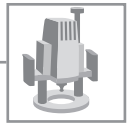


Handrail Bits

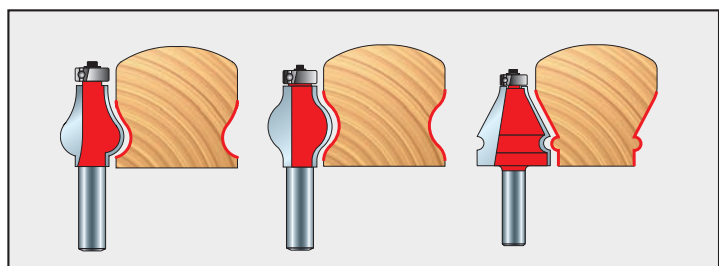
Application: Banisters and handrails

- Ideal for creating custom banisters and handrails.
- Use these bits for the lower profile on a handrail; select Freud bit 99-450 or 99-452 for 99-027 for the top profile.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
99-442	1-3/16"	5/8"	1-1/2"	1"	3/8"	1/2"	3-1/2"
99-444	1-3/16"	5/8"	1-1/2"	1/2"	3/8"	1/2"	3-1/2"
99-446	1-3/8"	1/2"	1-1/2"	1/8"	-	1/2"	3-1/4"



Examples of various handrail profiles ▼



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale





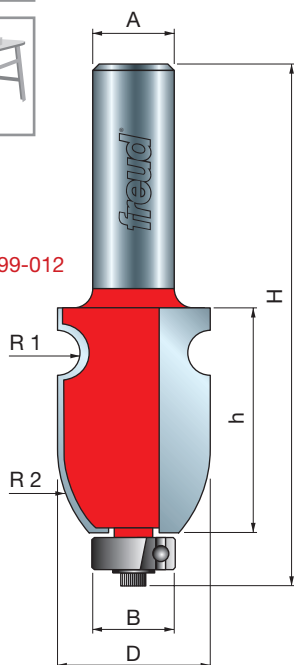
Face Molding Bits

Application: Door casings, trim, baseboards, and pilasters

- Add architectural detail to your furniture, cabinets and millwork.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

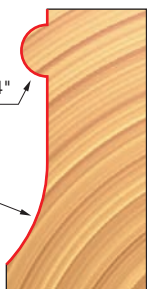
Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
99-012	15/16"	1/2"	1-3/8"	3/32"	25/32"	9/64"	1/2"	3-1/4"
99-013	15/16"	1/2"	1-3/8"	5/32"	21/64"	9/64"	1/2"	3-1/4"
99-014	15/16"	1/2"	1-1/2"	11/64"	25/32"	5/32"	1/2"	3-3/8"
99-015	1-1/16"	1/2"	1-5/8"	5/64"	5/16"	1/8"	1/2"	3-1/2"
99-016	1"	1/2"	7/8"	1/8"	45/64"	1/8"	1/2"	2-3/4"

99-012



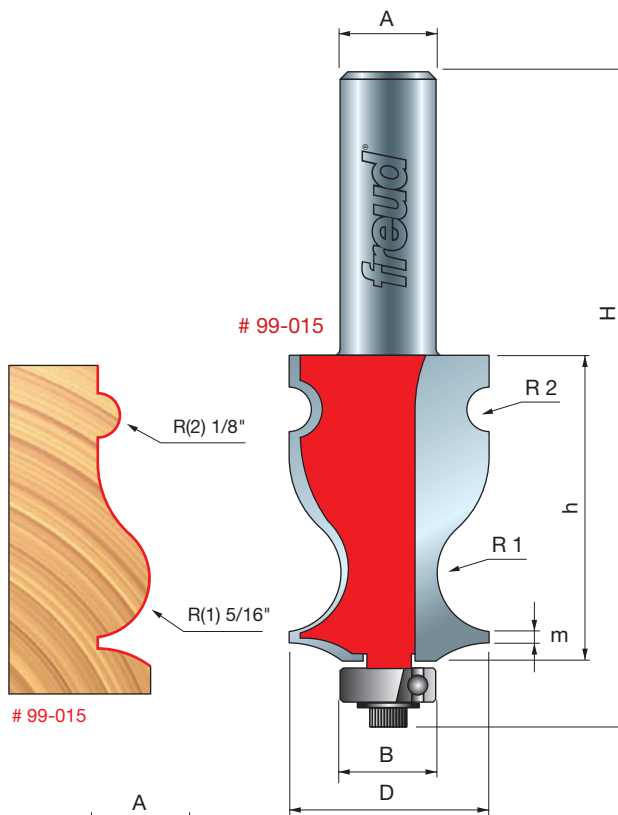
R(2) 9/64"

R(1) 25/32"



99-012

99-015

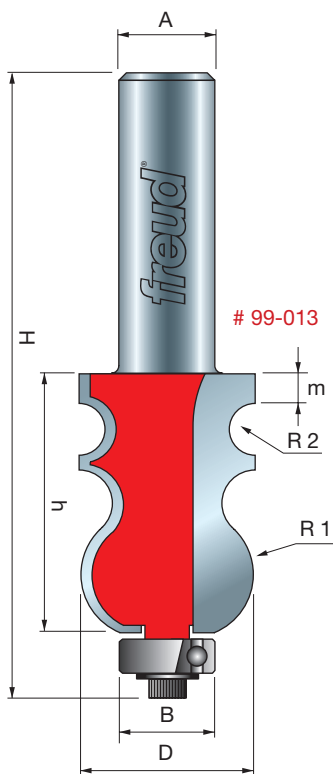


R(2) 1/8"

R(1) 5/16"

99-015

99-013

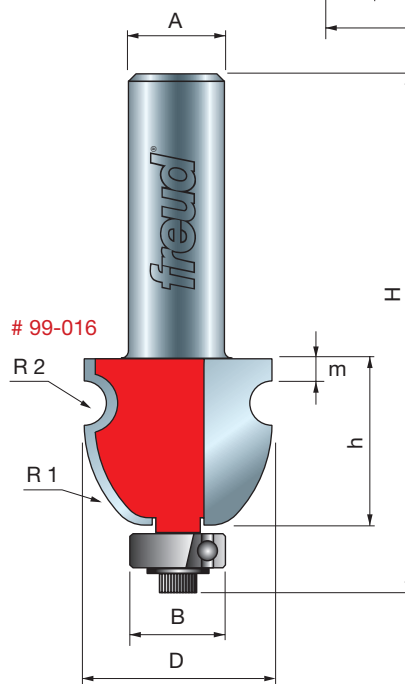


R(2) 9/64"

R(1) 21/64"

99-013

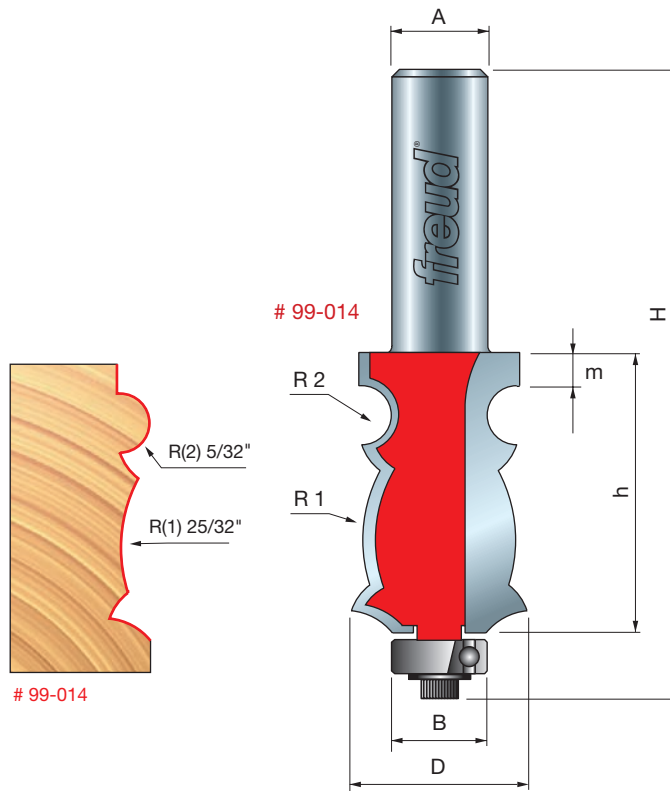
99-016



R(2) 1/8"

R(1) 45/64"

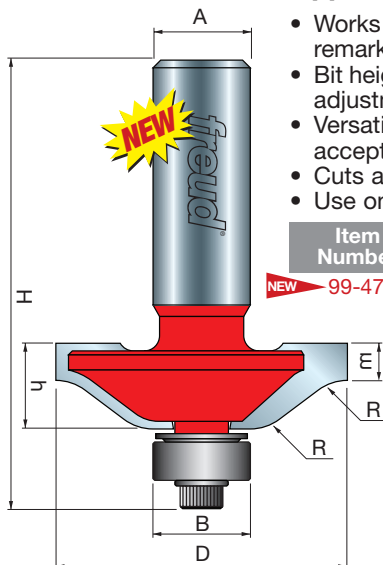
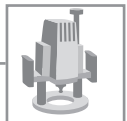
99-016



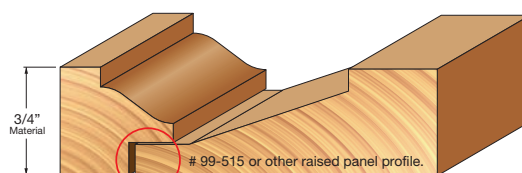
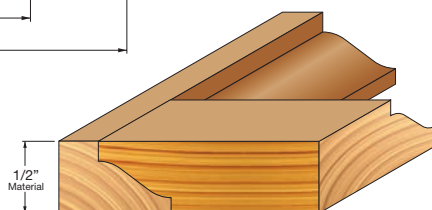
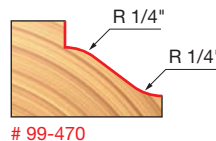
Reversible Wainscoting Bit

Application: For milling matching joints in wainscoting

- Works with stock from 1/2" to 5/8" thick, and mills matching frame joints with remarkable ease and precision.
- Bit height is set one time for male and female joints without requiring fence or height adjustments. Just rout stiles face down and rails face up for a perfect fit.
- Versatile design—after routing the matching profiles, rout a rabbet on the back to accept the tongue of a raised panel in 3/4" stock.
- Cuts all composition materials, plywoods, hardwoods and softwoods.
- Use on hand-held and table-mounted portable routers.



Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R)	Minor Height(m)	Shank Dia.(A)	Overall Length(H)
NEW 99-470	1-1/2"	1/2"	7/16"	1/4"	3/16"	1/2"	2-1/4"



This application requires a rabbeting bit for the rail/stile and a raised panel bit, both sold separately.



New Wide Crown Molding System

Application: Milling 5-1/2" wide Crown Molding for ceilings

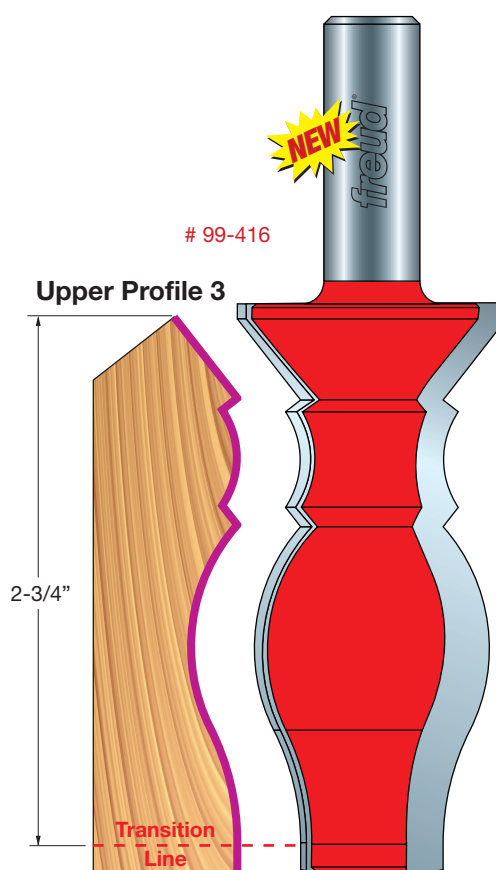
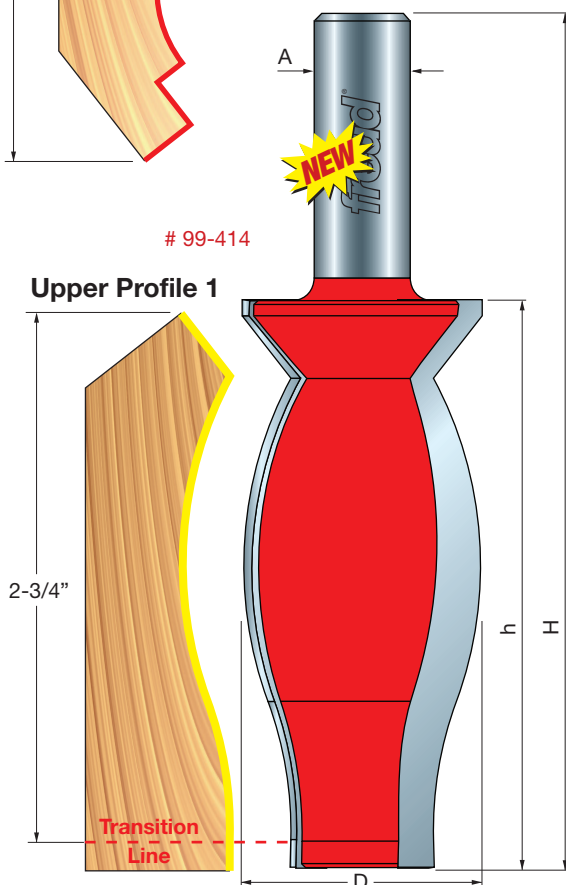
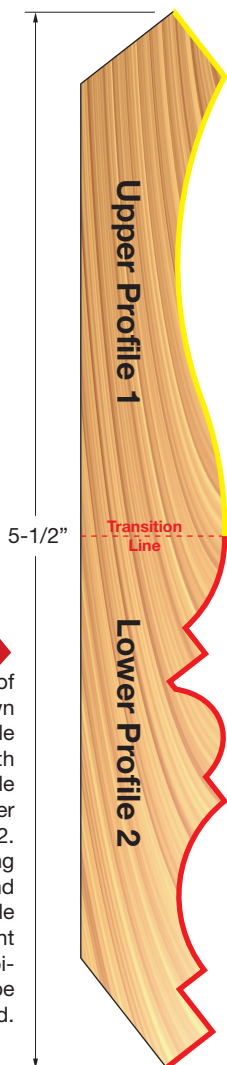
Crown molding is the perfect way to transform a room, giving height and elegance to an otherwise ordinary ceiling. But commercially manufactured wide crown molding is expensive, hard to find, and the selection of available wood species is very limited. Now, thanks to Freud's unique Wide Crown Molding bits, **woodworkers can mill their own 5-1/2" wide Crown Molding** economically and in their choice of wood and profile. These bits are the only router tooling capable of producing such wide crown molding, and they also feature a carefully designed shape that lets you mix and match profiles to produce precisely the shape you need – **up to nine different profiles from only six bits!**

The concept is easy: each bit produces half of the molding profile. Three bits are designed for the upper half of the molding, and three produce the lower half. Each bit features a sweeping curve that transitions perfectly into the corresponding curve of the adjoining profile. Just select the upper and lower profiles that match your favorite design. Then use Freud's Molding Bevel Cutter to rout perfect 38° and 52° bevels on the stock to finish the job.

- Mill 5-1/2" wide crown molding from almost any hardwood or softwood.
- Mix and match bits for upper and lower profiles to produce nine different designs.
- Use only in a router table with minimum 6" high fence, mill in 3 or more passes.
- Use featherboards and hold downs to hold stock down & against the fence.
- Use pusher blocks or a push stick to feed stock. Make test cuts in scrap stock first.

Item Number	Profile Number	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
Upper Profiles					
NEW 99-414	Upper 1	1-5/16"	3"	1/2"	4-7/16"
NEW 99-416	Upper 3	1-13/32"	3"	1/2"	4-7/16"
NEW 99-418	Upper 5	1-1/4"	3"	1/2"	4-7/16"
Lower Profiles					
NEW 99-415	Lower 2	1-3/8"	3-1/16"	1/2"	4-9/16"
NEW 99-417	Lower 4	1-3/8"	3-1/16"	1/2"	4-9/16"
NEW 99-419	Lower 6	1-3/8"	3-1/16"	1/2"	4-9/16"
Molding Bevel Cutter					
NEW 99-421	—	2-3/8"	1-3/8"	1/2"	2-13/16"

Example of Crown Molding profile made with Upper Profile bit #1 & Lower Profile Bit #2. By combining the Upper and Lower Profile bits 9 different profile combinations can be achieved.

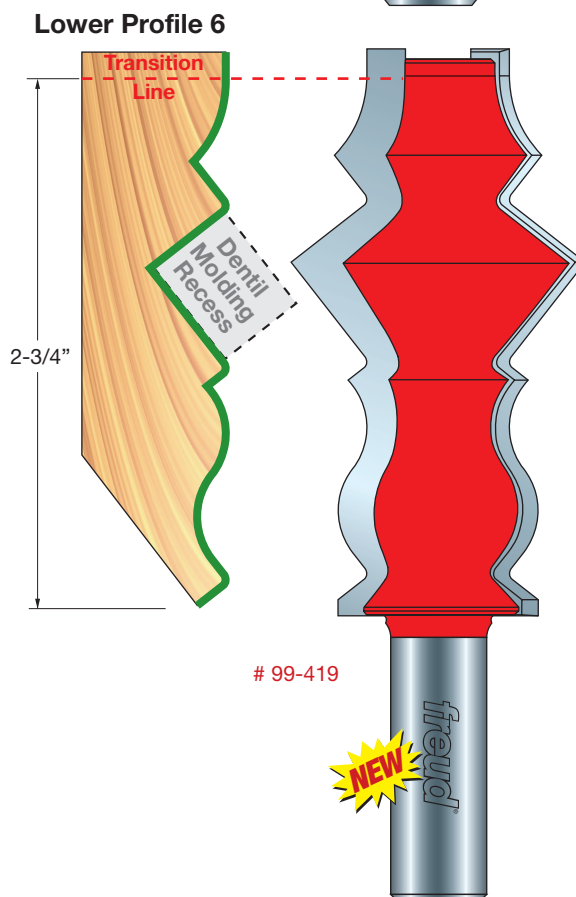
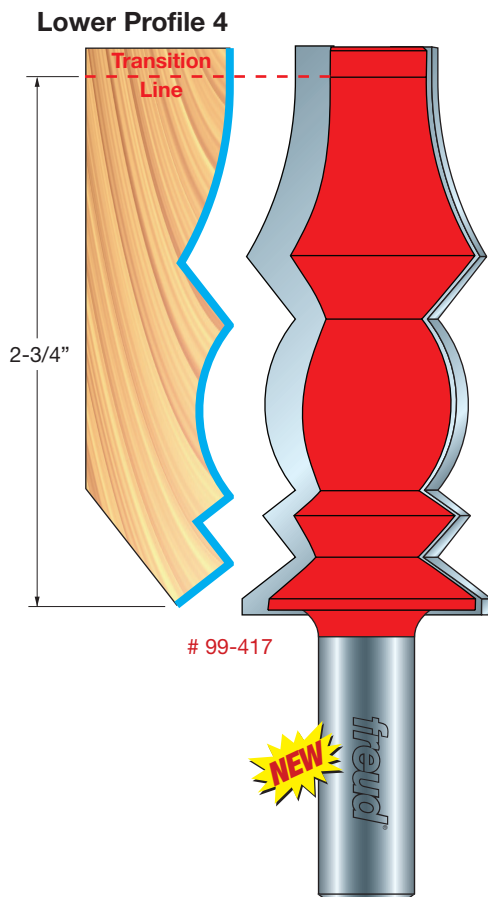
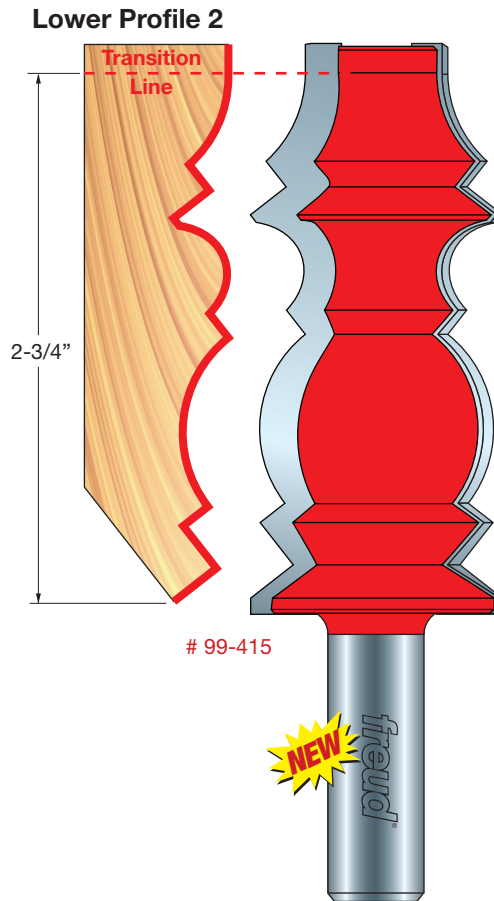
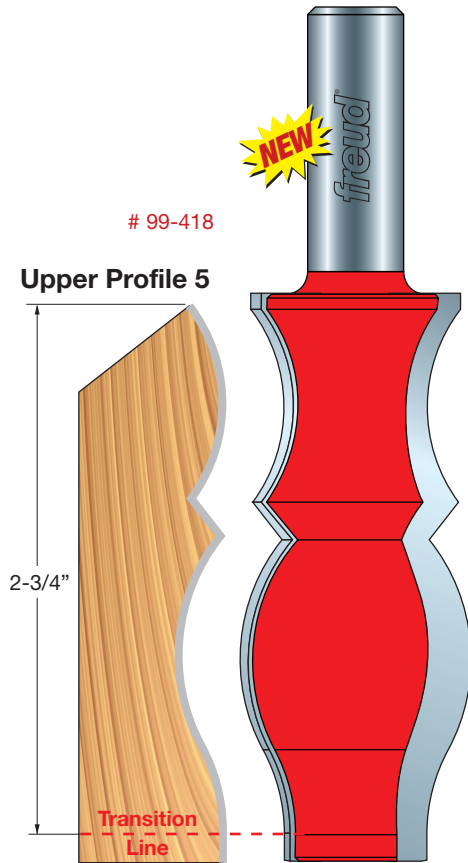


All Profile Drawings 1:1 Scale

Red Item Numbers Indicate 1/2" Shank

(Continued)

New Wide Crown Molding System



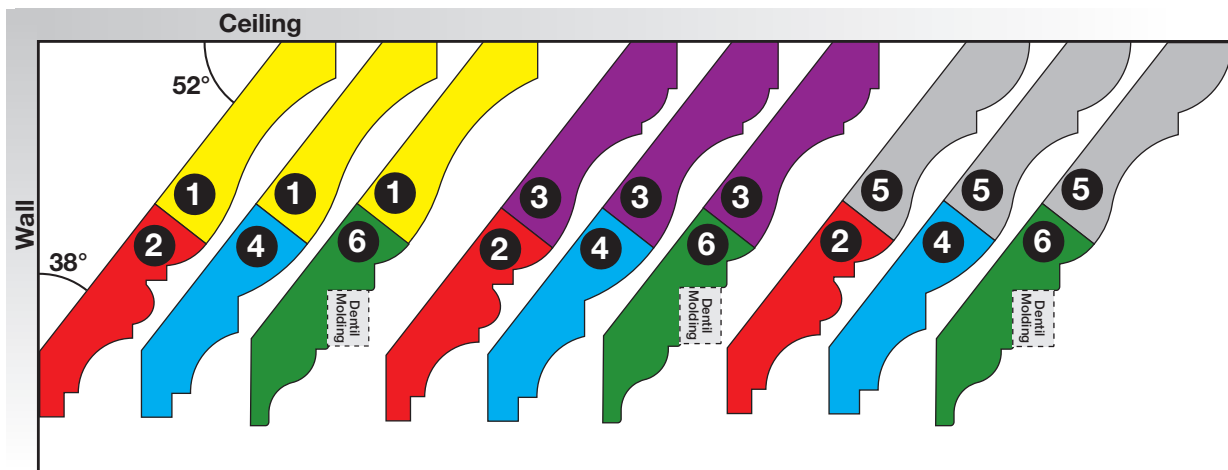
Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale

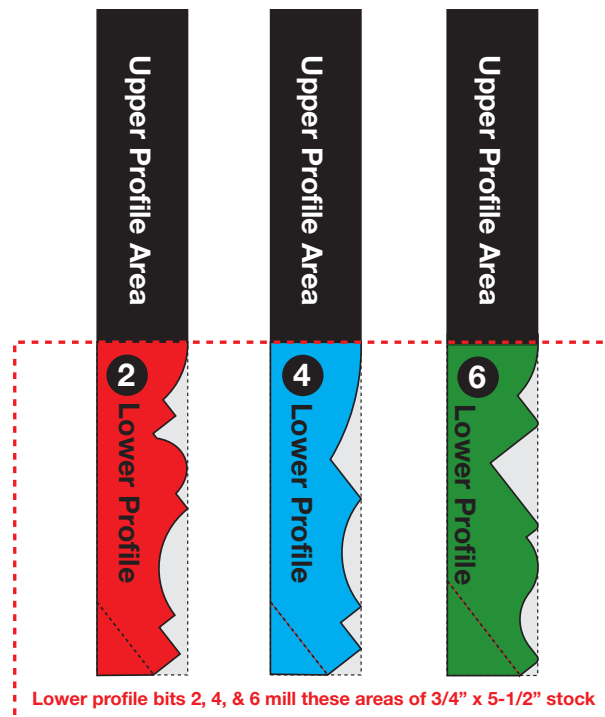
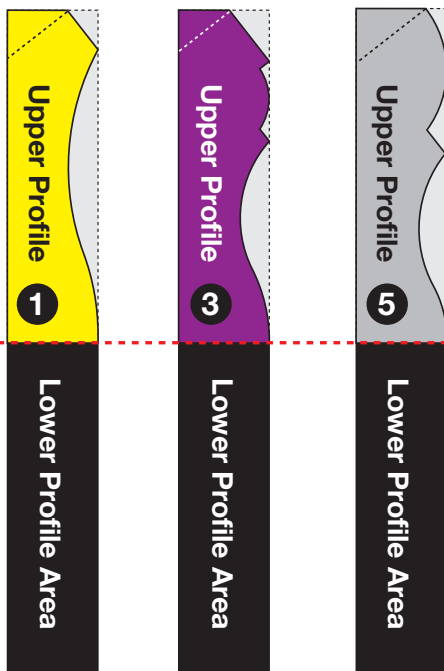


(Continued) **New Wide Crown Molding System**

A total of 9 different combinations can be created with the Wide Crown Molding System



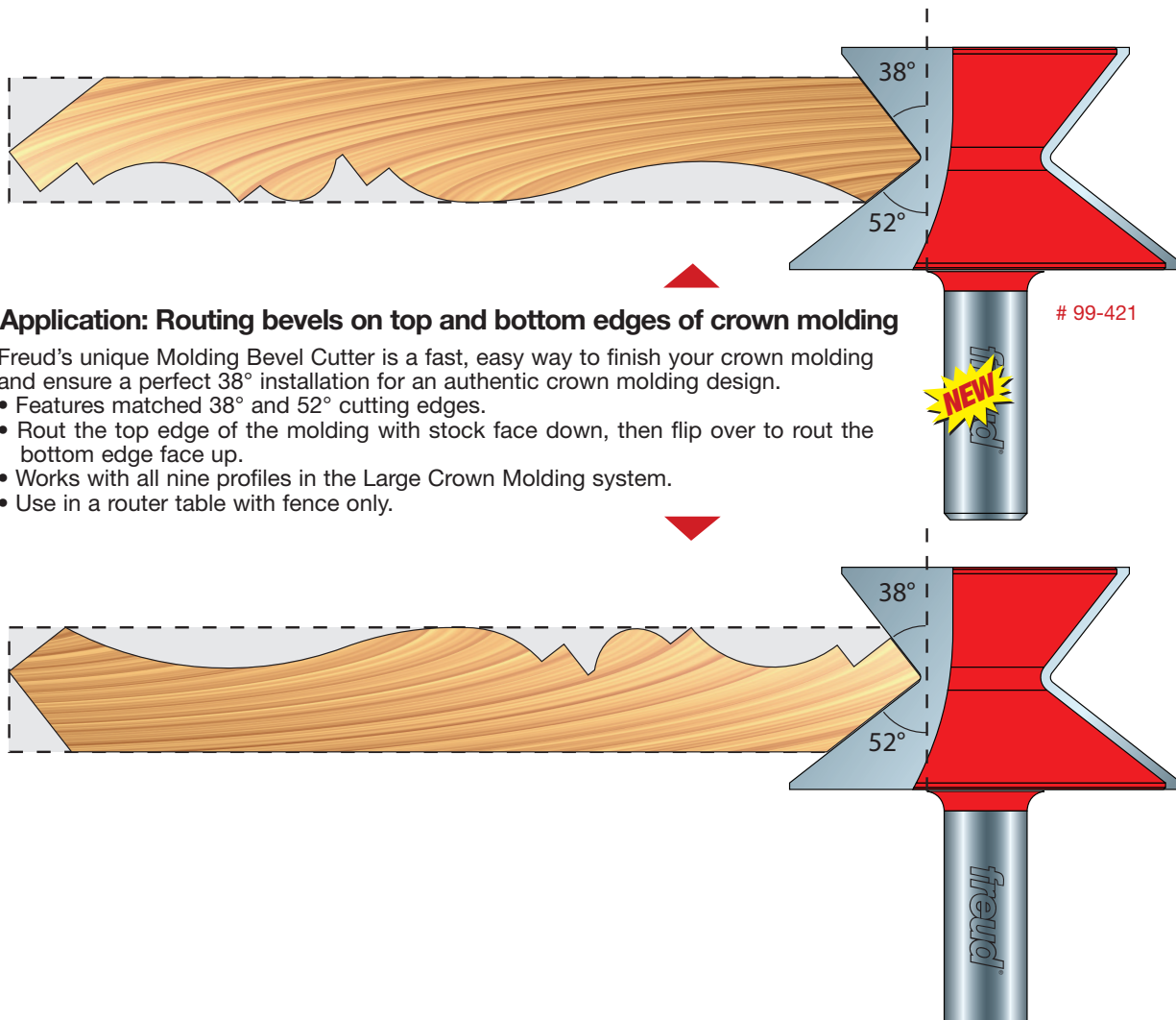
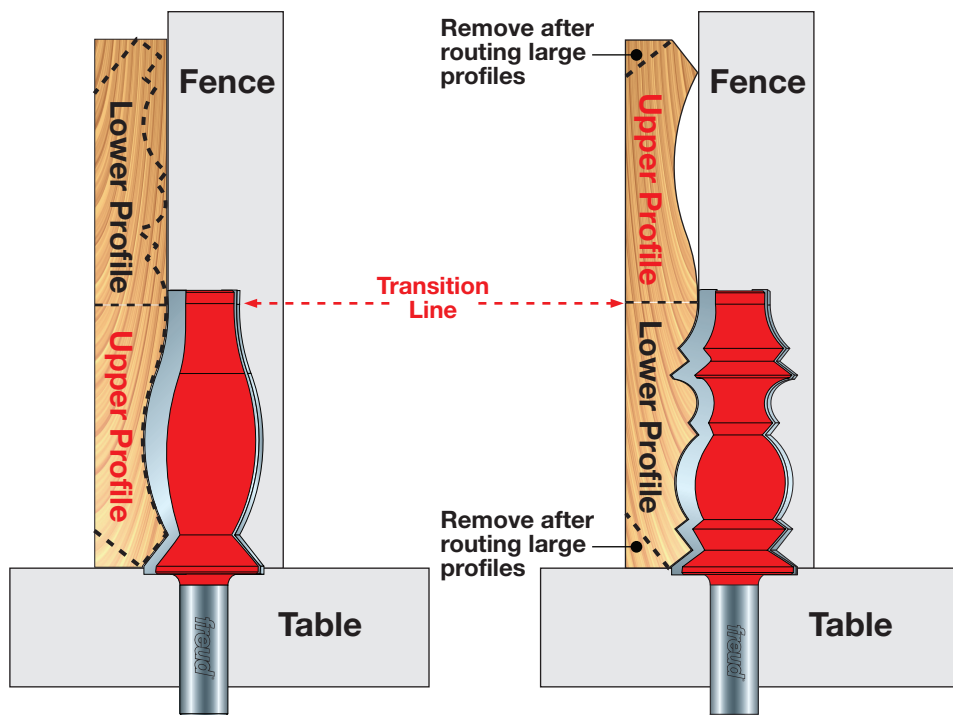
Upper profile bits 1, 3, & 5 mill these areas of 3/4" x 5-1/2" stock



Lower profile bits 2, 4, & 6 mill these areas of 3/4" x 5-1/2" stock

(Continued)

New Wide Crown Molding System



Application: Routing bevels on top and bottom edges of crown molding

Freud's unique Molding Bevel Cutter is a fast, easy way to finish your crown molding and ensure a perfect 38° installation for an authentic crown molding design.

- Features matched 38° and 52° cutting edges.
- Rout the top edge of the molding with stock face down, then flip over to rout the bottom edge face up.
- Works with all nine profiles in the Large Crown Molding system.
- Use in a router table with fence only.



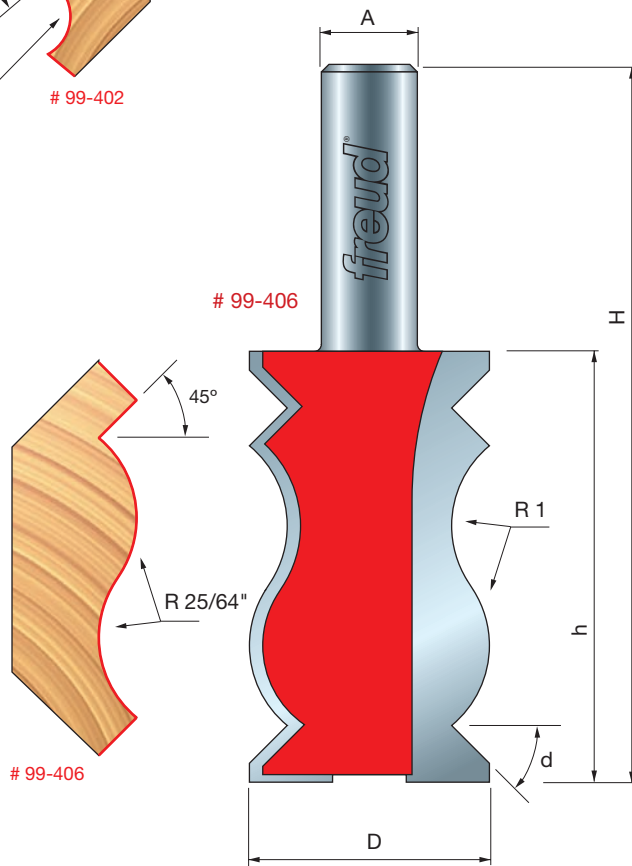
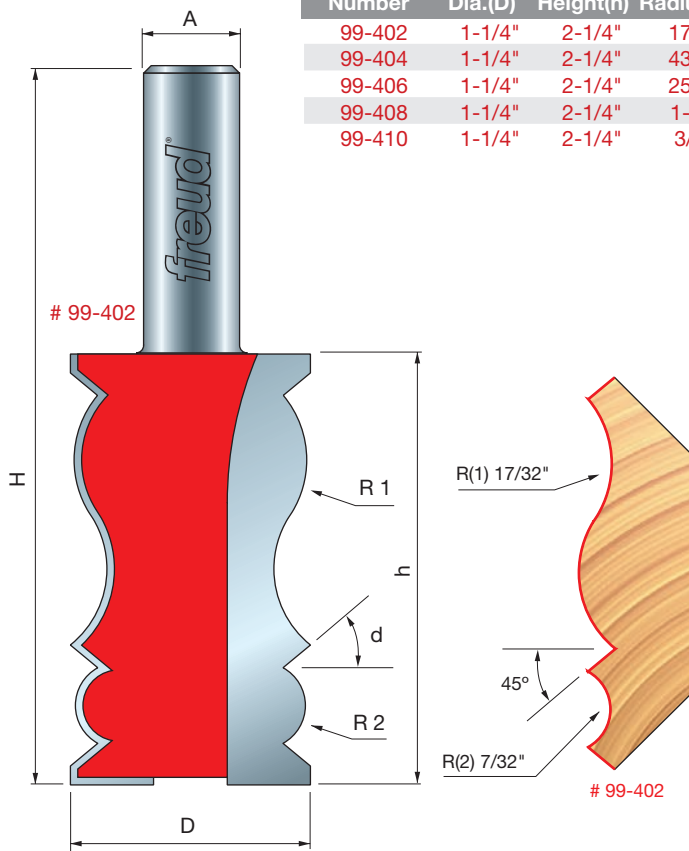


Crown Molding Bits

Application: Elaborate crown moldings

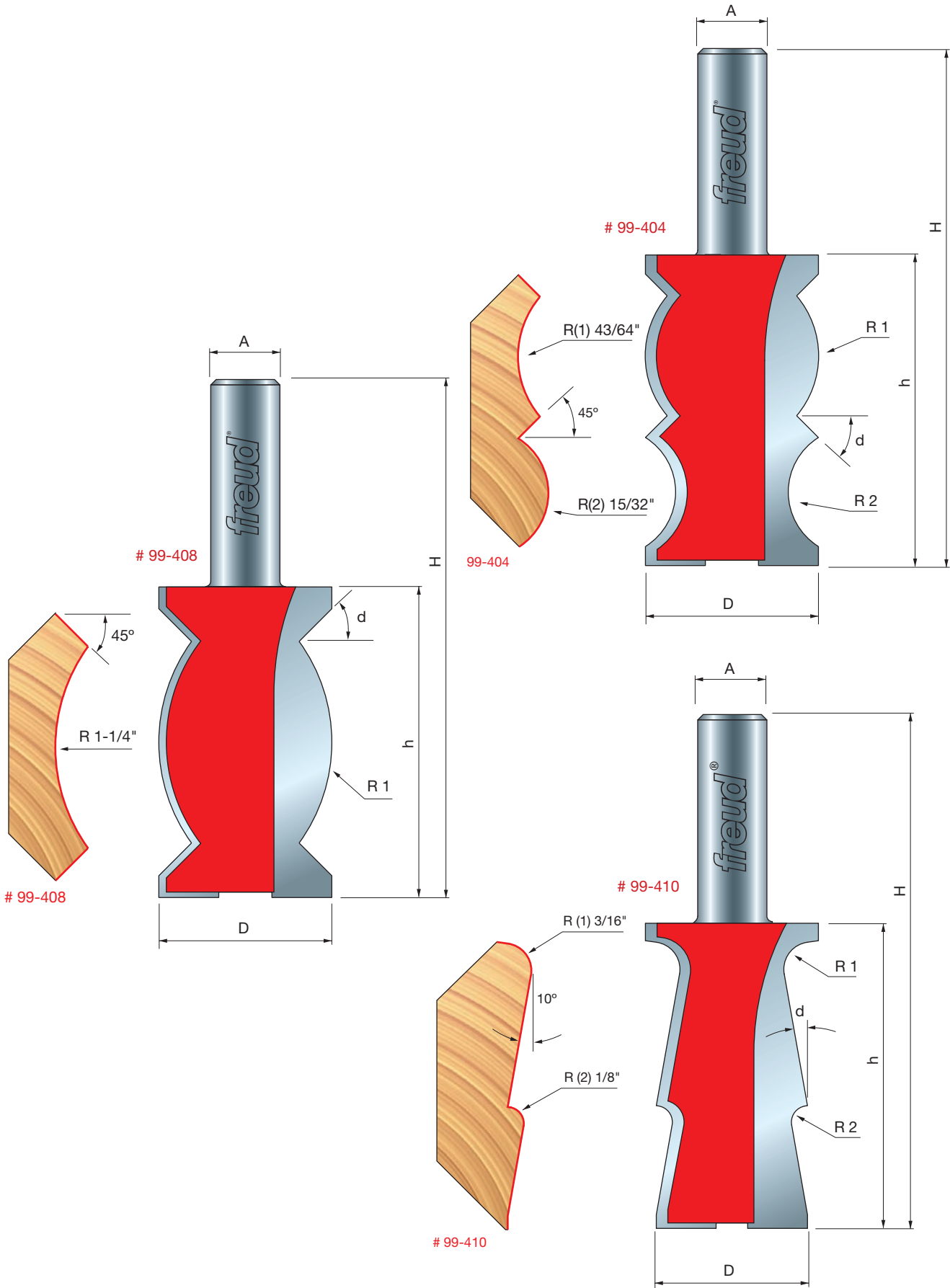
- Customize your decorative crown moldings to add elegance to any room.
- Simply adjust the height of your cut to change the entire profile.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers and table-mounted portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Angle (d)	Shank Dia.(A)	Overall Length(H)
99-402	1-1/4"	2-1/4"	17/32"	7/32"	45°	1/2"	3-3/4"
99-404	1-1/4"	2-1/4"	43/64"	15/32"	45°	1/2"	3-3/4"
99-406	1-1/4"	2-1/4"	25/64"	—	45°	1/2"	3-3/4"
99-408	1-1/4"	2-1/4"	1-1/4"	—	45°	1/2"	3-3/4"
99-410	1-1/4"	2-1/4"	3/16"	1/8"	10°	1/2"	3-3/4"



(Continued)

Crown Molding Bits



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



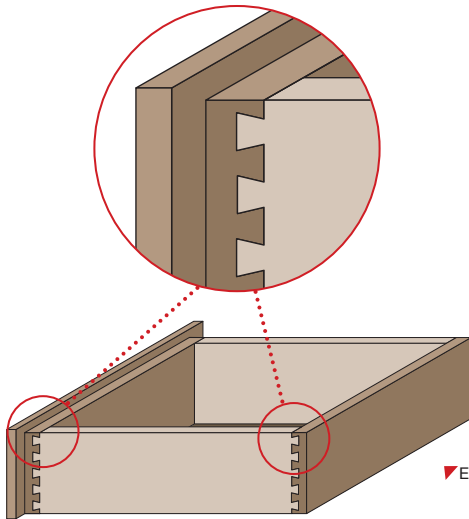
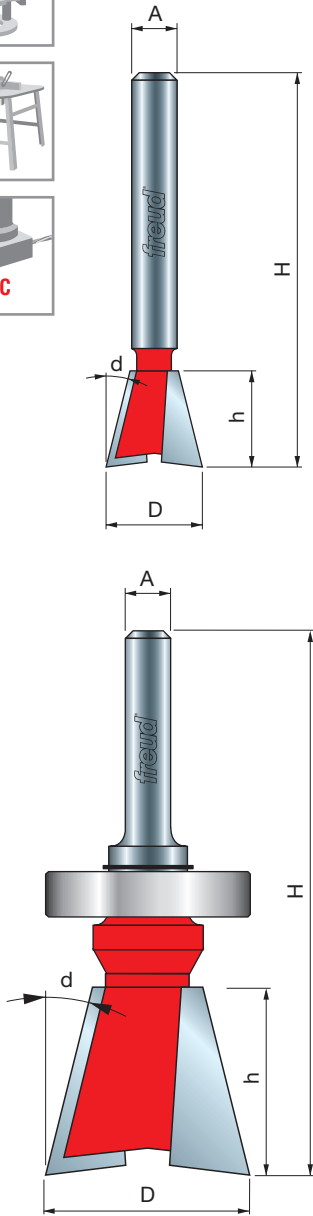
Architectural Millwork Bits



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ROUTER BITS & SETS

freud®



Dovetail Bits

Application: Strong, attractive joints for drawers and boxes

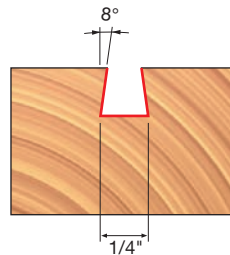
- Compatible with popular dovetail jigs, these bits produce smooth, intricate dovetail joints.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
22-100	1/4"	5/16"	7-1/2°	1/4"	2"
22-101	5/16"	3/8"	9°	1/4"	1-7/8"
22-102	3/8"	3/8"	9°	1/4"	1-7/8"
22-103	3/8"	3/8"	14°	1/4"	2-1/2"
22-104	1/2"	1/2"	14°	1/4"	1-7/8"
22-105	5/8"	7/8"	7°	1/4"	2-1/8"
22-106	3/4"	7/8"	7°	1/4"	2-1/8"
22-119	1/4"	1/4"	8°	1/4"	2"
22-120	3/8"	1/2"	8°	1/4"	2-1/2"
22-121	7/16"	5/8"	8°	1/4"	2-3/8"
22-122	1/2"	13/16"	8°	1/4"	2-3/4"
22-123	5/16"	3/8"	8°	1/4"	1-7/8"
22-124	1/2"	1/2"	14°	1/4"	2-5/8"
22-125	1/2"	5/8"	10°	1/4"	2-3/8"
22-126	9/16"	3/8"	14°	1/4"	2"
22-128	3/4"	7/8"	14°	1/4"	2-3/8"
22-129	1/2"	13/32"	8°	1/4"	2-5/32"
22-107	1/4"	5/16"	7-1/2°	1/2"	2-5/8"
22-108	5/16"	3/8"	9°	1/2"	2-1/8"
22-110	3/8"	3/8"	9°	1/2"	2-1/4"
22-112	1/2"	1/2"	14°	1/2"	2-1/4"
22-113	5/8"	7/8"	7°	1/2"	2-5/8"
22-114	3/4"	7/8"	7°	1/2"	2-5/8"
NEW 22-115*	17/32"	25/32"	7°	1/2"	2-3/8"
22-130	11/16"	1"	8°	1/2"	3-1/8"
22-132	13/16"	1-1/4"	8°	1/2"	3-3/8"
22-134	3/4"	3/4"	14°	1/2"	3-1/8"

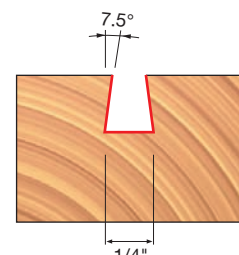
Top Bearing Dovetail

Item Number	Overall Dia.(D)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
22-505	5/8"	7/8"	7°	1/4"	2-5/8"
22-506	3/4"	7/8"	7°	1/4"	2-5/8"
22-507	3/4"	7/8"	14°	1/4"	2-5/8"
22-508	9/16"	3/8"	14°	1/4"	2-3/16"

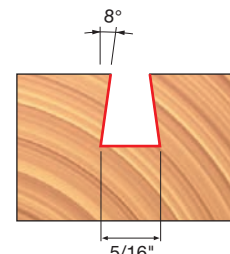
* For use with Porter-Cable® Dovetail Jig #4212.



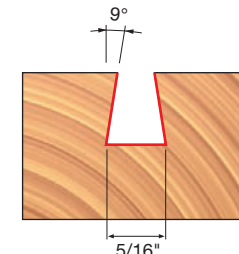
22-119



22-100
22-107



22-123

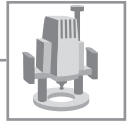


22-101
22-108

▼ Example of Dovetail on drawer sides

(Continued)

Dovetail Bits



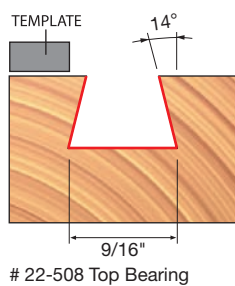
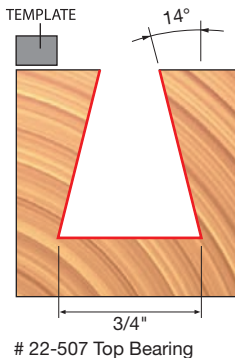
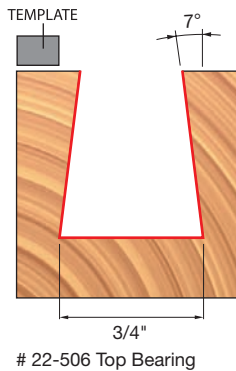
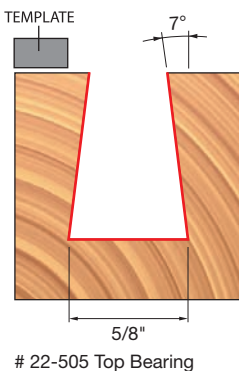
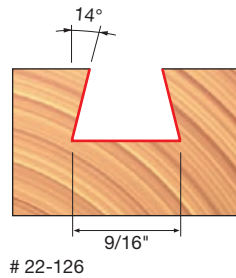
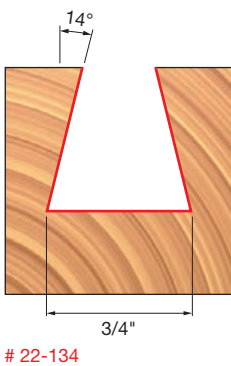
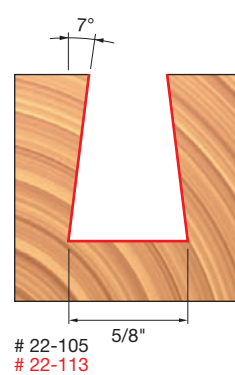
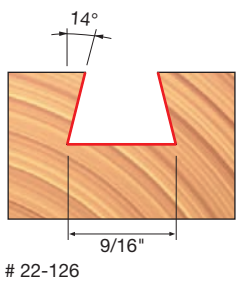
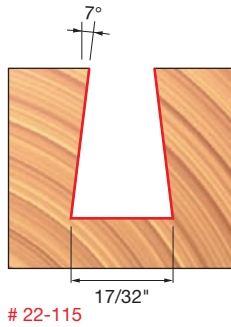
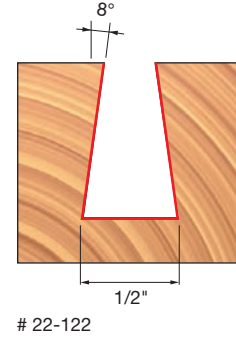
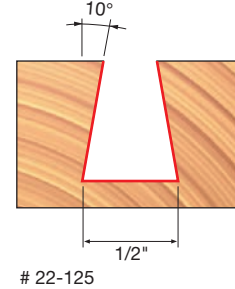
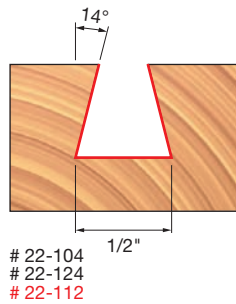
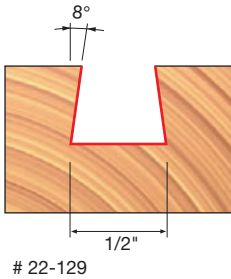
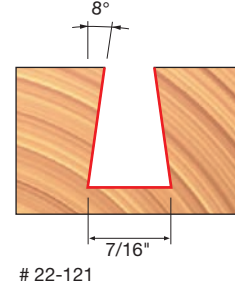
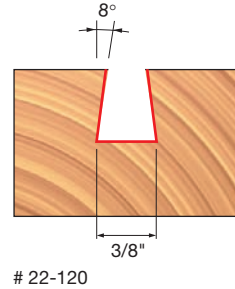
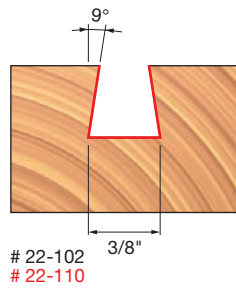
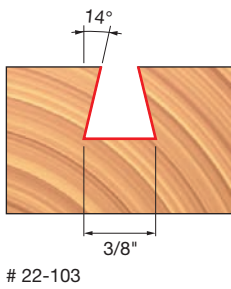
Joinery Bits



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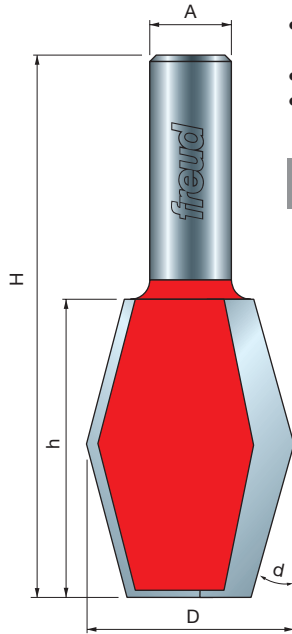
ROUTER BITS & SETS

freud®



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



Butterfly Spline Bit

Application: Sturdy, decorative design for exposed joints

- This bit produces a strong, attractive method of joining wood. Use a 14-degree dovetail bit to produce the mating grooves.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

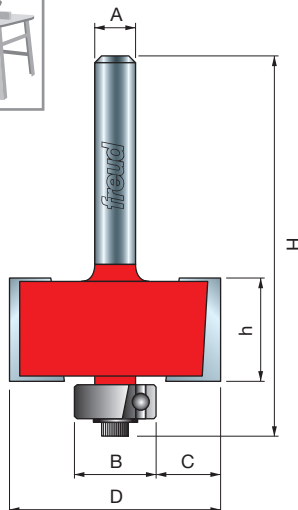
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
24-106	1-1/8"	11/16"	1-3/4"	14°	1/2"	3-1/4"



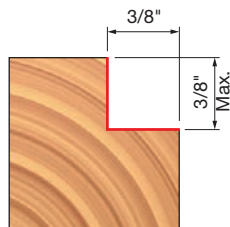
Rabbeting Bits

Application: Joining boards and letting in back panels

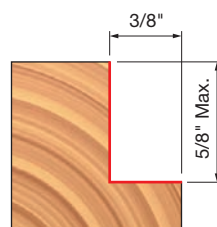
- Produces super smooth cuts on both surfaces of the rabbet.
- Steel pilots can be removed from bits and used with edge guides for wider rabbets.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



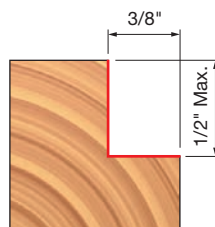
Item Number	Overall Dia.(D)	Bearing Dia.(B)	Cut Depth(C)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
32-096	1-1/4"	1/2"	3/8"	3/8"	1/4"	2"
32-098	1-1/4"	1/2"	3/8"	5/8"	1/4"	2-1/4"
32-100	1-1/4"	1/2"	3/8"	1/2"	1/4"	2"
32-101	1-3/8"	3/8"	1/2"	1/2"	1/4"	2-1/4"
32-102	1-1/4"	1/2"	3/8"	1/2"	1/2"	2-1/4"
32-106	1-3/8"	3/8"	1/2"	1/2"	1/2"	2-1/4"
32-110	1-3/8"	3/8"	1/2"	3/4"	1/2"	2"
Steel Pilots						
32-302	1-1/4"	1/2"	3/8"	3/8"	1/4"	1-7/8"
32-306	1-1/4"	1/2"	3/8"	5/8"	1/4"	2"



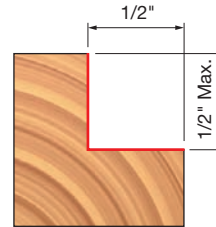
32-096
32-302



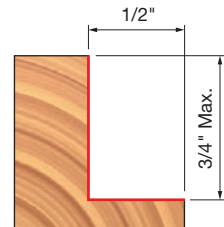
32-098
32-306



32-100
32-102



32-101
32-106

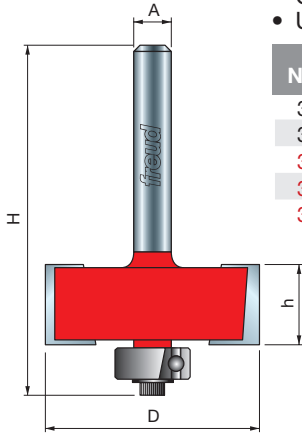
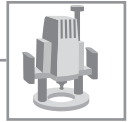


32-110

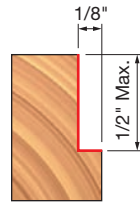
Rabbeting Bits with Bearing Set

Application: Joining boards and letting in back panels with different depths of cut

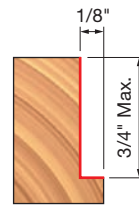
- With interchangeable bearings to cut rabbets of different depths, these sets produce super smooth cuts on both surfaces of the rabbet.
- 32-504, 32-524, and 32-526 can also be used as flush cutting trim bits.
- Wrench included.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Item Number	Overall Dia.(D)	Rabbeting Depths	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
32-502	1-3/8"	5/16", 3/8", 7/16", 1/2"	1/2"	1/4"	2-1/4"
32-504	1-3/8"	flush, 1/8", 1/4", 5/16", 3/8", 7/16", 1/2"	1/2"	1/4"	2-1/4"
32-522	1-3/8"	5/16", 3/8", 7/16", 1/2"	1/2"	1/2"	2-1/4"
32-524	1-3/8"	flush, 1/8", 1/4", 5/16", 3/8", 7/16", 1/2"	1/2"	1/2"	2-1/4"
32-526	1-3/8"	flush, 1/8", 1/4", 5/16", 3/8", 7/16", 1/2"	3/4"	1/2"	2-1/2"



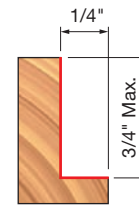
32-504
32-524



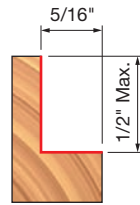
32-526



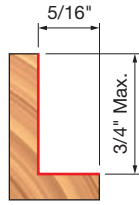
32-504
32-524



32-526



32-502
32-504
32-522
32-524



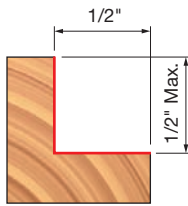
32-526



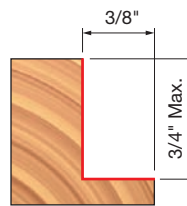
32-502
32-504
32-522
32-524



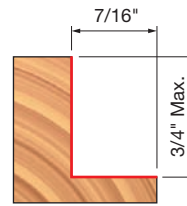
32-502
32-504
32-522
32-524



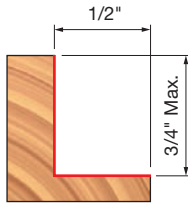
32-502
32-504
32-522
32-524



32-526



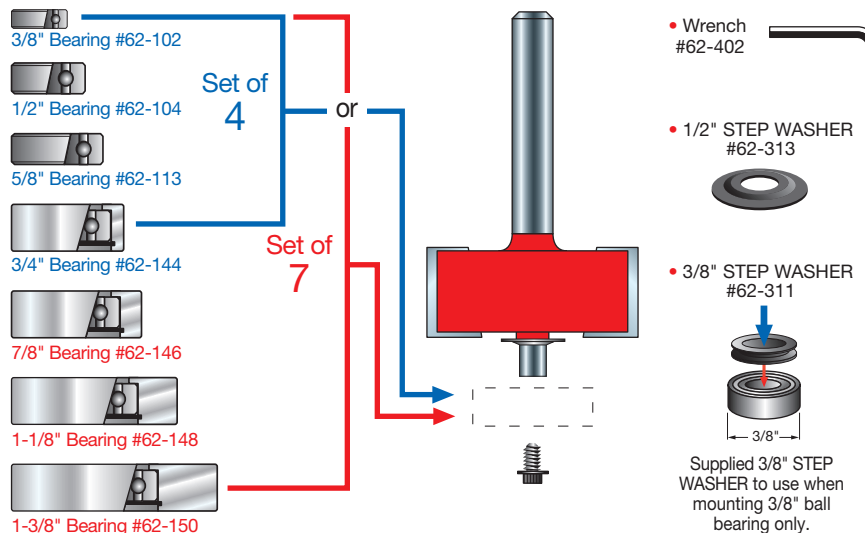
32-526



32-526



Both Sets Include the Wrench and Step Washers





Stacked Slotting Set

Application: Producing grooves 1/8" to 23/32" wide

- By changing the bearings this set will cut three different depths (1/4", 3/8", 1/2").
- Set includes Freud's slotting cutter arbor 60-202, 3 bearings and 4 specially designed slotting cutters.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

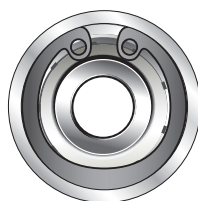
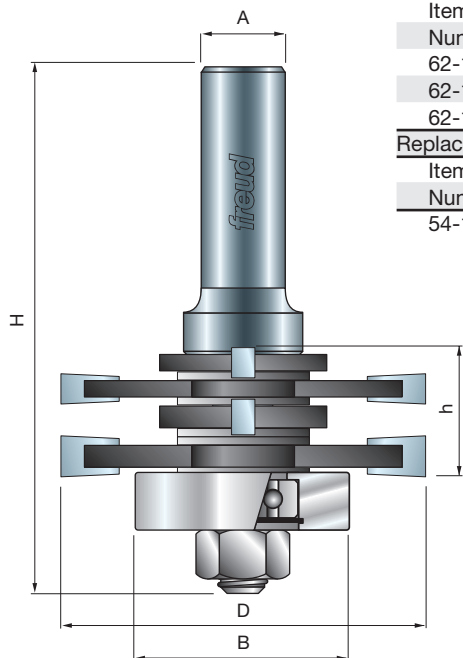
Item Number	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
61-102	2"	1/8"-23/32"	1/2"	3-1/4"

Replacement Bearings

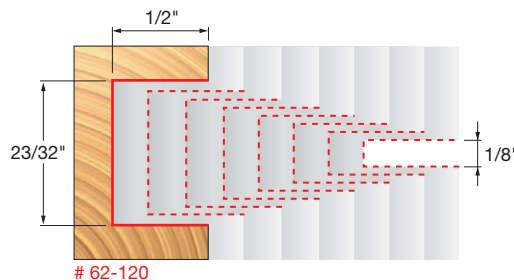
Item Number	Bearing Dia.(B)	Cut Depth
62-120	1"	1/2"
62-121	1-1/4"	3/8"
62-122	1-1/2"	1/4"

Replacement Cutters

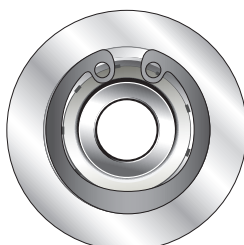
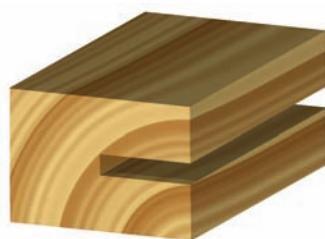
Item Number	Overall Dia.	Carbide Height
54-108	2"	1/8"



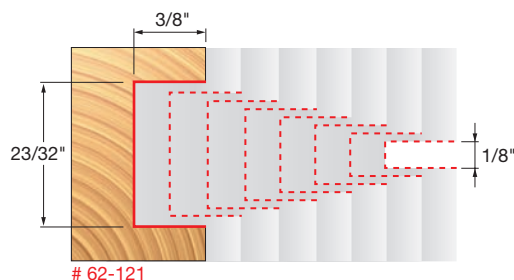
62-120
(1" Bearing)



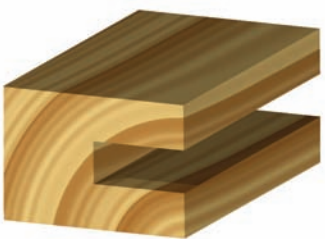
62-120



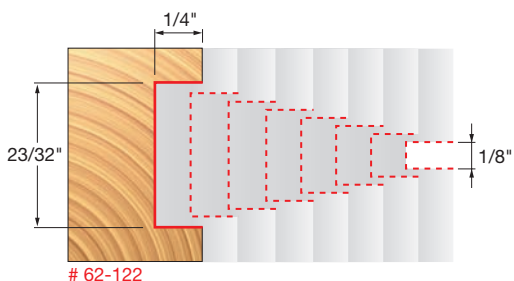
62-121
(1-1/4" Bearing)



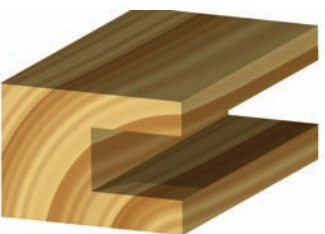
62-121



62-122
(1-1/2" Bearing)



62-122



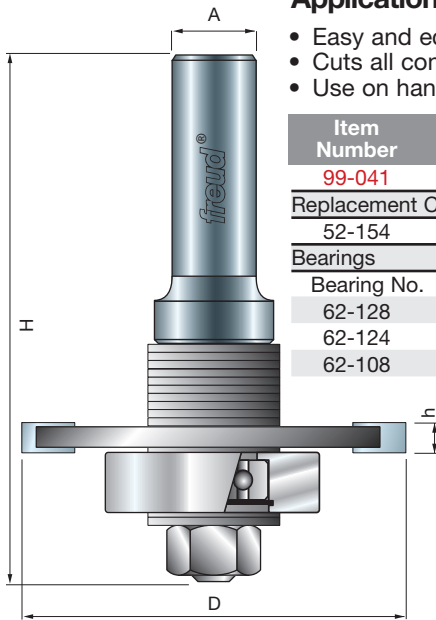
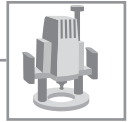
All Profile Drawings 1:1 Scale

Red Item Numbers Indicate 1/2" Shank

Biscuit Joining Set

Application: Creating perfect slots for biscuit joining

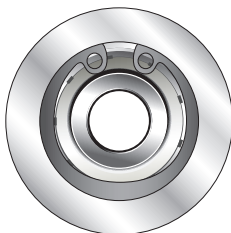
- Easy and economical way to join wood.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



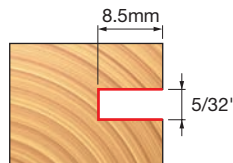
Item Number	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
99-041	1-27/32"	5/32"	1/2"	3-1/4"
Replacement Cutter				
52-154	1-27/32"	5/32"	5/16"	—
Bearings				
Bearing No.	Size	Bearing Dia.	Cut Depth	
62-128	00	30mm	8.5mm	
62-124	10	26mm	10.5mm	
62-108	20	22mm	12.5mm	



Examples of various joint configurations ▲



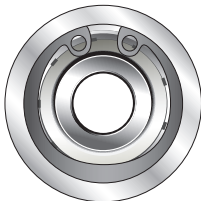
62-128
(30mm Bearing)



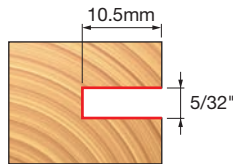
With Bearing
62-128



Biscuit Size-00
47mm x 15mm
1-7/8" x 5/8"



62-124
(26mm Bearing)



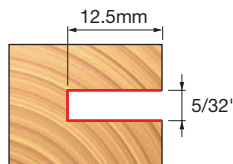
With Bearing
62-124



Biscuit Size-10
54mm x 19mm
2-1/8" x 3/4"



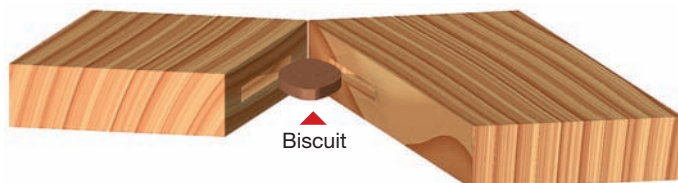
62-108
(22mm Bearing)



With Bearing
62-108



Biscuit Size-20
59mm x 22mm
2-3/8" x 7/8"



Biscuit

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



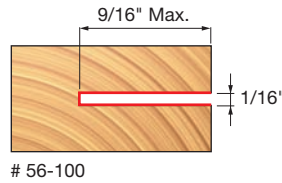
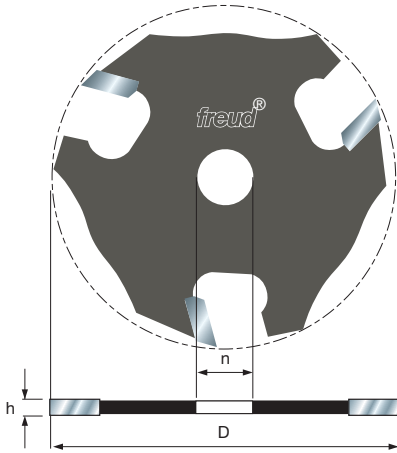


Three Wing Slotting Cutters

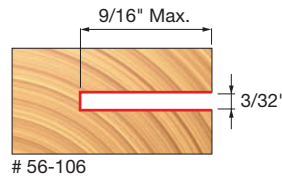
Application: Producing slots and grooves for T-moldings, spline joints, tongue & groove joints and many other applications

- Should be used with Freud's slotting cutter arbors 60-100 for 1/4" shanks and 60-102 for 1/2" shanks.
- Compatible with 62-108 bearing.
- Cutter 56-109 can be used for biscuit joining.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

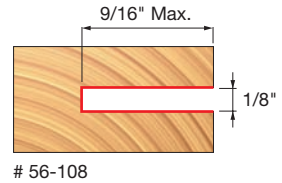
Item Number	Overall Dia.(D)	Number of Cutters	Bore Dia.(n)	Carbide Height(h)
56-100	2"	3	5/16"	1/16"
56-106	2"	3	5/16"	3/32"
56-108	2"	3	5/16"	1/8"
56-109	2"	3	5/16"	5/32"
56-110	2"	3	5/16"	3/16"
56-112	2"	3	5/16"	1/4"



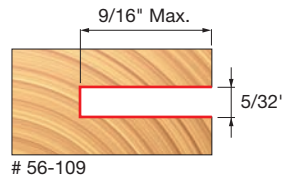
56-100



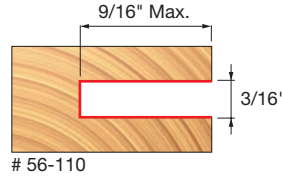
56-106



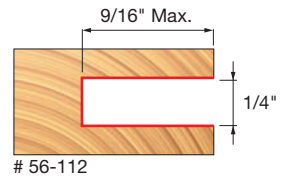
56-108



56-109



56-110



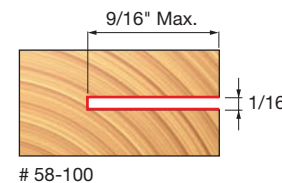
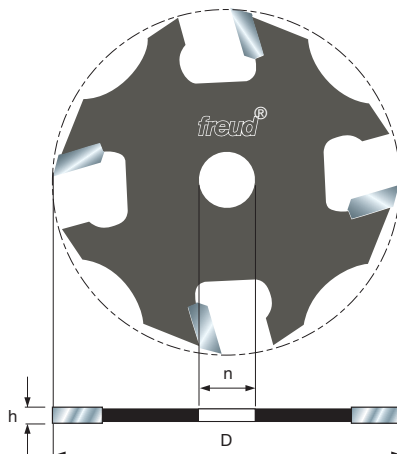
56-112

Four Wing Slotting Cutters

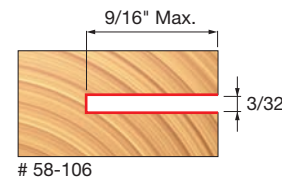
Application: Producing slots and grooves for T-moldings, spline joints, tongue & groove joints and many other applications

- Should be used with Freud's slotting cutter arbors 60-100 for 1/4" shanks and 60-102 for 1/2" shanks.
- Compatible with 62-108 bearing.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

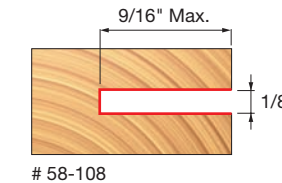
Item Number	Overall Dia.(D)	Number of Cutters	Bore Dia.(n)	Carbide Height(h)
58-100	2"	4	5/16"	1/16"
58-106	2"	4	5/16"	3/32"
58-108	2"	4	5/16"	1/8"
58-110	2"	4	5/16"	3/16"
58-112	2"	4	5/16"	1/4"



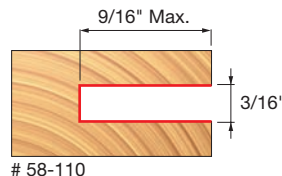
58-100



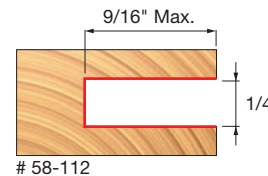
58-106



58-108



58-110



58-112

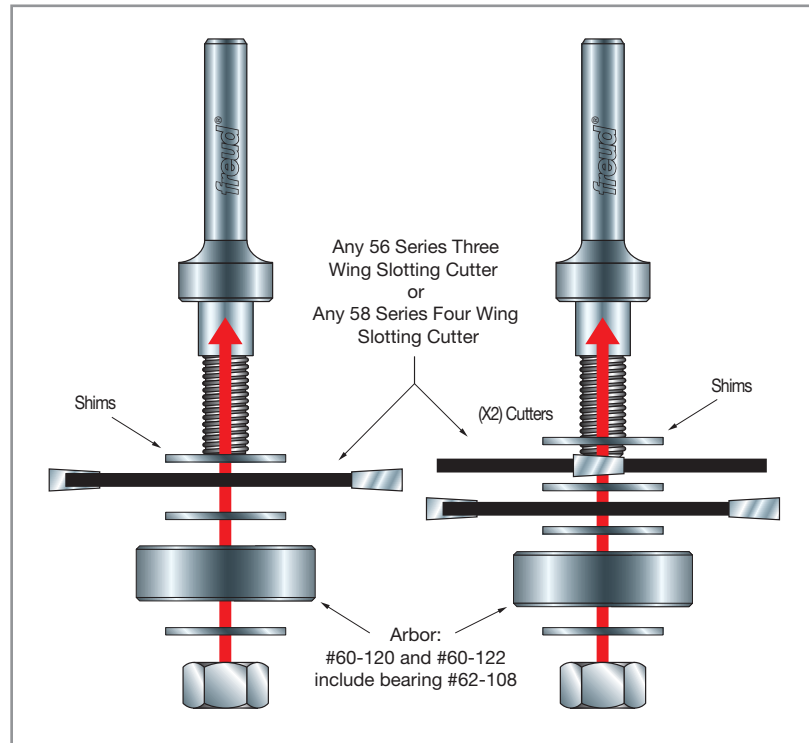
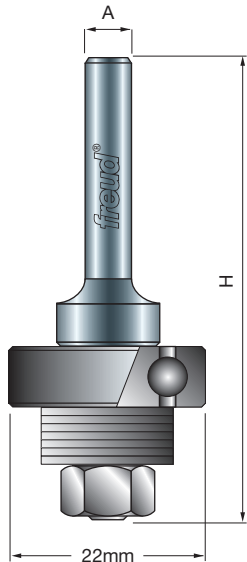
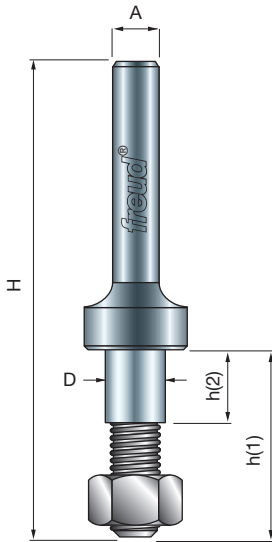
Slotting Cutter Arbors

Application: Producing smooth, precise, accurate slots

- For premium performance use with Freud slotting cutters, although compatible with any slotting cutter with a 5/16" bore.
- Use on hand-held and table-mounted portable routers.

Item Number	Arbor Dia.(D)	Stud Height(h1)	Arbor Height(h2)	Shank Dia.(A)	Overall Length(H)
60-100	5/16"	1"	25/64"	1/4"	2-3/8"
60-102	5/16"	1"	25/64"	1/2"	2-3/8"
60-120*	5/16"	1"	25/64"	1/4"	2-3/8"
60-122*	5/16"	1"	25/64"	1/2"	2-3/8"
60-152	5/16"	2-1/4"	5/8"	1/2"	4-1/4"

* Includes bearing # 62-108



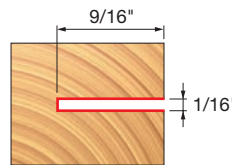
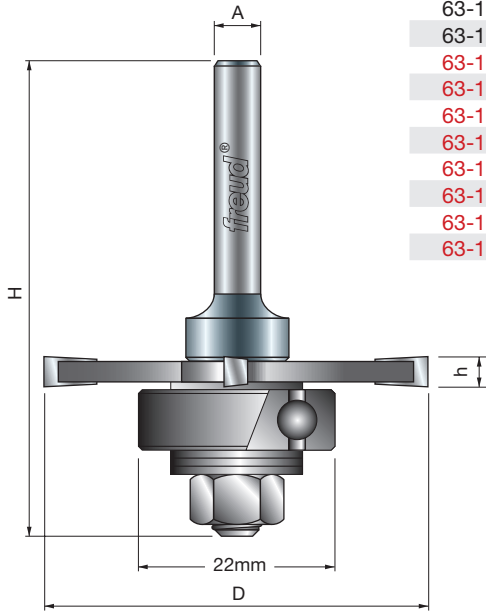


Slotting Cutter Sets

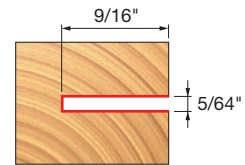
Application: Producing slots and grooves 9/16" deep for T-moldings, Spline Joints, Tongue & Groove Joints, and other applications

- Includes three wing slotting cutter, arbor and ball bearing.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

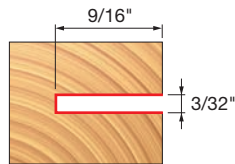
Item Number	Overall Dia.(D)	Carbide Height(h)	Cut Depth	Shank Dia.(A)	Overall Length(H)
63-100	2"	1/16"	9/16"	1/4"	2-3/8"
63-104	2"	5/64"	9/16"	1/4"	2-3/8"
63-106	2"	3/32"	9/16"	1/4"	2-3/8"
63-108	2"	1/8"	9/16"	1/4"	2-3/8"
63-109	2"	5/32"	9/16"	1/4"	2-3/8"
63-110	2"	3/16"	9/16"	1/4"	2-3/8"
63-111	2"	15/64"	9/16"	1/4"	2-3/8"
63-112	2"	1/4"	9/16"	1/4"	2-3/8"
63-150	2"	1/16"	9/16"	1/2"	2-3/8"
63-154	2"	5/64"	9/16"	1/2"	2-3/8"
63-156	2"	3/32"	9/16"	1/2"	2-3/8"
63-158	2"	1/8"	9/16"	1/2"	2-3/8"
63-159	2"	5/32"	9/16"	1/2"	2-3/8"
63-160	2"	3/16"	9/16"	1/2"	2-3/8"
63-161	2"	15/64"	9/16"	1/2"	2-3/8"
63-162	2"	1/4"	9/16"	1/2"	2-3/8"



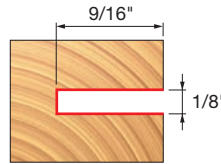
63-100
63-150



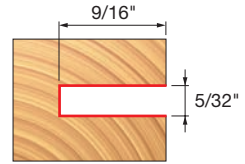
63-104
63-154



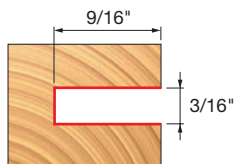
63-106
63-156



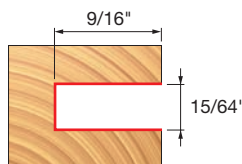
63-108
63-158



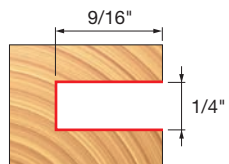
63-109
63-159



63-110
63-160



63-111
63-161



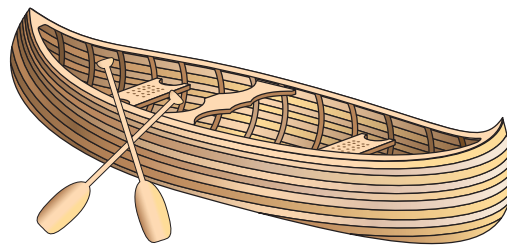
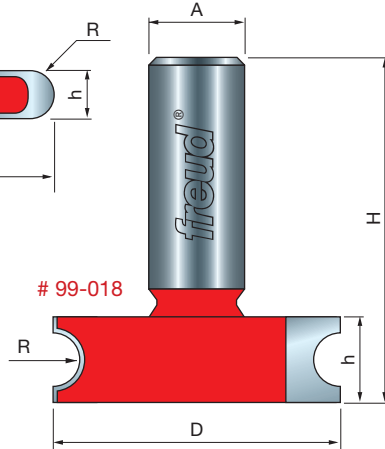
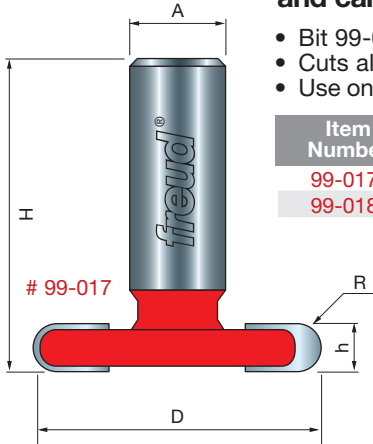
63-112
63-162

Canoe Joint Bits

Application: Producing joints for projects such as circular planters and canoes

- Bit 99-017 cuts the flute and 99-018 cuts the mating bead.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as table-mounted portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
99-017	1-1/2"	1/4"	1/8"	1/2"	1-11/16"
99-018	1-1/2"	3/8"	1/8"	1/2"	1-7/8"

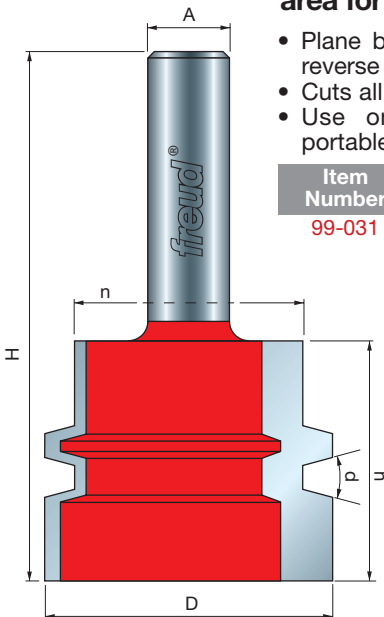


Reversible Glue Joint Bit

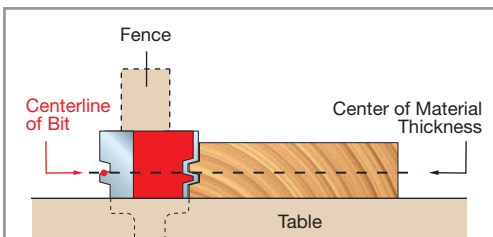
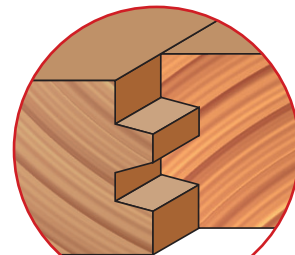
Application: Providing a stronger joint by increasing the surface area for glue

- Plane boards to a uniform thickness; align bit to the center of the board, then reverse each board for a perfect glue joint.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers, as well as table-mounted portable routers.

Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
99-031	1-1/2"	1-3/16"	1-1/4"	30°	1/2"	2-3/4"



99-031



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale

Opposing Grain Direction



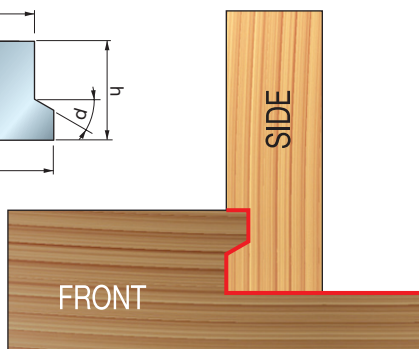
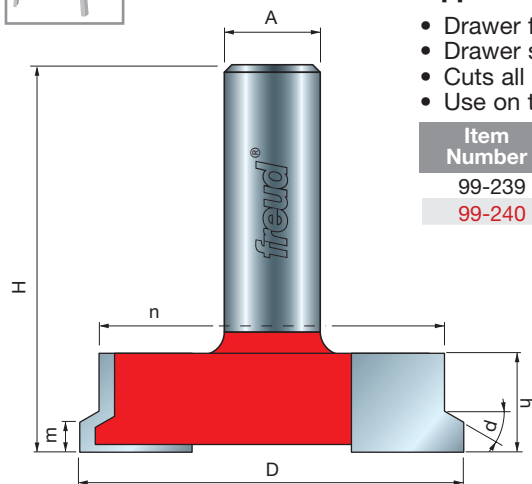


Drawer Lock Bits

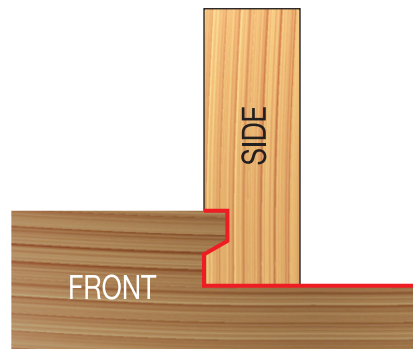
Application: Forming a strong joint between the sides and front of a drawer

- Drawer fronts are formed horizontally, flat on the table surface.
- Drawer sides are formed vertically against the fence of the table.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

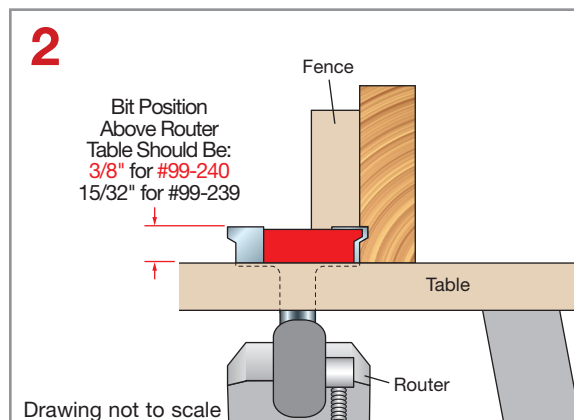
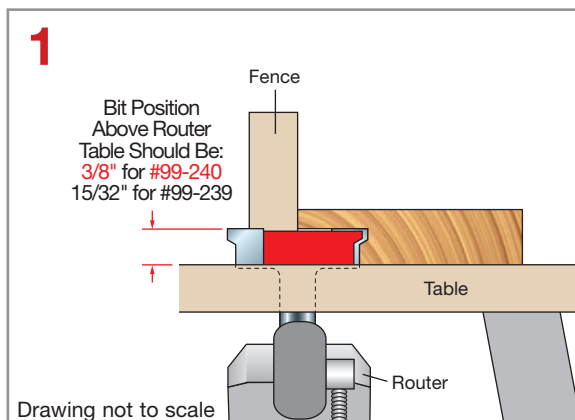
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Angle (d)	Shank Dia.(A)	Overall Length(H)
99-239	1-1/4"	1-1/64"	1/2"	13/64"	30°	1/4"	1-3/4"
99-240	2"	1-3/4"	33/64"	5/32"	30°	1/2"	2"



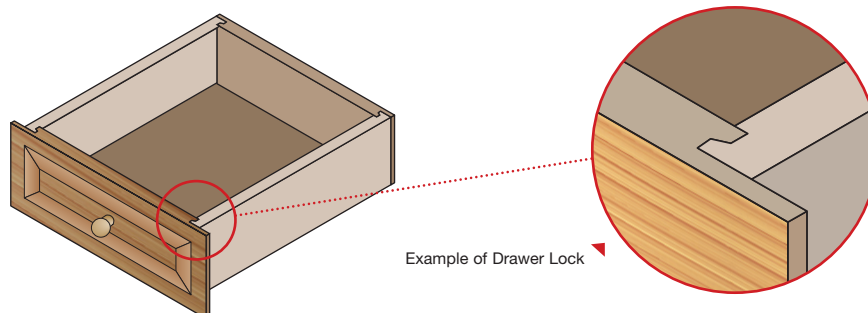
99-239



99-240



Drawer lock bits should be positioned above the router table as shown above for optimal performance.



Example of Drawer Lock

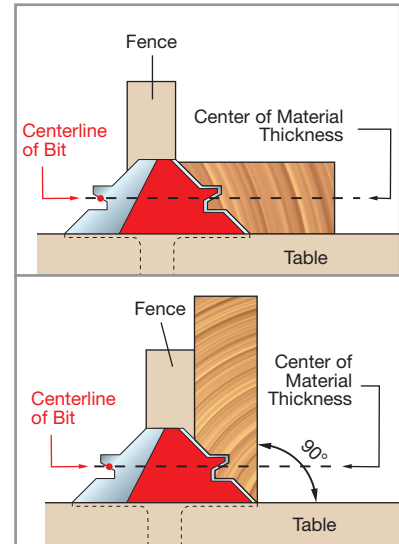
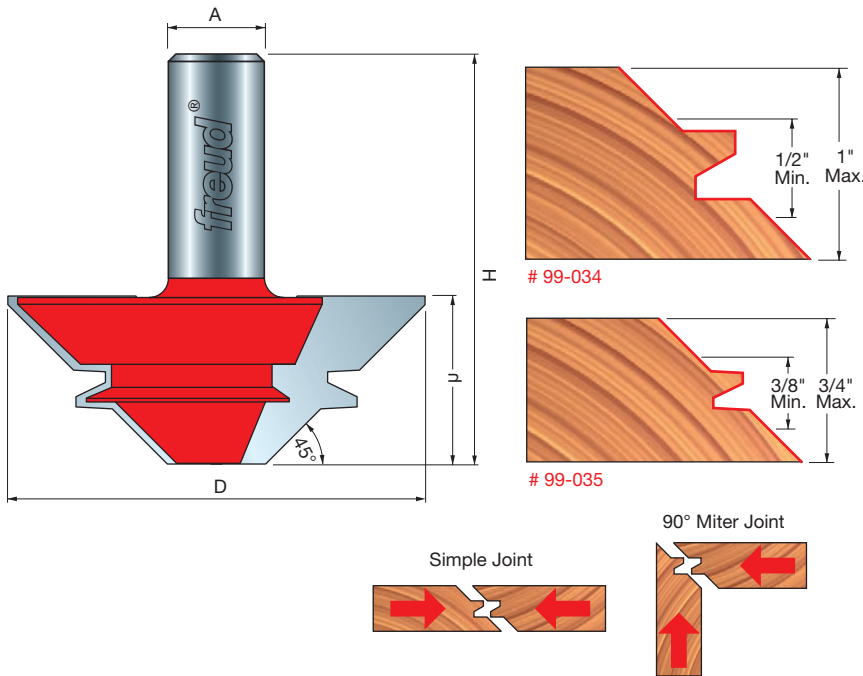
Lock Miter Bits

Application: Creating interlocking corner joints

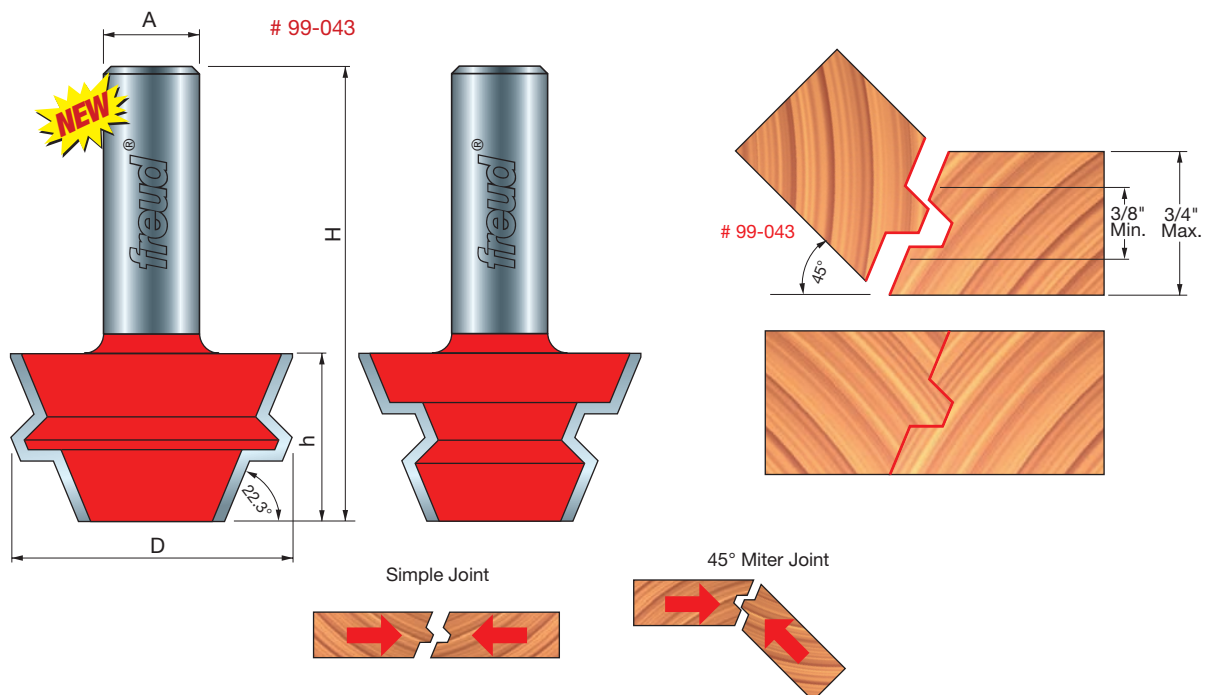
- Run one board vertically and the piece to be joined horizontally.
- 99-035 cuts thinner panels for projects such as humidors and jewelry boxes.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers, as well as table-mounted portable routers.



Item Number	Overall Dia.(D)	Carbide Height(h)	Angle	Shank Dia.(A)	Overall Length(H)
99-034	2-3/4"	1-5/32"	45°	1/2"	2-5/8"
99-035	2-11/64"	7/8"	45°	1/2"	2-3/8"
NEW 99-043	1-15/32"	7/8"	22-1/2°	1/2"	2-3/8"



22-1/2 Degree Set



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



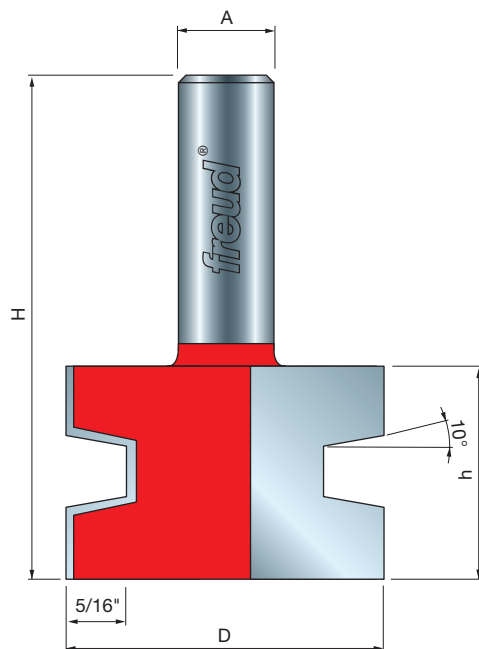
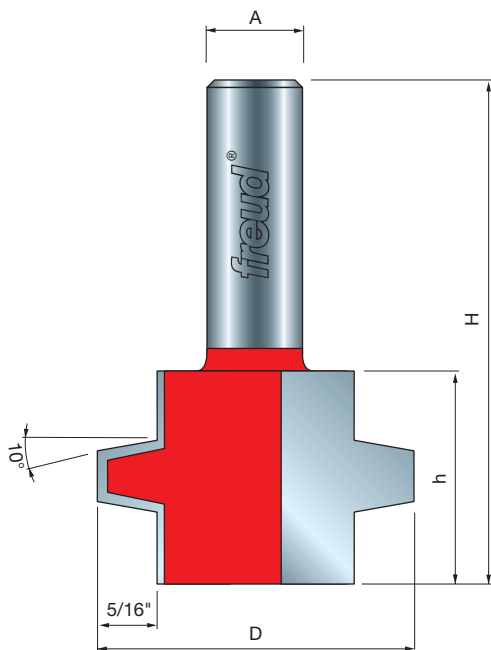


Wedge Tongue & Groove Bits

Application: Joining boards for wide panels such as table tops

- Provides a strong joint, due to the increased glue area.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

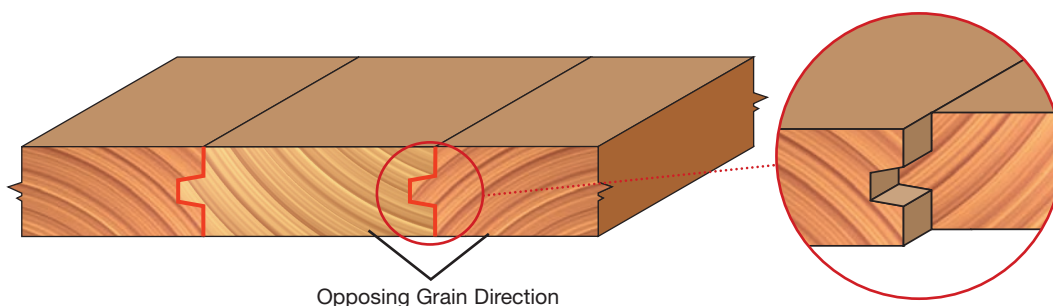
Item Number	Overall Dia.(D)	Cut Depth	Carbide Height(h)	Angle	Shank Dia.(A)	Overall Length(H)
99-032	1-21/32"	5/16"	1-3/32"	10°	1/2"	2-5/8"
99-033	1-21/32"	5/16"	1-3/32"	10°	1/2"	2-5/8"



99-033



99-032



All Profile Drawings 1:1 Scale

Red Item Numbers Indicate 1/2" Shank

Adjustable Tongue & Groove Bit Set

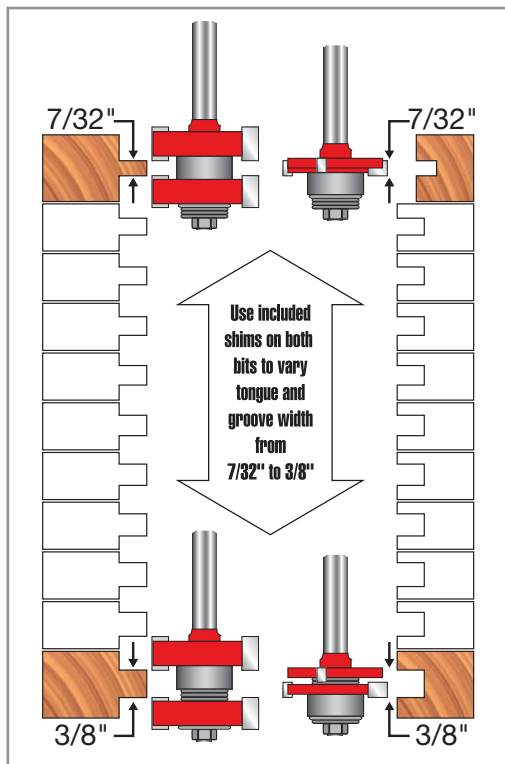
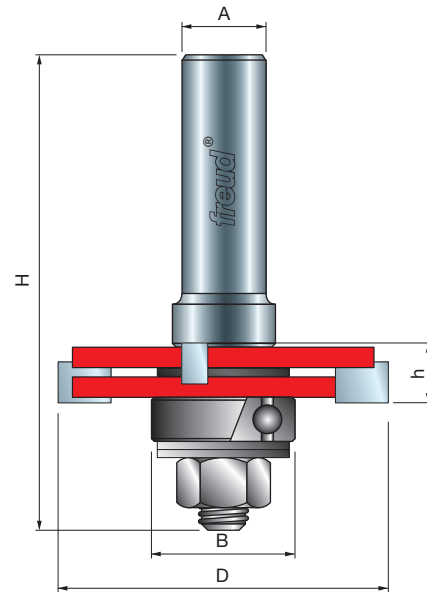
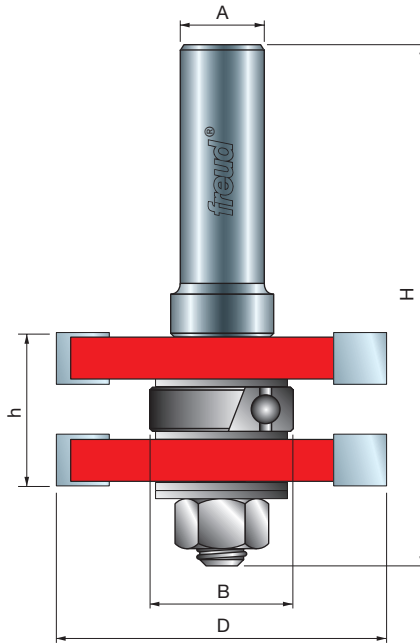


Application: Producing perfectly fitted tongue and groove joints for projects such as Shaker style cabinet doors

- Exclusive Freud design features a tongue cutter with opposing shear angles to ensure a flawless finish.
- Adjustable at .002 inch increments for stock thickness of 1/2" to 1-1/4" and groove widths of 7/32" to 3/8".
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

Item Number	Bit Type	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
99-036	Tongue Bit	1-3/4"	7/8"	7/32" ~ 3/8"	1/2"	3-1/4"
	Groove Bit	1-3/4"	7/8"	13/16" ~ 1-11/32"	1/2"	2-11/16"

U.S. Pat. No. 6,367,524



Breadboard Ends



Tongue & Groove Joints



Shaker Style Doors

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



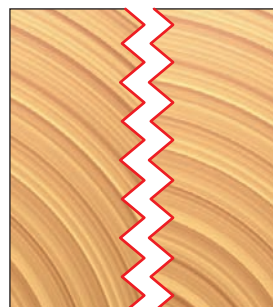
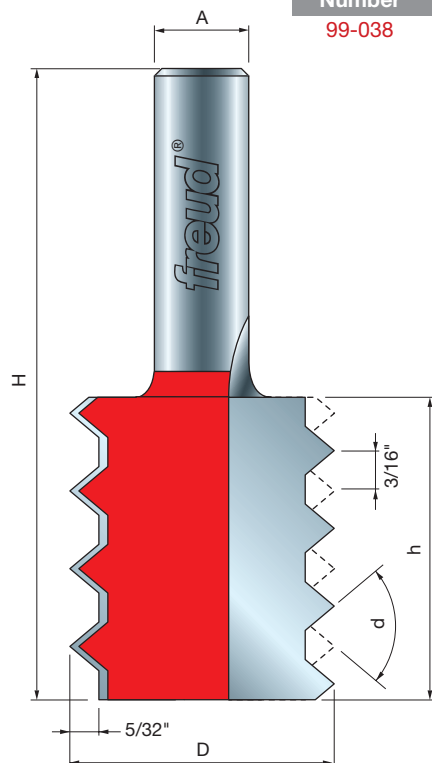


Raised Panel "V" Joint Bit

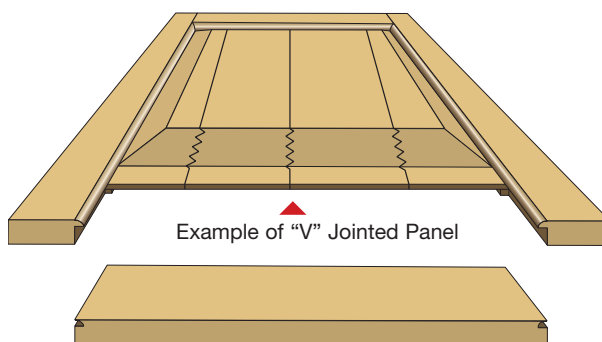
Application: Producing strong, attractive glue joint raised panels

- Mating surfaces are at an angle, not vertical, so the dark lines like those created by standard finger joint bits are not visible.
- Bit does not have to be centered in the wood.
- Simply raise or lower the bit $3/32"$ to route the mating edge.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

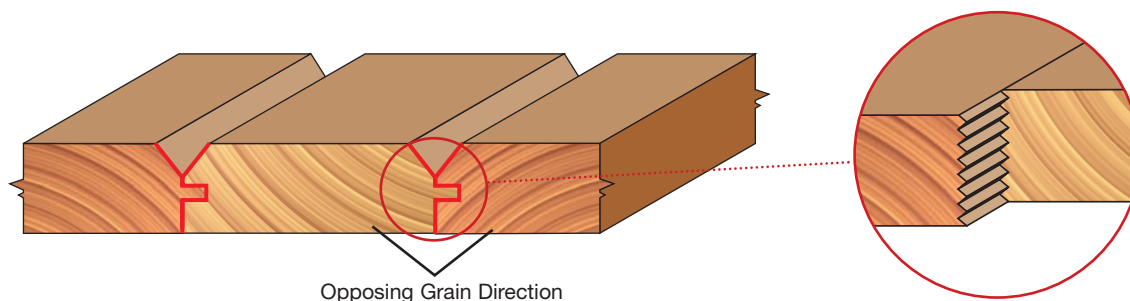
Item Number	Overall Dia.(D)	Carbide Height(h)	Minor Height	Angle (d)	Shank Dia.(A)	Overall Length(H)
99-038	1-3/8"	1-37/64"	3/16"	80°	1/2"	3-1/16"



99-038



Example of "V" Jointed Panel



Opposing Grain Direction

All Profile Drawings 1:1 Scale

Red Item Numbers Indicate 1/2" Shank

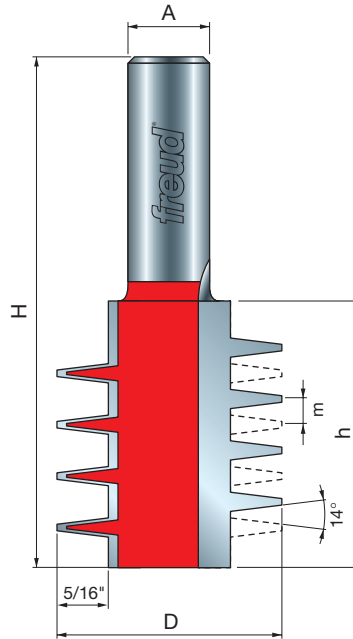
Finger Joint Bit

Application: Joining wood edge-to-edge or end-to-end

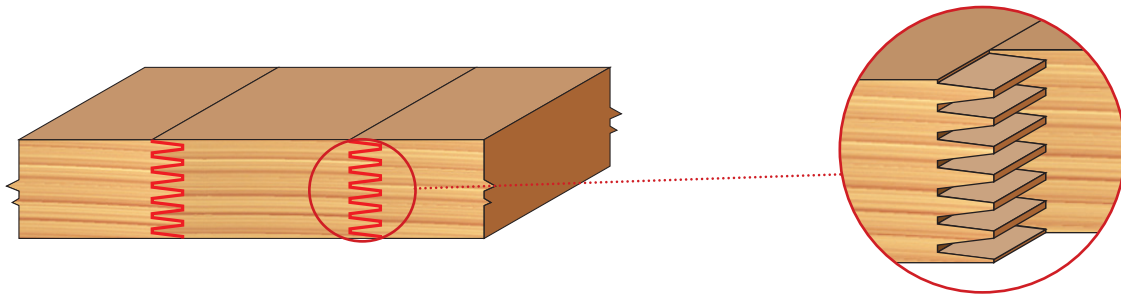
- Produces a joint that is stronger than the wood itself.
- Tips on each side of the bit are offset, cutting twice as many fingers as you see tips on each side of the bit.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as table-mounted portable router.



Item Number	Overall Dia.(D)	Cut Depth	Carbide Height(h)	Minor Height(m)	Shank Dia.(A)	Overall Length(H)
99-037	1-3/8"	5/16"	1-9/16"	21/64"	1/2"	3"



99-037

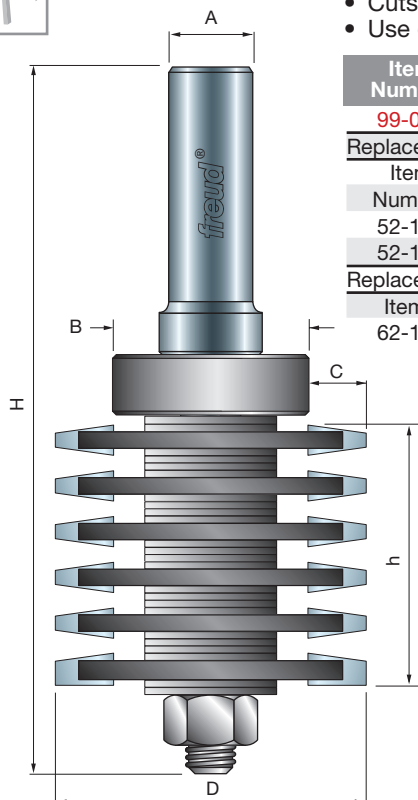




Variable Height Finger Joint Bit

Application: Adjustable to produce finger joints up to 1-25/32" thick

- Ideal for joining wood edge-to-edge or end-to-end, because the joint produced is stronger than the wood itself.
- Replacement cutters available and uses arbor #60-152.
- Allows you complete freedom when producing finger joints.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



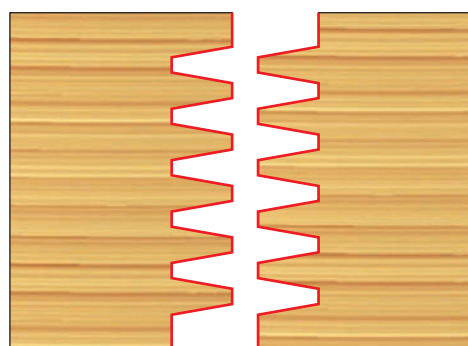
Item Number	Overall Dia.(D)	Cut Dia.(C)	Bearing Dia.(B)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
99-039	2"	5/16"	1-3/8"(35mm)	1-9/16"	1/2"	4-1/4"

Replacement Cutters

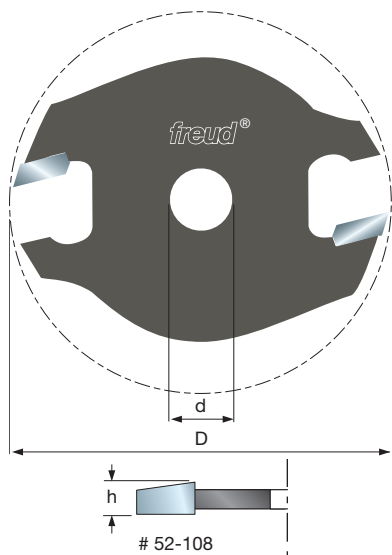
Item Number	Overall Dia.	Bore Dia.	Carbide Height
52-104	2"	5/16"	7/32"
52-108	2"	5/16"	21/64"

Replacement Bearing

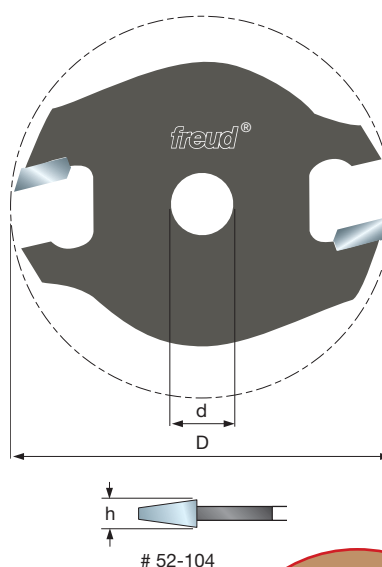
Item#	Outside Dia.	Inside Dia.	Height
62-109	35mm	15mm	11mm



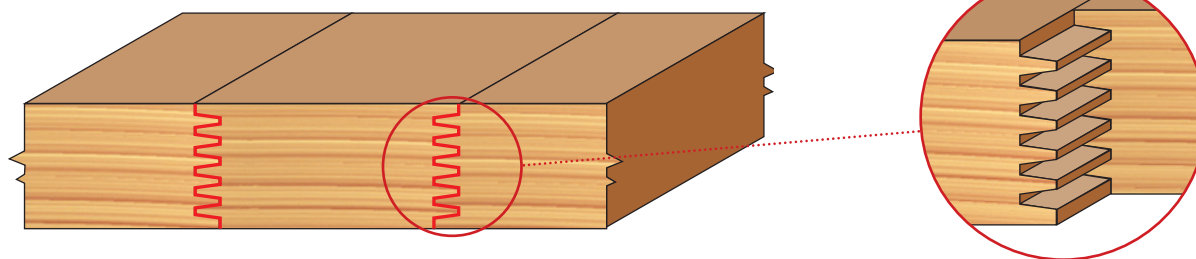
99-039



52-108



52-104



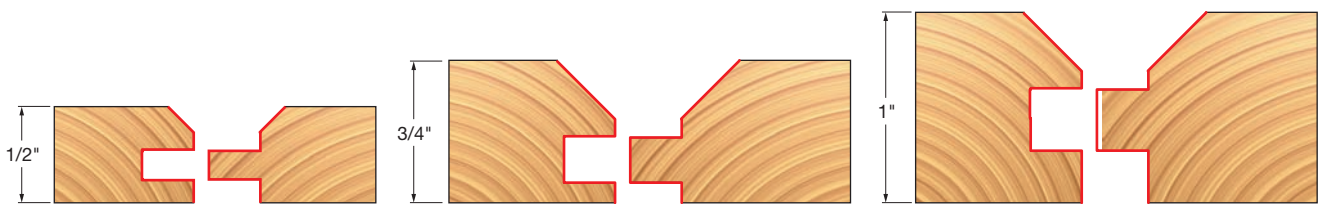
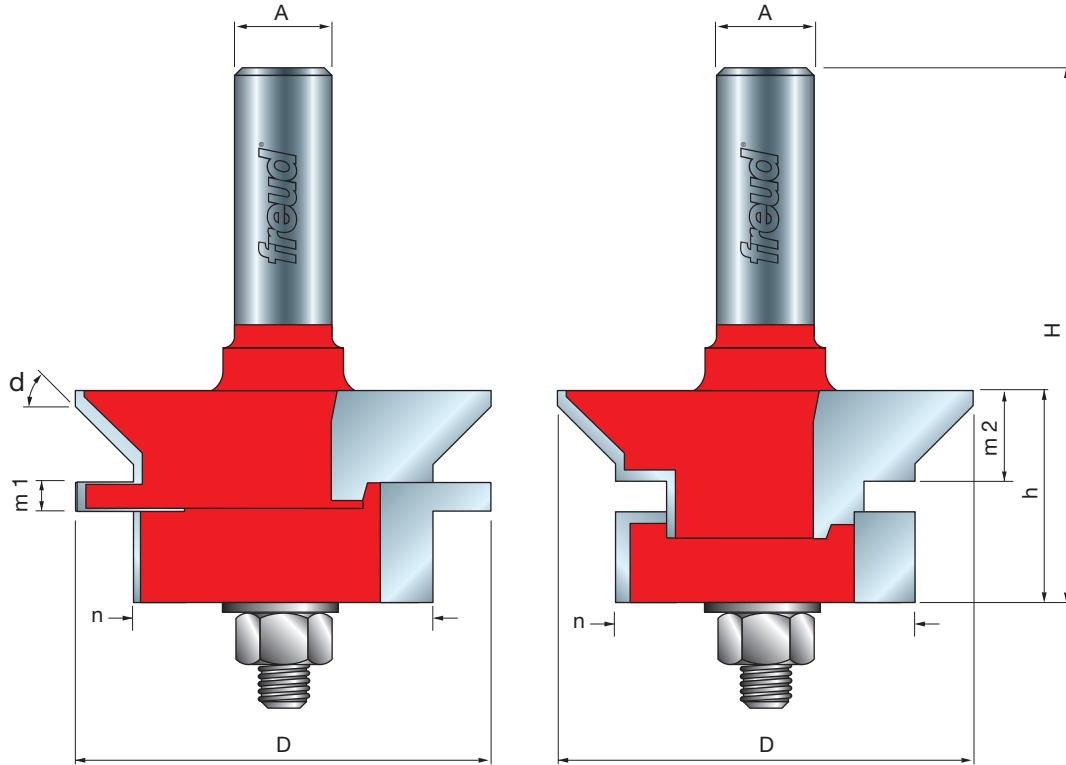
“V” Panel Bit Set



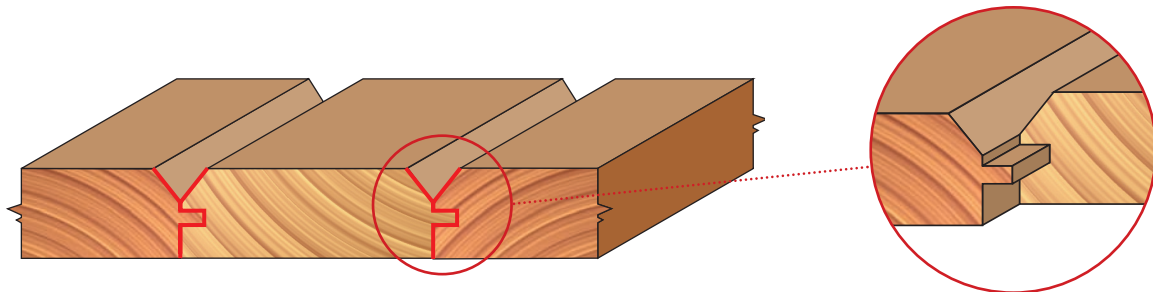
Application: Creating attractive “V” Groove paneling

- Set includes spacers that allow you to produce “V” paneling from 1/2", 3/4", or 1" thick stock.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m1)	Minor Height(m2)	Angle	Shank Dia.(A)	Overall Length(H)
99-191	1-11/64"	1-37/64"	1-1/8"	5/32"~5/16"	25/64"	45°	1/2"	3-3/8"



99-191



Joinery Bits



173

ROUTER BITS & SETS

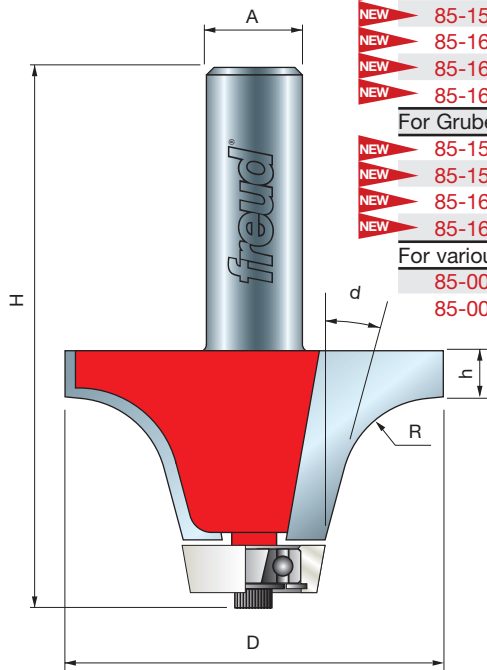
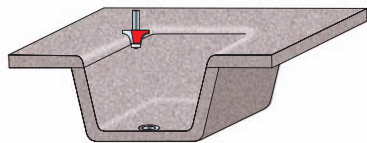
freud®



Round Over Bowl Bits

Application: Trimming joint between solid surface countertops and solid surface sink bowls with a smooth, rounded edge

- Specially formulated carbide is ideal for fabricating solid surface materials.
- Features non-marring synthetic bearing to protect finished edges.
- Cuts all solid surface materials.
- Use in hand-held portable routers.



Item Number	For Top Thickness	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Angle (d)	Shank Dia.(A)	Overall Length(H)
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For Corian® Bowls 802, 809, 810, 871

NEW	85-140	1/2"	2-1/8"	1"	1/2"	20°	1/2"	2-13/16"
NEW	85-145	3/4"	2-1/4"	1-1/4"	1/2"	20°	1/2"	3-21/64"

For Avonite®, Corian®, Fountainhead®, & Formica® bowls, Transolid® and Hi-Macs® sinks

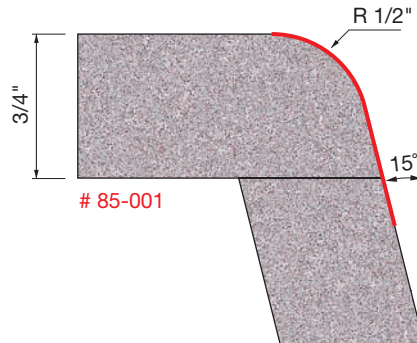
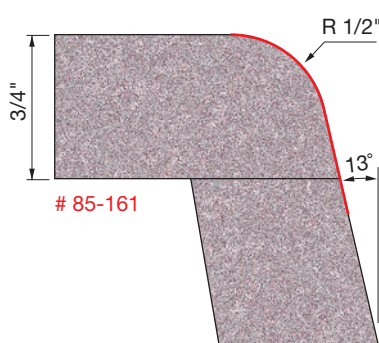
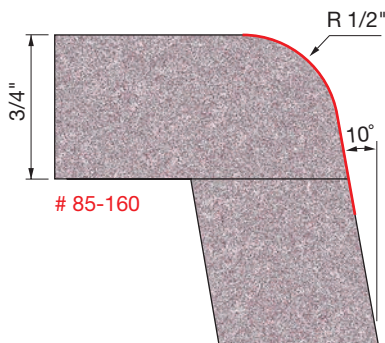
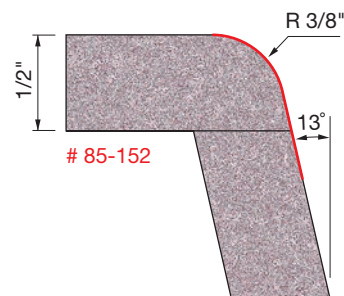
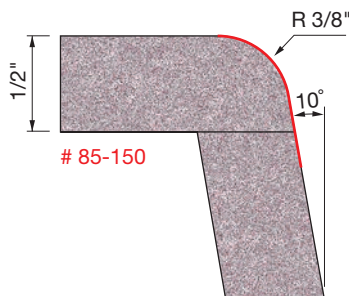
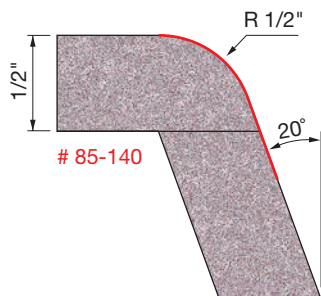
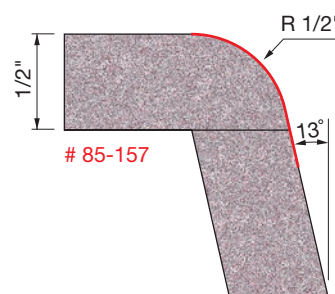
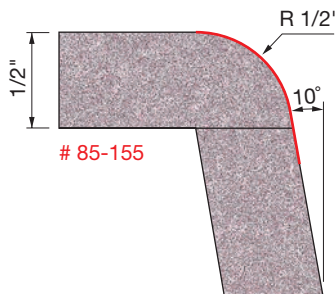
NEW	85-150	1/2"	2-1/8"	7/8"	3/8"	10°	1/2"	2-3/4"
NEW	85-155	1/2"	2-1/4"	7/8"	1/2"	10°	1/2"	2-51/64"
NEW	85-160	3/4"	2-1/2"	1-1/8"	1/2"	10°	1/2"	3-3/64"
NEW	85-165	3/4"	2-9/16"	1-1/4"	3/4"	10°	1/2"	3-1/8"
NEW	85-166	1"	2-5/8"	1-1/4"	1/2"	10°	1/2"	3-1/4"

For Gruber®, Royal Stone®, Transolid® and Hi-Macs® Bowls

NEW	85-152	1/2"	2-1/8"	7/8"	3/8"	13°	1/2"	2-51/64"
NEW	85-157	1/2"	2-3/8"	7/8"	1/2"	13°	1/2"	2-51/64"
NEW	85-161	3/4"	2-1/2"	1-1/8"	1/2"	13°	1/2"	3-3/64"
NEW	85-164	3/4"	2-1/2"	1-1/8"	3/4"	13°	1/2"	3-3/64"

For various bowls and sinks with 15° angle

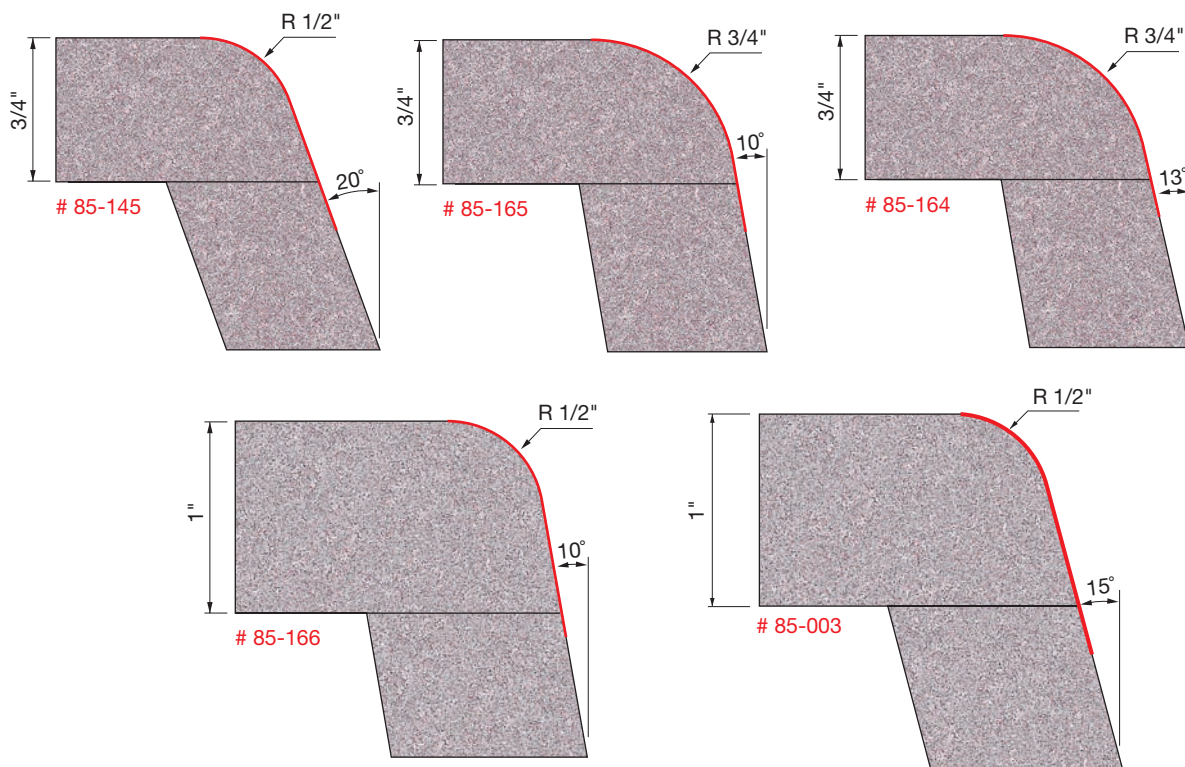
	85-001	3/4"	2"	1"	1/2"	15°	1/2"	2-7/8"
	85-003	1"	2"	1-1/4"	1/2"	15°	1/2"	3-1/8"



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(Continued)

Round Over Bowl Bits

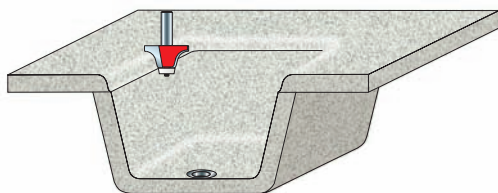
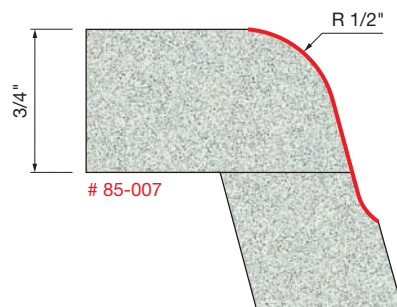
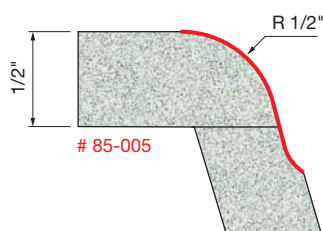
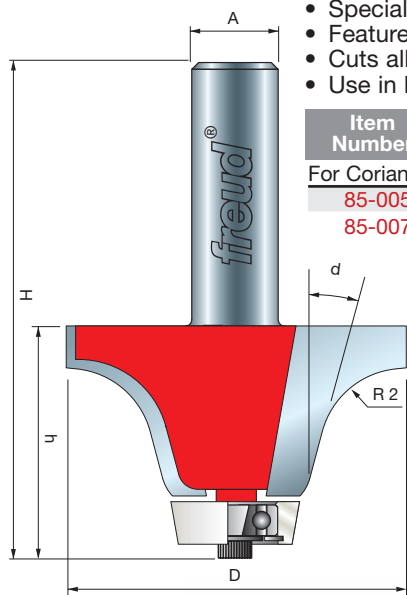


Ogee Bowl Bits

Application: Trimming joint between solid surface countertops and solid surface sink bowls with a rounded ogee design

- Specially formulated carbide is ideal for fabricating solid surface materials.
- Features non-marring synthetic bearing to protect finished edges.
- Cuts all solid surface materials.
- Use in hand-held portable routers.

Item Number	For Top Thickness	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Angle (d)	Shank Dia.(A)	Overall Length(H)
For Corian® Bowls 802, 809, 810, 871							
85-005	1/2"	2"	1"	1/2"	15°	1/2"	2-7/8"
85-007	3/4"	2"	1-1/4"	1/2"	15°	1/2"	3-1/8"



Corian® is a registered trademark of Dupont Co.

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



Solid Surface Bits



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ROUTER BITS & SETS

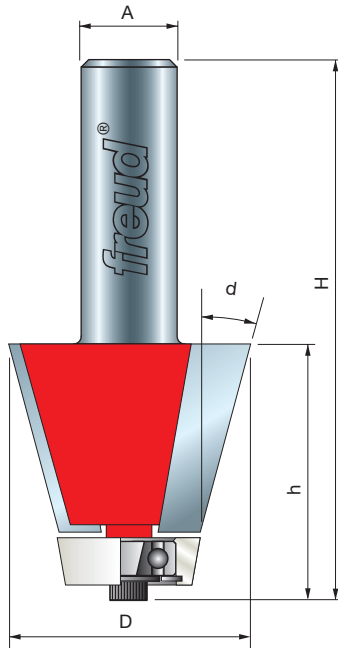
freud®



Bevel Bowl Bits

Application: Trimming joint between solid surface countertops and solid surface sink bowls with a beveled edge

- Specially formulated carbide is ideal for fabricating solid surface materials.
- Features non-marring synthetic bearing to protect finished edges.
- Cuts all solid surface materials.
- Use in hand-held portable routers.



Item Number	For Top Thickness	Overall Dia.(D)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
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For Avonite®, Cerata® and Corian® sinks and bowls

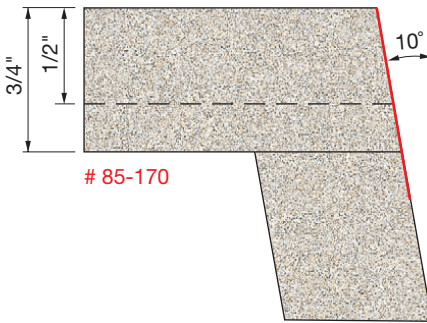
NEW 85-170	1/2" or 3/4"	1-3/8"	1"	10°	1/2"	2-7/8"
NEW 85-171	1"	1-9/16"	1-1/4"	10°	1/2"	3-1/8"
NEW 85-172	1-1/2"	1-3/4"	1-3/4"	10°	1/2"	3-3/8"

For Royal Stone®, Gruber® and Staron® sinks and bowls

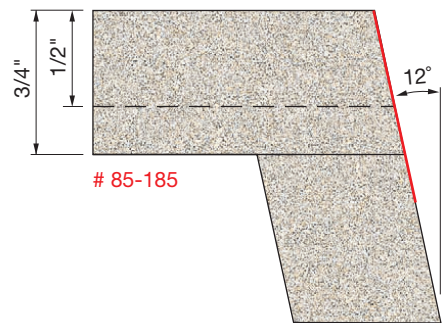
NEW 85-185	1/2" or 3/4"	1-3/8"	1"	12°	1/2"	2-7/8"
NEW 85-186	1"	1-9/16"	1-1/4"	12°	1/2"	3-1/8"
NEW 85-187	1-1/2"	1-3/4"	1-3/4"	12°	1/2"	3-5/8"

For 15° sinks and bowls

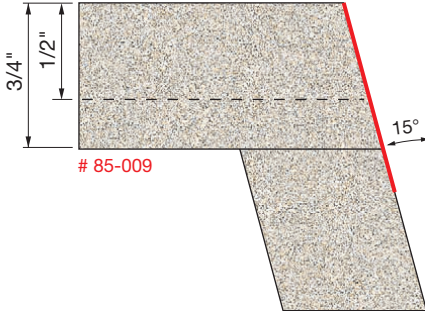
85-009	1/2" or 3/4"	1-9/32"	1"	15°	1/2"	2-7/8"
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85-170



85-185



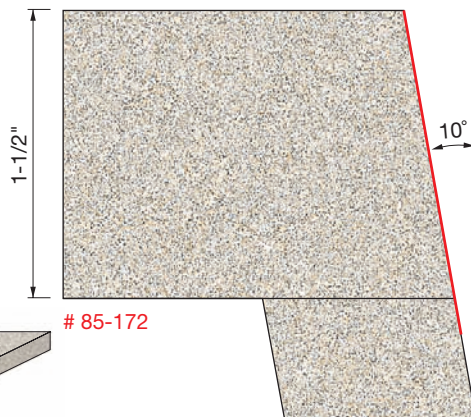
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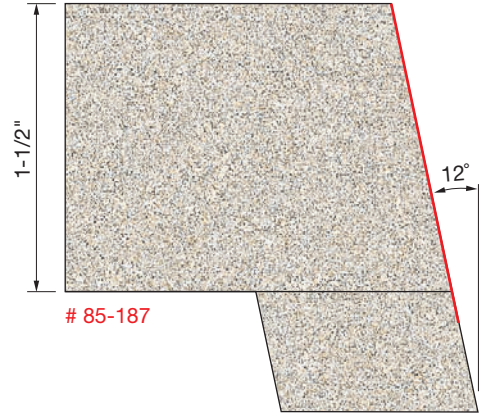
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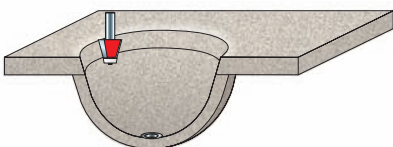
85-186



85-172

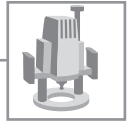


85-187



Avonite® is a registered trademark of Aristech Acrylics LLC, Cerata® is a registered trademark of Hartson-Kennedy Corp., Corian® is a registered trademark of Dupont Co., Gruber® is a registered trademark of Gruber System, Inc., Royal Stone® is a registered trademark of Royal Stone Industries, Inc., Staron® is a registered trademark of Samsung, Inc.

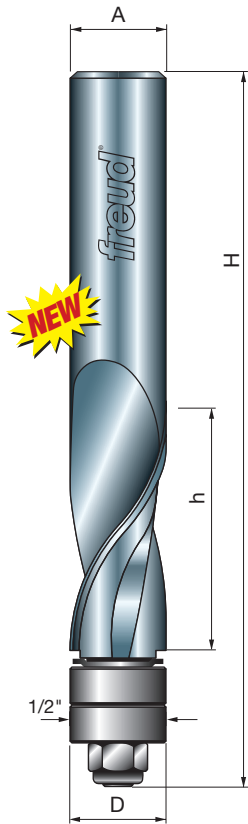
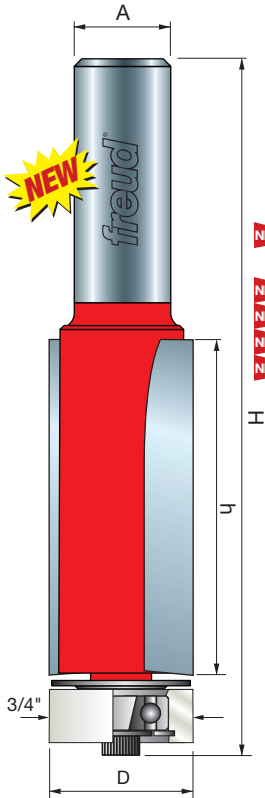
Flush Trim Solid Surface Bits



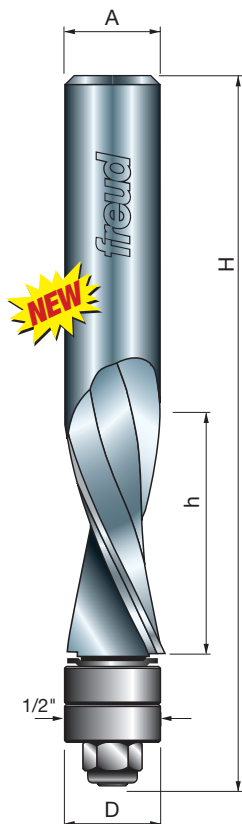
Application: Flush trimming of solid surface materials

- Specially formulated carbide is ideal for fabricating solid surface materials.
- Bit #85-227 features non-marring synthetic bearing to protect finished edges.
- Spiral flush trim bits deliver very fast, clean cuts in thick tops.
- Cuts all solid surface materials.
- Use in hand-held portable routers.

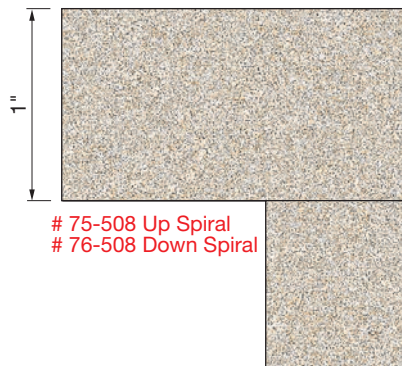
Item Number	For Top Thickness	Shear Direction	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
NEW 85-227	1/2" to 1-1/2"	N/A	3/4"	1-3/4"	1/2"	3-5/8"
Spiral Flush Trim Bits						
NEW 75-508	1"	Up	1/2"	1-1/4"	1/2"	3-3/4"
NEW 75-509	1-3/4"	Up	1/2"	2"	1/2"	4-11/16"
NEW 76-508	1"	Down	1/2"	1-1/4"	1/2"	3-3/4"
NEW 76-509	1-3/4"	Down	1/2"	2"	1/2"	4-11/16"



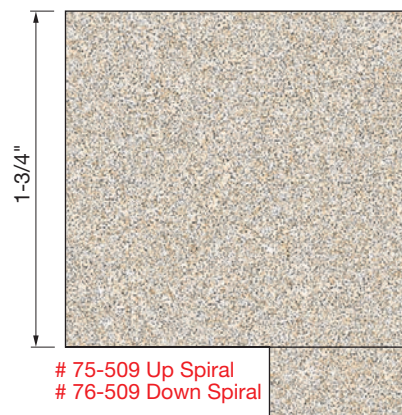
Up Spiral Bit



Down Spiral Bit



75-508 Up Spiral
76-508 Down Spiral



75-509 Up Spiral
76-509 Down Spiral

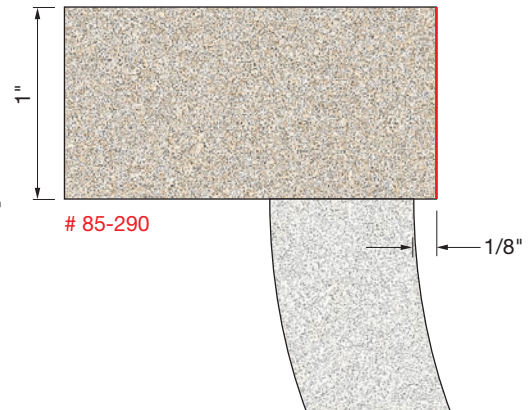
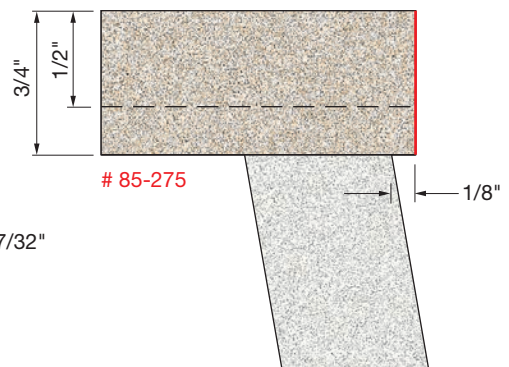
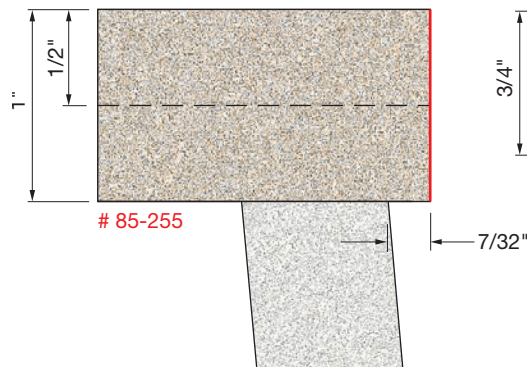
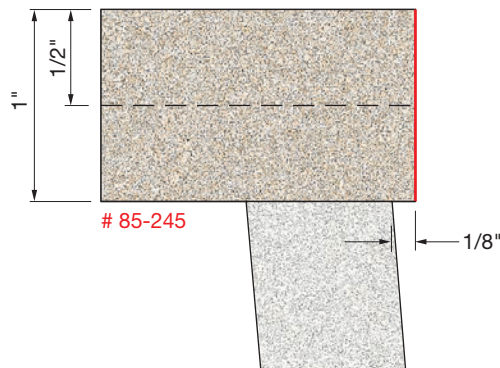
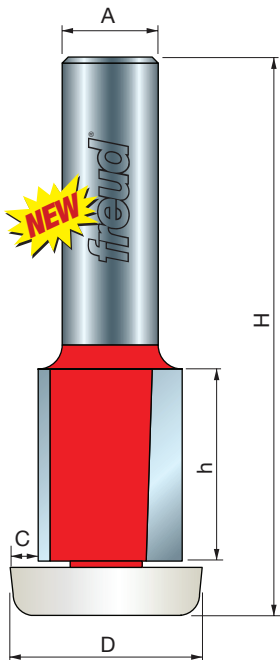
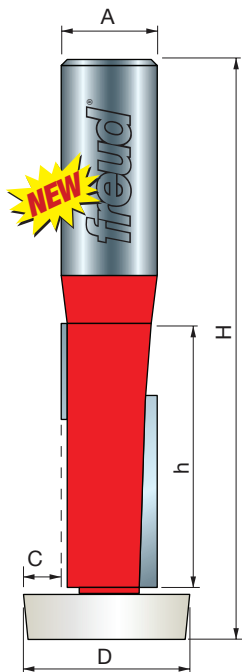


Overhang Trim and Cut Out Bits

Application: Initial bowl cut out to prepare for Round Over, Ogee, Bevel or Bull Nose finish cuts

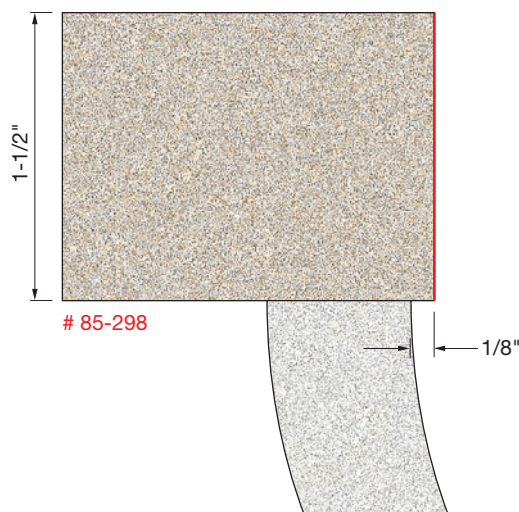
- Specially formulated carbide is ideal for fabricating solid surface materials.
- Features non-marring synthetic bearing to protect finished edges.
- Cuts all solid surface materials.
- Use in hand-held portable routers.

Item Number	For Top Thickness	Overhang Amount(C)	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
Overhang Cut Out Bits with 5° beveled bearing						
NEW 85-245	1-1/4"	1/8"	1/2"	1-3/8"	1/2"	3"
NEW 85-255	1-1/4"	7/32"	1/2"	1-3/8"	1/2"	3"
Overhang Trim Bit with 10° beveled bearing						
NEW 85-275	1/2" or 3/4"	1/8"	3/4"	1"	1/2"	2-7/8"
Overhang Trim Bits with 5° radiused bearing						
NEW 85-280	1/2" or 3/4"	1/8"	3/4"	1"	1/2"	2-7/8"
NEW 85-290	1"	1/8"	3/4"	1-1/4"	1/2"	3-1/8"
NEW 85-296	1-1/4"	1/8"	3/4"	1-1/2"	1/2"	3-3/8"
NEW 85-298	1-1/2"	1/8"	3/4"	1-3/4"	1/2"	3-5/8"



(Continued)

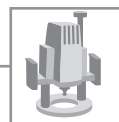
Overhang Trim and Cut Out Bits



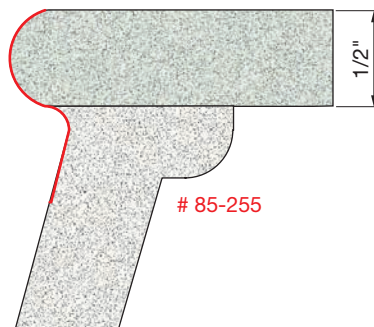
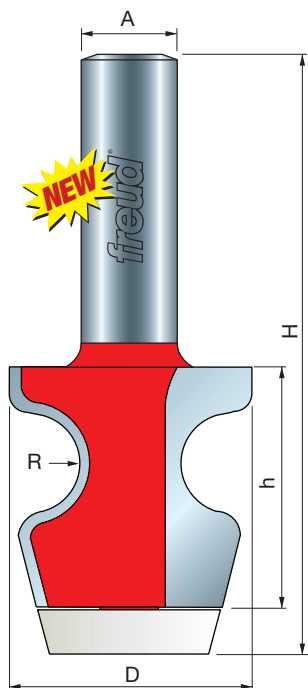
Bull Nose Bits

Application: Create a bullnose edge around undermount sink openings

- Routes a perfect bullnose on 1/2" thick tops.
- Specially formulated carbide is ideal for fabricating solid surface materials.
- Features non-marring synthetic bearing with 5° bevel to protect finished edges.
- Cuts all solid surface materials.
- Use in hand-held portable routers.



Item Number	For Top Thickness	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
For Avonite®, Cerata® and Surell® lavatory bowls						
NEW 85-605	1/2"	1-1/4"	1-1/4"	1/4"	1/2"	3-1/8"



Avonite® is a registered trademark of Aristech Acrylics LLC, Cerata® is a registered trademark of Hartson-Kennedy Corp., Surell® are registered trademarks of the Formica Corp.

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



Solid Surface Bits



179

ROUTER BITS & SETS

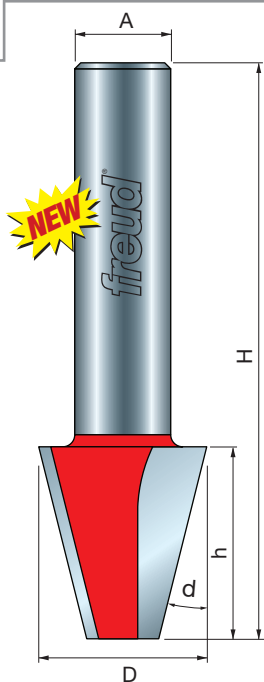
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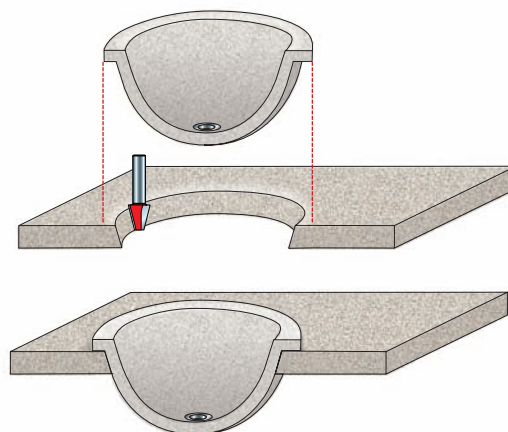
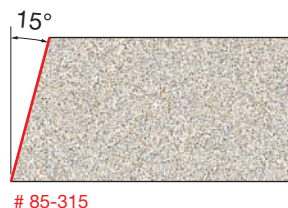
Top Mount Bowl Bits

Application: Routing cutouts for top mount European style bowls, or other bevel applications

- Specially formulated carbide is ideal for fabricating solid surface materials.
- Cuts all solid surface materials.
- Use in hand-held portable routers.



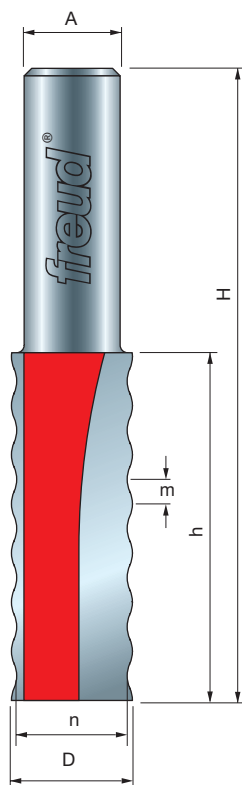
Item Number	Overall Dia.(D)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
NEW 85-315	29/32"	1"	15°	1/2"	3"



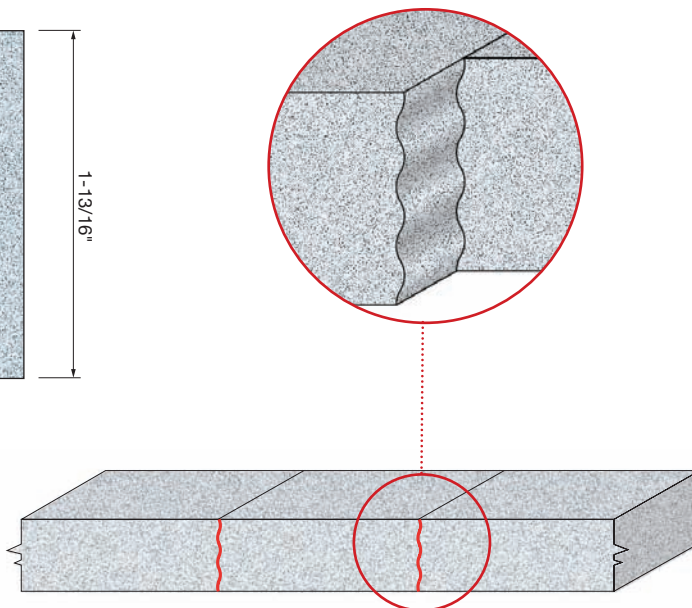
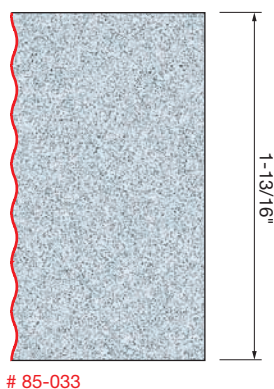
Wavy Joint Bit

Application: Producing a sturdy joint in solid surface countertops

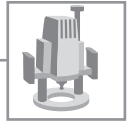
- Waves formed in material accommodate more surface glue, creating a solid joint.
- Specially formulated carbide is ideal for fabricating solid surface materials.
- Cuts all solid surface materials.
- Use on hand-held portable routers.



Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Shank Dia.(A)	Overall Length(H)
85-033	5/8"	37/64"	1-13/16"	1/8"	1/2"	3-1/8"



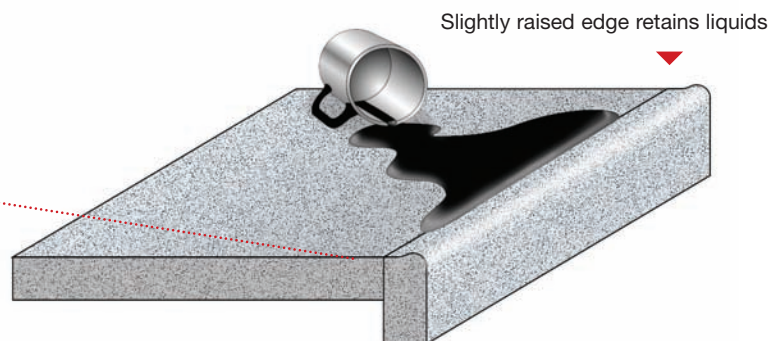
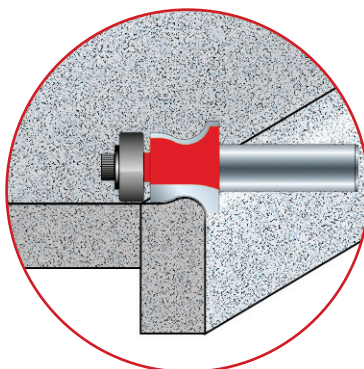
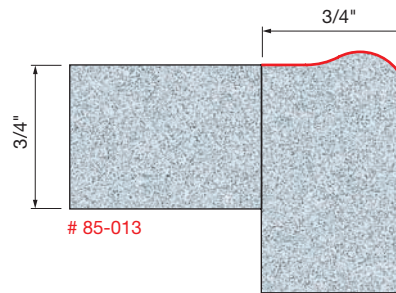
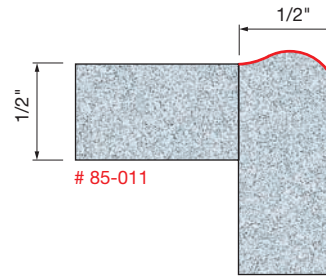
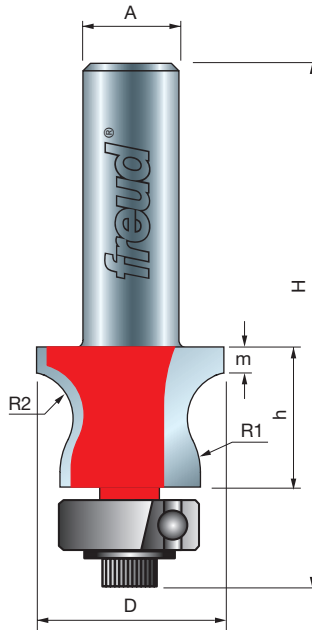
No Drip Edge Bits



Application: Creating a slightly raised edge on a solid surface countertop

- Specially formulated carbide is ideal for fabricating solid surface materials.
- Cuts all solid surface materials.
- Use on hand-held portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Minor Height(m)	Large Radius(R1)	Small Dia.(R2)	Shank Dia.(A)	Overall Length(H)
85-011	1"	3/4"	9/64"	3/8"	1/4"	1/2"	2-13/16"
85-013	1"	1"	9/64"	3/8"	1/4"	1/2"	3-1/16"



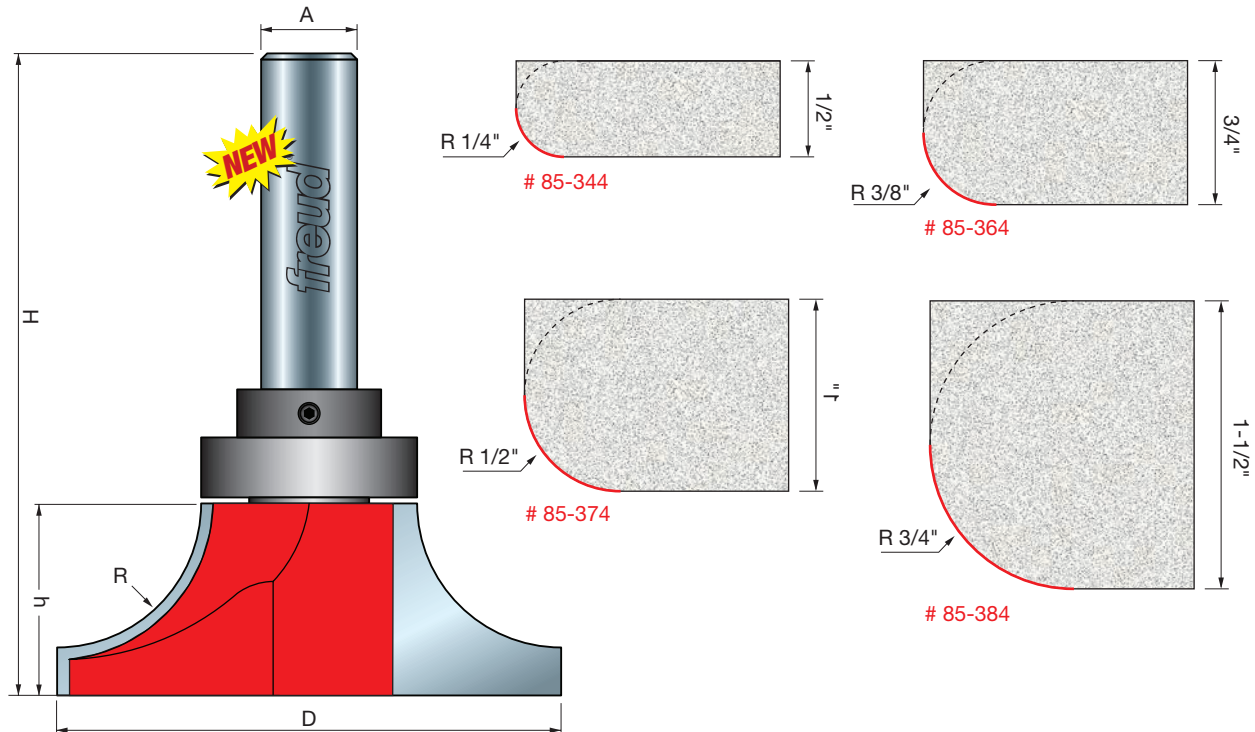


Under Rounding Bit For Bull Nose

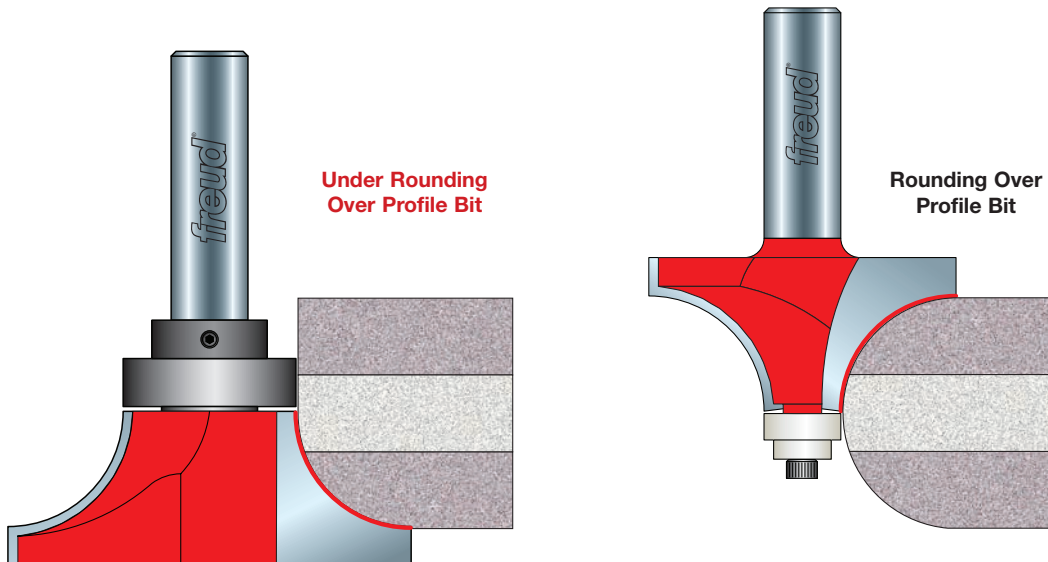
Application: Routing the lower portion of a bull nose edge

- Combine these bits with the Rounding Over Bits above to create perfect bull nose edges.
- Specially formulated carbide is ideal for fabricating solid surface materials.
- Cuts all solid surface materials.
- Use in hand-held portable routers.
- Includes steel bearing.

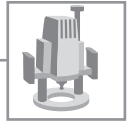
	Item Number	For Top Thickness	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
NEW	85-344	1/2"	1-5/8"	3/8"	1/4"	1/2"	2-5/8"
NEW	85-364	3/4"	1-7/8"	1/2"	3/8"	1/2"	2-3/4"
NEW	85-374	1"	2-1/8"	3/4"	1/2"	1/2"	3"
NEW	85-384	1-1/2"	2-5/8"	1"	3/4"	1/2"	3-3/8"



A full bull nose profile can be created by using the above the Under Rounding Bit to create the bottom round over profile and use the Rounding Over Bit (next page) to create the top round over profile.



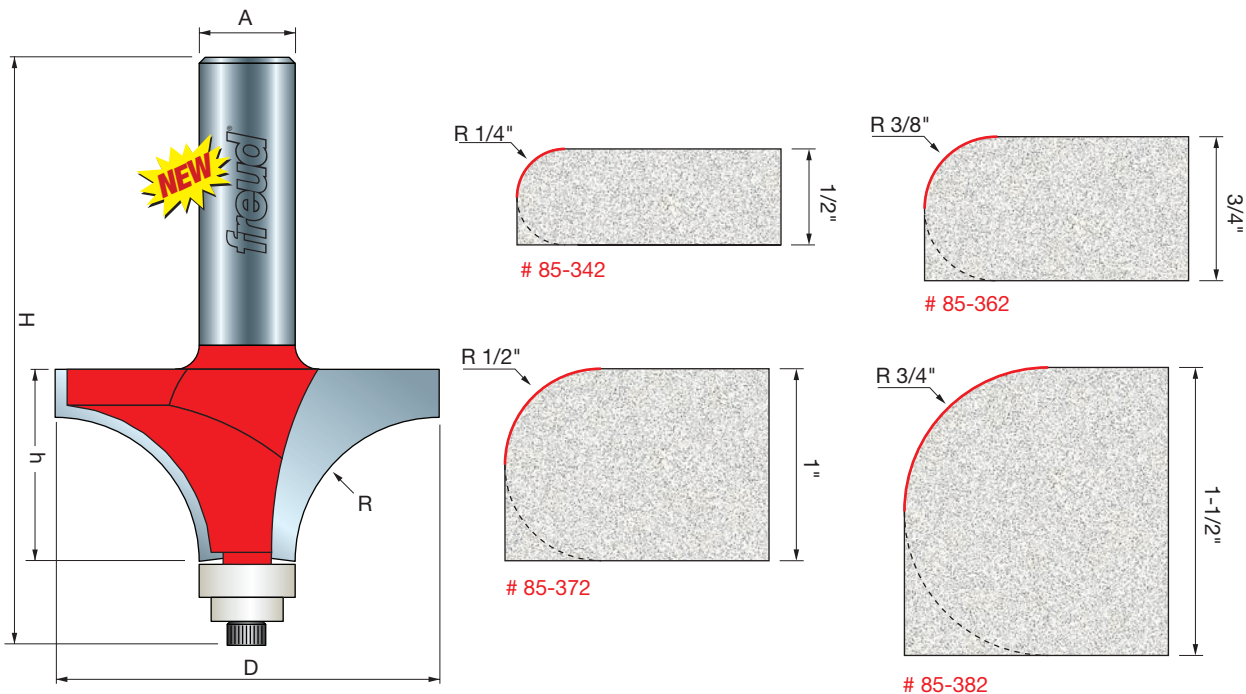
Rounding Over Bits



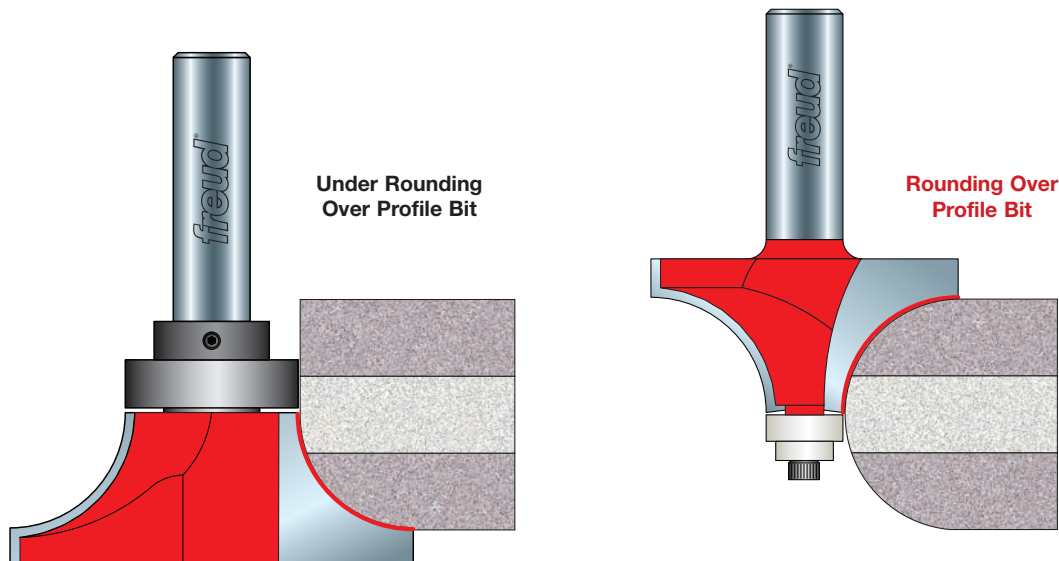
Application: Rout rounded top edges, or use with Under Rounding Bits to create bull nose profiles

- Use to rout a round over, or in combination with the Under Rounding Bits with the same radius below to rout a bull nose.
- Specially formulated carbide is ideal for fabricating solid surface materials.
- Features non-marring synthetic bearing to protect finished edges.
- Cuts all solid surface materials.
- Use in hand-held portable routers.

	Item Number	For Top Thickness	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
NEW	85-342	1/2"	1"	3/8"	1/4"	1/2"	2-3/8"
NEW	85-362	3/4"	1-1/4"	1/2"	3/8"	1/2"	2-1/2"
NEW	85-372	1"	1-1/2"	3/4"	1/2"	1/2"	2-3/4"
NEW	85-382	1-1/2"	2"	1"	3/4"	1/2"	3"



A full bull nose profile can be created by using the Under Rounding Bit (previous page) to create the bottom round over profile and use the above Rounding Over Bit to create the top round over profile.



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale

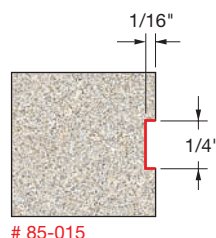
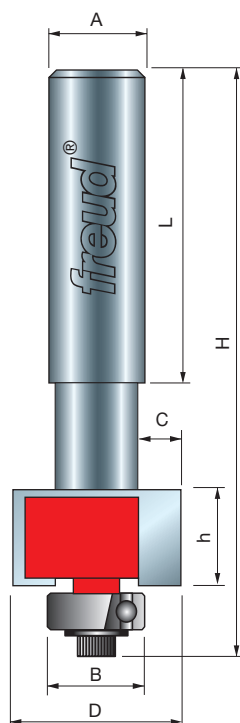


Inlay Bits

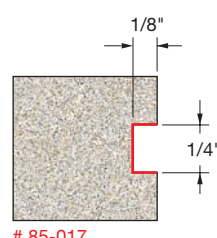
Application: Decorative inlay work in solid surface countertops

- Specially formulated carbide is ideal for fabricating solid surface materials.
- Cuts all solid surface materials.
- Use on hand-held portable routers.

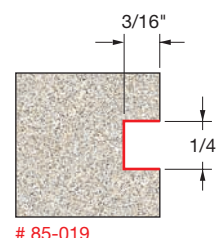
Item Number	Overall Dia.(D)	Cut Depth(C)	Bearing Dia.(B)	Carbide Height(h)	Shank Length(L)	Shank Dia.(A)	Overall Length(H)
85-015	7/8"	1/16"	3/4"	1/4"	1-5/8"	1/2"	2-13/16"
85-017	7/8"	1/8"	5/8"	1/4"	1-5/8"	1/2"	2-13/16"
85-019	7/8"	3/16"	1/2"	1/4"	1-5/8"	1/2"	2-13/16"
85-021	7/8"	1/16"	3/4"	1/2"	1-5/8"	1/2"	3-1/16"
85-023	7/8"	1/8"	5/8"	1/2"	1-5/8"	1/2"	3-1/16"
85-025	7/8"	3/16"	1/2"	1/2"	1-5/8"	1/2"	3-1/16"
85-027	7/8"	1/16"	3/4"	3/4"	1-5/8"	1/2"	3-5/16"
85-029	7/8"	1/8"	5/8"	3/4"	1-5/8"	1/2"	3-5/16"
85-031	7/8"	3/16"	1/2"	3/4"	1-5/8"	1/2"	3-5/16"



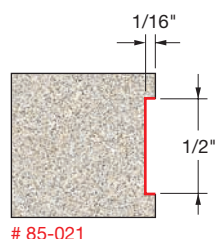
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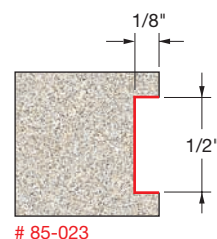
85-017



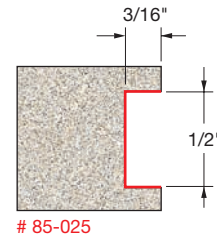
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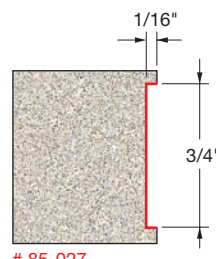
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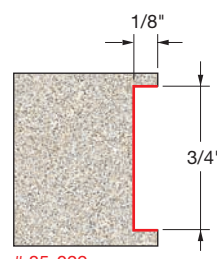
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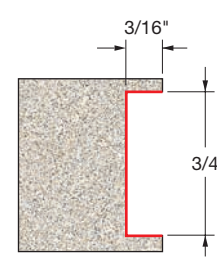
85-025



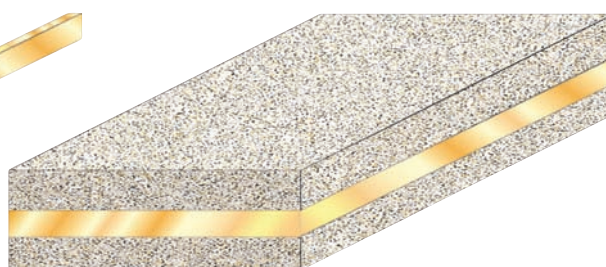
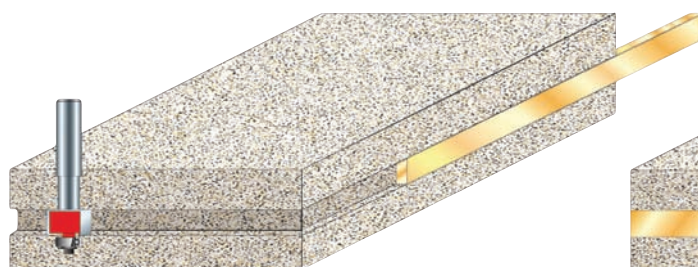
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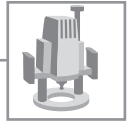
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85-031

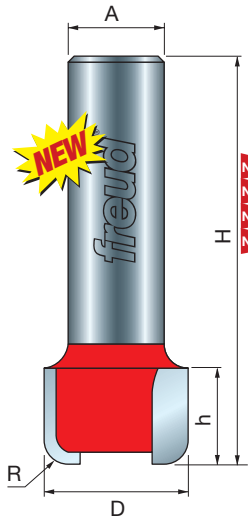


Drainboard Bits

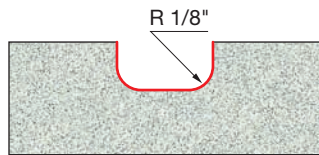


Application: Routing Grooves in Drainboard Countertops

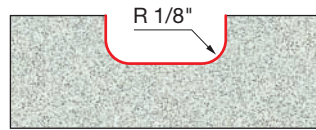
- Specially formulated carbide is ideal for fabricating solid surface materials.
- Cuts all solid surface materials.
- Use in hand-held portable routers.



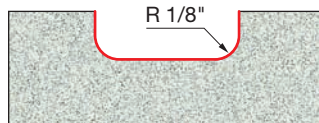
	Item Number	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
NEW	85-050	1/2"	1/2"	1/8"	1/2"	2-7/8"
NEW	85-052	5/8"	1/2"	1/8"	1/2"	2-7/8"
NEW	85-054	3/4"	1/2"	1/8"	1/2"	2-7/8"
NEW	85-056	1"	1/2"	1/8"	1/2"	2-7/8"



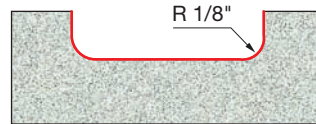
85-050



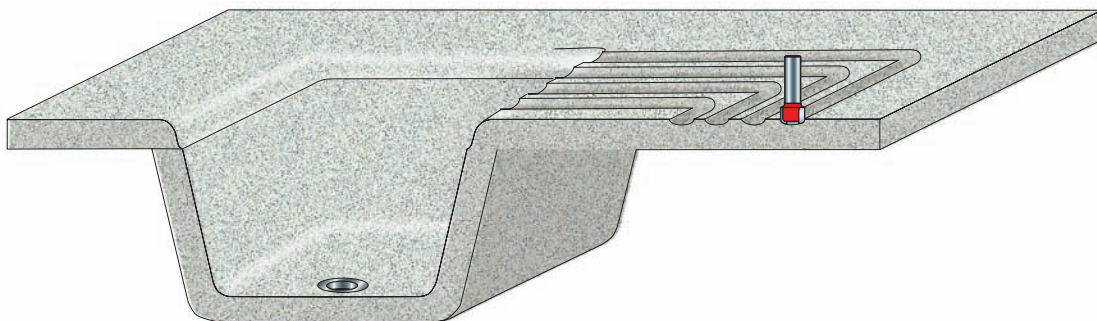
85-052



85-015



85-056



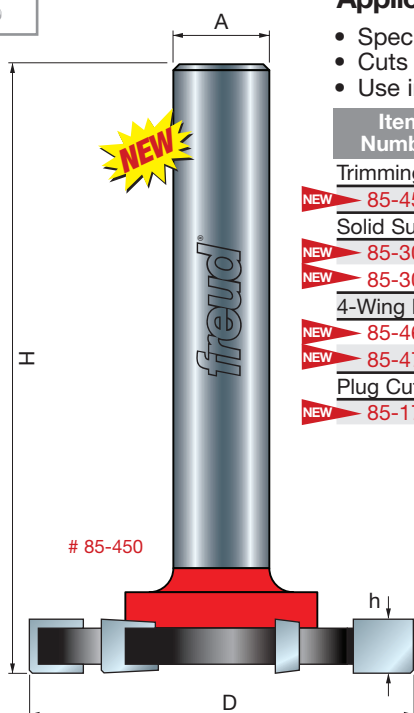


Trimming, Repair and Bowl Removal Bits

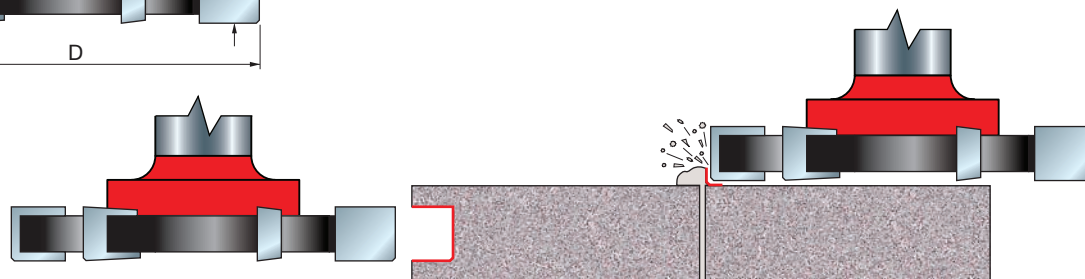
Application: Trimming, repair and bowl removal

- Specially formulated carbide is ideal for fabricating solid surface materials.
- Cuts all solid surface materials.
- Use in hand-held portable routers.

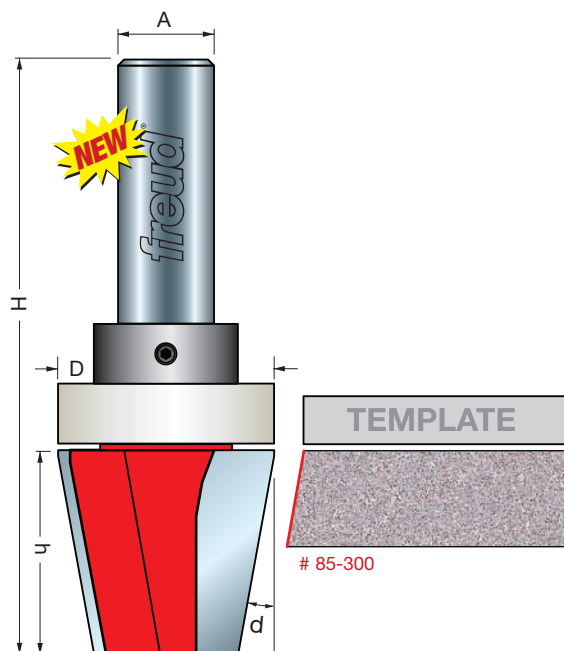
Item Number	Description	Overall Dia.(D)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
Trimming & Grooving Bit, removes excess adhesive, cuts spline grooves						
NEW 85-450	6 wing trim	2"	1/4"	—	1/2"	3-1/8"
Solid Surface "Dovetail" repair set, produces matching bevel edges						
NEW 85-300	Bevel Bit	1-1/8"	1"	10°	1/2"	3"
NEW 85-305	Dovetail Bit	1-1/8"	1"	10°	1/2"	3"
4-Wing Bowl Removal Bits, remove damaged bowls from tops						
NEW 85-465	1-1/8" cut depth. For all bowls except Corian®	3-5/8"	1/4"	—	1/2"	2-5/8"
NEW 85-470	15/16" cut depth. For Corian® bowls	3-3/16"	1/4"	—	1/2"	2-5/8"
Plug Cutter Repair Set, use to repair holes and gouges in tops						
NEW 85-175	2 bit beveled plug set	2-1/4"	1-7/16"	—	1/2"	3-5/16"
	2 bit beveled plug set	1-11/16"	1-7/16"	—	1/2"	3-5/16"



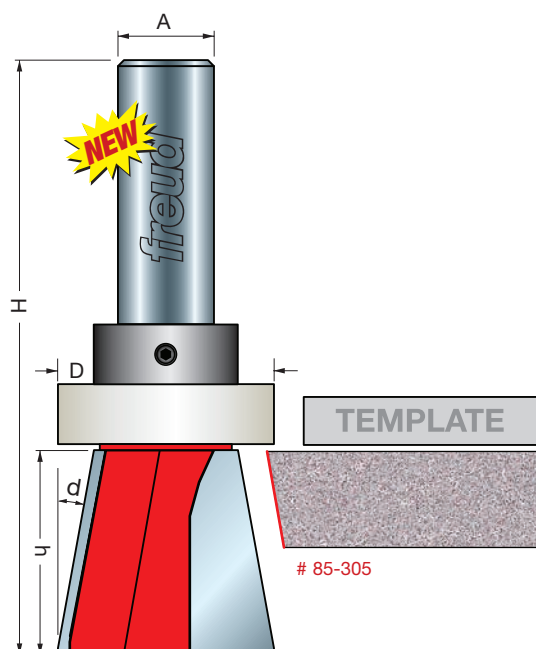
85-450



85-450



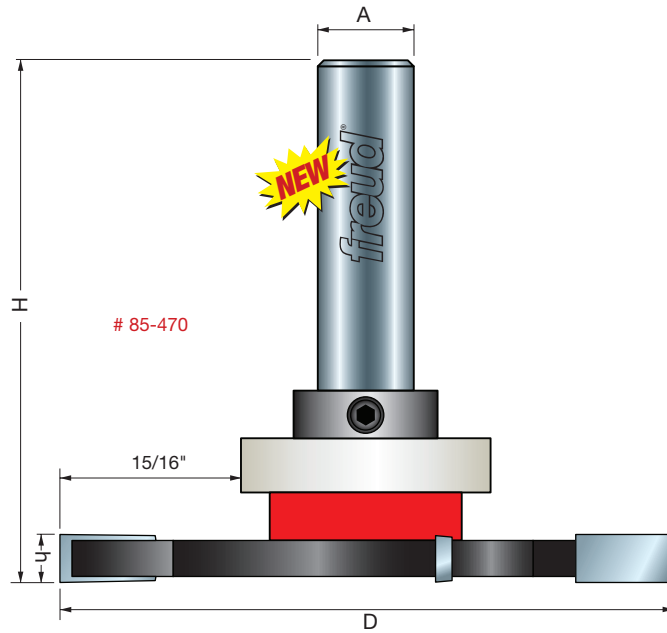
85-300



85-305

(Continued)

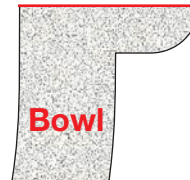
Trimming, Repair and Bowl Removal Bits



Bits #85-465 & #85-470 are used for removing mounted bowls as shown below.

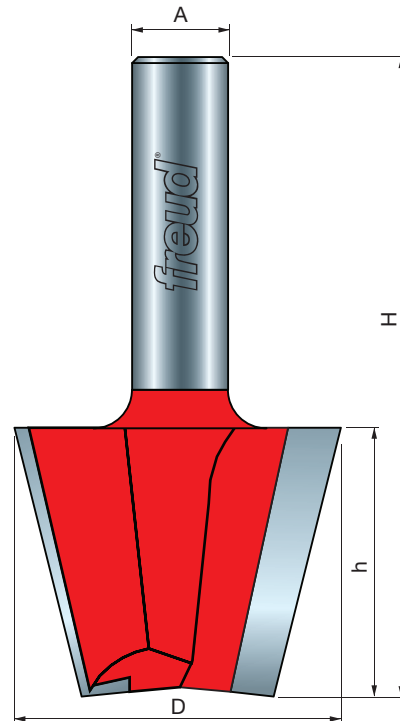
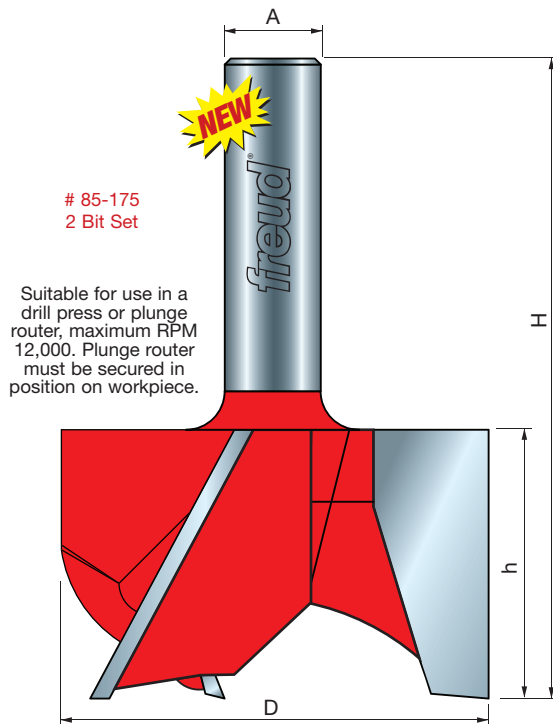


Counter Top

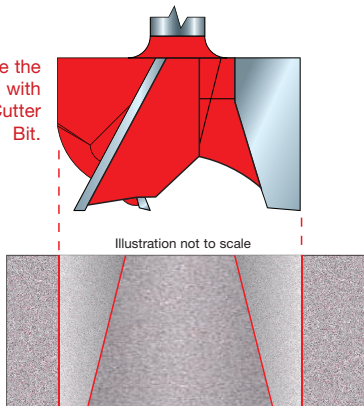


Bowl

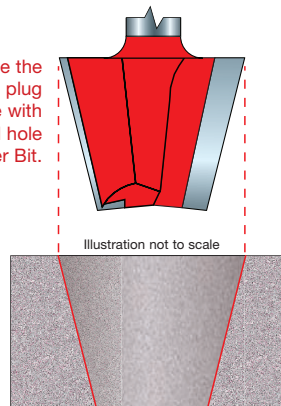
85-465
85-470



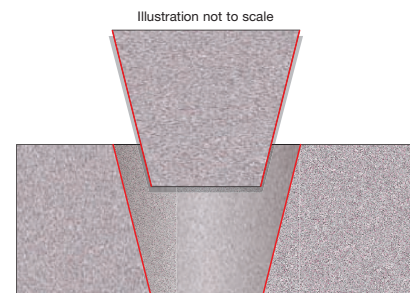
Create the plug with Plug Cutter Bit.



Create the tapered plug hole with beveled hole Cutter Bit.



Plug is ready for installation and finishing. Maximum plug diameter is 1-3/4".



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



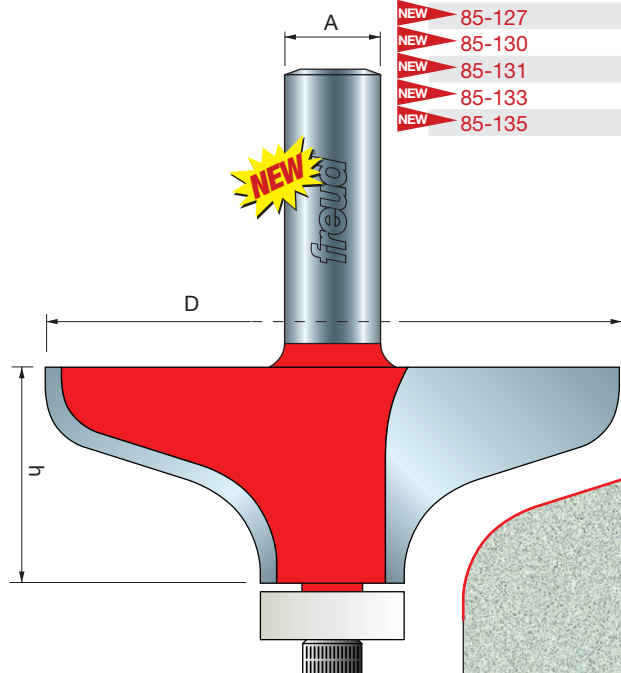


Solid Surface Edge Profile Bits

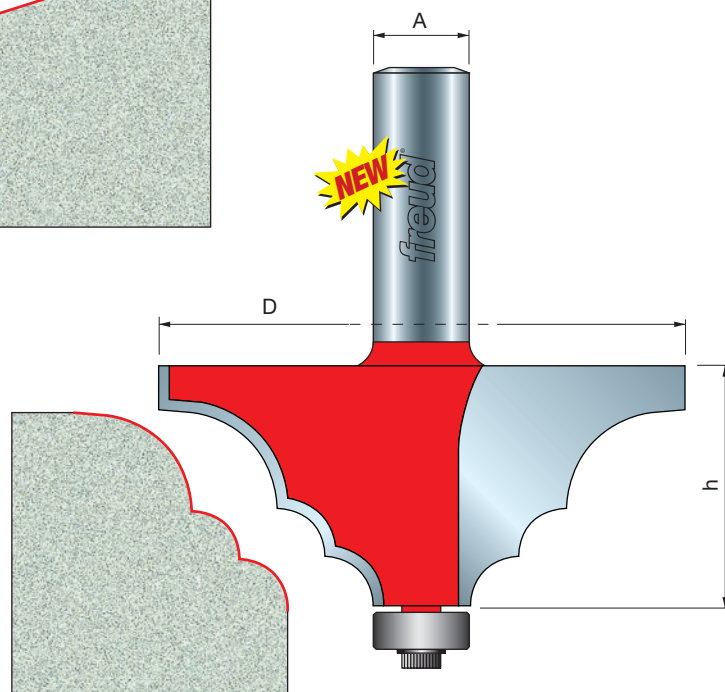
Application: Decorative edges on all solid surface tops

- Specially formulated carbide is ideal for fabricating solid surface materials.
- Cuts all solid surface materials.
- Use in hand-held portable routers.

	Item Number	Overall Dia.(D)	Carbide Height(h)	Shank Dia.(A)	Bearing Type
NEW	85-101	3"	1-1/8"	1/2"	Synthetic
NEW	85-103	2-3/4"	1-1/4"	1/2"	Steel
NEW	85-104	3"	1-3/8"	1/2"	Synthetic
NEW	85-105	2-1/2"	1-1/8"	1/2"	Synthetic
NEW	85-106	2-1/4"	1-1/4"	1/2"	Steel
NEW	85-108	2-1/2"	1-1/4"	1/2"	Steel
NEW	85-109	2-3/4"	1-5/8"	1/2"	Synthetic
NEW	85-110	1-1/2"	2"	1/2"	Steel
NEW	85-111	2-1/2"	1-1/2"	1/2"	Steel
NEW	85-113	2-1/2"	1-3/4"	1/2"	Steel
NEW	85-115	3-1/8"	1"	1/2"	Steel
NEW	85-117	2-3/8"	1-3/16"	1/2"	Steel
NEW	85-118	1-11/16"	3/4"	1/2"	Steel
NEW	85-125	2"	1-1/8"	1/2"	Steel
NEW	85-126	1-3/4"	1/2"	1/2"	Steel
NEW	85-127	2-1/8"	1"	1/2"	Steel
NEW	85-130	2-1/2"	1-1/4"	1/2"	Steel
NEW	85-131	2"	7/8"	1/2"	Steel
NEW	85-133	1-3/4"	1-1/4"	1/2"	Steel
NEW	85-135	1-5/16"	1-1/16"	1/2"	Synthetic



85-101



85-103

(Continued)

Solid Surface Edge Profile Bits



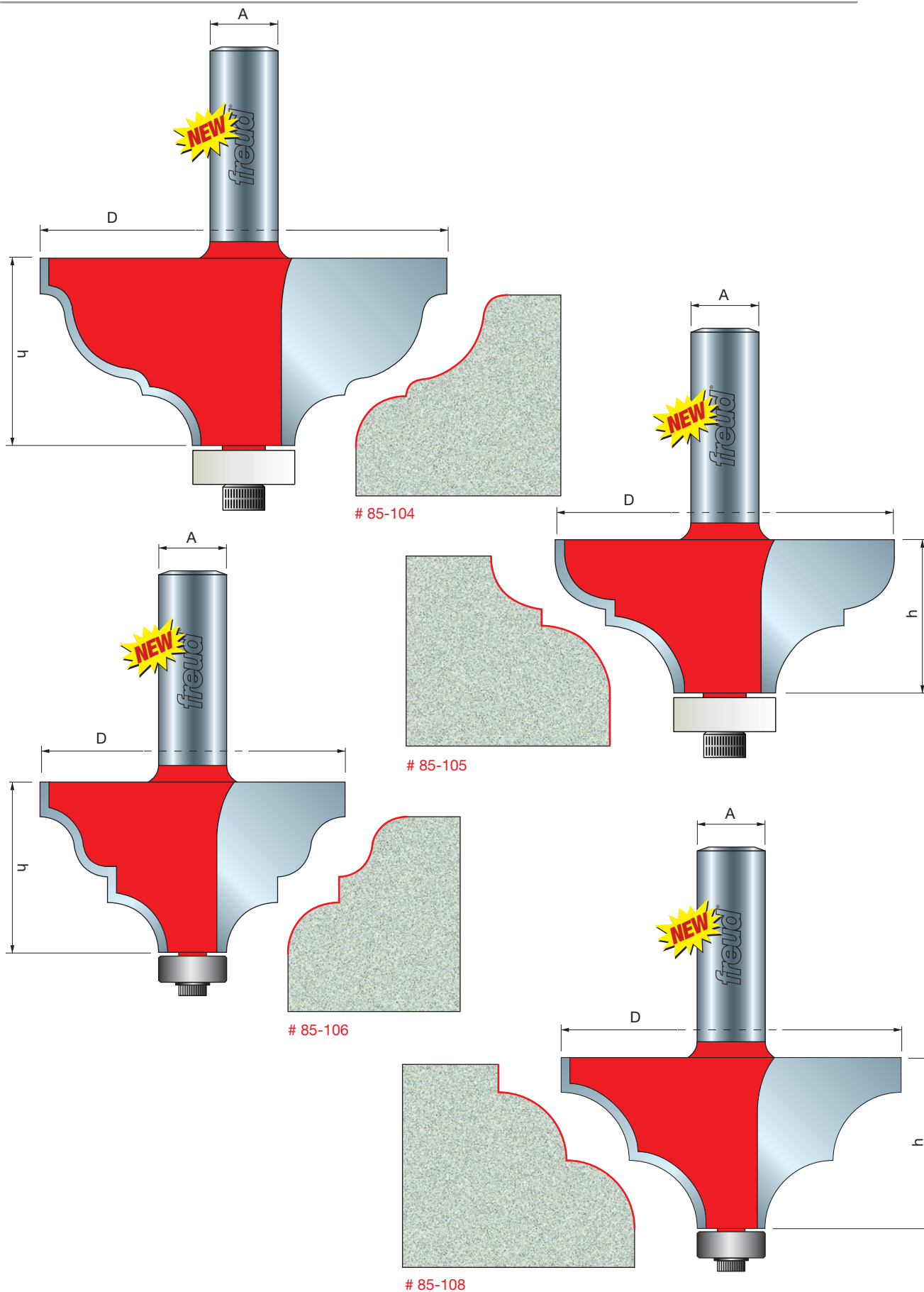
Solid Surface Bits



189

ROUTER BITS & SETS

freud®

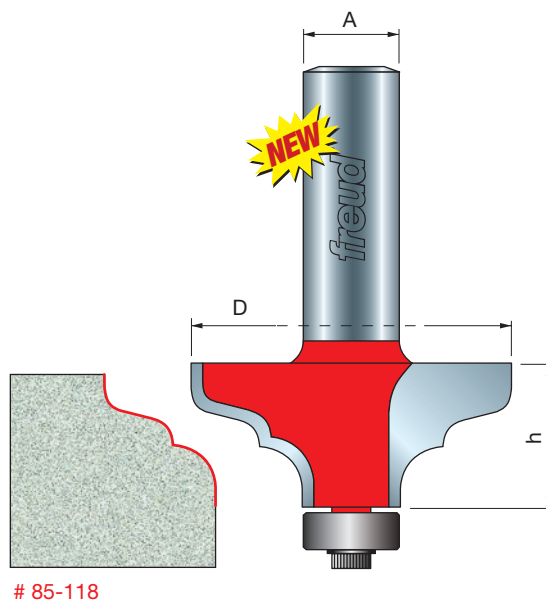
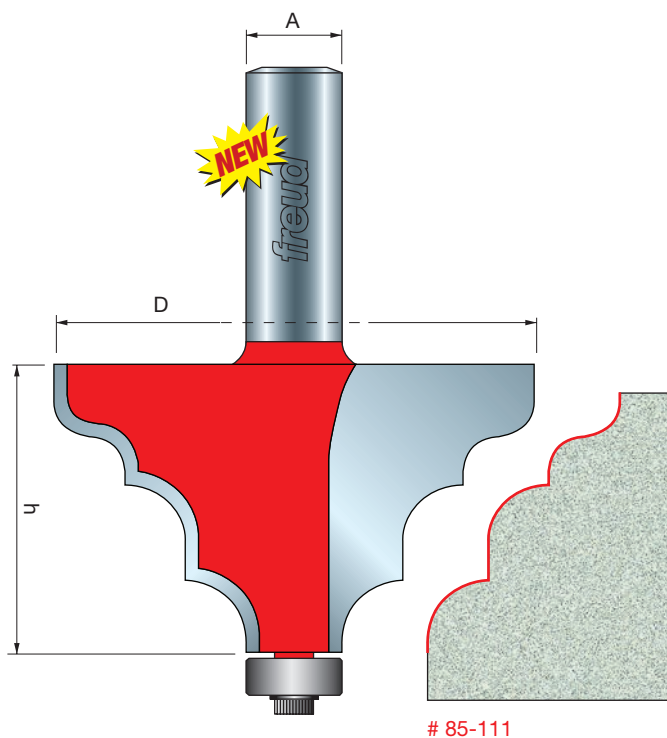
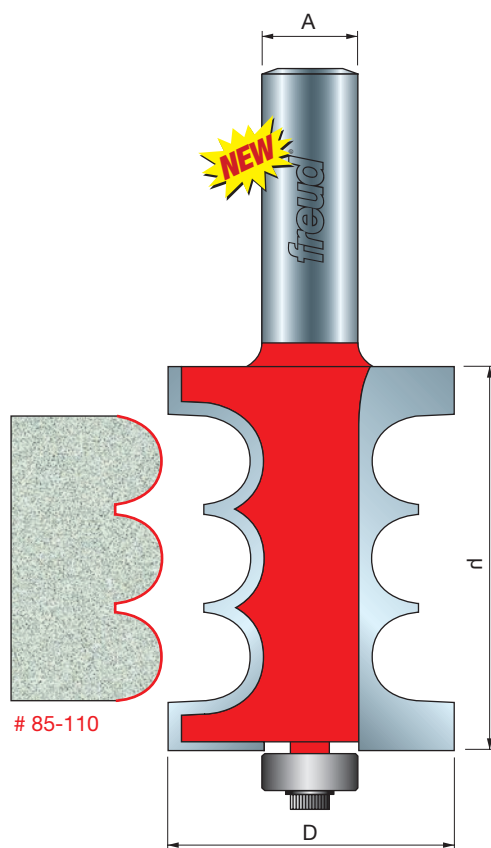
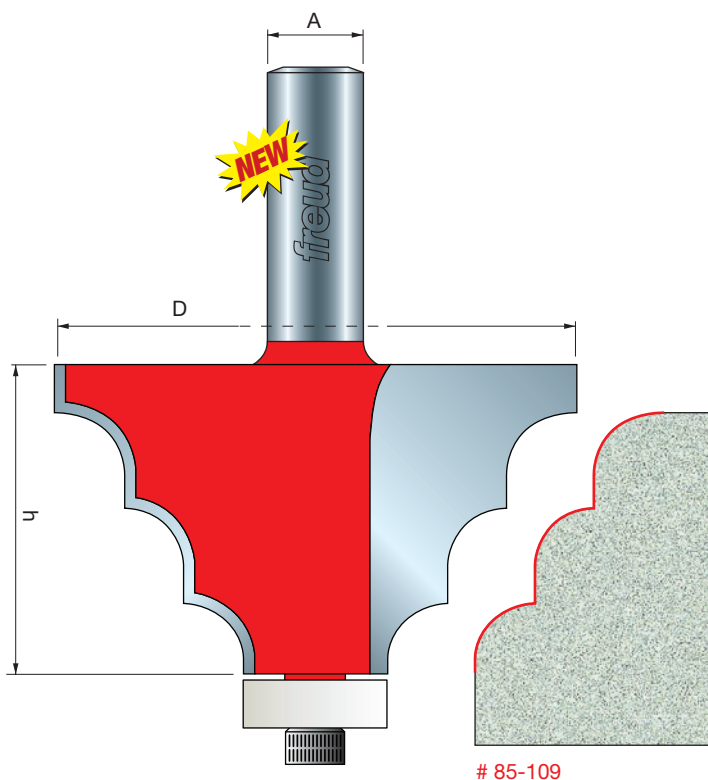


Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale

(Continued)

Solid Surface Edge Profile Bits



(Continued)

Solid Surface Edge Profile Bits



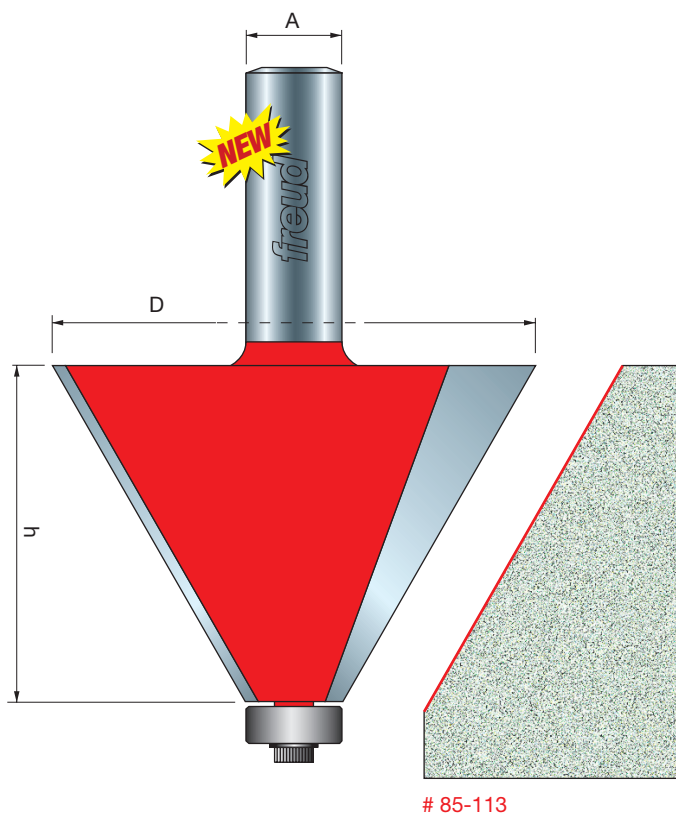
Solid Surface Bits



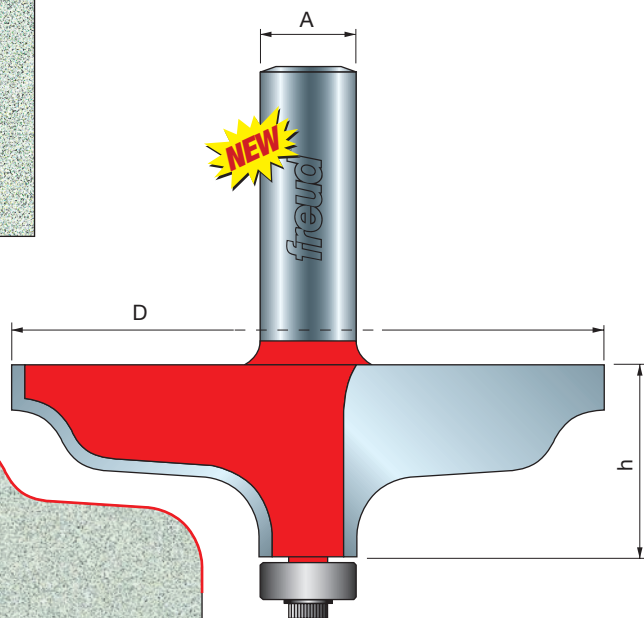
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ROUTER BITS & SETS

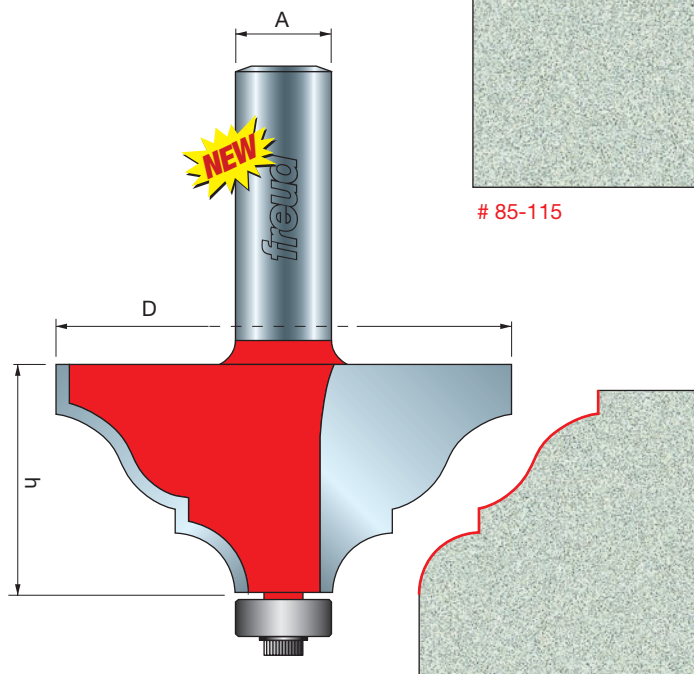
freud®



85-113



85-115



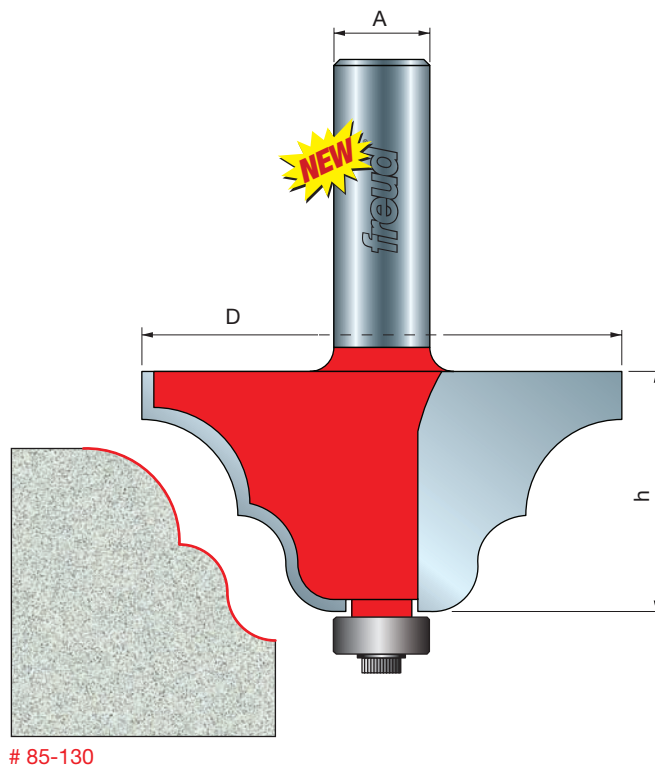
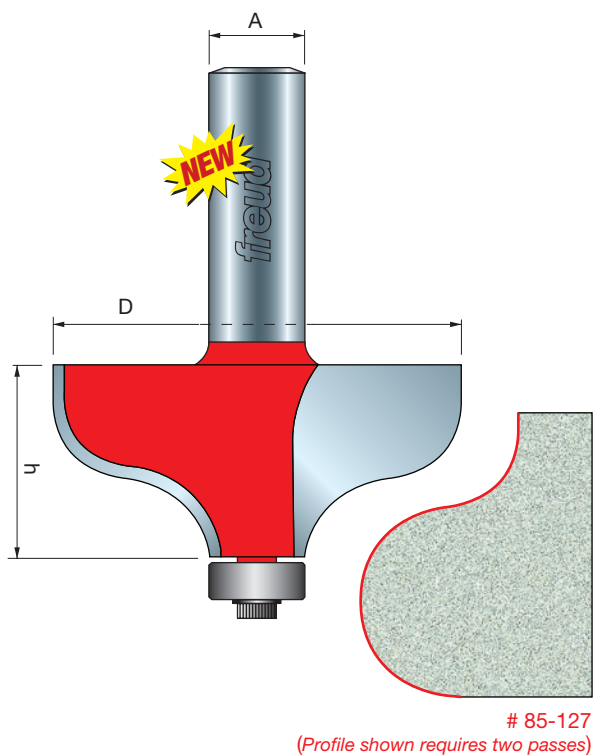
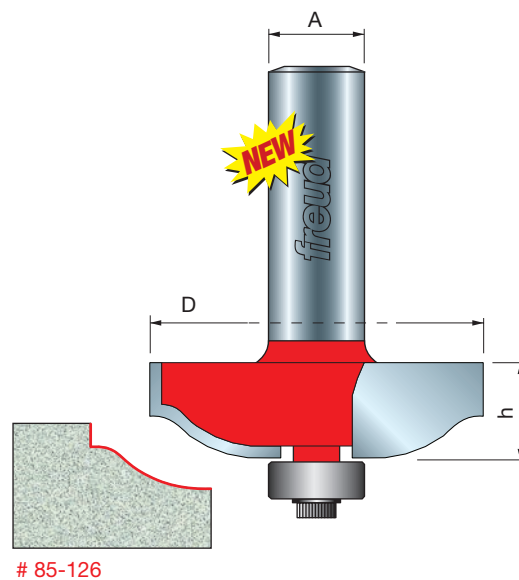
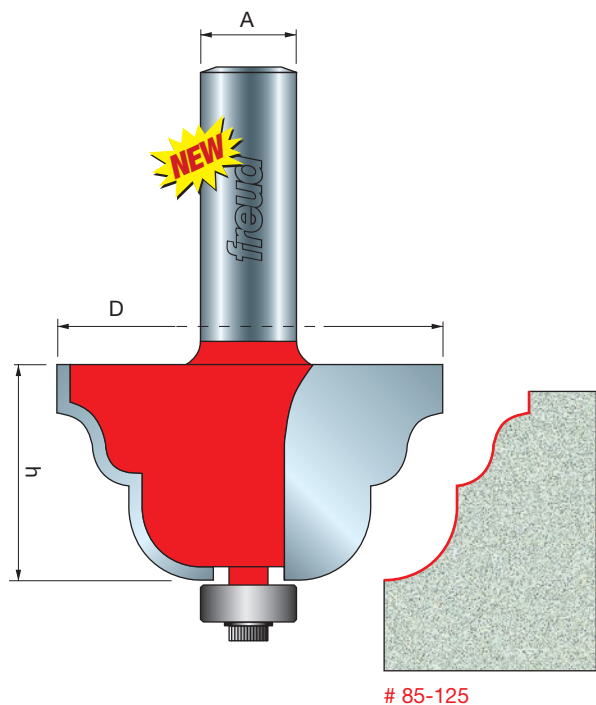
85-117

Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale

(Continued)

Solid Surface Edge Profile Bits



(Continued)

Solid Surface Edge Profile Bits



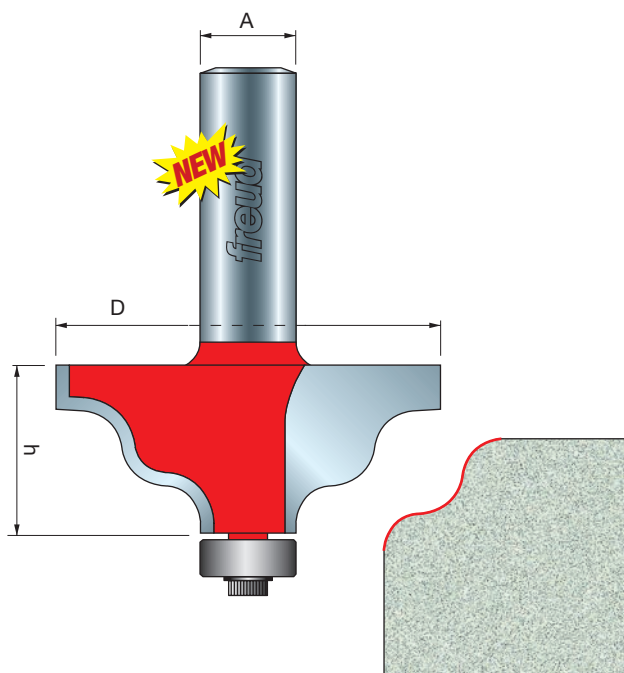
Solid Surface Bits



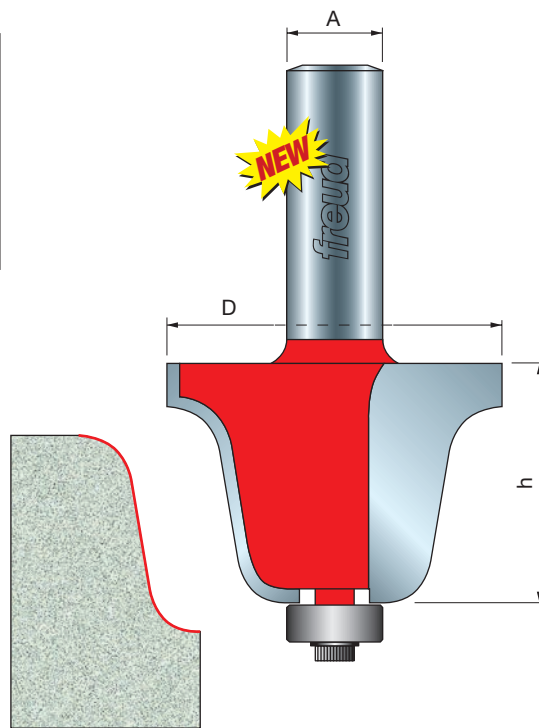
193

ROUTER BITS & SETS

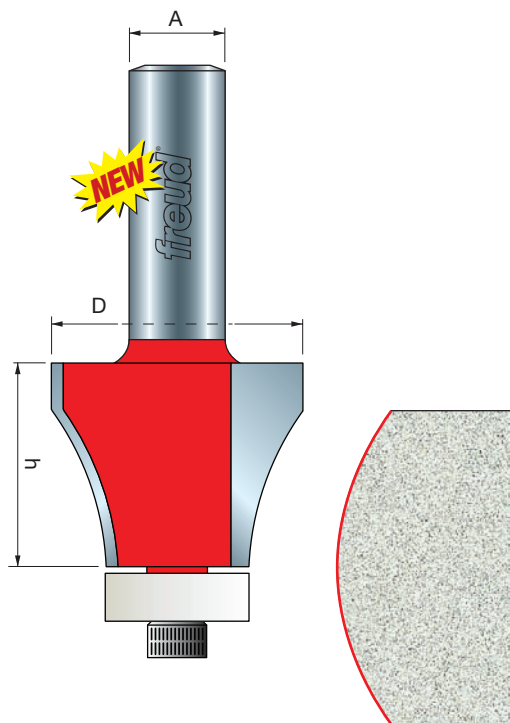
freud®



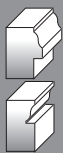
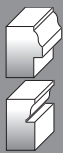
85-131



85-133



85-135
(Profile shown requires two passes)

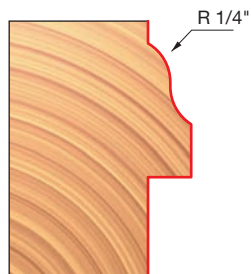
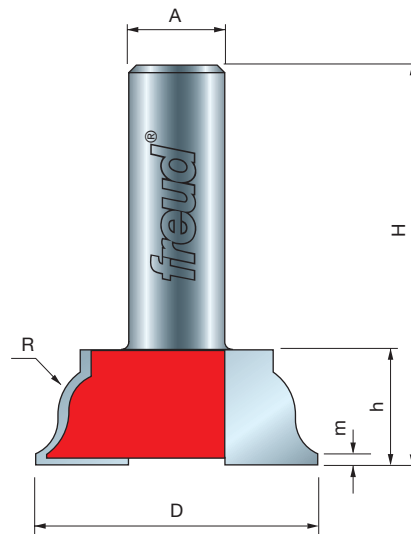
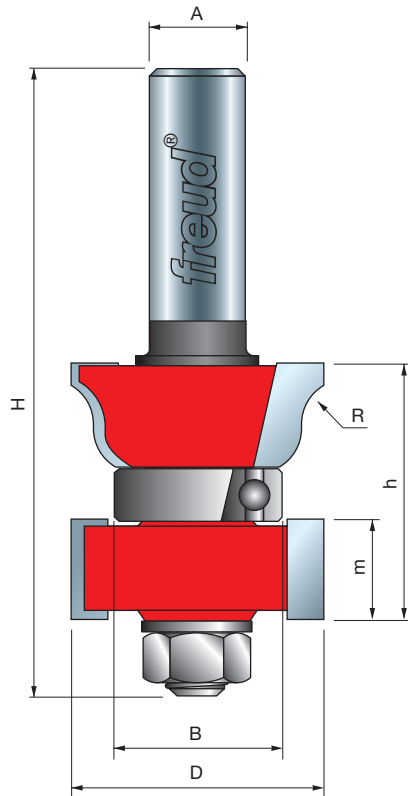


Window Sash & Rail Bits

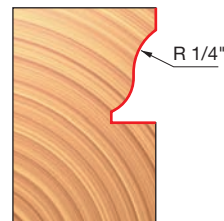
Application: Two bits work together to produce a complete divided lite sash

- 99-050 copes the rails, sash bars and muntins, while 99-051 cuts the profile on all components. Includes instruction manual.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Minor Height(m)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
99-051	1-11/32"	22mm	1-25/64"	17/32"	1/4"	1/2"	3-7/16"
99-050	1-1/2"	—	39/64"	1/16"	1/4"	1/2"	2-1/16"



99-051



99-050

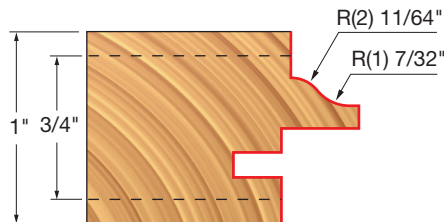
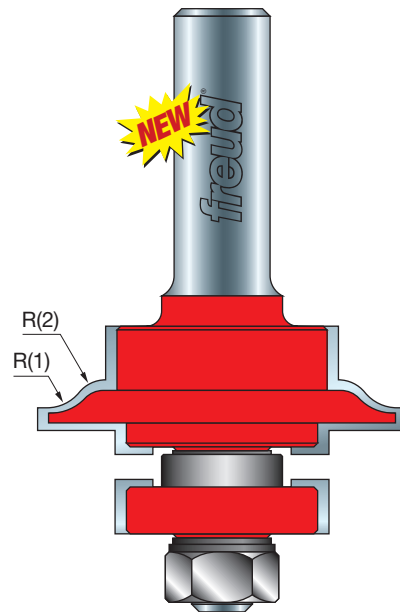
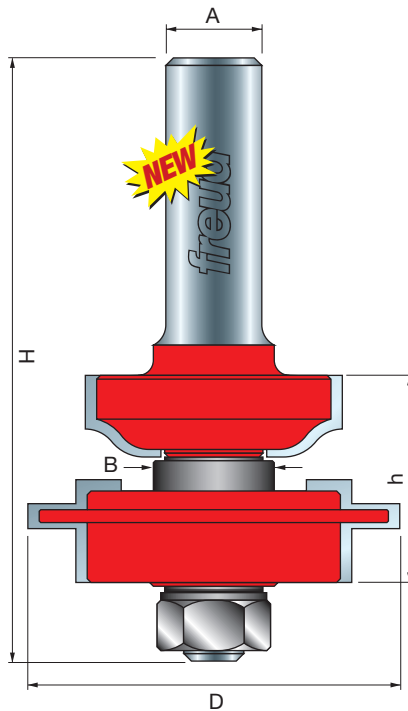
Glass Panel Cabinet Door Bit Set



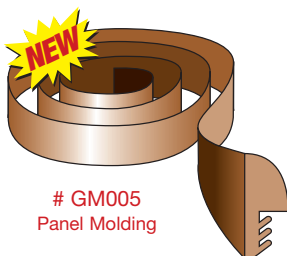
Application: Creates top quality strong, tight-fitting glass panel door joints with ease and accuracy

- Extra strong rail and stile joints with a unique lock in the stile and rail joint, plus significantly more gluing surface. No other set on the market provides this feature.
- Easy time saving set-up improves accuracy and increases profitability for the professional.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
NEW 99-286	2"	16mm	1-3/32"	7/32"	11/32"	1/2"	3-1/8"
Glass Panel Molding Spline							
Item #	Color	Roll Length					
NEW GM005	Fruitwood (medium brown)	25'					



99-286



GM005
Panel Molding



.125" (1/8") glass





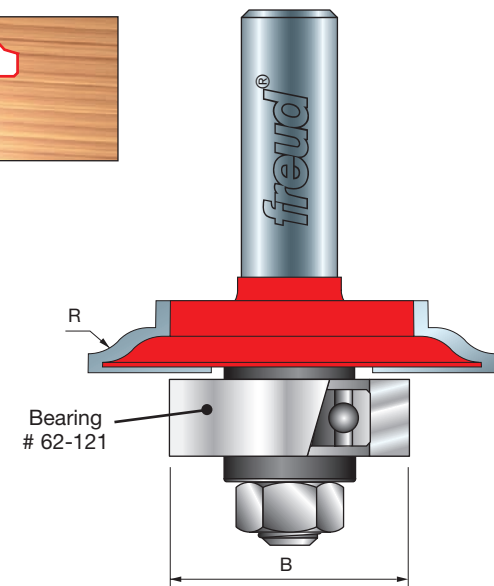
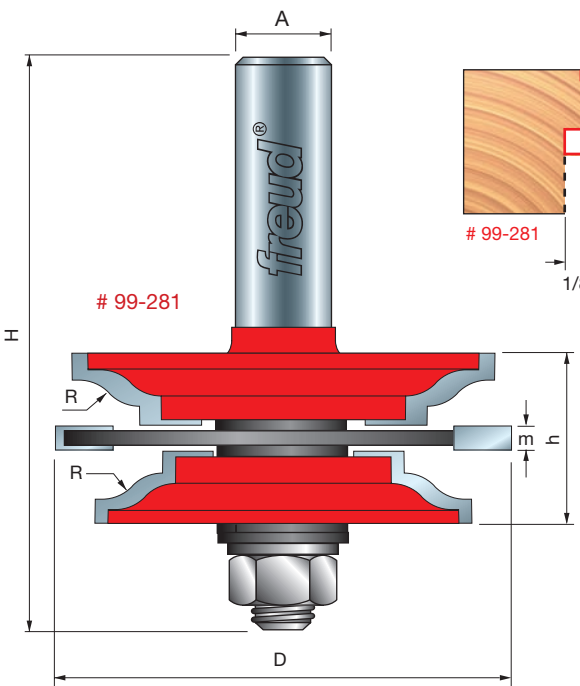
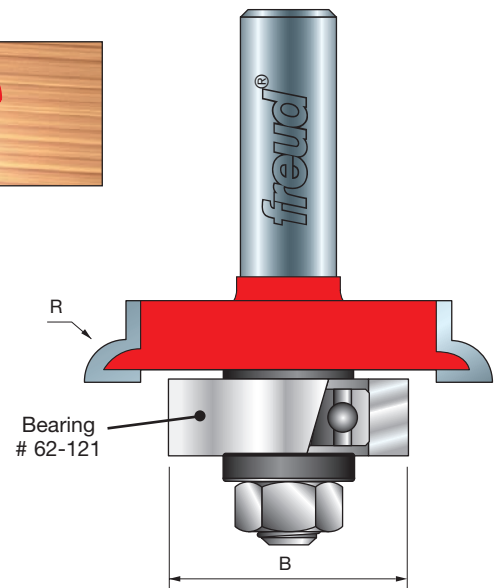
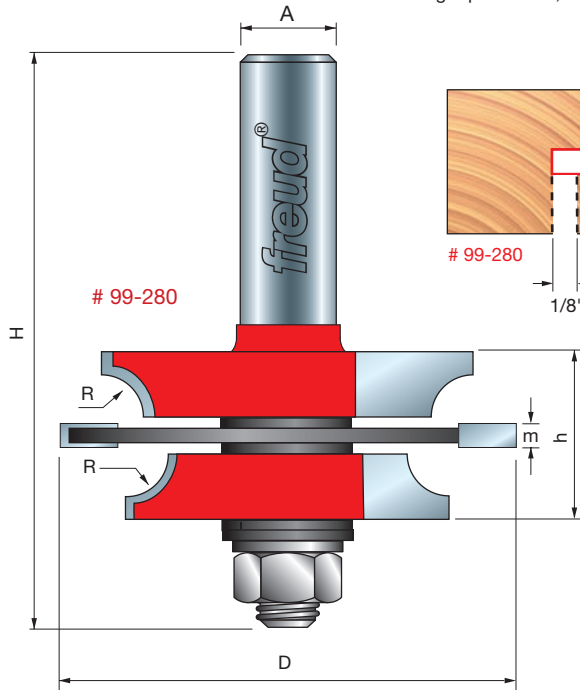
Recoverable Bead Glass Door Bit Sets

Application: Creates glass doors that look equally good from the front and back

- Each bit produces a unique profile on the front of the door and a matching profile on the back that can be removed with a 1/8" kerf saw blade, then miter cut to make a bead to secure the glass panel.
- 99-280 produces an ogee profile, 99-280 produces a quarter round profile, and 99-283 produces a beaded profile.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

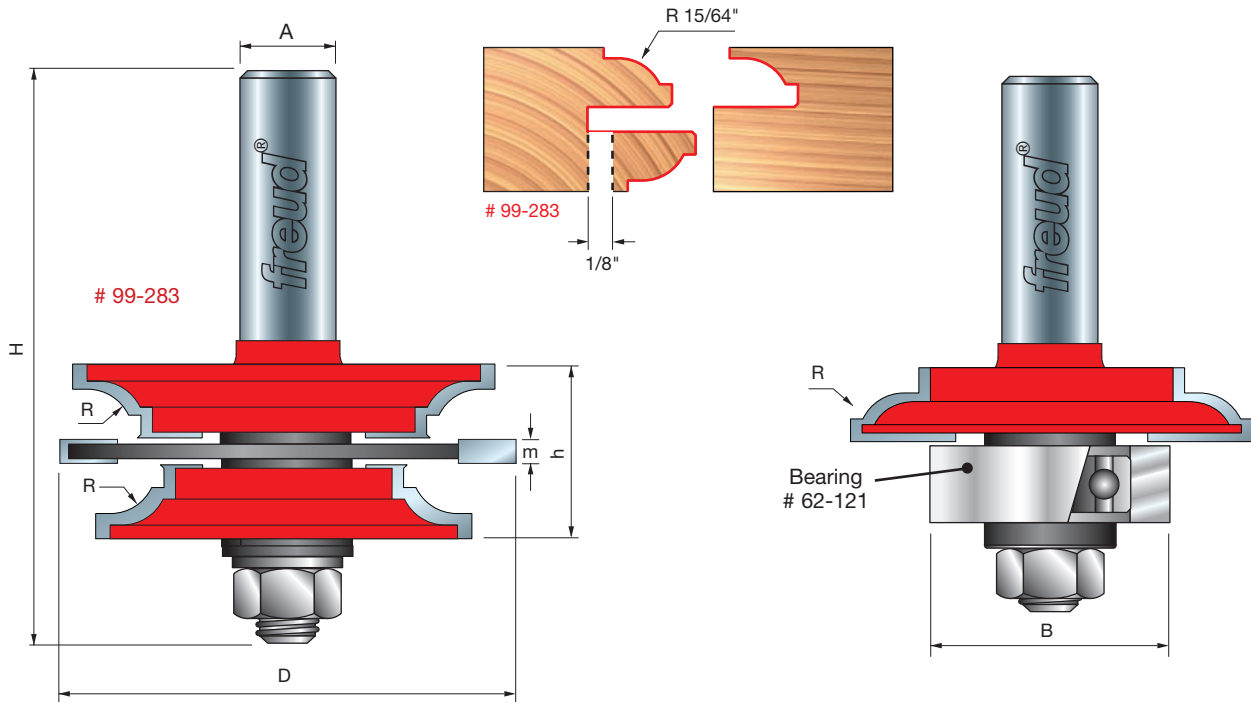
Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Minor Height(m)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
99-280	2-3/8"	1-1/4"	7/8"	1/8"	7/32"	1/2"	3"
99-281	2-3/8"	1-1/4"	7/8"	1/8"	7/32"	1/2"	3"
99-283	2-3/8"	1-1/4"	7/8"	1/8"	15/64"	1/2"	3"

For bearing replacement, use specialty sleeve bearing item # 62-121

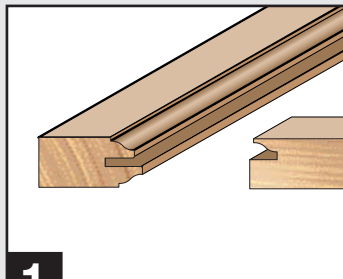


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Recoverable Bead Glass Door Bit Sets

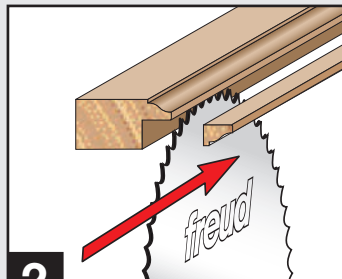


Steps To Perfect Glass Cabinet Doors



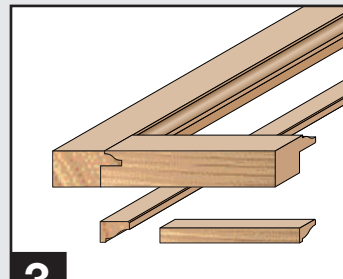
1

Cut profiles on stiles and rails using the Freud Recoverable Bead Glass Door Bit Set



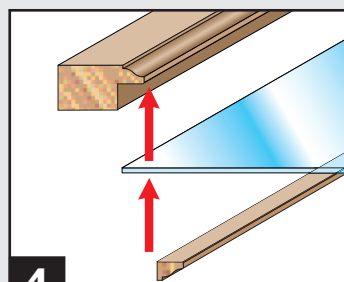
2

Remove beads with 1/8" kerf saw blade (10" Freud LM72 or LM74 Series recommended)



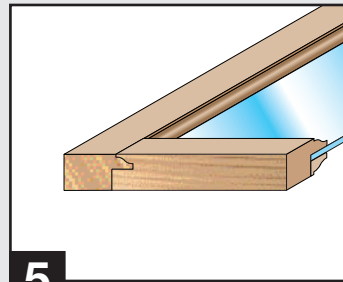
3

Assemble stiles and rails. Miter cut beads to size



4

Install 1/8" glass and secure with beads



5

Now you have cabinet doors that look as good open as they do closed



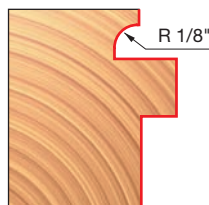
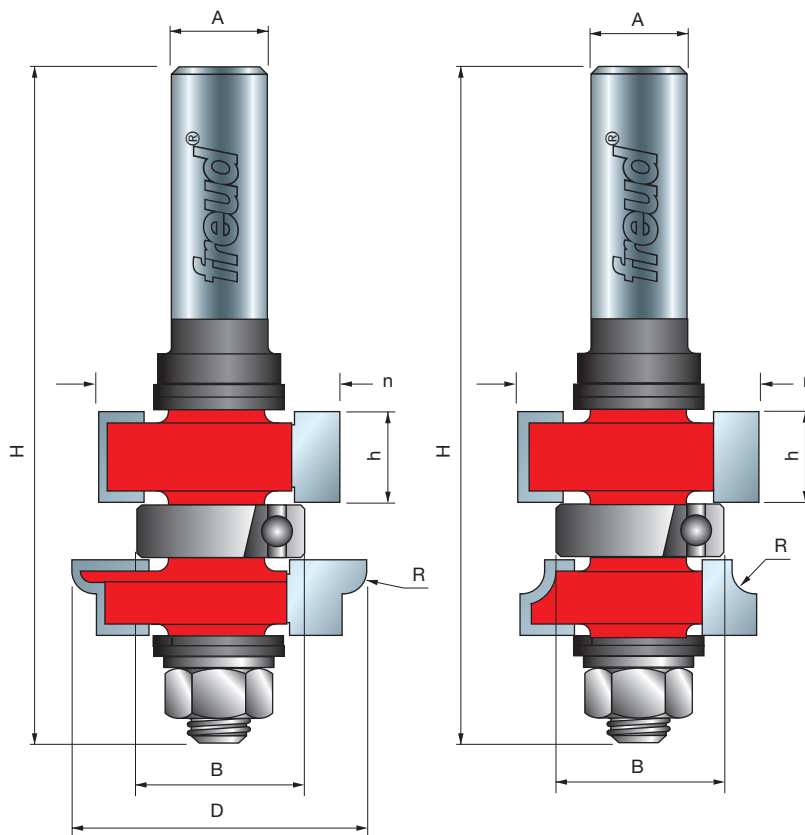


Divided Lite Cabinet Door Bit Set

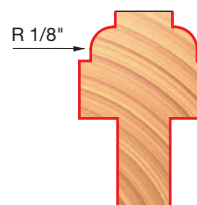
Application: Produces cabinet doors with stylish glass panes

- Build beautiful glass panel doors with classic multiple pane styling.
- The perfectly matched bits mill profiles for stiles, rails, mullions and muntins that allow you build strong mortise and tenon joints.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Small Dia.(n)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
99-270	1-17/32"	22mm	1-1/4"	1-1/8"	1/8"	1/2"	3-7/16"



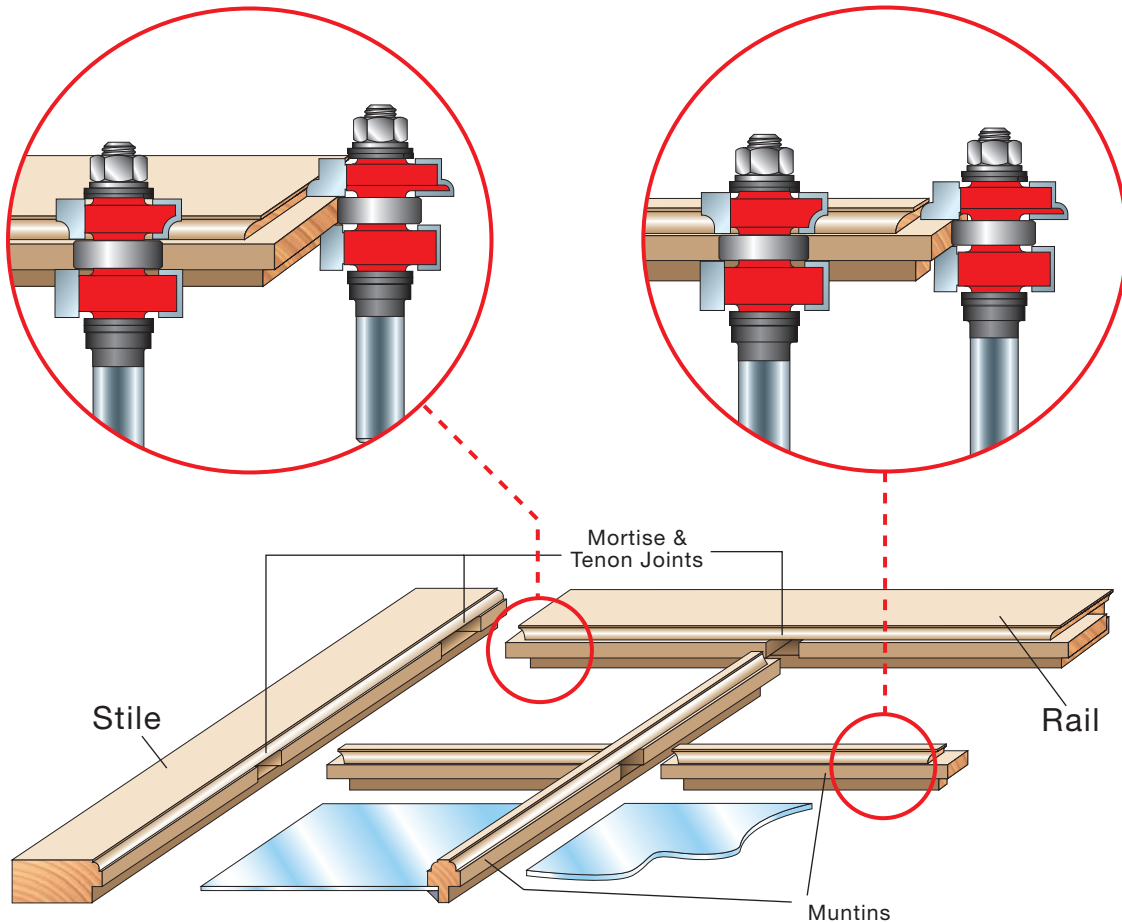
99-270



99-270

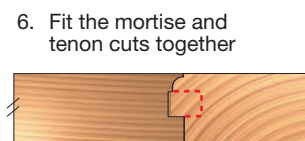
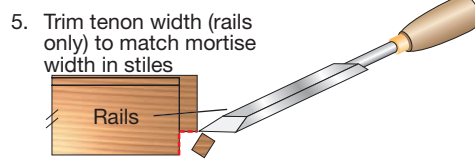
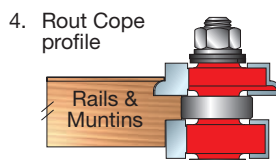
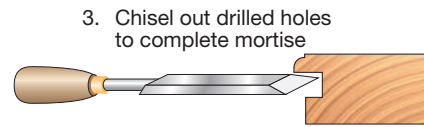
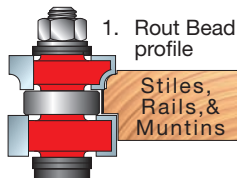
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Divided Lite Cabinet Door Bit Set



Steps To Produce A Divided Lite Door

(mortise should be 1/2 or 2/3 the width of the rail)



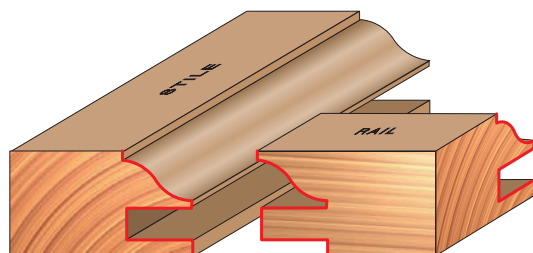
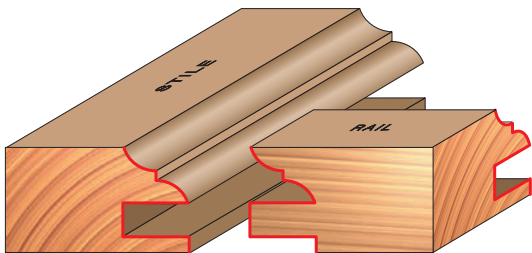
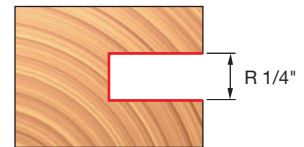
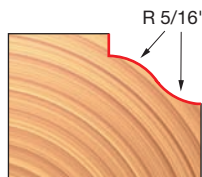
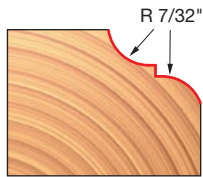
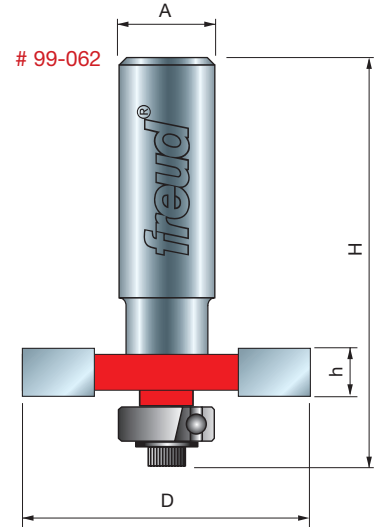
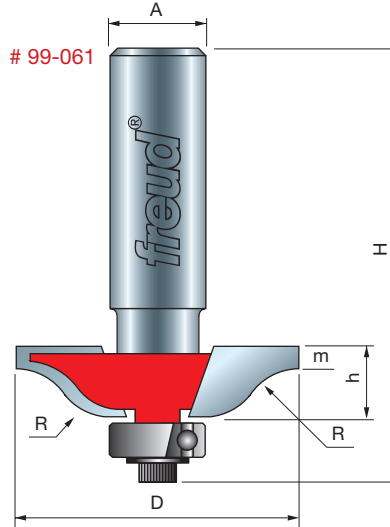
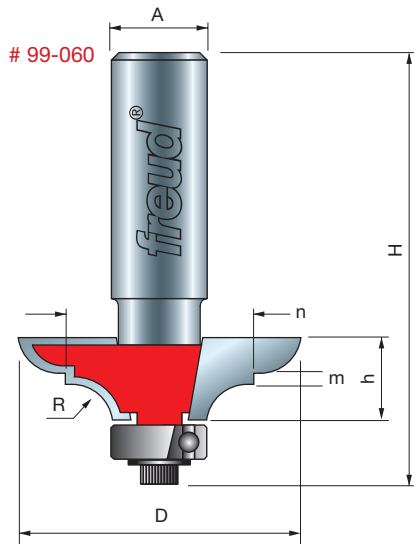


Rail & Stile Profile Bits

Application: Creates rail and stile doors matched reverse profiles

- 99-060 and 99-061 bits cope and stick cut the rails and stiles, and also can be used alone to form a matching edge profile. 99-062 cuts the panel slot and the back of the tongue on the coped piece.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
99-060	1-1/2"	1"	7/16"	1/16"	7/32"	1/2"	2-1/4"
99-061	1-1/2"	—	3/8"	1/8"	5/16"	1/2"	2-1/4"
99-062	1-1/2"	—	1/4"	—	—	1/2"	2-1/8"



(Continued)

Rail & Stile Profile Bits

1a

Stile Cut Profile Using
Bit # 99-060

2a

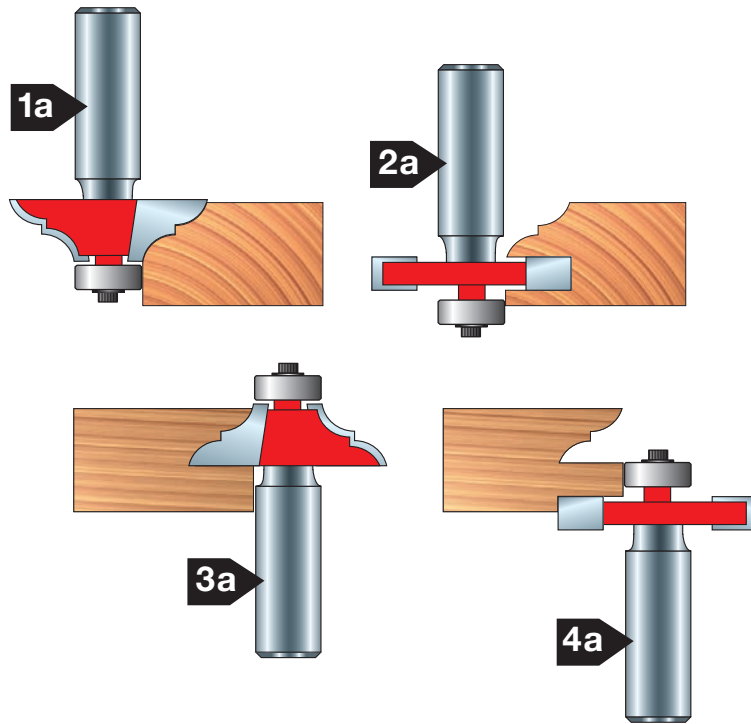
Panel Slot Cut Using
Bit # 99-062

3a

Cope Cut Profile Using
Bit # 99-060

4a

Tongue Back Cut Using
Bit # 99-062



1b

1b
Stile Cut Profile Using
Bit # 99-061

2b

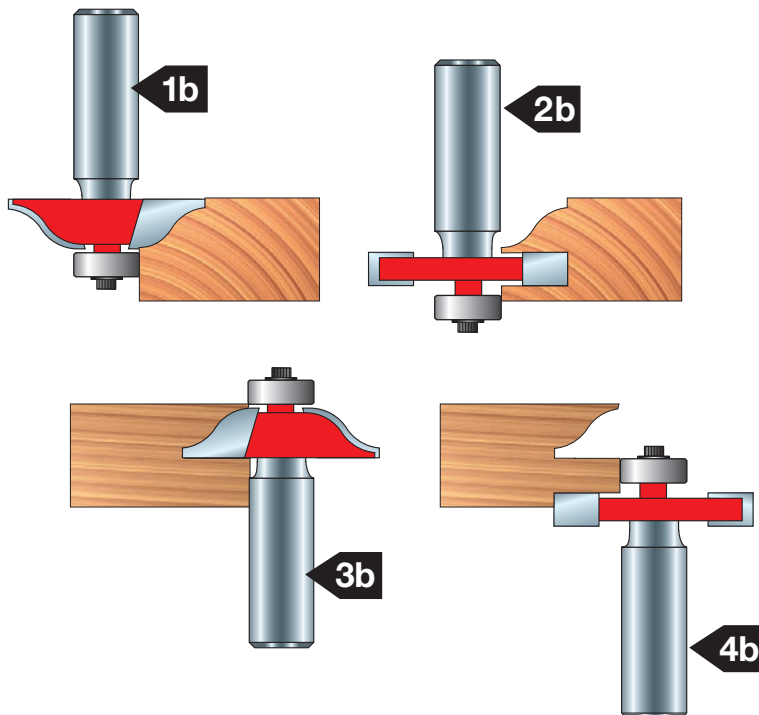
2b
Panel Slot Cut Using
Bit # 99-062

3b

Cope Cut Profile Using
Bit # 99-061

4b

Tongue Back Cut Using
Bit # 99-062



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



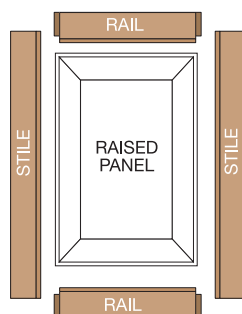
Door & Window Bits



201

ROUTER BITS & SETS

freud®



Matched Rail & Stile Bit Sets

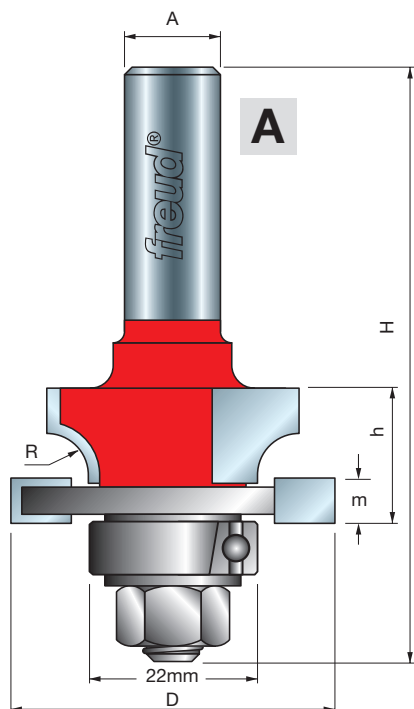
Application: Produces perfect fitting rail and stile doors from 3/4" stock

- Produce flawless raised panel doors when you combine these bits with one of Freud's Raised Panel Bits. Shims are included to ensure a perfect fit.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

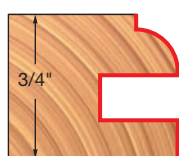
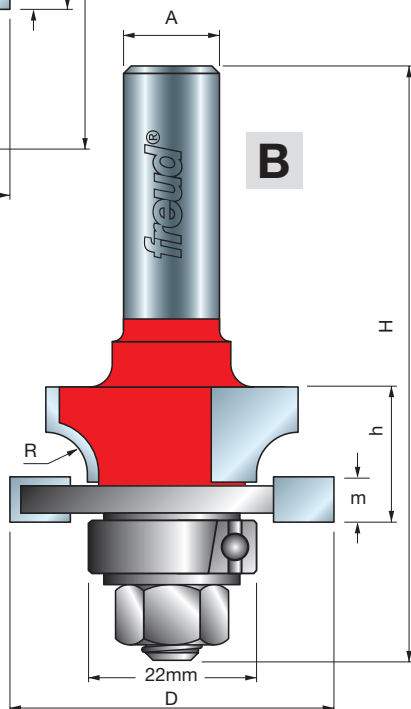
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
99-260	1-11/16"	1-5/16"	11/16"	15/64"	7/32"	1/2"	3"
99-261	1-11/16"	1-19/32"	23/32"	15/64"	13/64"	1/2"	3"
99-263	1-11/16"	1-19/32"	3/4"	15/64"	9/32"	1/2"	3"
NEW 99-264	1-11/16"	1-19/32"	3/4"	15/64"	9/32"	1/2"	3"

Mini Rail & Stile Bit Set

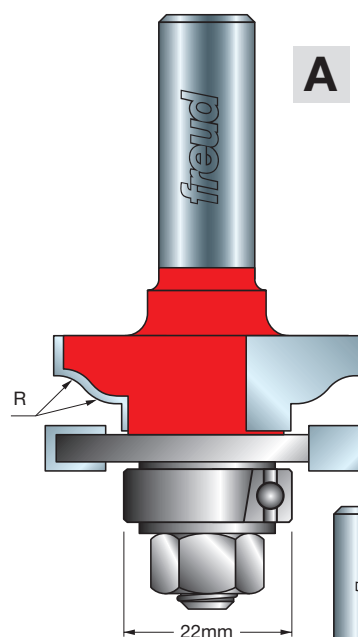
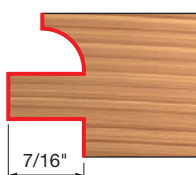
NEW 99-266	1-9/32"	25/32"	13/16"	-	-	1/2"	2-11/16"
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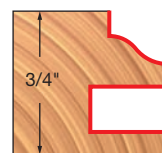
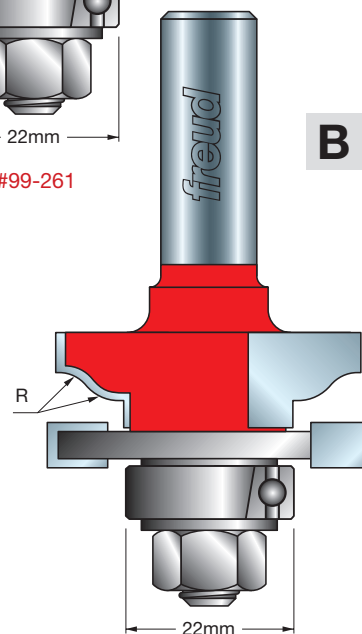
#99-260



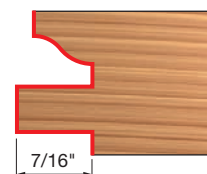
99-260



#99-261



99-261



(Continued)

Matched Rail & Stile Bit Sets



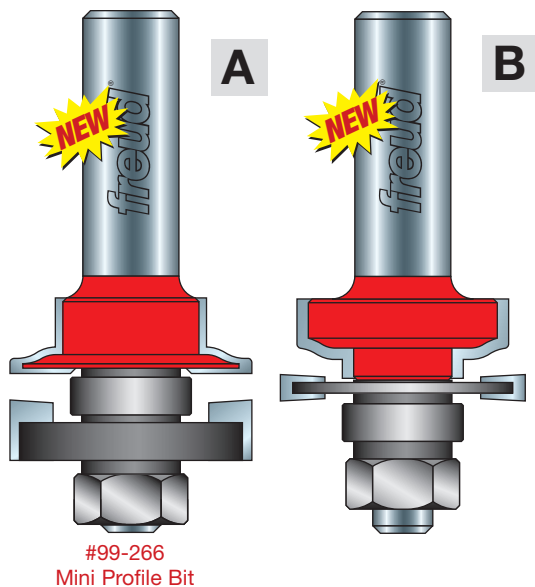
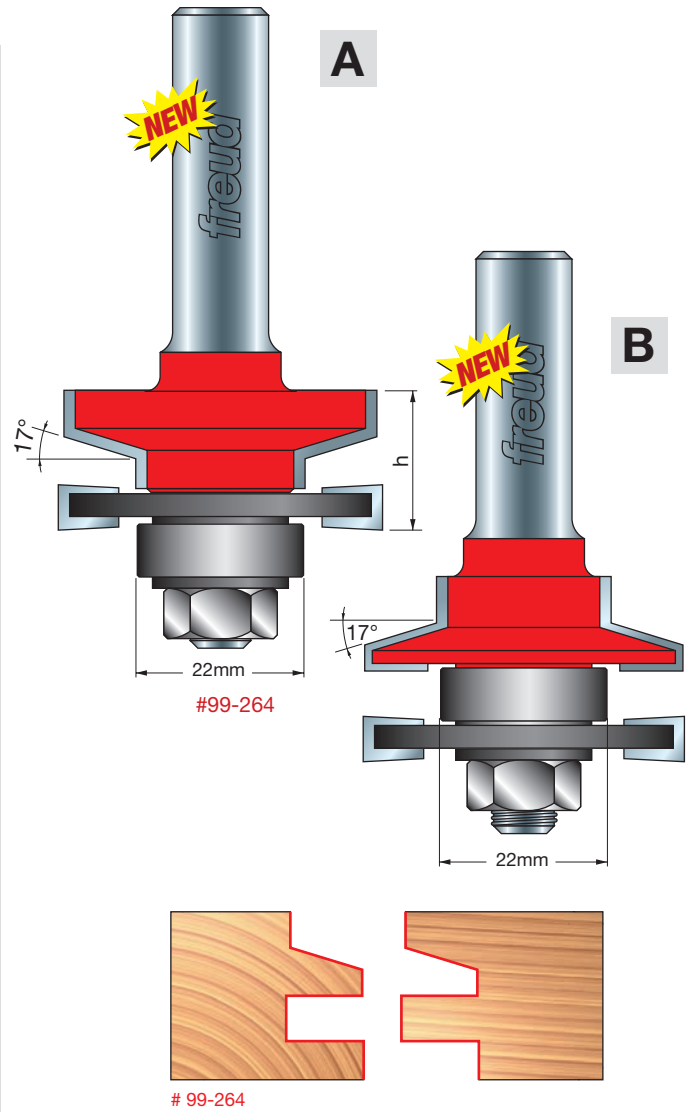
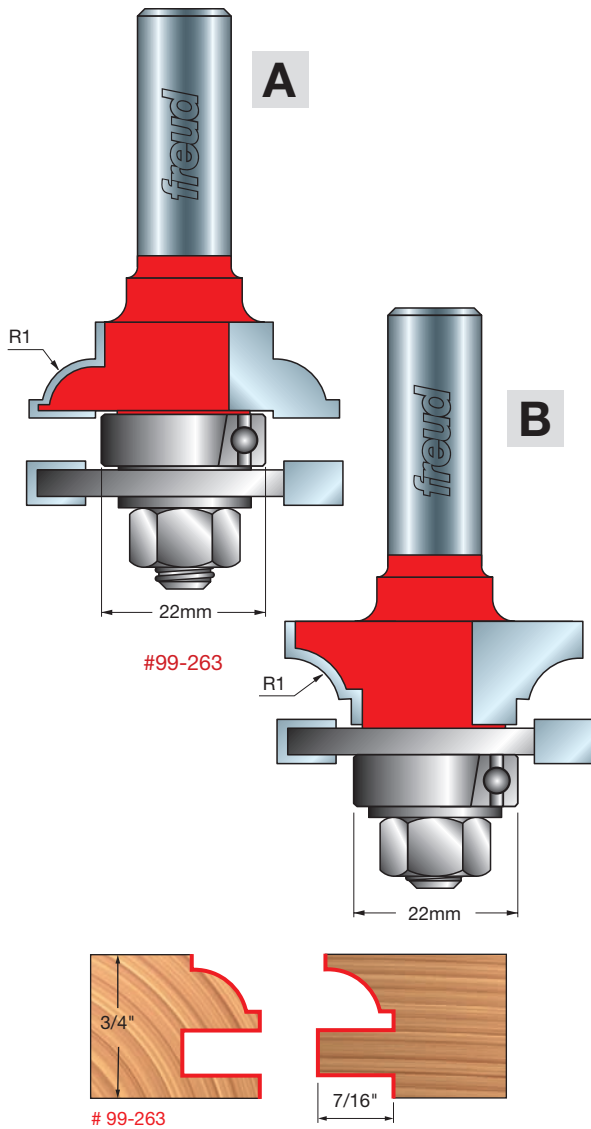
Door & Window Bits



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ROUTER BITS & SETS

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See next page for steps on usage...

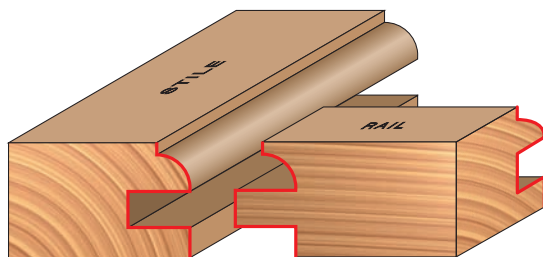
Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



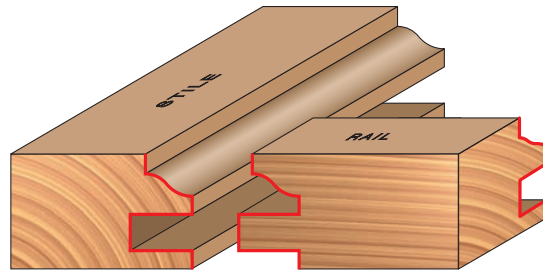
(Continued)

Matched Rail & Stile Bit Sets



99-260

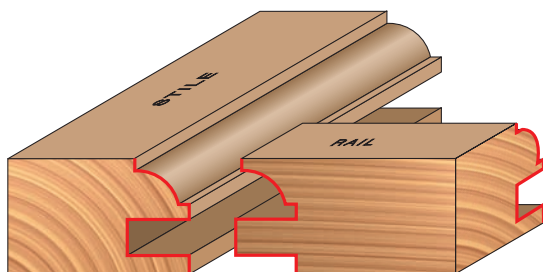
Drawing not to scale



99-261

99-266 (Mini Profile Bit)

Drawing not to scale



99-263

Drawing not to scale



99-264

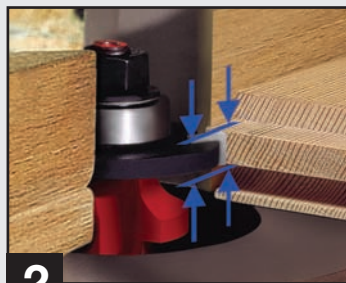
Drawing not to scale

Steps For Matched Rail & Stile Joints



1

Set bit "B" and make the cope on both ends of each rail.



2

Replace bit "B" with bit "A". Adjust the height of bit "A" until the stick cutter bit is perfectly aligned with the tenon.



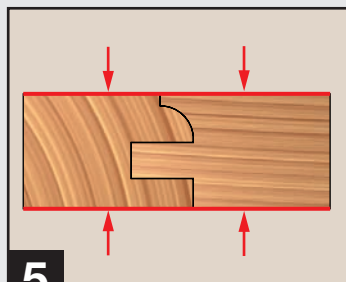
3

Cut the profile on the inner side of each rail.



4

With the same bit make the profile on one side of each stile.



5

Follow the instructions thoroughly and you will achieve a perfectly matched joint.



6

Rail and Stile Joint.

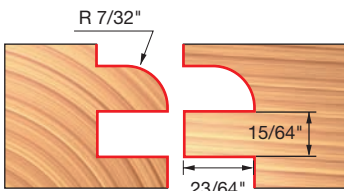
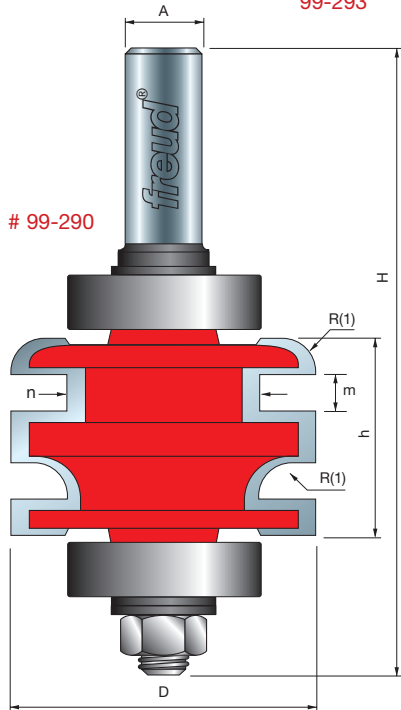
One-Piece Rail & Stile Bits



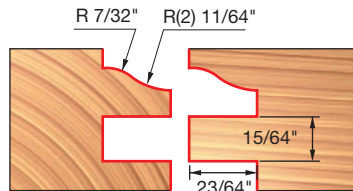
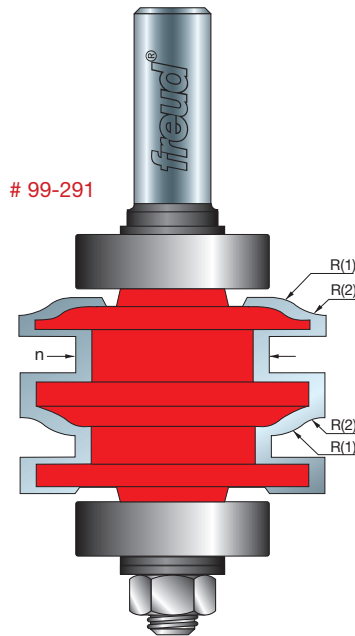
Application: A simple, efficient method for creating beautiful cabinet doors without having to reconfigure or change cutters or fence settings

- Cuts all frame members face down so variations in stock thickness are not a problem.
- 99-290 produces a quarter round profile, 99-291 produces an ogee profile, and 99-293 produces a classical bead profile.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

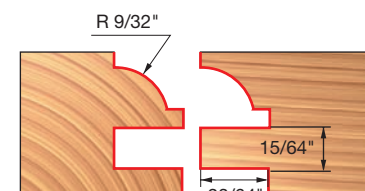
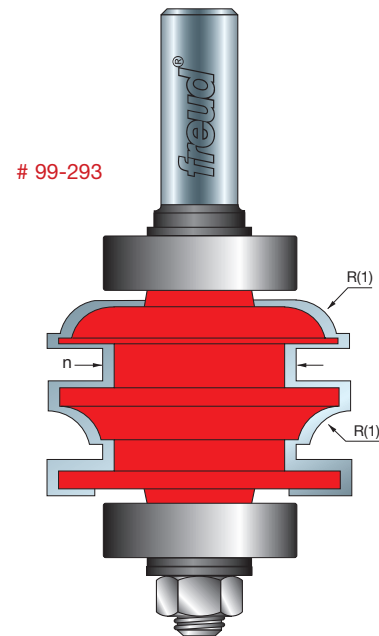
Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
99-290	2"	1-1/4"	1-9/32"	15/64"	7/32"	—	1/2"	4-3/32"
99-291	2"	1-1/4"	1-9/32"	15/64"	7/32"	11/64"	1/2"	4-3/32"
99-293	2"	1-1/4"	1-9/32"	15/64"	9/32"	—	1/2"	4-3/32"



99-290

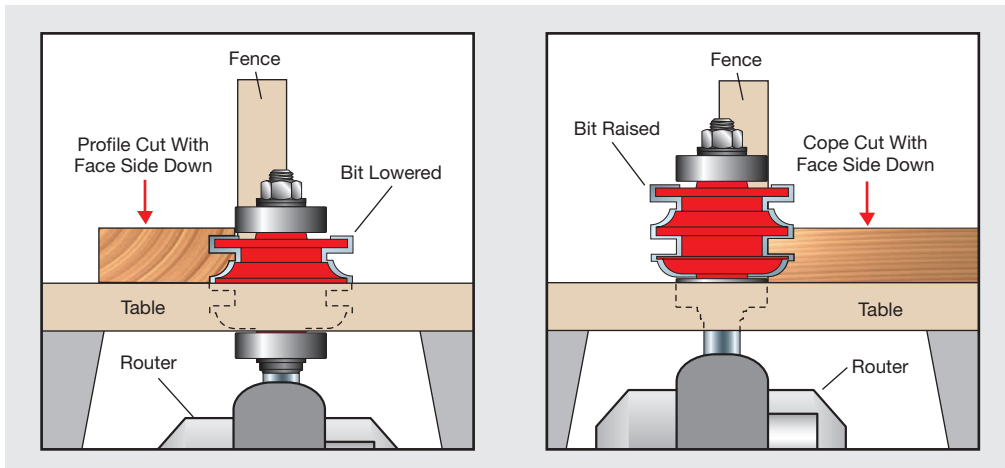


99-291



99-293

Set-Up for One-Piece Rail & Stile Bit



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



Entry & Interior Door Router Bit System

Application: Build entry and interior doors with true mortise and tenon construction for rock-solid joints that last a lifetime

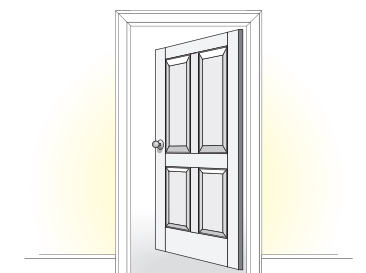
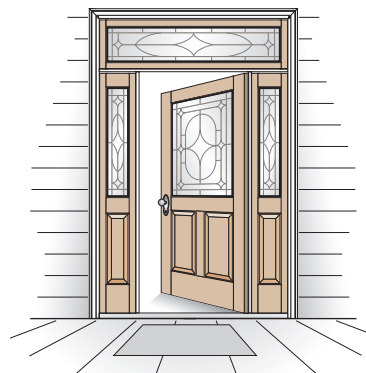
- This Entry and Interior Door System lets the woodworker build doors with true mortise and tenon construction for rock-solid joints that last a lifetime.
- This Matched Rail and Stile Bit Set comes fully assembled to mill perfect 1-3/4" Rail and Stile joints for exterior doors. To mill 1-3/8" interior door joints, simply remove the spacers from each bit.
- Milling a tenon of virtually any length is easy: the top cutter and bearing of the rail bit is simply unscrewed from the lower cutter and shank, without removing the bit from the router or changing the height of the cutter!
- Cuts all composition materials, hardwoods, and softwoods.
- Use on table-mounted portable routers.

Item Number	Profile	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Shank Dia.(A)	Overall Length(H)
2 Piece Entry & Interior Door Bit Sets For 1-3/8" & 1-3/4" Stock						
NEW 99-267	Roundover	1-7/8"	7/8"	1-7/8"	1/2"	4-1/8"
NEW 99-268	Ogee	1-7/8"	7/8"	1-7/8"	1/2"	4-1/8"
NEW 99-269	Cove & Bead	1-7/8"	7/8"	1-7/8"	1/2"	4-1/8"

2 Piece Entry & Interior Door Bit Set For 2" & 2-1/4" Thick Stock

NEW 99-277	Roundover	1-7/8"	7/8"	2-3/8"	1/2"	4-19/32"
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Patent Pending

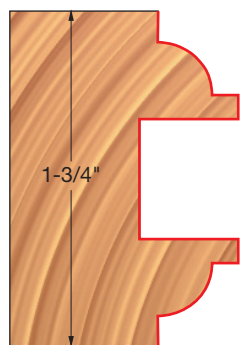
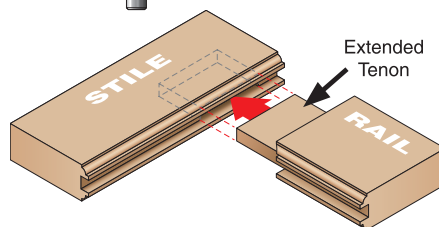


1/2" Long Stub Tenon

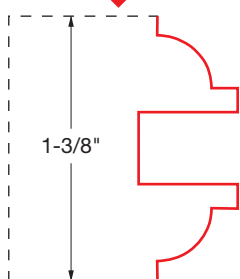


2-1/2" Long Extended Tenon

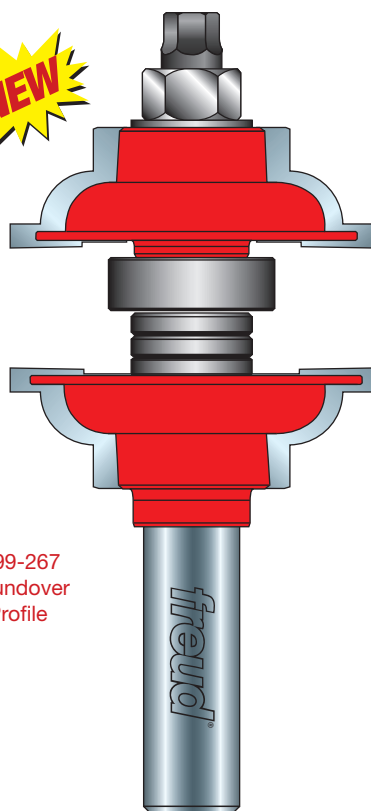
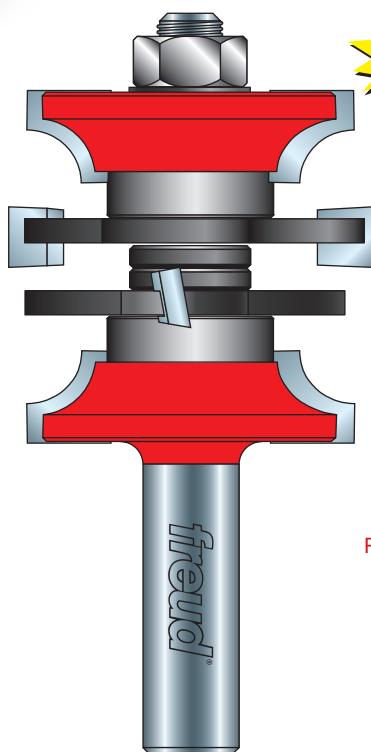
Freud's innovative feature enables the top section of the rail bit to be removed allowing you to cut an extended tenon cut in the rail. By making matching mortises in the mating stiles, a strong mortise & tenon joint will be created, which is required for making entry and interior door joints.



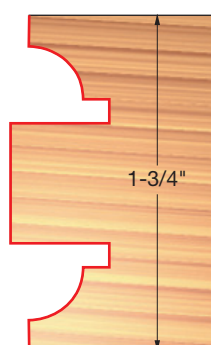
#99-267



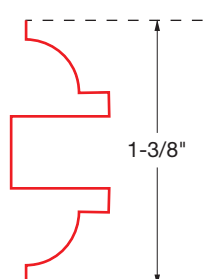
1-3/8"



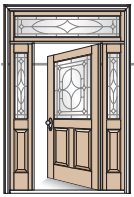
99-267
Roundover
Profile



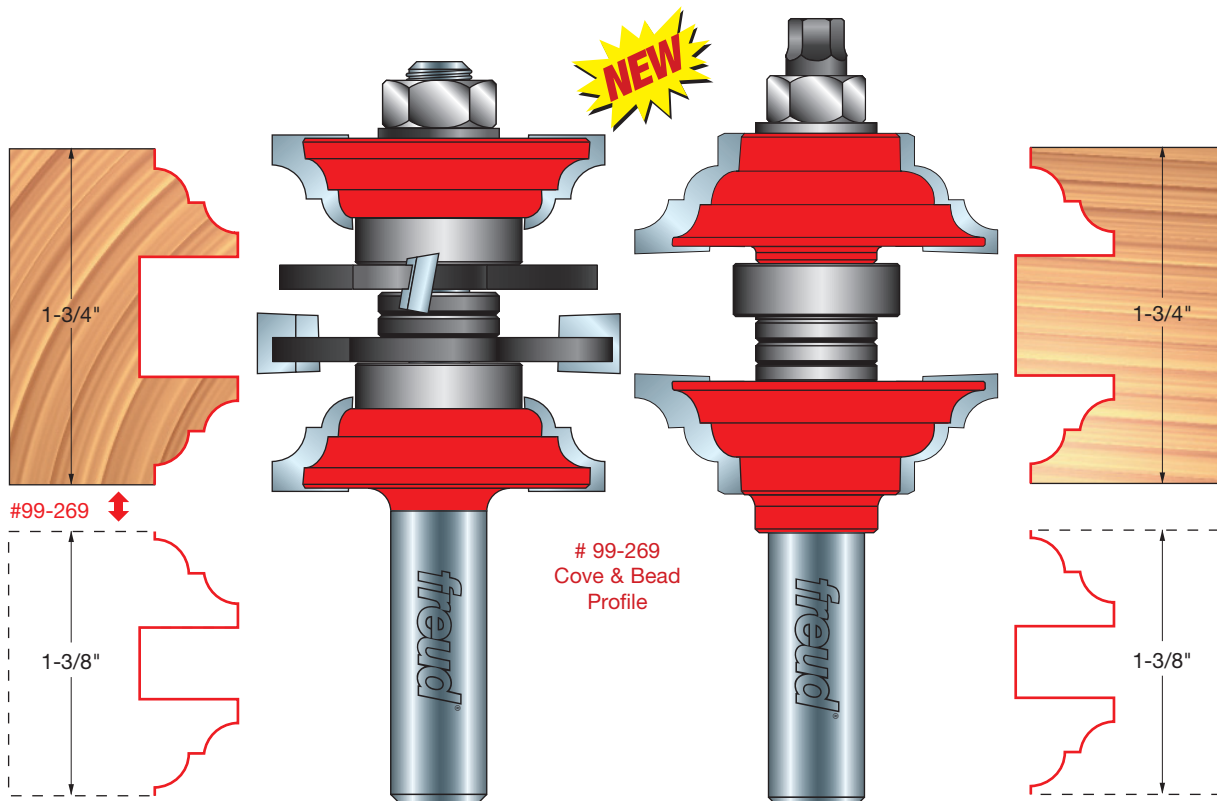
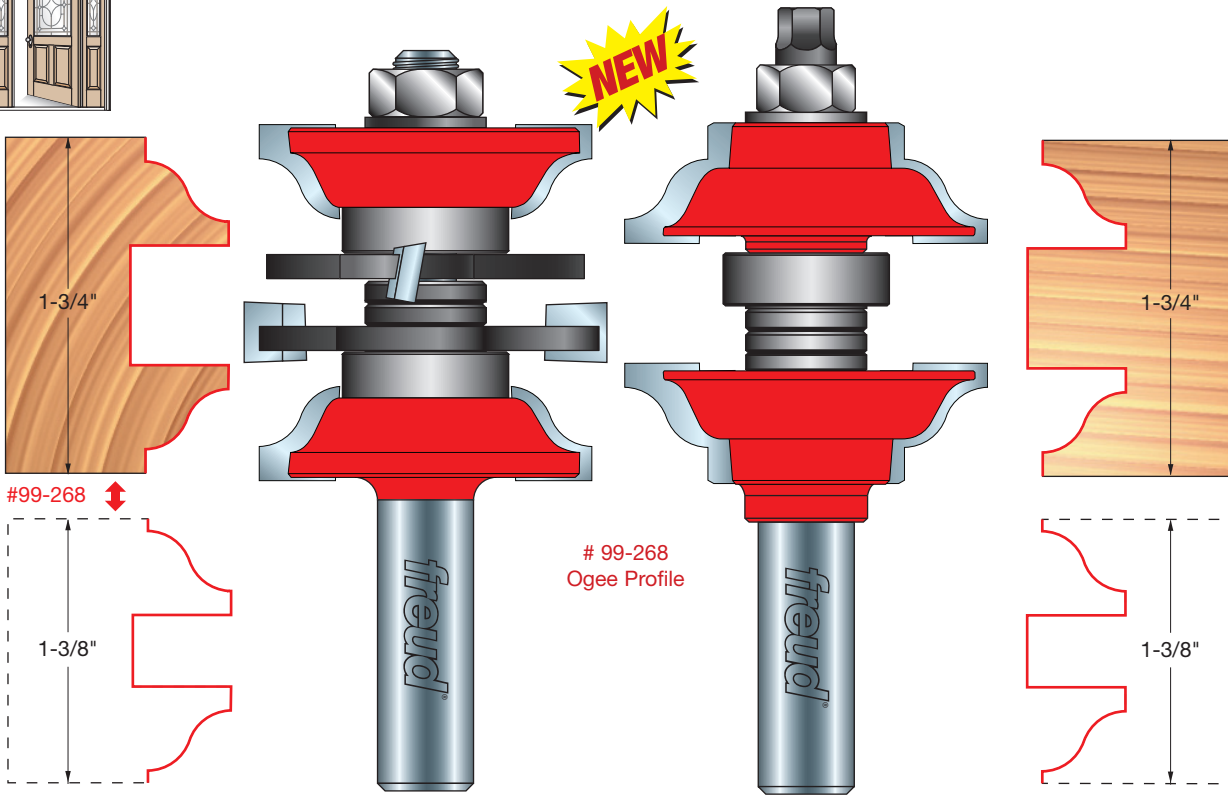
1-3/4"

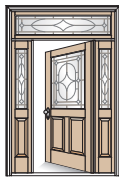


1-3/8"



(Continued) Entry & Interior Door Router Bit System



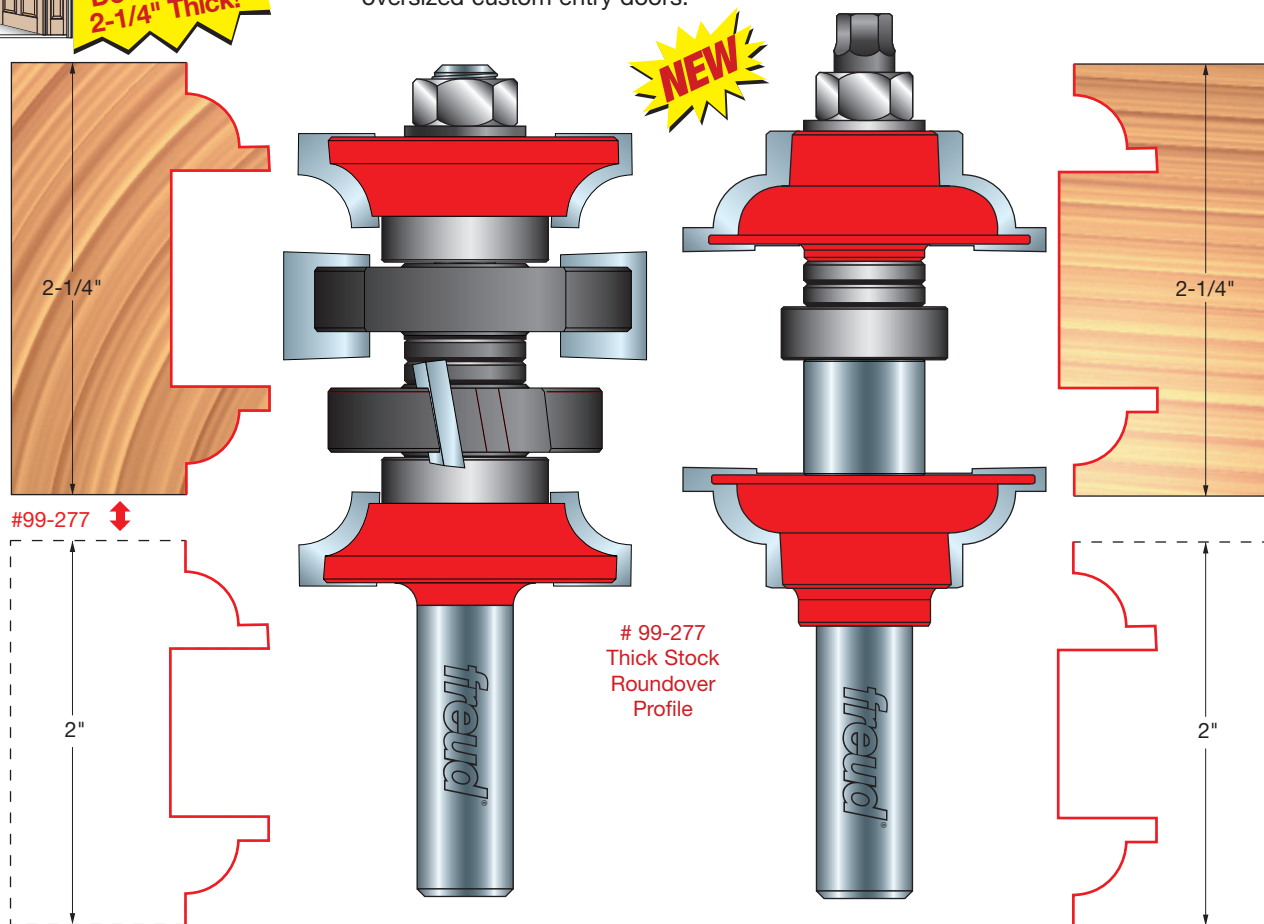


Thick Stock Entry Door – Up To 2-1/4" Thick!

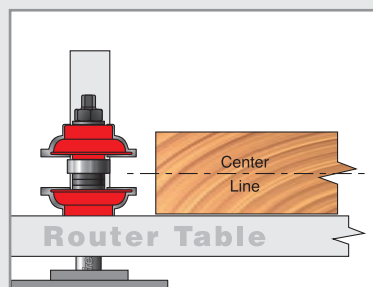
(Continued)

Entry & Interior Door Router Bit System

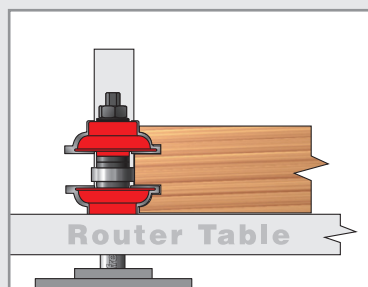
Freud's Thick Stock Entry Door Set lets woodworkers build large doors with true mortise and tenon construction in stock up to 2-1/4" thick, the ideal choice for oversized custom entry doors.



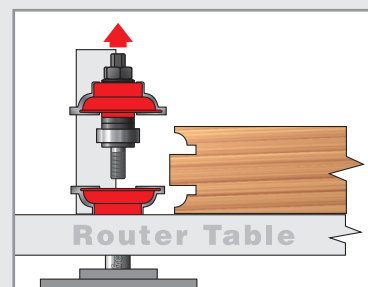
Steps To Create Rail & Stile Joints With Extended Tenons:



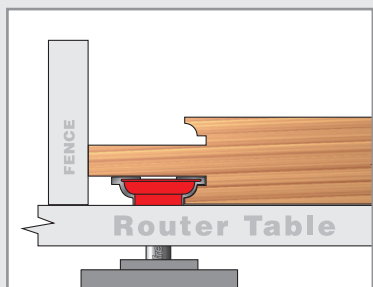
1) Install the rail bit and vertically center the bit with the stock.



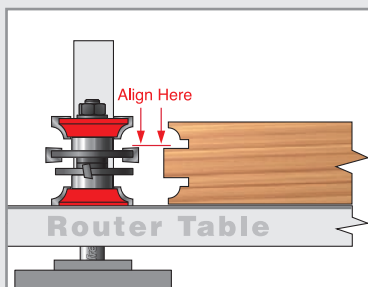
2) Rout the rail ends with stub tenons.



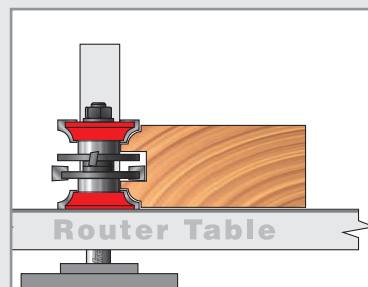
3) While leaving the rail bit in place, remove the top section of the router bit.



4) With the assistance of the fence, make several passes to create the extended tenon.



5) Install the stile cutter bit and align the top of the groove cutter to the top of the tongue of rail cut.



6) Using multiple passes, the stile cuts can now be made.

All Profile Drawings 1:1 Scale

Red Item Numbers Indicate 1/2" Shank

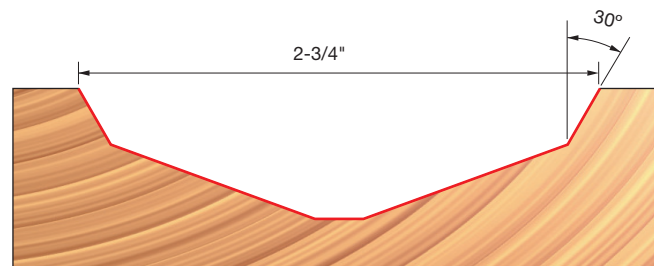
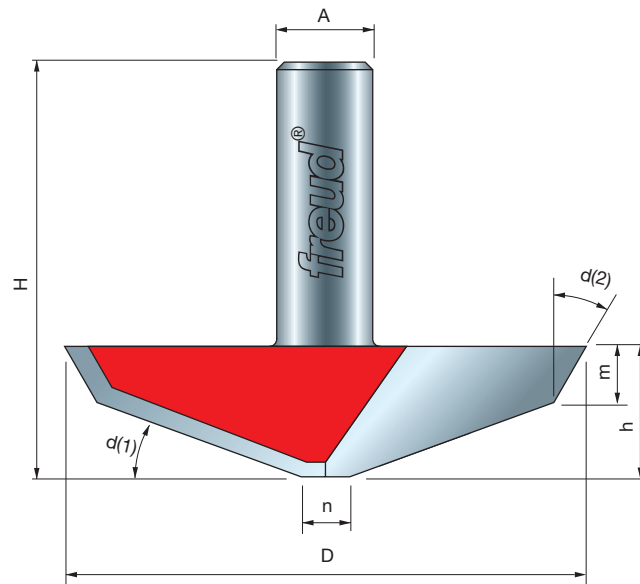
French Provincial Raised Panel Bit

Application: Ideal for making decorative grooves in panels, tops and plaques

- Produces raised panels used in doors and paneling from 3/4" stock. Adjust the length of the tongue by using a fence.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as table-mounted portable routers.



Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Angle (d1)	Angle (d2)	Shank Dia.(A)	Overall Length(H)
99-214	2-3/4"	1/4"	11/16"	19/64"	20°	30°	1/2"	2-3/16"



99-214

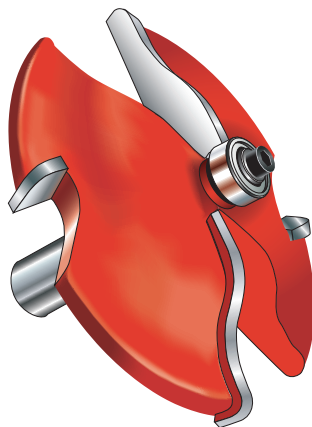




2+2 Raised Panel Bits

Application: Ideal for creating raised panels for doors and paneling, as well as decorative tops, plaques and molding

- Revolutionary design combines two small wings that cut downward to shear the top edge for a splinter-free surface, and two large wings that shear upward for a smooth finish.
- Use 1/2" height for 5/8" stock. Use 5/8" height for 3/4" stock.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

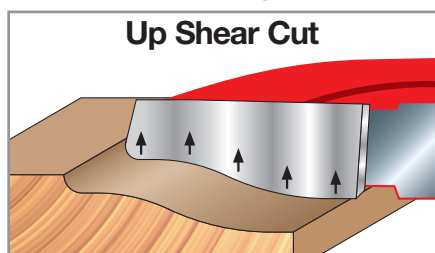


Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
99-510	2-3/4"	—	5/8"	7/32"	35/64"	1/8"	1/2"	2-1/2"
99-511	2-3/4"	1-1/8"	5/8"	15/64"	—	—	1/2"	2-1/2"
99-512	2-3/4"	1-1/4"	5/8"	17/64"	13/64"	—	1/2"	2-1/2"
99-513*	2-3/4"	—	5/8"	15/64"	7/16"	—	1/2"	2-1/2"
99-515	3-1/2"	1-1/4"	5/8"	5/32"	—	—	1/2"	2-1/2"
99-516	3-1/2"	1-1/4"	1/2"	5/32"	—	—	1/2"	2-1/2"
99-518	3-1/2"	—	5/8"	5/64"	1-1/2"	—	1/2"	2-1/2"
99-519	3-1/2"	—	1/2"	5/64"	1-1/2"	—	1/2"	2-1/2"
99-520	3-1/2"	—	5/8"	7/32"	25/32"	5/32"	1/2"	2-1/2"
99-521	3-1/2"	—	1/2"	—	1-3/16"	5/32"	1/2"	2-1/2"
99-522	3-1/2"	1-1/4"	5/8"	—	15/64"	—	1/2"	2-1/2"
99-523	3-1/2"	1-1/4"	1/2"	—	5/32"	—	1/2"	2-1/2"

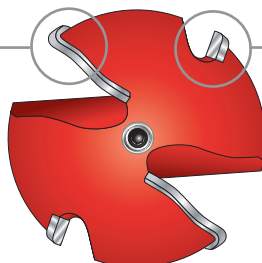
* Angle=110°

U.S. Patent No. 5,899,252

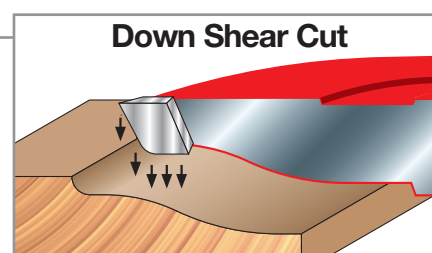
Freud's 2+2 Design



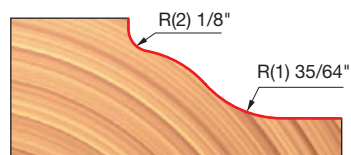
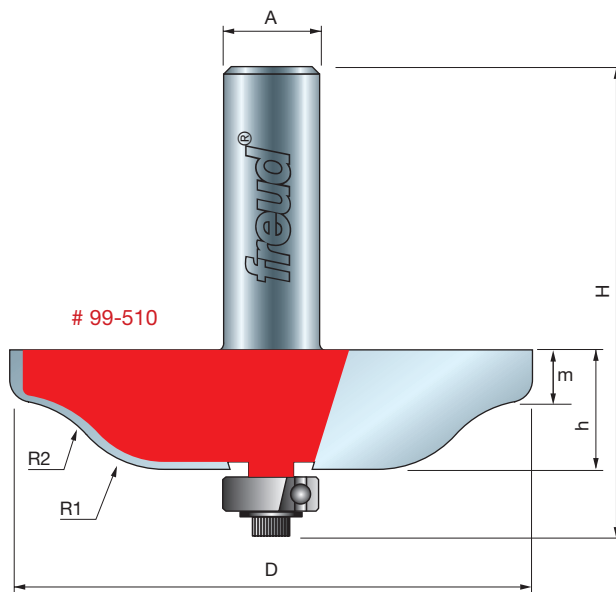
(Drawing not to scale)



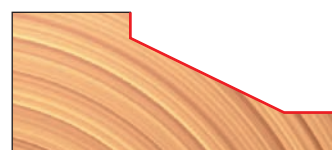
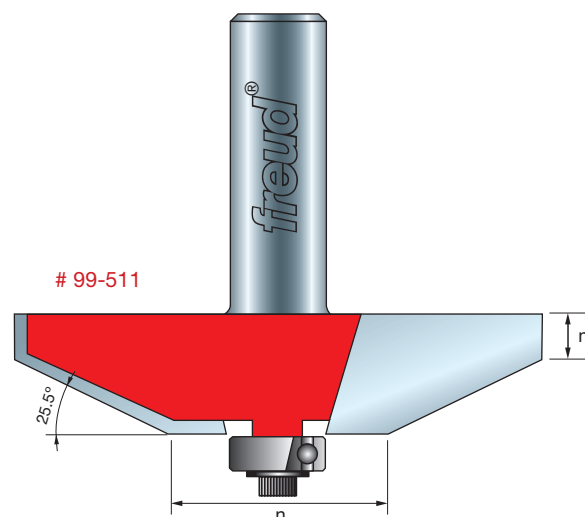
Bottom view of 2+2 bit



(Drawing not to scale)



99-510



99-511

All Profile Drawings 1:1 Scale

Red Item Numbers Indicate 1/2" Shank

(Continued)

2+2 Raised Panel Bits



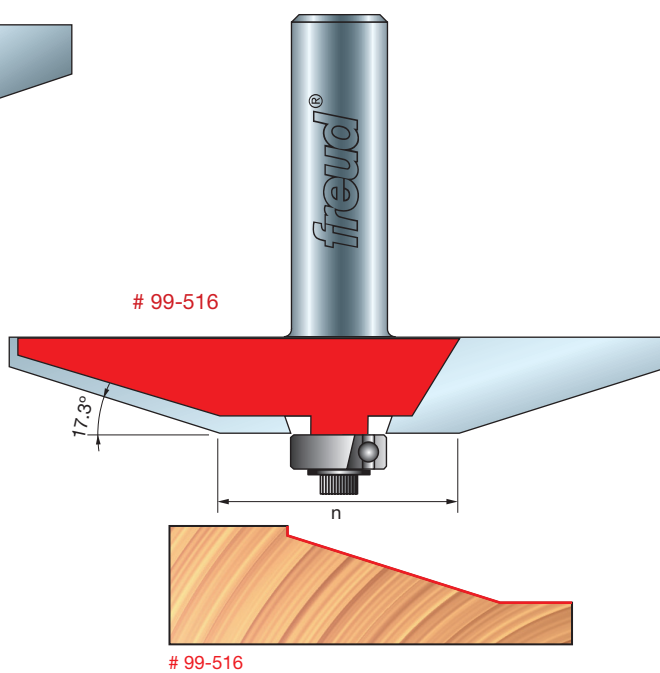
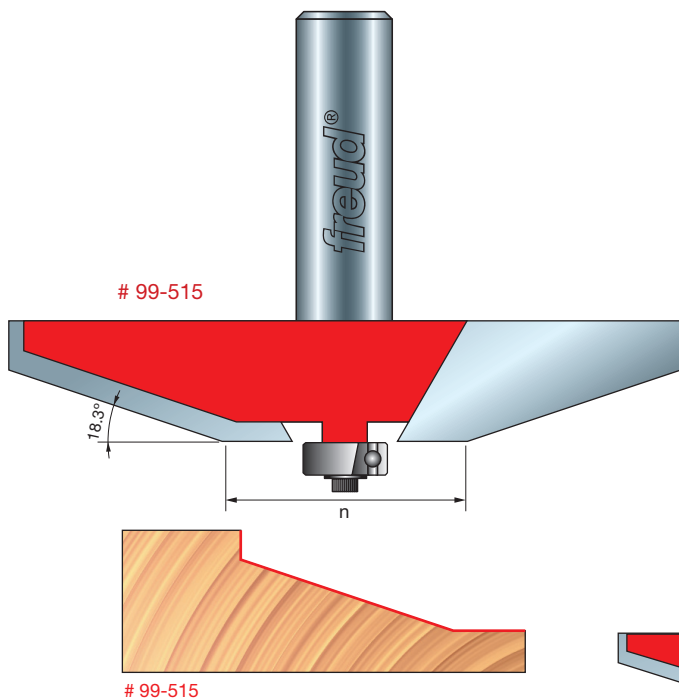
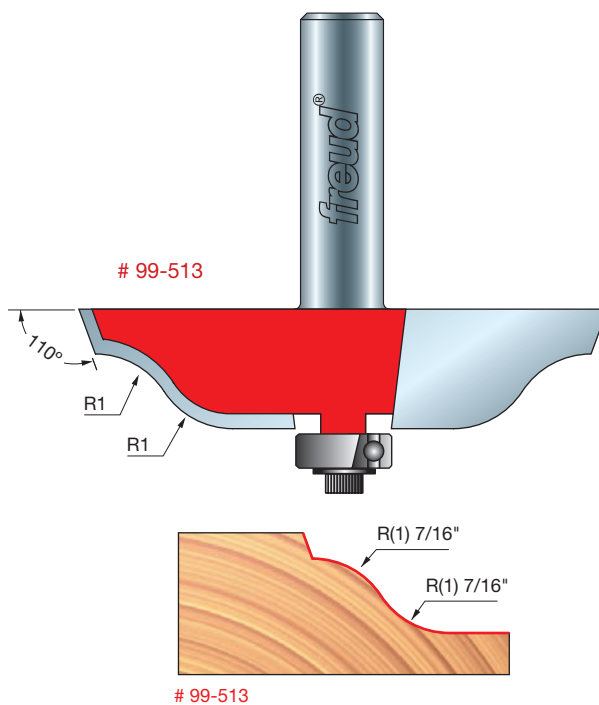
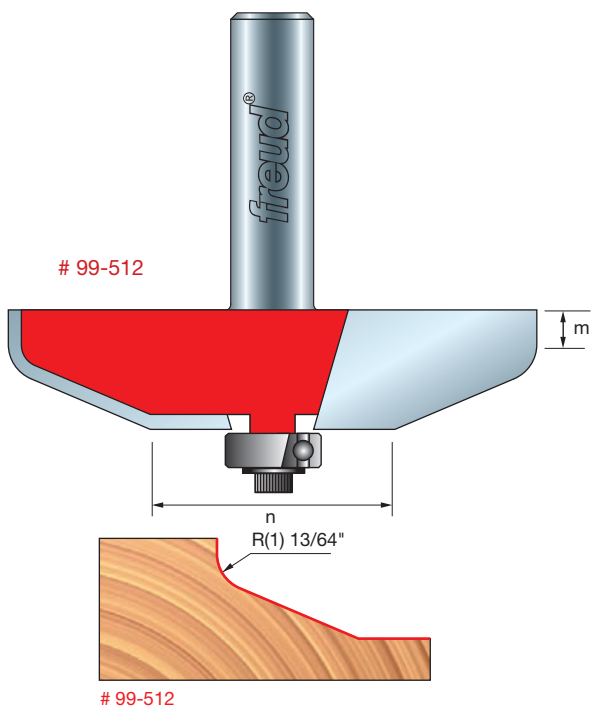
Door & Window Bits



211

ROUTER BITS & SETS

freud®



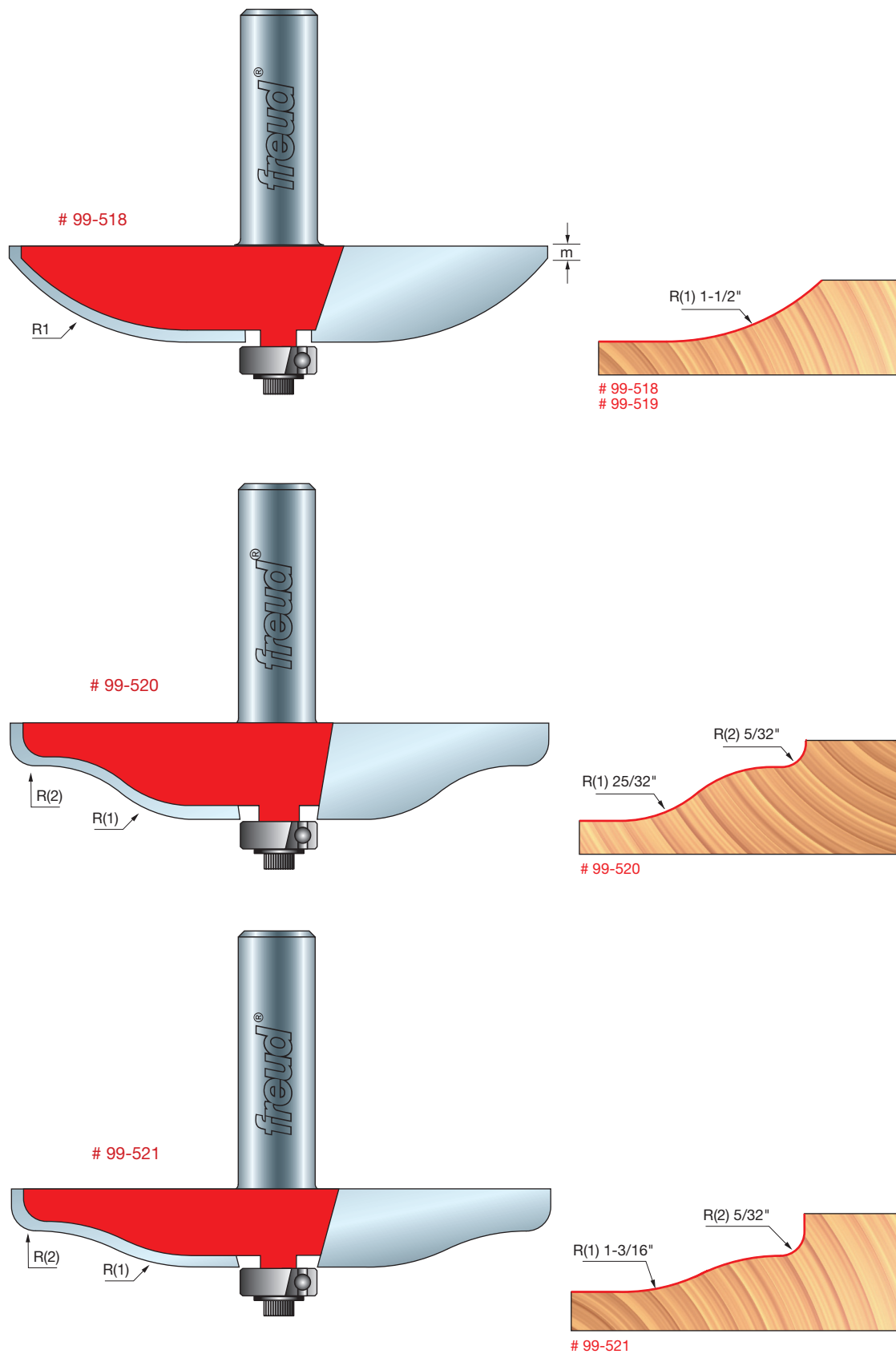
Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



(Continued)

2+2 Raised Panel Bits



(Continued)

2+2 Raised Panel Bits



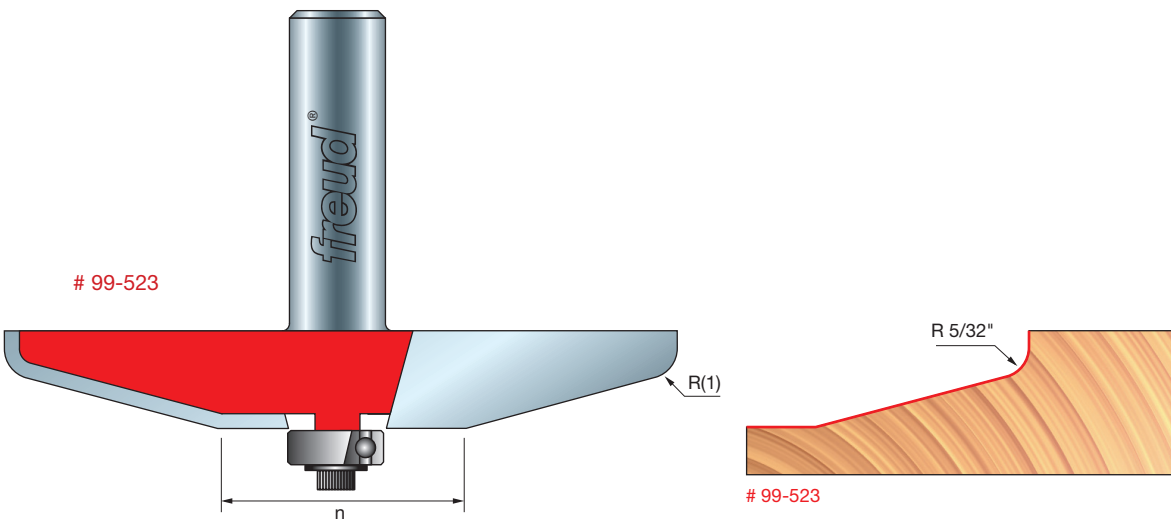
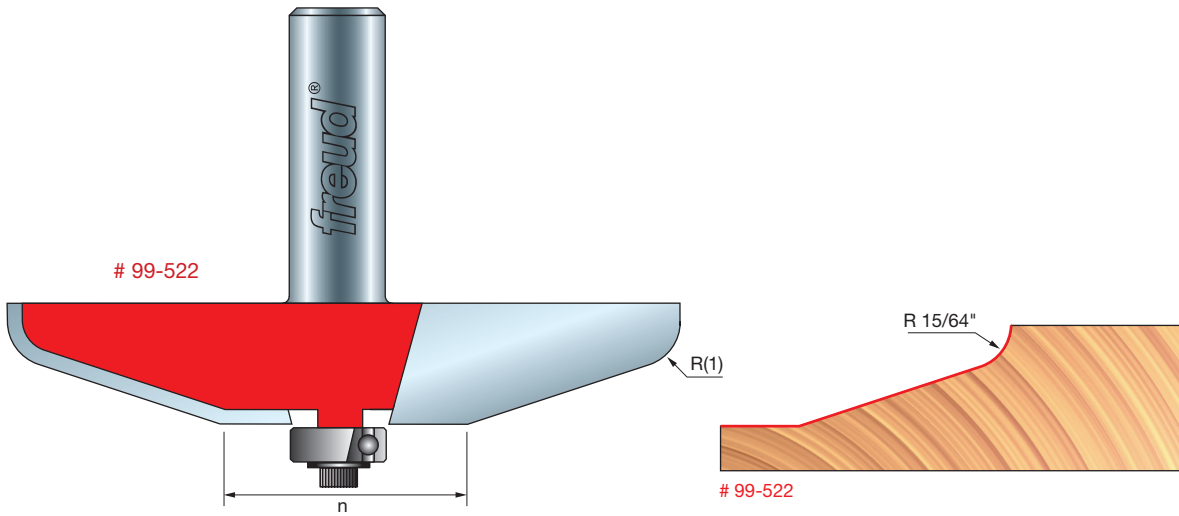
Door & Window Bits



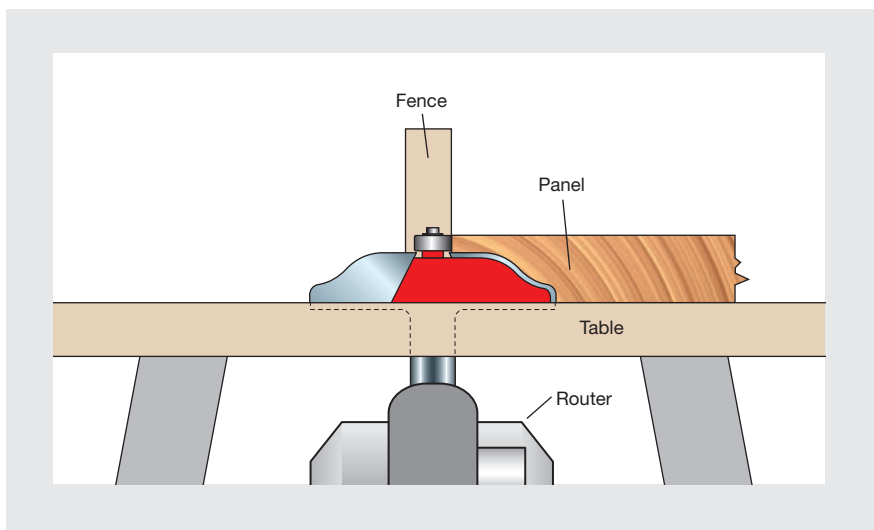
213

ROUTER BITS & SETS

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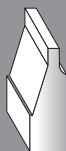


Raised Panel Setup



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



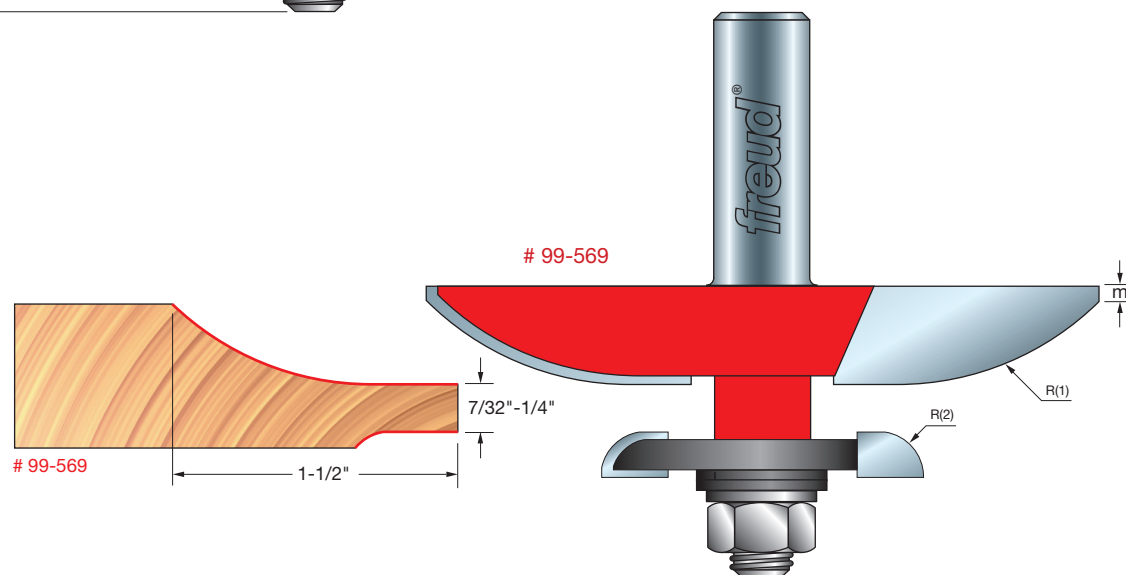
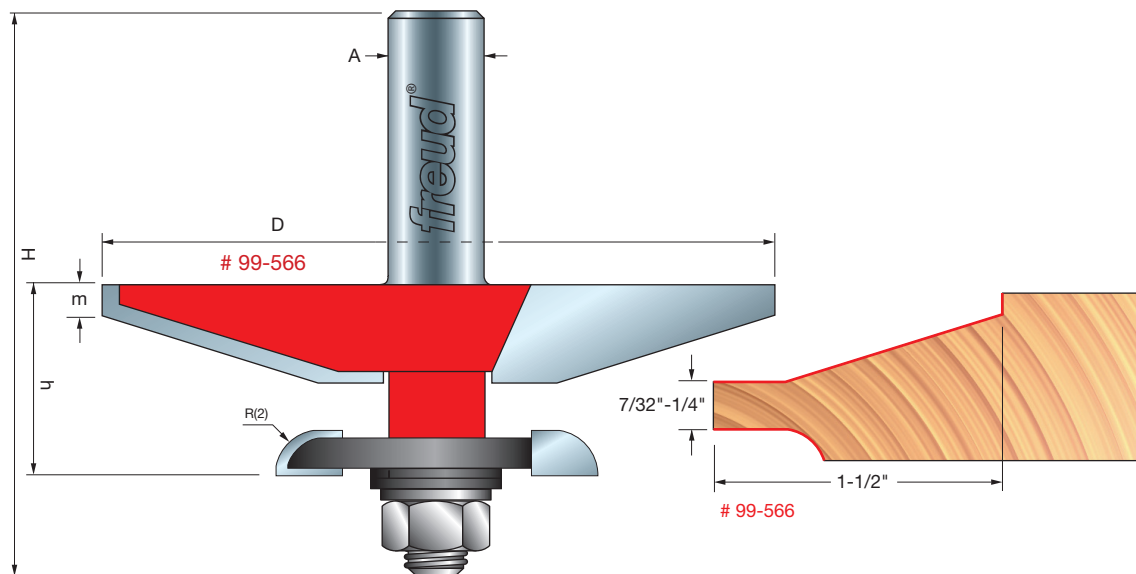
2+2 Raised Panel Bits with Backcutters

Application: Producing panels from 3/4" stock that are flush with the doorframe for a professional, architecturally correct appearance

- Exclusive design combines a backcutter with the smooth cuts of Freud's 2+2 Raised Panel Bits.
- Shims are included to allow adjustment of tongue thickness from 7/32" to 1/4" for maximum versatility and compatibility.
- Patented design allows these bits to produce a full 1-1/2" wide reveal for traditional raised panel doors.
- Included 54-562 radius backcutter gives double-sided appearance and can be replaced with optional 54-560 square backcutter for a more contemporary look.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
99-566	3-1/2"	1"	5/32"	—	3/16"	1/2"	3"
99-569	3-1/2"	1"	5/32"	1-1/2"	3/16"	1/2"	3"
NEW 99-571	3-1/2"	1"	—	1-3/16"	5/32"	1/2"	3"
Optional Replacement Backcutters							
54-560	1-7/16"	15/64"	—	—	—	—	—
54-562	1-13/16"	15/64"	—	—	3/16"	—	—
Mini 2+2 Raised Panel Bit							
NEW 99-500	2-19/32"	7/8"	—	3/4"	7/64"	1/2"	2-51/64"

U.S. Patent No. 5,899,252
U.S. Patent No. 6,354,347



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2+2 Raised Panel Bits with Backcutters



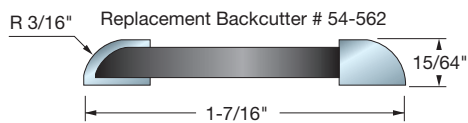
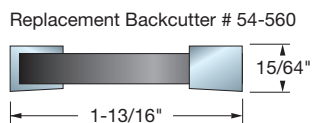
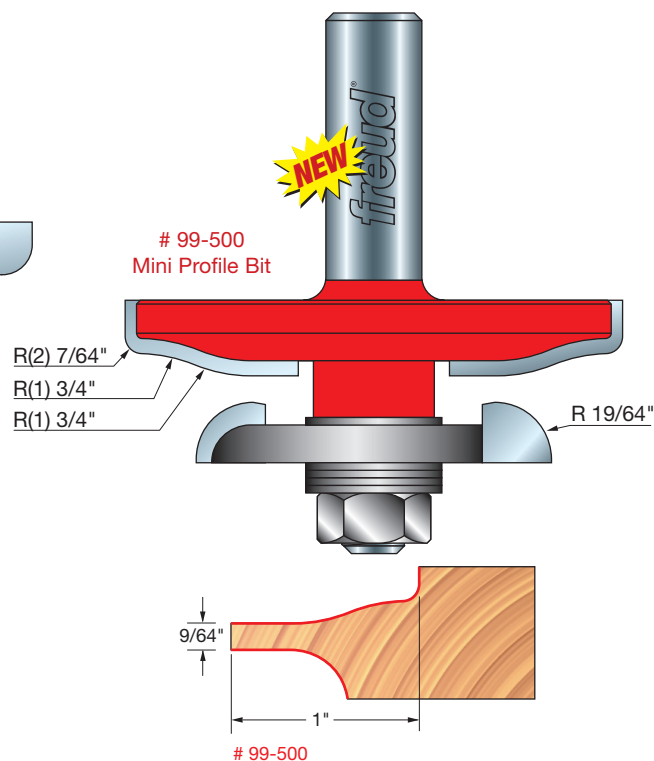
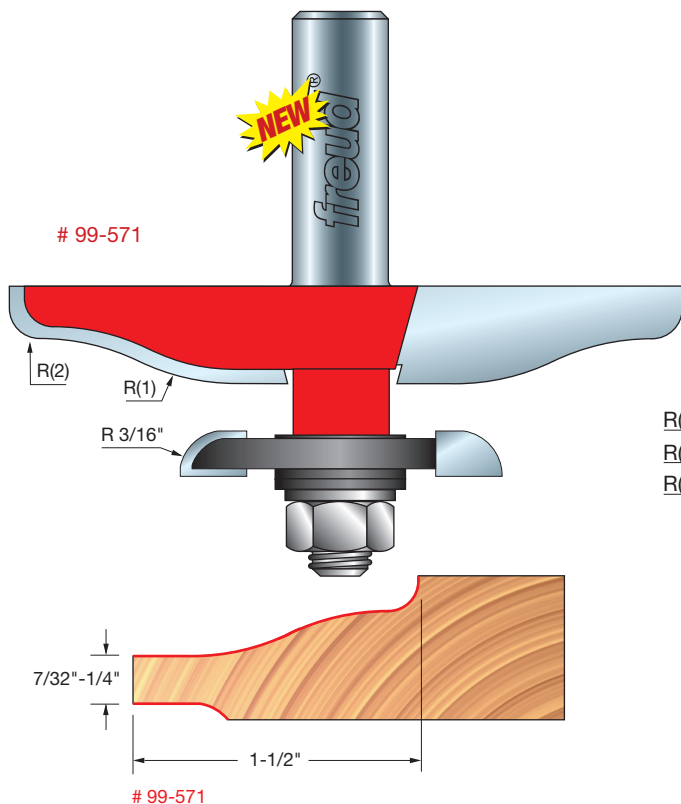
Door & Window Bits



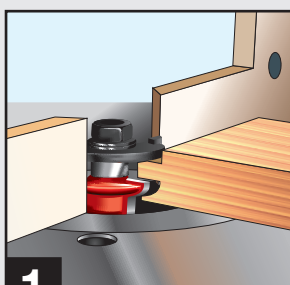
215

ROUTER BITS & SETS

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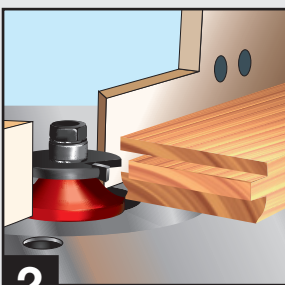
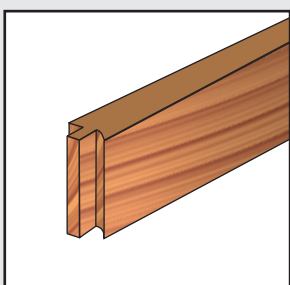


Steps To Building A Perfect Panel Door



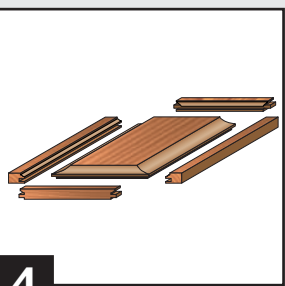
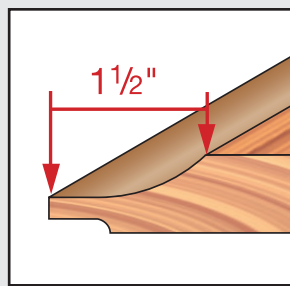
1

Cut rail ends. Bit shown is from Freud set #99-260.



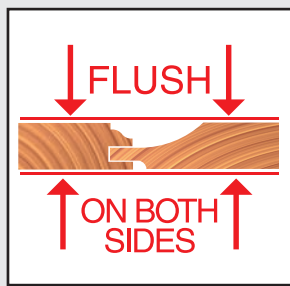
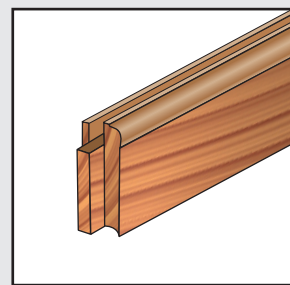
3

In one step, cut door panel profile and back cut. 2+2 Raised Panel Bit shown is the #99-569.



4

Assemble stiles, rails and door panel.



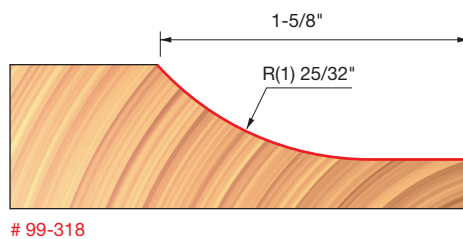
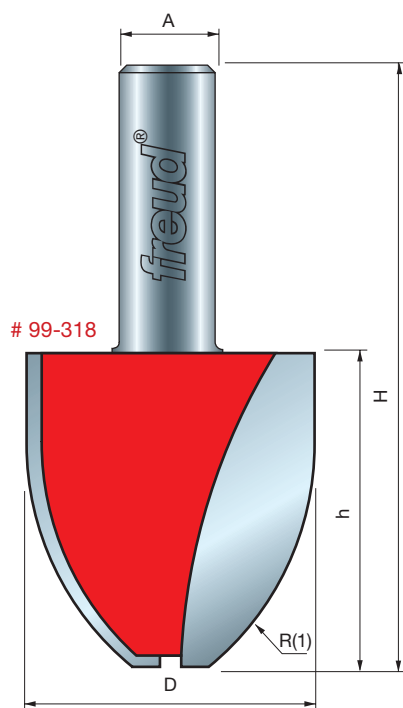
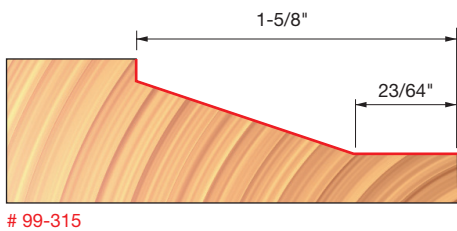
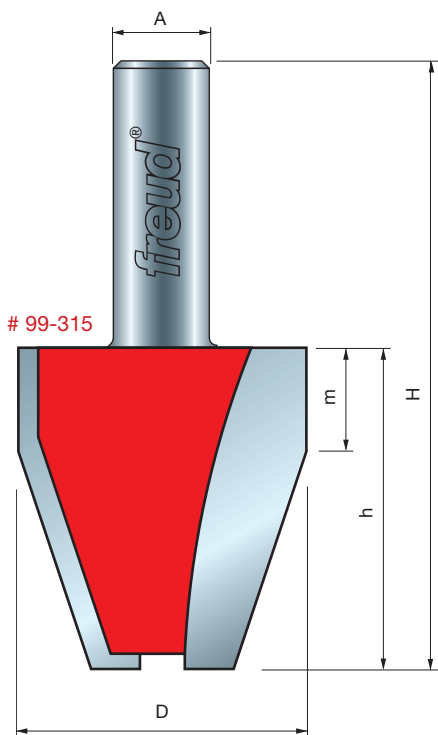


Vertical Raised Panel Bits

Application: Creates full sized raised panels by feeding 3/4" stock vertically

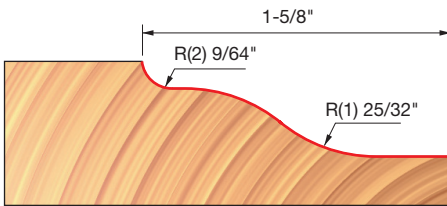
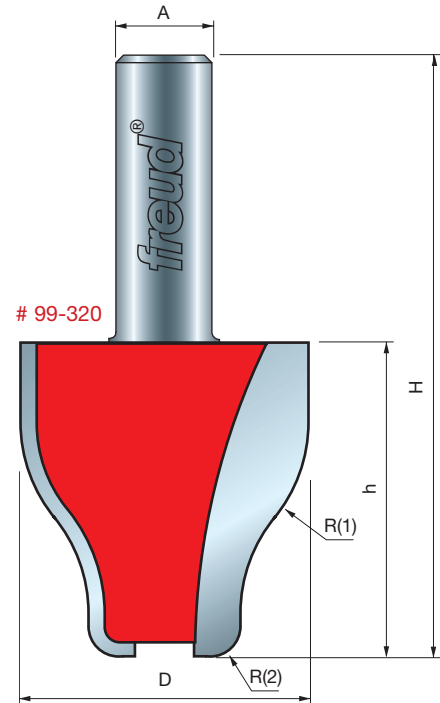
- Small overall diameter makes these bits ideal for lower horsepower routers and single speed routers.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
99-315	1-1/2"	1-5/8"	23/64"	–	–	1/2"	3-3/16"
99-318	1-1/2"	1-5/8"	–	1-1/2"	–	1/2"	3-3/16"
99-320	1-1/2"	1-5/8"	–	25/32"	5/32"	1/2"	3-3/16"
99-322	1-1/2"	1-5/8"	23/64"	3/8"	–	1/2"	3-3/16"

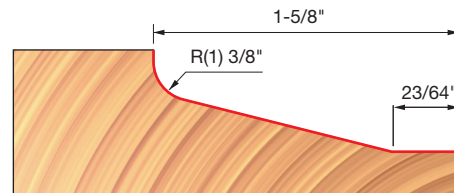
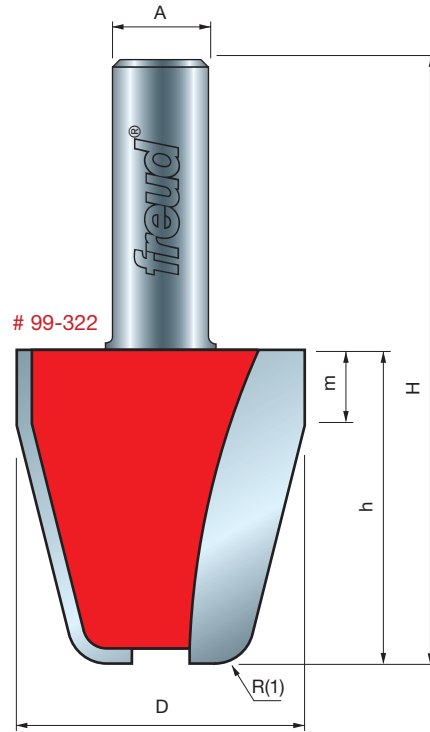


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Vertical Raised Panel Bits

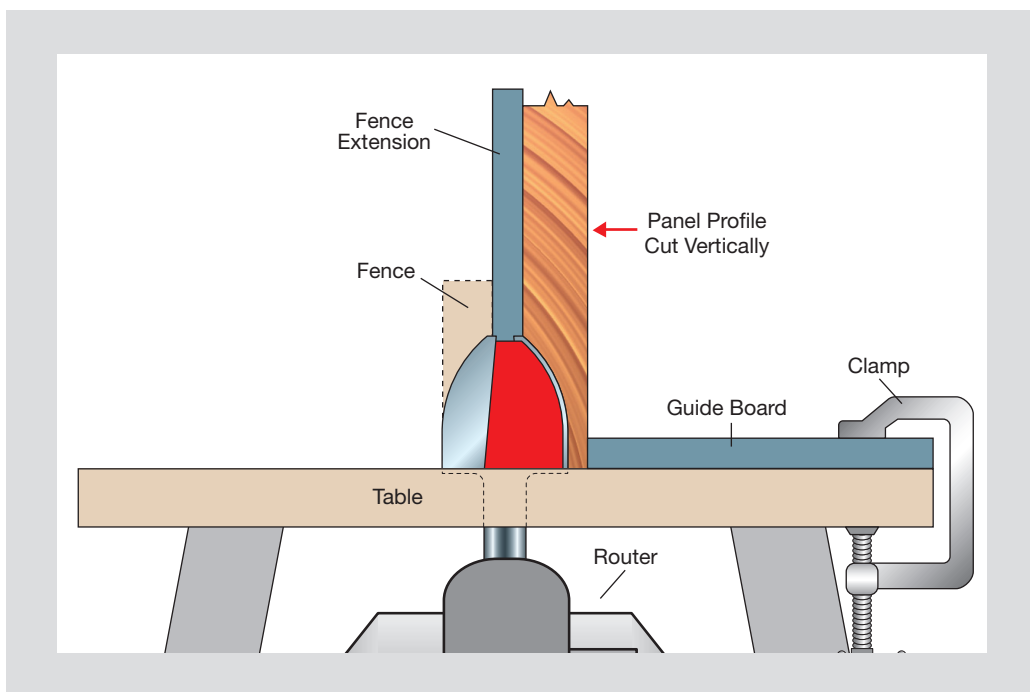


99-320



99-322

Vertical Panel Bit Setup



Red Item Numbers Indicate 1/2" Shank

All Profile Drawings 1:1 Scale



Door & Window Bits



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ROUTER BITS & SETS

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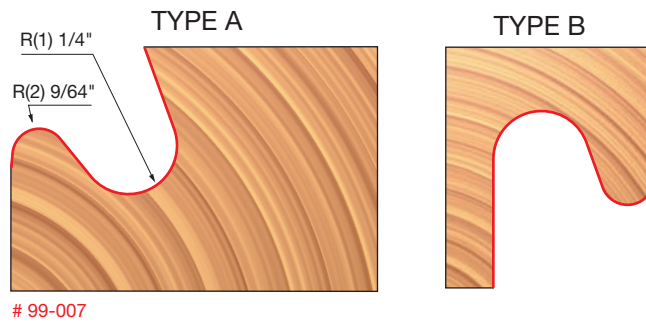
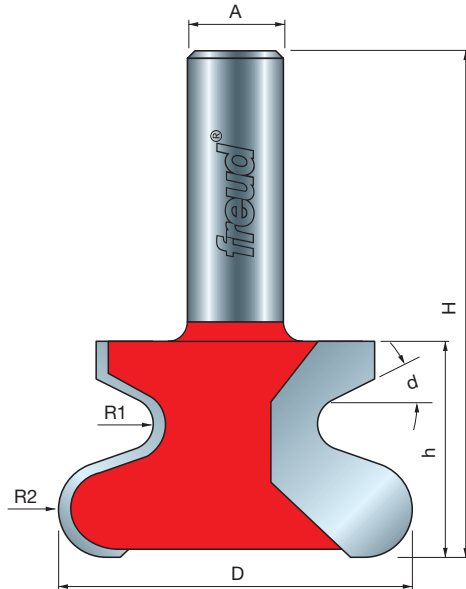


Door Pull Bit

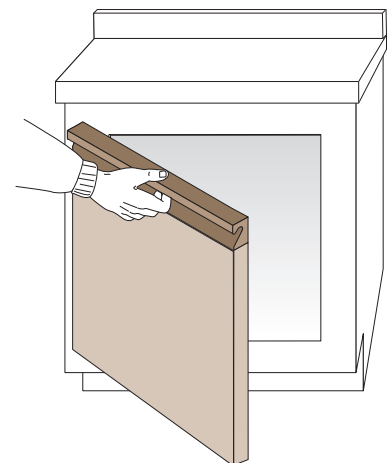
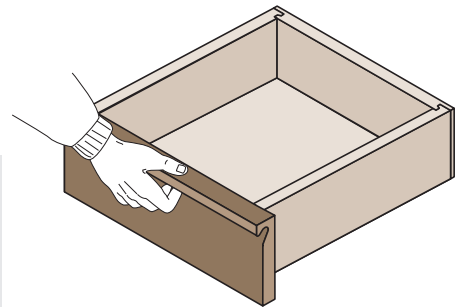
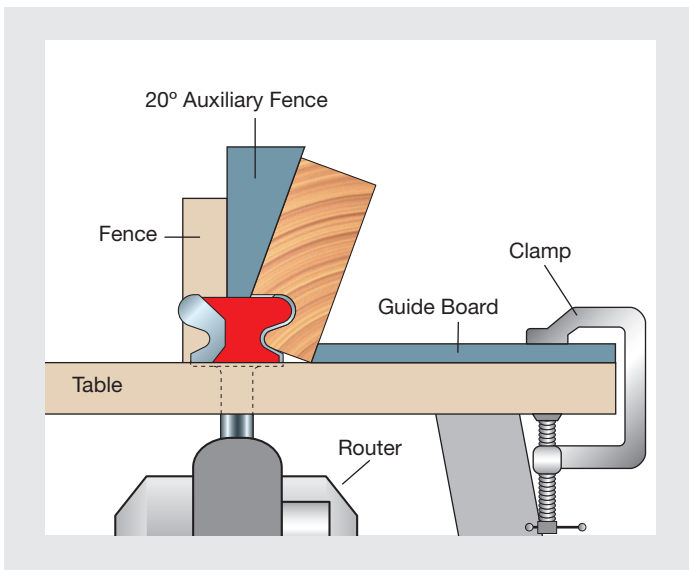
Application: Produces the finger pull groove found on popular contemporary cabinet doors

- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

Item Number	Overall Dia.(D)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Angle (d)	Shank Dia.(A)	Overall Length(H)
99-007	1-27/32"	1-1/8"	1/4"	9/64"	26-1/2°	1/2"	2-5/8"



Door Pull Bit Setup

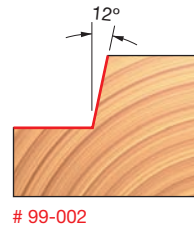
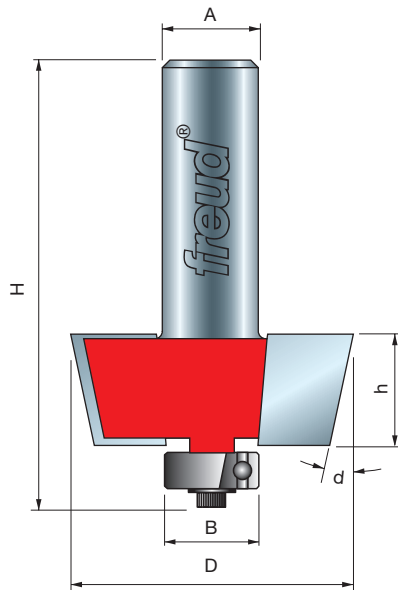


Door Lip Bit

Application: Cutting out the inset portion of a cabinet door

- Use with your choice of face profiles for maximum design versatility.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Item Number	Overall Dia.(D)	Bearing Dia.(B)	Carbide Height(h)	Angle (d)	Shank Dia.(A)	Overall Length(H)
99-002	1-1/2"	1/2"	19/32"	12°	1/2"	2-7/16"

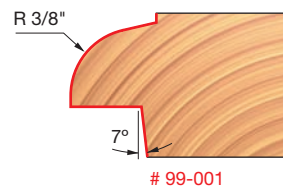
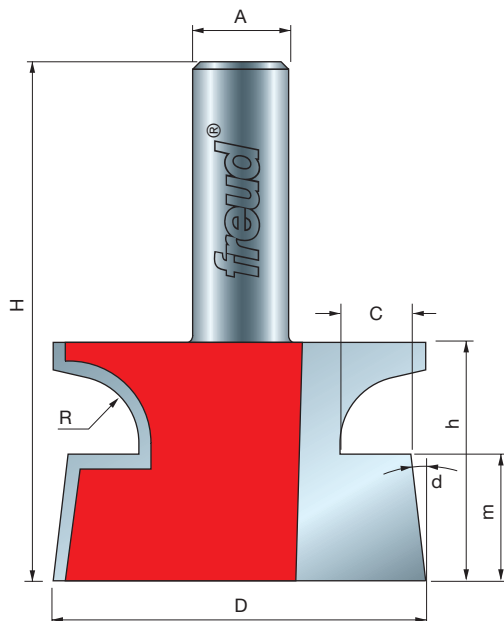


Door Lip Bit

Application: Producing classical door lips on stock from 1/2" to 1-1/4" in thickness

- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(h)	Minor Height(m)	Large Radius(R)	Angle (d)	Shank Dia.(A)	Overall Length(H)
99-001	2"	29/64"	1-1/4"	11/16"	3/8"	7°	1/2"	2-3/4"

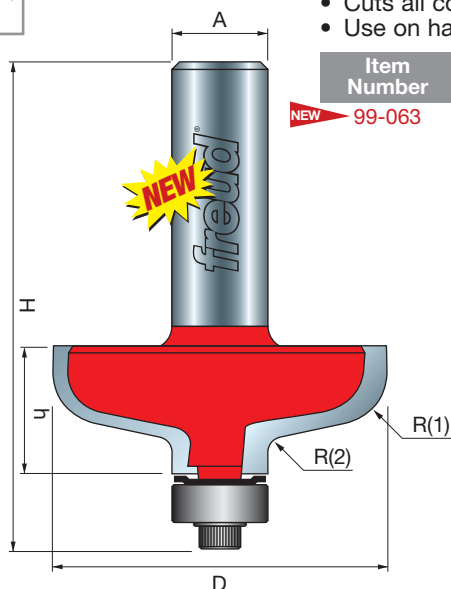




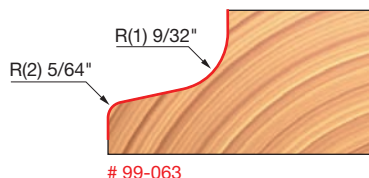
No Lip Door Edge Bit

Application: Create a decorative inverted Ogee Profile on the face of door fronts

- Designed to compliment the profile formed on the face of the door created by the 99-064 Finger Pull door edge bit.
- Precise shear angles provide a splinter-free finish,
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



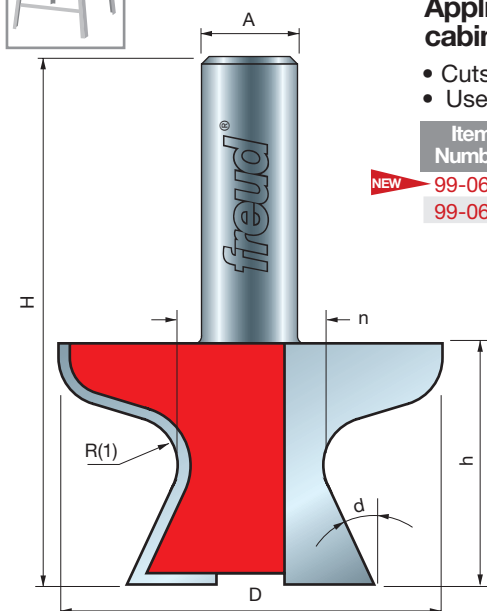
Item Number	Overall Dia.(D)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Shank Dia.(A)	Overall Length(H)
NEW 99-063	1-3/4"	5/8"	9/32"	5/64"	1/2"	2-5/8"



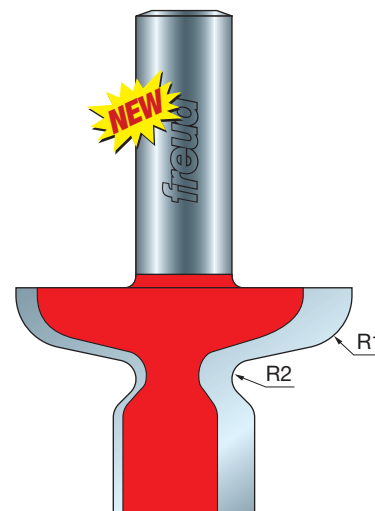
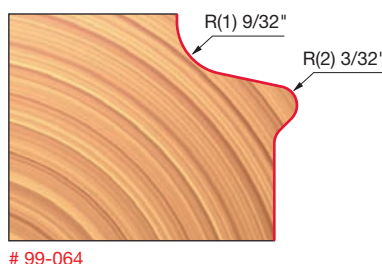
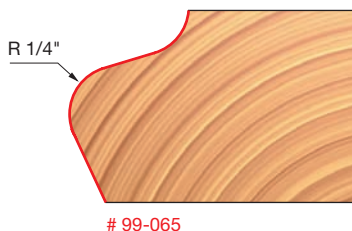
Finger Pull Door Lip Bit

Application: Creating the finger pull found on popular contemporary cabinet doors

- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers.



Item Number	Overall Dia.(D)	Small Dia.(n)	Carbide Height(h)	Large Radius(R1)	Small Radius(R2)	Angle (d)	Shank Dia.(A)	Overall Length(H)
NEW 99-064	1-3/4"	5/8"	1-3/16"	9/32"	3/32"	—	1/2"	2-5/8"
99-065	2"	3/4"	1-1/4"	1/4"	—	25°	1/2"	2-3/4"



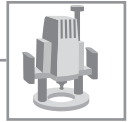
All Profile Drawings 1:1 Scale

Red Item Numbers Indicate 1/2" Shank

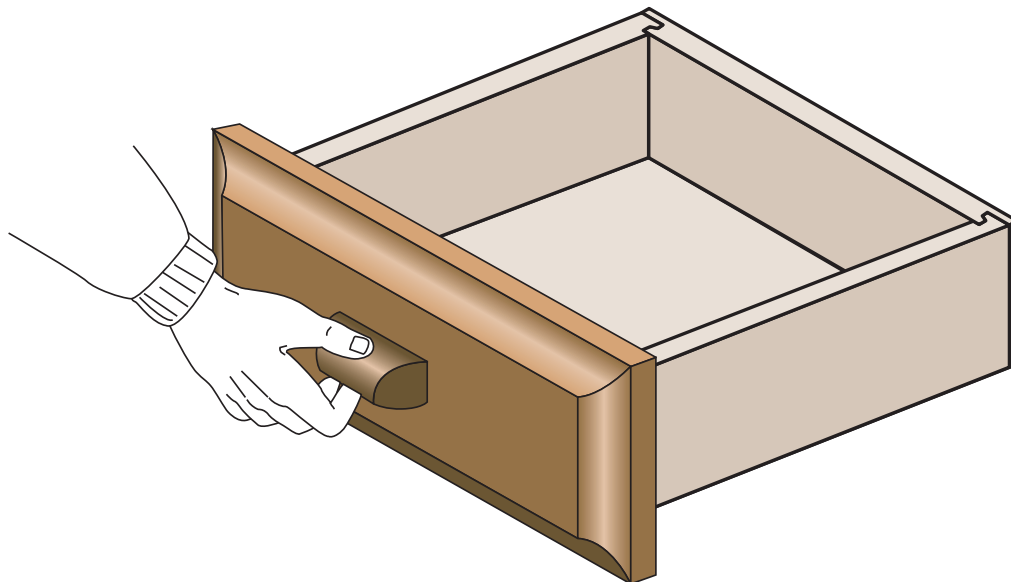
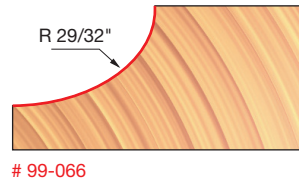
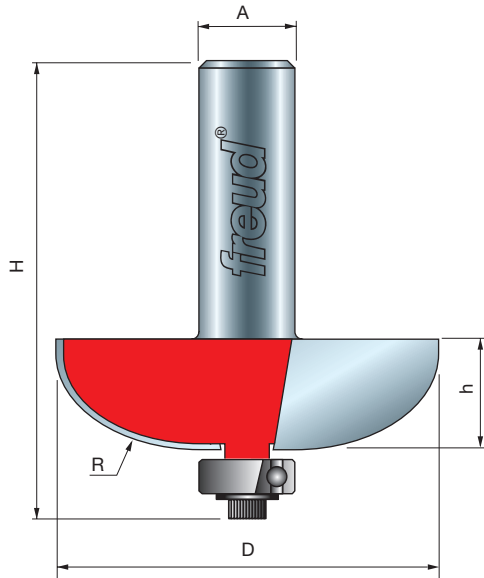
Drawer Front Bit

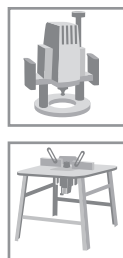
Application: Adding a decorative "raised panel" look to drawer fronts

- Precise shear angles provide a splinter-free finish.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Item Number	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
99-066	2"	9/16"	29/32"	1/2"	2-3/8"



**New Shadow Box**

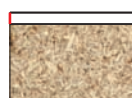
88-104



Five Piece Introductory Bit Set

Application: Fundamental bit set for novice woodworkers

- This four-piece set transforms to five pieces by using a bearing to convert the beading bit into a rounding over bit.
- Includes a flush trim, straight, Roman ogee and beading bit.
- All bits have 1/4" shanks.
- Includes attractive wooden storage box and extra bearing.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



42-104



04-108



38-100



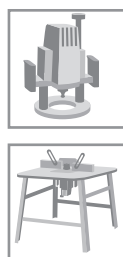
36-114



34-114*

Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Number of Flutes	Large Radius	Shank Dia.	Overall Length
Item Number 88-104								
Bearing Flush Trim Bit	42-104	1/2"	1/2"	1"	2	—	1/4"	2-13/16"
Double Flute Straight Bit	04-108	1/4"	—	1"	2	—	1/4"	2-1/2"
Roman Ogee Bit	38-100	1-1/16"	3/8"	1/2"	—	5/32"	1/4"	2-3/16"
Beading Bit	36-114	1-1/4"	3/8"	5/8"	—	3/8"	1/4"	2-3/16"
Rounding Over Bit*	34-114	1-1/4"	3/8"	5/8"	—	3/8"	1/4"	2-3/16"

* Use included bearing #62-104 to convert 36-114 Beading Bit into 34-114 Rounding Over Bit.

**New Shadow Box**

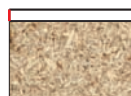
91-103



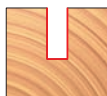
Five Piece Introductory Bit Set

Application: Fundamental bit set for novice woodworkers

- Freud's new Five Piece Introductory Set provides an economical yet very useful introduction to the wide world of possibilities offered by your 1/2" collet router.
- Includes a flush trim, straight, Roman ogee, and rounding over bit.
- All bits have 1/2" shanks.
- Set comes in Freud's unique shadow box case, this set hangs on the wall or mounts on the bench to keep bits handy and safe.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



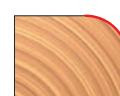
42-110



12-100



38-104



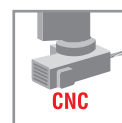
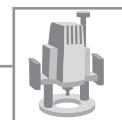
34-124



36-124*

Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Number of Flutes	Large Radius	Shank Dia.	Overall Length
Item Number 91-103								
Bearing Flush Trim Bit	42-110	1/2"	1/2"	1"	2	—	1/2"	3-1/4"
Double Flute Straight Bit	12-100	1/4"	—	3/4"	2	—	1/2"	2-3/8"
Roman Ogee Bit	38-104	1-1/16"	3/8"	1/2"	—	5/32"	1/2"	2-3/8"
Rounding Over Bit	34-124	1-1/4"	1/2"	5/8"	—	3/8"	1/2"	2-5/8"
*Beading Bit	36-124	1-1/4"	3/8"	5/8"	—	3/8"	1/2"	2-5/8"

* Use included bearing #62-104 to convert 34-124 Beading Bit into 36-124 Rounding Over Bit.



Nine Piece Basic Bit Set

Application: Ideal starter set for the beginning woodworker

- Includes a variety of bits that allow you to experience several router functions.
- Set comes in Freud's unique shadow box case that can hang on the wall or mount on the bench to keep bits handy and safe.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



91-108

# 04-104, # 04-124,
12-116, # 12-108

16-100, # 16-110



22-104, # 22-112



32-100, # 32-102



34-110, # 34-120



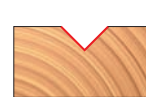
38-100, # 38-106



42-104, # 42-109



70-100



20-108

Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Number of Flutes	Angle	Large Radius	Shank Dia.	Overall Length
Item Number 88-100 (9 pc. 1/4" Shank Set)									
Double Flute Straight Bit*	04-104	1/4"	—	1/2"	—	—	—	1/4"	2"
Double Flute Straight Bit	04-124	3/8"	—	1"	—	—	—	1/4"	2-1/2"
Mortising Bit	16-100	1/2"	—	1/2"	—	—	—	1/4"	2"
Dovetail Bit	22-104	1/2"	—	1/2"	—	14°	—	1/4"	1-7/8"
Rabbeting Bit	32-100	1-1/4"	1/2"	1/2"	—	—	—	1/4"	2"
Rounding Over Bit	34-110	1"	1/2"	1/2"	—	—	1/4"	1/4"	2-3/16"
Roman Ogee Bit	38-100	1-1/16"	3/8"	1/2"	—	—	5/32"	1/4"	2-3/16"
Bearing Flush Trim Bit	42-102	3/8"	3/8"	1/2"	2	—	—	1/4"	2-5/16"
Panel Pilot Bit*	70-100	1/4"	—	1/4"	1	—	—	1/4"	1-5/8"
Item Number 91-108 (9 pc. 1/2" Shank Set)									
Double Flute Straight Bit	12-116	1/2"	—	1"	—	—	—	1/2"	2-5/8"
Double Flute Straight Bit	12-108	3/8"	—	1"	—	—	—	1/2"	2-5/8"
Mortising Bit	16-110	1/2"	—	1/2"	—	—	—	1/2"	2-3/8"
Dovetail Bit	22-112	1/2"	—	1/2"	—	14°	—	1/2"	2-1/4"
Rabbeting Bit	32-102	1-1/4"	1/2"	1/2"	—	—	—	1/2"	2-1/4"
Rounding Over Bit	34-120	1"	1/2"	1/2"	—	—	1/4"	1/2"	2-1/2"
Roman Ogee Bit	38-106	1-3/8"	3/8"	1/2"	—	—	5/32"	1/2"	2-3/8"
Bearing Flush Trim Bit	42-109	1/2"	1/2"	1/2"	2	—	—	1/2"	2-7/8"
"V" Grooving Bit	20-108	3/4"	—	1/2"	—	90°	—	1/2"	2-1/4"

* Solid Carbide



90-150

# 75-101, # 75-102
75-104, # 75-106
75-108

Five Piece Up Spiral Bit Set

Application: Quickly create grooves, mortises, and dadoes with chip removal

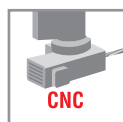
- Use the Up Spiral Bit Set for mortises, dado cuts, and deep blind holes where chips must be pulled out of the cut, and where speed of cut is the primary consideration.
- Set comes in Freud's unique shadow box case that can hang on the wall or mount on the bench to keep bits handy and safe.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Bit Type	Item Number	Overall Dia.	Carbide Height	Shank Dia.	Overall Length
Item Number 90-150					
Up Spiral Bit*	75-101	3/16"	3/4"	1/4"	2"
Up Spiral Bit*	75-102	1/4"	1"	1/4"	2-1/2"
Up Spiral Bit*	75-104	5/16"	1"	1/2"	3"
Up Spiral Bit*	75-106	3/8"	1-1/4"	1/2"	3"
Up Spiral Bit*	75-108	1/2"	1-1/4"	1/2"	3"

* Solid Carbide

Red Item Numbers Indicate 1/2" Shank

See individual bit for scale profile

**New Shadow Box**

90-160

# 76-101, # 76-102
76-104, # 76-106
76-108**NEW**

5 Piece Down Spiral Bit Set

Application: Create chip-free top surface mortises and dadoes

- The Down Spiral Bit Set is the ideal choice for grooves and dadoes in delicate materials, or any application where chip removal is not a concern.
- Set comes in Freud's unique shadow box case that can hang on the wall or mount on the bench to keep bits handy and safe.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on CNC and other automatic routers as well as hand-held and table-mounted portable routers.

Bit Type	Item Number	Overall Dia.	Carbide Height	Shank Dia.	Overall Length
Item Number 90-160					
Down Spiral Bit*	76-101	3/16"	3/4"	1/4"	2"
Down Spiral Bit*	76-102	1/4"	1"	1/4"	2-1/2"
Down Spiral Bit*	76-104	5/16"	1"	1/2"	2-1/2"
Down Spiral Bit*	76-106	3/8"	1-1/4"	1/2"	3"
Down Spiral Bit*	76-108	1/2"	1-1/4"	1/2"	3"

* Solid Carbide

**New Shadow Box**

89-650

# 16-103, # 16-069
16-098, # 04-111
16-094, # 16-107
16-109, # 16-116**NEW**

Four Piece Undersized Plywood Bit Set

Application: Creates perfectly fitted grooves and dadoes

- Designed to cut today's undersized plywood; ideal for 1/4" to 3/4" plywood.
- Set comes in Freud's unique shadow box case that can hang on the wall or mount on the bench to keep bits handy and safe.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

Bit Type	Item Number	Overall Dia.	Carbide Height	Shank Dia.	Overall Length
Item Number 90-106 (4 pc. 1/4" Shank Set)					
Double Flute Straight Bit*	04-111	7/32"	3/4"	1/4"	2"
Mortising Bit	16-103	23/32"	1/2"	1/4"	1-3/4"
Mortising Bit	16-096	11/32"	1/2"	1/4"	2"
Mortising Bit	16-098	15/32"	1/2"	1/4"	2"
Item Number 89-650 (4 pc. 1/2" Shank Set)					
Down Shear Mortising Bit	16-094	7/32"	1/2"	1/2"	2-1/4"
Down Shear Mortising Bit	16-107	11/32"	1/2"	1/2"	2-1/4"
Down Shear Mortising Bit	16-109	15/32"	1/2"	1/2"	2-1/4"
Mortising Bit	16-116	23/32"	3/8"	1/2"	2-1/8"

* Solid Carbide

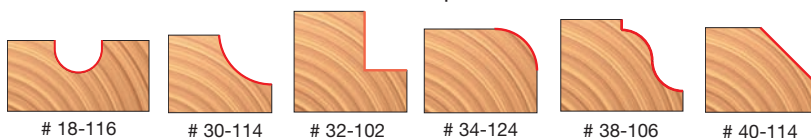
**New Shadow Box**

91-104

Six Piece Starter Bit Set

Application: Includes a variety of profiles ideal for the beginning woodworker

- Enables a novice woodworker to be very creative with a minimum investment.
- Set comes in Freud's unique shadow box case that can hang on the wall or mount on the bench to keep bits handy and safe.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Number of Flutes	Large Radius	Shank Dia.	Overall Length
Item Number 91-104 (6 pc. 1/2" Shank Set)								
Round Nose Bit	18-116	1/2"	—	1-1/8"	—	1/4"	1/2"	2-13/16"
Cove Bit	30-114	1-1/2"	1/2"	5/8"	—	1/2"	1/2"	2-1/2"
Rabbeting Bit	32-102	1-1/4"	1/2"	1/2"	—	—	1/2"	2-1/4"
Rounding Over Bit	34-124	1-1/4"	1-1/2"	5/8"	—	3/8"	1/2"	2-5/8"
Roman Ogee Bit	38-106	1-3/8"	3/8"	23/32"	—	1/4"	1/2"	2-9/16"
Chamfer Bit	40-114	1-3/4"	1/2"	5/8"	45°	—	1/2"	2-9/16"

See individual bit for scale profile

Red Item Numbers Indicate 1/2" Shank





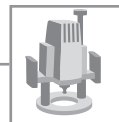
#90-100



15 Piece Advanced Bit Set

Application: Offers a variety of useful bits, from "V" grooving and flush trimming to chamfering and dovetailing

- All bits have 1/4" shanks.
- Set comes in Freud's unique shadow box case that can hang on the wall or mount on the bench to keep bits handy and safe.
- Cuts all composition materials, plywood, hardwood, and softwood.
- Use on hand-held and table-mounted portable routers.



04-106
04-140



16-100



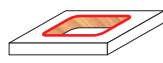
18-104



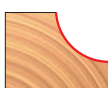
20-104



22-104



26-100



30-106



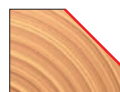
32-100



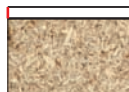
34-114



38-100



40-106



42-104, # 64-100

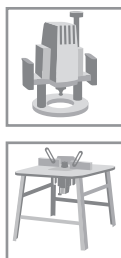


66-100

Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Number of Flutes	Angle	Large Radius	Shank Dia.	Overall Length
Item Number 90-100									
Double Flute Straight Bit*	04-106	1/4"	—	3/4"	—	—	—	1/4"	2-1/4"
Double Flute Straight Bit	04-140	3/4"	—	3/4"	—	—	—	1/4"	2-1/8"
Mortising Bit	16-100	1/2"	—	1/2"	—	—	—	1/4"	2"
Round Nose Bit*	18-104	1/4"	—	3/8"	—	—	1/8"	1/4"	2"
"V" Grooving Bit	20-104	1/2"	—	7/16"	—	90°	—	1/4"	1-3/4"
Dovetail Bit	22-104	1/2"	—	1/2"	—	14°	—	1/4"	1-7/8"
Panel Pilot Bit	26-100	1/4"	—	3/4"	1	—	—	1/4"	2-1/4"
Cove Bit	30-106	1-3/8"	3/8"	5/8"	—	—	1/2"	1/4"	2-3/16"
Rabbeting Bit	32-100	1-1/4"	1/2"	1/2"	—	—	—	1/4"	2"
Rounding Over Bit	34-114	1-1/4"	1/2"	5/8"	—	—	3/8"	1/4"	2-3/16"
Roman Ogee Bit	38-100	1-1/16"	3/8"	1/2"	—	—	5/32"	1/4"	2-3/16"
Chamfer Bit	40-106	1-3/4"	1/2"	5/8"	—	45°	—	1/4"	2-3/16"
Bearing Flush Trim Bit	42-106	1/2"	1/2"	1/2"	2	—	—	1/4"	2-1/8"
Flush Trim Bit*	64-100	1/4"	—	3/8"	—	—	—	1/4"	1-1/2"
Bevel Trim Bit*	66-100	1/4"	3/16"	1/4"	—	7°	—	1/4"	1-1/2"

* Solid Carbide



New
Shadow
Box

#92-100

26 Piece Artisan Bit Set

Application: The best set for the professional and serious woodworker

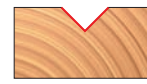
- Offers the craftsman a wide range of bits, including: "V" grooving, rounding over, Roman ogee, flush trim, chamfer and many other popular profiles.
- All bits have 1/4" shanks.
- Set comes in Freud's unique shadow box case that can hang on the wall or mount on the bench to keep bits handy and safe.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.

# 04-104, # 04-106
04-108, # 04-140

16-100



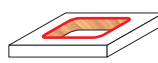
18-104, # 18-106



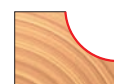
20-100, # 20-104



22-104



26-100



30-102, # 30-106



32-100



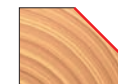
30-110, # 34-114



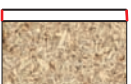
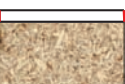
36-110, # 36-114



38-100, # 38-102



40-106

# 42-100, # 42-104
42-106, # 64-100

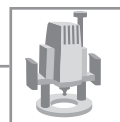
66-100

Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Number of Flutes	Angle	Large Radius	Shank Dia.	Overall Length
Item Number 92-100									
Double Flute Straight Bit*	04-100	1/8"	—	3/8"	—	—	—	1/4"	1-3/4"
Double Flute Straight Bit*	04-106	1/4"	—	3/4"	—	—	—	1/4"	2-1/4"
Double Flute Straight Bit*	04-108	1/4"	—	1"	—	—	—	1/4"	2-1/2"
Double Flute Straight Bit	04-140	3/4"	—	3/4"	—	—	—	1/4"	2-1/8"
Mortising Bit	16-100	1/2"	—	1/2"	—	—	—	1/4"	2"
Round Nose Bit*	18-104	1/4"	—	3/8"	—	—	1/8"	1/4"	2"
Round Nose Bit	18-106	3/8"	—	3/8"	—	—	3/16"	1/4"	1-13/16"
"V" Grooving Bit*	20-100	1/4"	—	1/4"	—	90°	—	1/4"	1-1/2"
"V" Grooving Bit	20-104	1/2"	—	7/16"	—	90°	—	1/4"	1-3/4"
Dovetail Bit	22-104	1/2"	—	1/2"	—	14°	—	1/4"	1-7/8"
Panel Pilot Bit*	26-100	1/4"	—	3/4"	1	—	—	1/4"	2-1/4"
Cove Bit	30-102	7/8"	3/8"	1/2"	—	—	1/4"	1/4"	2-3/16"
Cove Bit	30-106	1-1/2"	1/2"	5/8"	—	—	1/2"	1/4"	2-3/16"
Rabbeting Bit	32-100	1-1/4"	1/2"	1/2"	—	—	—	1/4"	2"
Rounding Over Bit	34-110	1"	1/2"	1/2"	—	—	1/4"	1/4"	2-3/16"
Rounding Over Bit	34-114	1-1/4"	1/2"	1/4"	—	—	3/8"	1/4"	2-3/16"
Beading Bit	36-110	1"	3/8"	1/2"	—	—	1/4"	1/4"	2-3/16"
Beading Bit	36-114	1-1/4"	3/8"	5/8"	—	—	3/8"	1/4"	2-3/16"
Roman Ogee Bit	38-100	1-1/16"	3/8"	1/2"	—	—	5/32"	1/4"	2-3/16"
Roman Ogee Bit	38-102	1-3/8"	3/8"	23/32"	—	—	1/4"	1/4"	2-3/8"
Chamfer Bit	40-106	1-3/4"	1/2"	1/4"	—	45°	—	1/4"	2-3/16"
Bearing Flush Trim Bit	42-100	3/8"	3/8"	1"	2	—	—	1/4"	2-13/16"
Bearing Flush Trim Bit	42-104	1/2"	1/2"	1"	2	—	—	1/4"	2-13/16"
Bearing Flush Trim Bit	42-106	1/2"	1/2"	1/2"	2	—	—	1/4"	2-1/8"
Flush Trim Bit*	64-100	1/4"	—	3/8"	—	—	—	1/4"	1-1/2"
Bevel Trim Bit*	66-100	1/4"	3/16"	1/4"	—	7°	—	1/4"	1-1/2"

* Solid Carbide

See individual bit for scale profile

Red Item Numbers Indicate 1/2" Shank



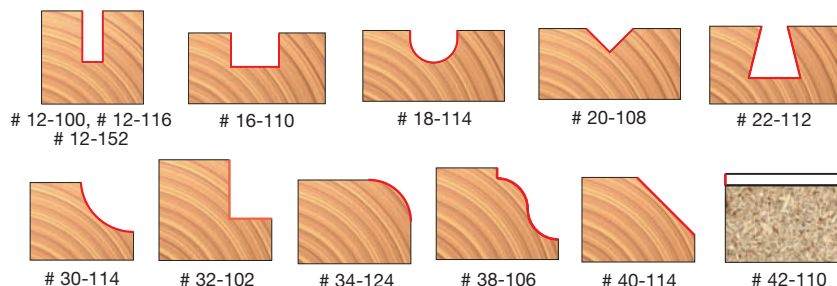
13 Piece Super Bit Set

Application: Offers a mix of woodworkers' favorite bits, including "V" grooving, flush trimming, chamfering and dovetailing

- All bits have 1/2" shanks.
- Set comes in Freud's unique shadow box case that can hang on the wall or mount on the bench to keep bits handy and safe.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



91-100



Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Number of Flutes	Angle	Large Radius	Shank Dia.	Overall Length
Item Number 91-100									
Double Flute Straight Bit	12-100	1/4"	—	3/4"	—	—	—	1/2"	2-3/8"
Double Flute Straight Bit	12-116	1/2"	—	1"	—	—	—	1/2"	2-5/8"
Double Flute Straight Bit	12-152	3/4"	—	1"	—	—	—	1/2"	2-1/2"
Mortising Bit	16-110	1/2"	—	1/2"	—	—	—	1/2"	2-3/8"
Round Nose Bit	18-114	1/4"	—	3/8"	—	—	1/8"	1/2"	2-1/4"
"V" Grooving Bit	20-108	3/4"	—	1/2"	—	90°	—	1/2"	2-1/4"
Dovetail Bit	22-112	1/2"	—	1/2"	—	14°	—	1/2"	2-1/4"
Cove Bit	30-114	1-1/2"	1/2"	5/8"	—	—	1/2"	1/2"	2-1/2"
Rabbeting Bit	32-102	1-1/4"	1/2"	1/2"	—	—	—	1/2"	2-1/4"
Rounding Over Bit	34-124	1-1/4"	1/2"	5/8"	—	—	3/8"	1/2"	2-5/8"
Roman Ogee Bit	38-106	1-3/8"	3/8"	23/32"	—	—	1/4"	1/2"	2-9/16"
Chamfer Bit	40-114	1-3/4"	1/2"	5/8"	—	45°	—	1/2"	2-9/16"
Bearing Flush Trim Bit	42-110	1/2"	1/2"	1"	2	—	—	1/2"	3-1/4"

Three Piece Vertical Raised Panel Sets

Application: Combines our most popular rail and stile bit sets with a vertical ogee raised panel bit

- All bits have 1/2" shanks and are designed to be used on 3/4" stock.
- Includes attractive wooden storage box.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable router with 1/2" shank.



97-604



99-260



99-261



99-320

Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Number of Flutes	Angle	Large Radius	Shank Dia.	Overall Length
Item Number 97-504									
Rail & Stile Bit Set	99-260	1-11/16"	15/16"	11/16"	15/64"	7/32"	—	1/2"	3"
Vertical Raised Panel Bit	99-320	1-1/2"	—	1-5/8"	—	25/32"	5/32"	1/2"	3-3/16"
Item Number 97-604									
Rail & Stile Bit Set	99-261	1-11/16"	1-19/32"	23/32"	15/64"	13/64"	—	1/2"	3"
Vertical Raised Panel Bit	99-320	1-1/2"	—	1-5/8"	—	25/32"	5/32"	1/2"	3-3/16"





97-204



Three Piece Cabinet Bit Set

Application: Combines our most popular rail and stile bit sets with one of our exclusive 2+2 Raised Panel Bits

- All bits have 1/2" shanks and are designed to be used on 3/4" stock.
- Includes attractive wooden storage box.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers with 1/2" shank.



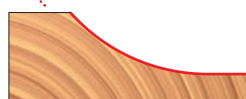
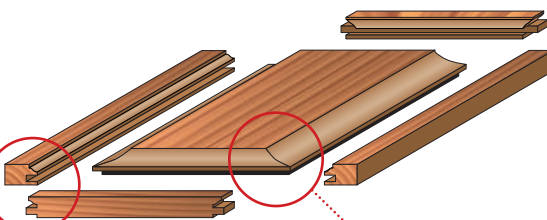
99-261, # 99-266 (Mini-Profile)



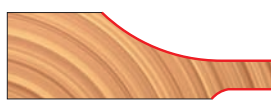
99-260



99-566



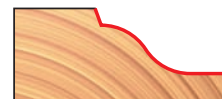
99-518



99-569



99-571



99-513



99-515



99-520



99-500

Bit Type	Item Number	Overall Dia.	Small Dia.	Carbide Height	Minor Height	Large Radius	Small Radius	Shank Dia.	Overall Length
Item Number 97-100									
Rail & Stile Bit Set	99-260	1-11/16"	1-5/16"	11/16"	15/64"	7/32"	—	1/2"	3"
2 + 2 Raised Panel Bit	99-515	3-1/2"	1-1/4"	5/8"	5/32"	—	—	1/2"	2-1/2"
Item Number 97-102									
Rail & Stile Bit Set	99-260	1-11/16"	1-5/16"	11/16"	15/64"	7/32"	—	1/2"	3"
2 + 2 Raised Panel Bit	99-518	3-1/2"	—	5/8"	5/64"	1-1/2"	—	1/2"	2-1/2"
Item Number 97-104									
Rail & Stile Bit Set	99-260	1-11/16"	1-5/16"	11/16"	15/64"	7/32"	—	1/2"	3"
2 + 2 Raised Panel Bit	99-520	3-1/2"	—	5/8"	7/32"	25/32"	5/32"	1/2"	2-1/2"
Item Number 97-200									
Rail & Stile Bit Set	99-261	1-11/16"	1-19/32"	23/32"	15/64"	13/64"	—	1/2"	3"
2 + 2 Raised Panel Bit	99-515	3-1/2"	1-1/4"	5/8"	5/32"	—	—	1/2"	2-1/2"
Item Number 97-202									
Rail & Stile Bit Set	99-261	1-11/16"	1-19/32"	23/32"	15/64"	13/64"	—	1/2"	3"
2 + 2 Raised Panel Bit	99-518	3-1/2"	—	5/8"	5/64"	1-1/2"	—	1/2"	2-1/2"
Item Number 97-204									
Rail & Stile Bit Set	99-261	1-11/16"	1-19/32"	23/32"	15/64"	13/64"	—	1/2"	3"
2 + 2 Raised Panel Bit	99-520	3-1/2"	—	5/8"	7/32"	25/32"	5/32"	1/2"	2-1/2"
Item Number 97-226									
Rail & Stile Bit Set	99-261	1-11/16"	1-19/32"	23/32"	15/64"	13/64"	—	1/2"	3"
2 + 2 Raised Panel Bit	99-513	2-3/4"	—	5/8"	15/64"	7/16"	—	1/2"	2-1/2"
Cabinet Sets with Backcutters									
Item Number 97-106 (Raised Panel Bit With Backcutters)									
Rail & Stile Bit Set	99-260	1-11/16"	1-5/16"	11/16"	15/64"	7/32"	—	1/2"	3"
2 + 2 Raised Panel Bit	99-566	3-1/2"	—	1"	5/32"	—	3/16"	1/2"	3"
Item Number 97-108 (Raised Panel Bit With Backcutters)									
Rail & Stile Bit Set	99-260	1-11/16"	1-5/16"	11/16"	15/64"	7/32"	—	1/2"	3"
2 + 2 Raised Panel Bit	99-569	3-1/2"	—	1"	5/32"	1-1/2"	3/16"	1/2"	3"
Item Number 97-208 (Raised Panel Bit With Backcutters)									
Rail & Stile Bit Set	99-261	1-11/16"	1-19/32"	23/32"	15/64"	13/64"	—	1/2"	3"
2 + 2 Raised Panel Bit	99-569	3-1/2"	—	1"	5/32"	1-1/2"	3/16"	1/2"	3"
Item Number 97-210 (Raised Panel Bit With Backcutters)									
Rail & Stile Bit Set	99-261	1-11/16"	1-19/32"	23/32"	15/64"	13/64"	—	1/2"	3"
2 + 2 Raised Panel Bit	99-571	3-1/2"	—	1"	—	1-3/16"	5/32"	1/2"	3"
Item Number 97-904 (Mini Raised Panel Bit With Backcutters)									
Rail & Stile Bit Set	99-266	1-9/32"	25/32"	13/16"	—	—	—	1/2"	2-11/16"
2 + 2 Raised Panel Bit	99-500	2-19/32"	—	7/8"	—	3/4"	7/64"	1/2"	2-51/64"

See individual bit for scale profile

Red Item Numbers Indicate 1/2" Shank



New Storage Box



94-100

Five Piece Cabinet Bit Set

Application: Produce your own cabinet doors at a fraction of the cost of shaper heads

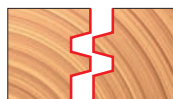
- All bits have 1/2" shanks and are designed to be used on 3/4" stock.
- Includes attractive wooden storage box.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers with 1/2" shank.



99-001



99-510



99-031



99-260

Bit Type	Item Number	Overall Dia.	Cut Depth	Small Dia.	Carbide Height	Minor Height	Large Radius	Small Radius	Angle	Shank Dia.	Overall Length
Item Number 94-100											
Door Lip Bit	99-001	2"	29/64"	—	1-1/4"	11/16"	3/8"	—	7°	1/2"	2-3/4"
2 + 2 Raised Panel Bit	99-510	2-3/4"	—	—	5/8"	7/32"	35/64"	1/8"	—	1/2"	2-1/2"
Reversible Glue Joint Bit	99-031	1-1/2"	—	1-3/16"	1-1/4"	23/64"	—	—	30°	1/2"	2-3/4"
Rail & Stile Bit Set	99-260	1-11/16"	—	1-5/16"	11/16"	15/64"	7/32"	—	—	1/2"	3"

Five Piece Cabinet & Molding Bit Set

Application: Create your own cabinet doors and more than 39 molding patterns

- All bits have 1/2" shanks and are designed to be used on 3/4" stock.
- Includes attractive wooden storage box.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on shank table-mounted portable router with 1/2" shank.

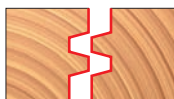


New Storage Box

95-100



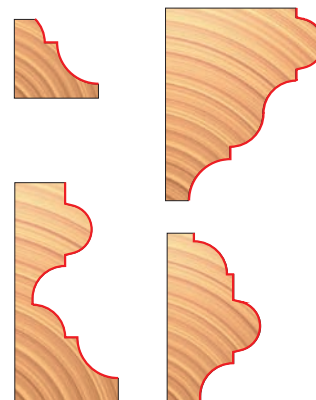
99-510



99-031

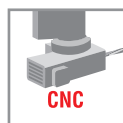


99-260



99-PK1

Bit Type	Item Number	Overall Dia.	Small Dia.	Carbide Height	Minor Height	Large Radius	Small Radius1	Small Radius2	Angle	Shank Dia.	Overall Length
Item Number 95-100											
Reversible Glue Joint Bit	99-031	1-1/2"	1-3/16"	1-1/4"	23/64"	—	—	—	30°	1/2"	2-3/4"
2 + 2 Raised Panel Bit	99-510	2-3/4"	—	5/8"	7/32"	35/64"	1/8"	—	—	1/2"	2-1/2"
Multi-Profile Bit	99-PK1	2-5/32"	—	1-59/64"	—	25/64"	5/16"	15/64"	—	1/2"	4"
Rail & Stile Bit Set	99-260	1-11/16"	1-5/16"	1-1/16"	15/64"	7/32"	—	—	—	1/2"	3"



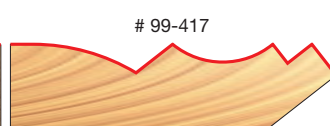
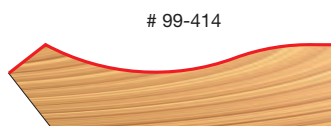
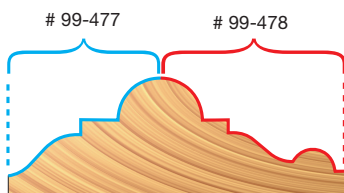
93-200

New Architectural Molding Set

Application: Add elegant detail to any room of the home with the most popular molding profiles. Includes bits to decorate the wall from top to bottom!

- Set of six 1/2" shank bits mill beautiful Crown, Casing, Chair Rail and Base Molding.
- Add beautiful, traditional molding to ceilings, doors, windows, built-ins and many other projects.
- Use with hardwoods or softwoods to mill stain grade molding. Also routs composition materials.
- Use only with 1/2" shank table-mounted, CNC or automatic routers.

Note: For best results make two or more passes.



99-466

99-480

Bit Type	Item Number	Overall Dia.	Carbide Height	Shank Dia.	Overall Length
NEW Item Number 93-200					
Base Cap #163	99-480	1-3/4"	1-1/2"	1/2"	3"
Casing #366	99-466	1-1/2"	1-13/16"	1/2"	3-9/32"
Crown Bit, upper profile #1	99-414	1-5/16"	3"	1/2"	4-7/16"
Crown Bit, lower profile #4	99-417	1-3/8"	3-1/16"	1/2"	4-9/16"
Chair Rail #300, upper bit	99-477	2-1/4"	1-1/2"	1/2"	3"
Chair Rail #300, lower bit	99-478	2-3/16"	1-13/16"	1/2"	3-5/16"



#98-300

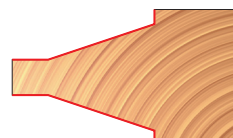
Three Piece Door Construction Set

Application: Create 1-3/4" thick exterior doors, 1-3/8" interior doors, sidelights or transoms in any style and any size

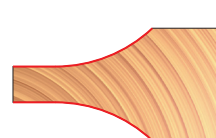
- Capable of producing tenons of any length—perfect for load bearing joints!
- Both bits include shims for fine-tuning the joint for a continued perfect fit.
- Perfect for milling fine hardwoods and softwoods, and also produces an excellent cut in other materials.
- Includes an instructional mini-DVD and an informative poster.
- Use on table-mounted portable routers.



#99-267



#99-515



#99-518



Bit Type	Item Number	Overall Dia.	Carbide Height	Shank Dia.	Overall Length
NEW Item Number 98-300					
Roundover	99-267	1-3/4"	1-1/2"	1/2"	3"
2+2 Raised Panel Bit	99-515	3-1/2"	5/8"	1/2"	2-1/2"
NEW Item Number 98-302					
Roundover	99-267	1-3/4"	1-1/2"	1/2"	3"
2+2 Raised Panel Bit	99-518	3-1/2"	5/8"	1/2"	2-1/2"

See individual bit for scale profile

Red Item Numbers Indicate 1/2" Shank

Advanced Cabinet Door Set



95-200

Application: Create cabinet doors and drawers at a fraction of the cost of shaper heads

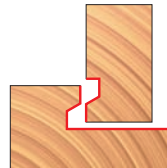
- Similar to Freud's 94-100 with a Drawer Lock Bit to produce a strong joint for cabinet drawers.
- All bits have 1/2" shanks and are designed to be used on 3/4" stock.
- Includes attractive wooden storage box.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable router with 1/2" shank.



99-031



99-510

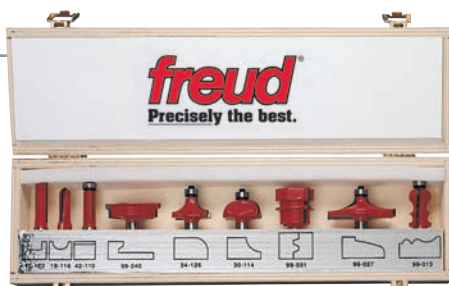


99-240



99-260

Bit Type	Item Number	Overall Dia.	Small Dia.	Carbide Height	Minor Height	Large Radius	Small Radius	Angle	Shank Dia.	Overall Length
Item Number 95-200										
Reversible Glue Joint Bit	99-031	1-1/2"	1-3/16"	1-1/4"	23/64"	—	—	30°	1/2"	2-3/4"
2 + 2 Raised Panel Bit	99-510	2-3/4"	—	5/8"	7/32"	35/64"	1/8"	—	1/2"	2-1/2"
Drawer Lock Bit	99-240	2"	1-3/4"	33/64"	5/32"	—	—	30°	1/2"	2"
Rail & Stile Bit Set	99-260	1-11/16"	1-5/16"	11/16"	15/64"	7/32"	—	—	1/2"	3"

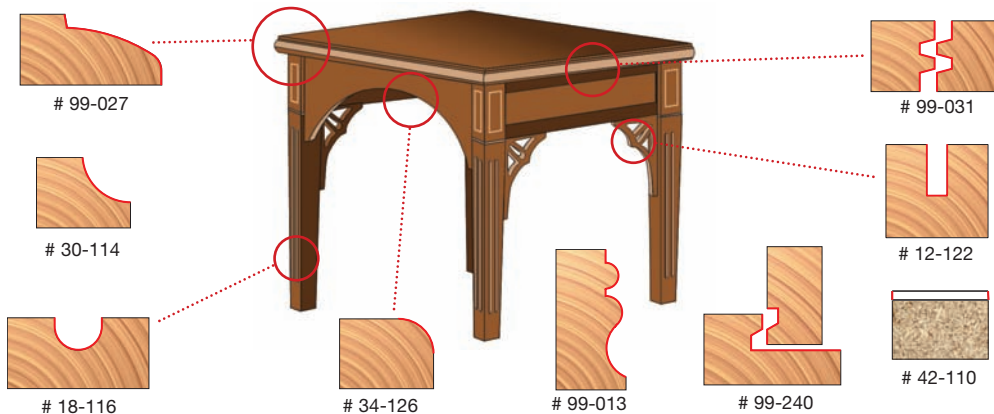
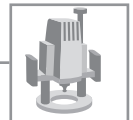


93-100

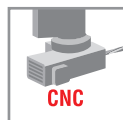
Nine Piece Table Making Set

Application: Includes a variety of bits ideal for creating tables: Fluting, flush trimming, chamfering, and others

- All bits have 1/2" shanks.
- Includes attractive wooden storage box.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Bit Type	Item Number	Overall Dia.	Bearing Dia.	Small Dia.	Carbide Height	Minor Height	Large Radius	Small Radius	Angle	Shank Dia.	Overall Length
Item Number 93-100											
Bearing Flush Trim Bit	42-110	1/2"	1/2"	—	1"	—	—	—	—	1/2"	3-1/4"
Round Nose Bit	18-116	1/2"	—	—	1-1/8"	—	1/4"	—	—	1/2"	2-13/16"
Drawer Lock Bit	99-240	2"	—	1-3/4"	33/64"	5/32"	—	—	30°	1/2"	2"
Reversible Glue Joint Bit	99-031	1-1/2"	—	1-3/16"	1-1/4"	23/64"	—	—	30°	1/2"	2-3/4"
Rounding Over Bit	34-126	1-1/2"	1/2"	—	3/4"	—	1/2"	—	—	1/2"	2-3/4"
Face Molding Bit	99-013	15/16"	1/2"	—	1-3/8"	5/32"	21/64"	9/64"	—	1/2"	3-1/4"
Table Edge Bit	99-027	2-19/32"	1/2"	—	23/32"	—	1-25/32"	13/64"	—	1/2"	2-5/8"
Double Flute Straight Bit	12-122	1/2"	—	—	1-1/2"	—	—	—	—	1/2"	3-1/8"
Cove Bit	30-114	1-1/2"	1/2"	—	5/8"	—	1/2"	—	—	1/2"	2-1/2"



#96-100

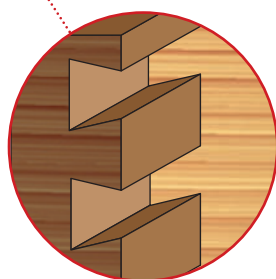
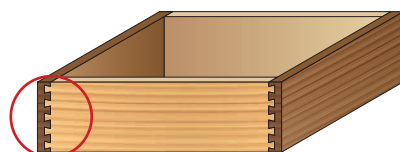
Eight Piece Bit Sets for Incra Jig®

Application: Create dovetail and box joints by combining these bits with your table-mounted router equipped with an Incra Jig®

- Follow the directions in the Incra Jig® manual and use the correct bit number for the joint you want to create.
- Both sets produce identical profiles.
- Includes attractive wooden storage box.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on table-mounted portable routers equipped with Incra Jig®.
- Can also be used with other joint making jigs or fence systems and CNC automatic routers.

Double Flute
Straight Bit Profile

Dovetail Bit Profile



Bit Type	Item Number	Overall Dia.	Carbide Height	Angle	Shank Dia.	Overall Length
Item Number 96-100						
Double Flute Straight Bit*	04-106	1/4"	3/4"	—	1/4"	2-1/4"
Double Flute Straight Bit	04-124	3/8"	1"	—	1/4"	2-1/2"
Dovetail Bit	22-100	1/4"	5/16"	7-1/2°	1/4"	2"
Dovetail Bit	22-101	5/16"	3/8"	9°	1/4"	1-7/8"
Dovetail Bit	22-102	3/8"	3/8"	9°	1/4"	1-7/8"
Dovetail Bit	22-104	1/2"	1/2"	14°	1/4"	1-7/8"
Dovetail Bit	22-105	3/8"	7/8"	7°	1/4"	2-1/8"
Dovetail Bit	22-106	3/4"	7/8"	7°	1/4"	2-1/8"
Item Number 96-102						
Double Flute Straight Bit	12-100	1/4"	3/4"	—	1/2"	2-3/8"
Double Flute Straight Bit	12-108	3/8"	1"	—	1/2"	2-5/8"
Dovetail Bit	22-107	1/4"	5/16"	7-1/2°	1/2"	2-5/8"
Dovetail Bit	22-108	5/16"	3/8"	9°	1/2"	2-1/8"
Dovetail Bit	22-110	3/8"	3/8"	9°	1/2"	2-1/4"
Dovetail Bit	22-112	1/2"	1/2"	14°	1/2"	2-1/4"
Dovetail Bit	22-113	5/8"	7/8"	7°	1/2"	2-5/8"
Dovetail Bit	22-114	3/4"	7/8"	7°	1/2"	2-5/8"

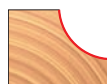
* Solid Carbide

Incra Jig® is a registered Trademark of Taylor Design Group

Three Piece Cove Bit Sets

Application: Produces classical decorative edge on furniture and moldings

- Includes 1/4", 3/8" and 1/2" radius cove bits and an attractive wooden storage box.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Cove Bit Profile



89-500

Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Large Radius	Shank Dia.	Overall Length
Item Number 89-500							
Cove Bit	30-102	7/8"	3/8"	1/2"	1/4"	1/4"	2-3/16"
Cove Bit	30-104	1-1/4"	1/2"	1/2"	3/8"	1/4"	2-3/16"
Cove Bit	30-106	1-1/2"	1/2"	5/8"	1/2"	1/4"	2-3/16"
Item Number 89-550							
Cove Bit	30-110	1"	1/2"	1/2"	1/4"	1/2"	2-1/2"
Cove Bit	30-112	1-1/4"	1/2"	1/2"	3/8"	1/2"	2-1/2"
Cove Bit	30-114	1-1/2"	1/2"	5/8"	1/2"	1/2"	2-1/2"

See individual bit for scale profile

Red Item Numbers Indicate 1/2" Shank

Three Piece Round Over/Beading Bit Sets



89-150

Application: Rounding over bits soften the edges of fine furniture, while beading bits produce a simple, decorative edge on furniture and moldings

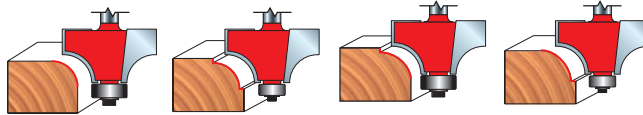
- Includes three rounding over bits and a 3/8" bearing which will convert all three bits into beading bits for the ultimate in value.
- Rounding over bits soften the edges of fine furniture.
- Beading bits produce a simple, decorative edge on furniture & moldings
- Set comes in Freud's unique shadow box case that can hang on the wall or mount on the bench to keep bits handy and safe.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Round Over Profile



Bead Profile



Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Large Radius	Shank Dia.	Overall Length
Item Number 89-100							
Rounding Over Bit	34-108	7/8"	1/2"	1/2"	3/16"	1/4"	2-3/16"
Rounding Over Bit	34-114	1-1/4"	1/2"	5/8"	3/8"	1/4"	2-3/16"
Rounding Over Bit	34-116	1-1/2"	1/2"	3/4"	1/2"	1/4"	2-1/2"
Item Number 89-150							
Rounding Over Bit	34-120	1"	1/2"	1/2"	1/4"	1/2"	2-1/2"
Rounding Over Bit	34-124	1-1/4"	1/2"	5/8"	3/8"	1/2"	2-5/8"
Rounding Over Bit	34-126	1-1/2"	1/2"	3/4"	1/2"	1/2"	2-3/4"

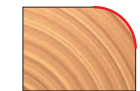
Five Piece Round Over/Beading Bit Sets



89-152

Application: Similar to the Three Piece Sets, these sets offer additional profiles for a wider range of applications

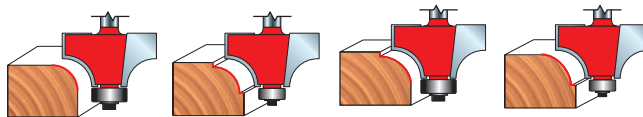
- Includes five rounding over bits and a 3/8" bearing which will convert all five bits into beading bits for the ultimate in value.
- Rounding over bits soften the edges of fine furniture.
- Beading bits produce a simple, decorative edge on furniture & moldings.
- Set comes in Freud's unique shadow box case that can hang on the wall or mount on the bench to keep bits handy and safe.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



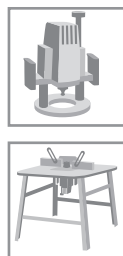
Round Over Profile



Bead Profile



Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Large Radius	Shank Dia.	Overall Length
Item Number 89-102							
Rounding Over Bit	34-104	3/4"	1/2"	1/2"	1/8"	1/4"	2-3/16"
Rounding Over Bit	34-108	7/8"	1/2"	1/2"	3/16"	1/4"	2-3/16"
Rounding Over Bit	34-110	1"	1/2"	1/2"	1/4"	1/4"	2-3/16"
Rounding Over Bit	34-114	1-1/4"	1/2"	5/8"	3/8"	1/4"	2-3/16"
Rounding Over Bit	34-116	1-1/2"	1/2"	3/4"	1/2"	1/4"	2-1/2"
Item Number 89-152							
Rounding Over Bit	34-118	3/4"	1/2"	1/2"	1/8"	1/2"	2-1/2"
Rounding Over Bit	34-120	1"	1/2"	1/2"	1/4"	1/2"	2-1/2"
Rounding Over Bit	34-124	1-1/4"	1/2"	5/8"	3/8"	1/2"	2-5/8"
Rounding Over Bit	34-126	1-1/2"	1/2"	3/4"	1/2"	1/2"	2-3/4"
Rounding Over Bit	34-128	2"	1/2"	1"	3/4"	1/2"	2-7/8"



Six Piece Slot Cutter Sets

Application: Produce precision slots for T molding, spline joints, and several other applications

- Includes four three-wing slot cutters (1/16", 1/8", 5/32", and 1/4" kerf), a ball bearing (62-108) to provide a 9/16" depth of cut, an arbor and an attractive wooden storage box.
- Slotting cutters produce precision slots for T-molding, spline joints, and many other applications.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- 56-109 can be used for biscuit joining.



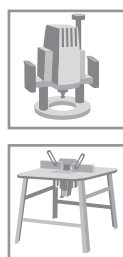
Slot Cutter's Profile

Bit Type	Item Number	Overall Dia.	Bore Dia.	Carbide Height	Shank Dia.
Item Number 89-300					
Three Wing Slot Cutter	56-100	2"	5/16"	1/16"	—
Three Wing Slot Cutter	56-108	2"	5/16"	1/8"	—
Three Wing Slot Cutter	56-109	2"	5/16"	5/32"	—
Three Wing Slot Cutter	56-112	2"	5/16"	1/4"	—
Ball Bearing	62-108	22mm (7/8")	8mm (5/16")	—	—
1/4" Arbor	60-100	—	—	—	1/4"
Item Number 89-350					
Three Wing Slot Cutter	56-100	2"	5/16"	1/16"	—
Three Wing Slot Cutter	56-108	2"	5/16"	1/8"	—
Three Wing Slot Cutter	56-109	2"	5/16"	5/32"	—
Three Wing Slot Cutter	56-112	2"	5/16"	1/4"	—
Ball Bearing	62-108	22mm (7/8")	8mm (5/16")	—	—
1/2" Arbor	60-102	—	—	—	1/2"

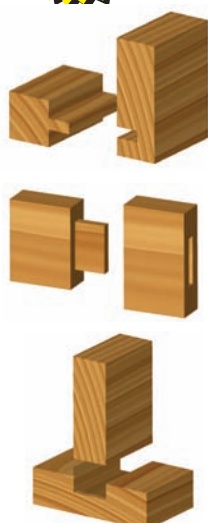
Six Piece Straight Bit Set

Application: Allows you to make grooves, dadoes, and rabbets

- Sizes range from 1/4" diameter to 1" diameter in 1/8" increments.
- All bits have 1/2" shanks.
- Includes attractive wooden storage box.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



91-102



Double Flute
Straight Bit Profile

Bit Type	Item Number	Overall Dia.	Carbide Height	Shank Dia.	Overall Length
Item Number 91-102					
Double Flute Straight Bit	12-100	1/4"	3/4"	1/2"	2-3/8"
Double Flute Straight Bit	12-106	5/16"	1"	1/2"	2-3/4"
Double Flute Straight Bit	12-116	1/2"	1"	1/2"	2-5/8"
Double Flute Straight Bit	12-136	5/8"	1"	1/2"	2-1/2"
Double Flute Straight Bit	12-152	3/4"	1"	1/2"	2-1/2"
Double Flute Straight Bit	12-172	1"	1-1/4"	1/2"	3"

See individual bit for scale profile

Red Item Numbers Indicate 1/2" Shank

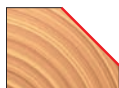
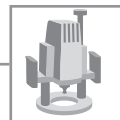


89-250

Three Piece Chamfer Bit Set

Application: Chamfer bits maintain crisp, geometric lines while forming a uniform bevel on the edge of the work piece

- Includes 22-1/2°, 30° and 45° chamfer bits and an attractive wooden storage box.
- All bits have 1/2" shanks.
- Adjust chamfer size by changing the height of the bit.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Chamfer Bit Profile



Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Angle	Shank Dia.	Overall Length
Item Number 89-250							
Chamfer Bit	40-101	1-1/4"	1/2"	7/8"	22-1/2°	1/2"	2-5/8"
Chamfer Bit	40-114	1-3/4"	1/2"	1/2"	45°	1/2"	2-9/16"
Chamfer Bit	40-206	1-11/32"	1/2"	3/4"	30°	1/2"	2-3/4"

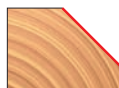
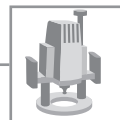


89-200

Four Piece Chamfer Bit Set

Application: Create a uniform bevel on the edge of a work piece to add character while keeping crisp, geometric lines

- Includes 15°, 25°, 30° and 45° chamfer bits and an attractive wooden storage box.
- All bits have 1/4" shanks.
- Adjust chamfer size by changing the height of the bit.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Chamfer Bit Profile



Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Angle	Shank Dia.	Overall Length
Item Number 89-200							
Chamfer Bit	40-100	23/32"	1/2"	1/2"	15°	1/4"	2-3/16"
Chamfer Bit	40-102	15/16"	1/2"	1/2"	25°	1/4"	2-3/16"
Chamfer Bit	40-106	1-3/4"	1/2"	5/8"	45°	1/4"	2-3/16"
Chamfer Bit	40-202	1-11/32"	1/2"	3/4"	30°	1/4"	2-1/4"

Red Item Numbers Indicate 1/2" Shank

See individual bit for scale profile



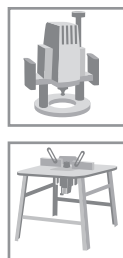
Router Bit Sets



235

ROUTER BITS & SETS

freud®



AVANTI freud®



NEW

A90200



With The CD Learn How To:

- Create Sliding Dovetails
- Cut Dadoes
- Joint Straight Edges
- Create Decorative Edge Treatments Freehand
- Chamfer Perfectly
- Accurate Beveled Angles
- And Much More...

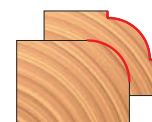
Four Piece Introductory Bit Set

Application: Fundamental bit set for novice woodworkers

- Freud's new Four Piece Introductory Set provides an economical yet very useful introduction to the wide world of possibilities offered by your 1/2" collet router.
- Includes a variety of bits that allow you to experience several router functions.
- All bits have 1/2" shanks.
- Set comes in Freud's unique shadow box case that can hang on the wall or mount on the bench to keep bits handy and safe.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Rabbeting Bit Profile



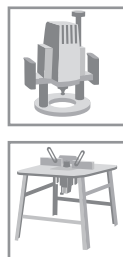
Rounding Over & Beading Bit Profile



Mortising Bit Profile

Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Large Radius	Shank Dia.	Overall Length
NEW Item Number A90200							
Rabbeting Bit	A32100	1-1/4"	1/2"	1/2"	—	1/4"	2"
Rounding Over/Beading Bit	A34110	1"	1/2"	1/2"	1/4"	1/4"	2-3/16"
Mortising Bit	A50102	1/2"	1/2"	1-1/4"	—	1/4"	2-5/8"

* Use included bearing to convert the Rounding Over Bit into a Beading Bit.



AVANTI freud®



NEW

A91210



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- Cut Dadoes
- Joint Straight Edges
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- Chamfer Perfectly
- Accurate Beveled Angles
- And Much More...

Five Piece Introductory Bit Set

Application: Fundamental bit set for novice woodworkers

- These two new Avanti Five Piece Sets include carbide tipped round nose, rabbeting, rounding over, Roman ogee, and 45 degrees chamfer bits in your choice of 1/4" or 1/2" shanks.
- Sets include an instructional video CD on Routing Tips & Techniques.
- All sets come in Freud's unique shadow box case that can hang on the wall or mount on the bench to keep bits handy and safe.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



Round Nose Profile



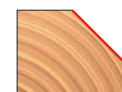
Rabbeting Bit Profile



Rounding Over Bit Profile



Roman Ogee Profile



Chamfer Bit Profile

Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Angle	Large Radius	Shank Dia.	Overall Length
NEW Item Number A90210 (5 pc. 1/4" Shank Set)								
Round Nose Bit	18-108	3/8"	—	3/8"	—	1/4"	1/4"	1-13/16"
Rabbeting Bit	32-100	1-1/4"	1/2"	1/2"	—	—	1/4"	2"
Rounding Over Bit	34-110	1"	1/2"	1/2"	—	1/4"	1/4"	2-3/16"
Roman Ogee Bit	38-100	1-1/16"	3/8"	1/2"	—	5/32"	1/4"	2-3/16"
Chamfer Bit	40-104	1-11/32"	1/2"	1/2"	45°	—	1/4"	2-3/16"
NEW Item Number A91210 (5 pc. 1/2" Shank Set)								
Round Nose Bit	18-122	3/4"	—	1-1/4"	—	3/8"	1/2"	2-13/16"
Rabbeting Bit	32-102	1-1/4"	1/2"	1/2"	—	—	1/2"	2-1/4"
Rounding Over Bit	34-126	1-1/2"	1/2"	3/4"	—	1/2"	1/2"	2-3/4"
Roman Ogee Bit	38-106	1-3/8"	3/8"	23/32"	—	1/4"	1/2"	2-9/16"
Chamfer Bit	40-114	1-3/4"	1/2"	5/8"	45°	—	1/2"	2-9/16"

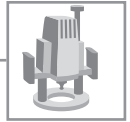
See individual bit for scale profile

Red Item Numbers Indicate 1/2" Shank

Fifteen Piece Introductory Bit Set

Application: Perfect starter set for the serious woodworker

- Freud's new Avanti 15 Piece Set includes just about every carbide tipped bit the woodworker needs to get a new shop up to speed. The set includes three straight bits, a pair of rounding over bits, a flushtrim, V-Groove, dovetail, rabbeting, and a great assortment of profile bits.
- Includes an instructional video CD on Routing Tips & Techniques.
- Set comes in Freud's unique shadow box case, this set hangs on the wall or mounts on the bench to keep bits handy and safe.
- All bits have 1/2" shanks.
- Cuts all composition materials, plywoods, hardwoods, and softwoods.
- Use on hand-held and table-mounted portable routers.



A91220

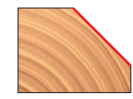


With The CD Learn How To:

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- Cut Dadoes
- Joint Straight Edges
- Create Decorative Edge Treatments Freehand
- Chamfer Perfectly
- Accurate Beveled Angles
- And Much More...



Traditional Beading Profile



Chamfer Profile



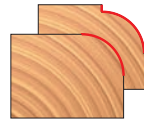
Dovetail Profile



Rabbeting Profile



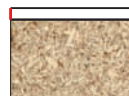
Cove Profile



*Rounding Over & Beading Profile



Roman Ogee Profile



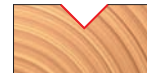
Flush Trim Profile



Straight Trim Profile



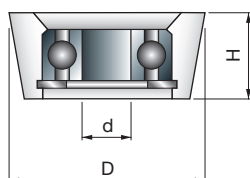
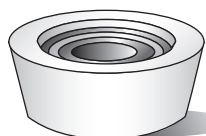
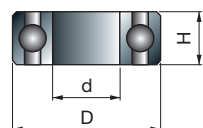
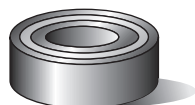
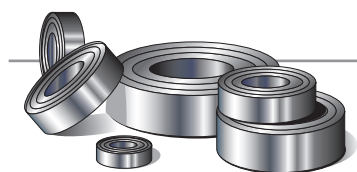
Round Nose Profile



"V"-Grooving Profile

Bit Type	Item Number	Overall Dia.	Bearing Dia.	Carbide Height	Number of Flutes	Angle	Large Radius	Shank Dia.	Overall Length
Item Number A91220									
Traditional Beading Bit	A80122	1"	1/2"	9/16"	—	—	1/8"	1/2"	2-7/16"
Chamfer Bit	A40114	1-3/4"	1/2"	5/8"	—	45°	—	1/2"	2-9/16"
Dovetail Bit	A22112	1/2"	—	1/2"	—	14°	—	1/2"	2-1/4"
Rabbeting Bit	A32102	1-1/4"	1/2"	1/2"	—	—	—	1/2"	2-1/4"
Cove Bit	A30114	1-1/2"	1/2"	5/8"	—	—	1/2"	1/2"	2-1/2"
Rounding Over / Beading Bit*	A34120	1"	1/2"	1/2"	—	—	1/4"	1/2"	2-1/2"
Rounding Over / Beading Bit*	A34126	1-1/2"	1/2"	3/4"	—	—	1/2"	1/2"	2-3/4"
Roman Ogee Bit	A38106	1-3/8"	3/8"	23/32"	—	—	1/4"	1/2"	2-9/16"
Flush Trim Bit	A42110	1/2"	1/2"	1"	2	—	—	1/2"	3-1/4"
Straight Trim Bit	A12100	1/4"	—	3/4"	2	—	—	1/2"	2-3/8"
Straight Trim Bit	A12128	1/2"	—	2"	2	—	—	1/2"	4-1/8"
Straight Trim Bit	A12156	3/4"	—	1-1/2"	2	—	—	1/2"	3"
Round Nose Bit	A18116	1/2"	—	1-1/8"	—	—	1/4"	1/2"	2-13/16"
"V" Grooving Bit	A20108	1/2"	—	1/2"	—	90°	—	1/2"	2-1/4"
3/8" Bearing	A62102	—	3/8"	—	—	—	—	—	—

* Use included bearing to convert the Rounding Over Bit into a Beading Bit.



Ball Bearings

Application: Repairing and altering the profile of Freud router bits. Will fit most brands of router bits

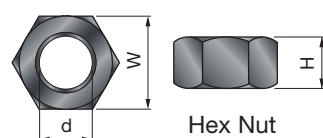
- Freud router bits feature superior quality ball bearings.
- Lubricated with a high temperature lubricant to withstand the stresses of turning at 22,000 RPMs.
- Shielded to keep out the unwanted wood dust and chips that greatly reduce bearing life.

Item Number	Inside Dia.(d)	Bearing Dia.(D)	Bearing Height
Individual Bearings			
62-100	1/8"	3/8"	5/32"
62-102	3/16"	3/8"	1/8"
62-103	1/4"	1/2"	3/16"
62-104	3/16"	1/2"	3/16"
62-105	10mm	19mm	7mm
62-106	1/4"	3/4"	9/32"
62-107	5/16"	7/8"	9/32"
62-108	8mm	22mm	7mm
62-109	15mm	35mm	11mm
62-111	15mm	32mm	9mm
62-112	1/4"	5/8"	3/16"
62-113	3/16"	5/8"	3/16"
62-114	1/2"	1-1/8"	5/16"
62-116	1/2"	1-3/8"	7/16"
62-118	10mm	26mm	8mm
Sleeved Specialty Bearings			
62-110	3/16"	3/4"	1/4"
62-120	5/16"	1"	10mm
62-121	5/16"	1-1/4"	10mm
62-122	5/16"	1-1/2"	10mm
62-124	5/16"	26mm	7mm
62-128	5/16"	30mm	7mm
62-136	17mm	2"	10mm
62-139	1/2"	1-1/2"	5/16"
62-144	3/16"	3/4"	12mm
62-146	3/16"	7/8"	12mm
62-148	3/16"	1-1/8"	12mm
62-150	3/16"	1-3/8"	12mm
Packages of Bearings			
62-XXX	Assorted Ball Bearing Set		
	Contains 1 each of: 62-100, 62-102, 62-104, & 62-108		
62-504	Full Bearing Kit for Set 32-502 – 32-526		
	Contains 1 each of: 62-102, 62-104, 62-106, 62-107, 62-112, 62-114, 62-116		

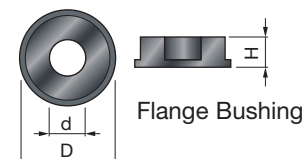
Repair Parts

Application: Repairing or rebuilding router bits

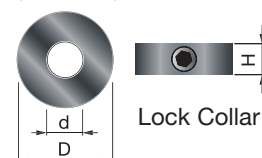
- Freud offers superior quality replacement parts for all Freud bits.
- These parts can be used to replace lost fasteners or to return a bit to its original condition.



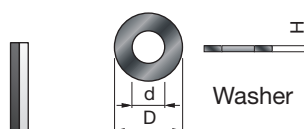
Hex Nut



Flange Bushing



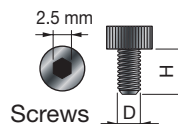
Lock Collar



Washer



Wrench



Screws

Item Number	Description	Outside Dia.(D)	Height (H)	Wrench Size	Inside Dia.(d)
62-303	Cap Screw	3mm	6mm	2.5mm	–
62-304	Long Cap Screw	3mm	12mm	2.5mm	–
62-305	Hex Nut	5/16-24UNF	17/64"	1/2"	–
62-306	Medium Cap Screw	3mm	8mm	2.5mm	–
62-307	Washer	–	–	–	3mm
62-309	Washer	–	–	–	5/16"
62-311	Washer	–	–	–	3/8"
62-313	Washer	–	–	–	1/2"
62-321	Flange Bushing	1/4"	3/16"	–	3/16"
62-323	Flange Bushing	5/16"	1/8"	–	3/16"
62-325	Flange Bushing	1/2"	1/8"	–	3/16"
62-331	Lock Collar	15/32"	5/32"	–	1/4"
62-402	Wrench	–	–	2.5mm	–

Ball Bearings Reference Guide

Item #	Bearing#	Item #	Bearing#	Item #	Bearing#	Item #	Bearing#
16-500	62-103	36-122	62-102	42-109	62-104	85-027	62-106
16-502	62-112	36-124	62-102	42-110	62-104	85-029	62-112
16-504	62-105	36-126	62-102	42-114	62-104	85-031	62-104
16-510	62-105	36-127	62-102	42-116	62-104	99-002	62-104
16-522	62-142	36-128	62-102	42-118	62-106	99-003	62-102
16-523	62-142	36-130	62-102	43-106	62-106	99-005	62-104
16-524	62-142	36-132	62-102	43-108	62-106	99-006	62-104
18-508	62-103	36-134	62-102	43-128	62-106	99-008	62-104
18-510	62-112	36-136	62-102	43-204	62-106	99-009	62-102
18-512	62-106	36-138	62-102	43-208	62-106	99-010	62-104
19-506	62-106	36-140	62-102	43-212	62-106	99-011	62-104
19-578	62-114	38-100	62-102	43-216	62-106	99-012	62-104
20-574	62-114	38-102	62-102	44-100	62-104	99-013	62-104
20-502	62-103	38-104	62-102	44-102	62-104	99-014	62-104
22-505	62-112	38-106	62-102	44-104	62-104	99-015	62-104
22-506	62-105	38-152	62-104	44-108	62-104	99-016	62-104
22-507	62-105	38-154	62-104	45-502	62-132	99-020	62-104
30-094	62-102	38-202	62-102	45-522	62-132	99-021	62-104
30-098	62-102	38-204	62-102	48-102	62-104	99-022	64-104
30-100	62-102	38-250	62-102	48-112	62-104	99-023	62-108
30-102	62-102	38-252	62-102	50-101	62-103	99-024	62-108
30-103	62-104	38-260	62-102	50-102	62-103	99-025	62-108
30-104	62-104	38-262	62-102	50-103	62-112	99-027	62-104
30-106	62-104	38-270	62-104	50-104	62-112	99-028	62-114
30-107	62-104	38-280	62-104	50-106	62-105	99-029	62-108
30-108	62-104	38-282	62-104	50-112	62-118	99-030	62-108
30-109	62-104	38-302	62-102	50-122	62-114	99-035	62-108
30-110	62-104	38-304	62-102	50-126	62-111	99-039	62-109
30-111	62-104	38-312	62-102	50-130	62-139	99-041	62-108
30-112	62-104	38-314	62-102	50-138	62-136	99-041	62-124
30-114	62-104	38-352	62-104	60-120	62-108	99-041	62-128
30-202	62-104	38-362	62-104	60-122	62-108	99-044	62-104
32-096	62-104	38-402	62-104	63-100	62-108	99-051	62-108
32-098	62-104	38-452	62-102	63-104	62-108	99-060	62-104
32-100	62-104	38-502	62-104	63-108	62-108	99-061	62-104
32-101	62-102	38-504	62-104	63-109	62-108	99-062	62-104
32-102	62-104	38-522	62-102	63-110	62-108	99-066	62-104
32-106	62-102	38-524	62-104	63-111	62-108	99-250	62-108
32-110	62-102	38-602	62-102	63-112	62-108	99-251	62-108
32-502	62-504	38-612	62-104	63-150	62-108	99-253	62-108
32-504	62-504	38-614	62-104	63-154	62-108	99-260	62-108
32-522	62-504	38-622	62-102	63-156	62-108	99-261	62-108
32-524	62-504	38-632	62-102	63-158	62-108	99-263	62-108
32-526	62-505	39-502	62-105	63-159	62-108	99-288	62-121
33-106	62-104	39-504	62-130	63-160	62-108	99-281	62-121
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Router Bit Sets



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ROUTER BITS & SETS

freud®

Shaper Cutters

Freud's Shaper Cutters and Performance System® Cutters are revolutionary. Recognized for their versatility, quality, and innovation, Freud offers the flexibility to choose the cutter that fits every need. The conventional fixed wing shaper cutters and Performance Systems® Cutters with re-sharpenable inserts both feature Freud made TiCo™ Hi-Density Carbide, Anti-Kickback Design, Computer Balancing, Shear Angle, and Multi-Axis grinding.

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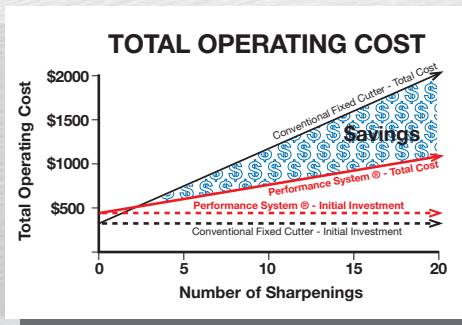
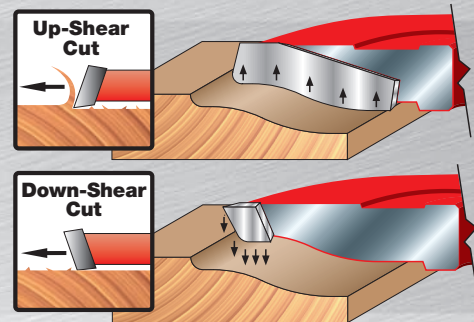
freud®



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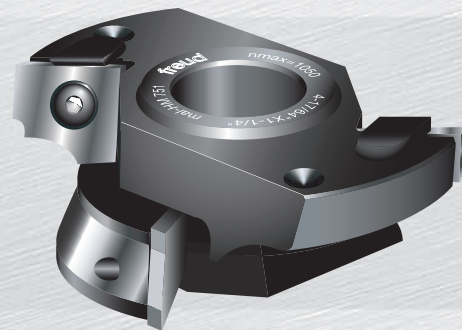
Technical Information

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Performance System® Cutters

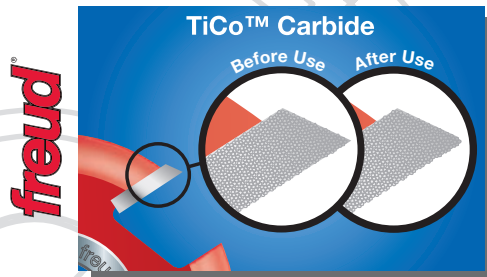
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Fixed Wing Cutters & Sets

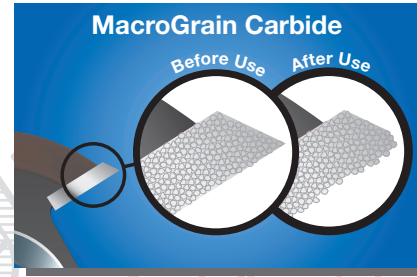
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Freud—Shaper Cutters Features And Benefits



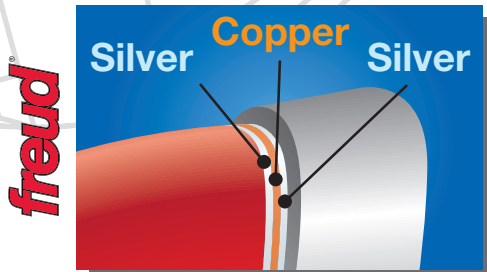
Superior Freud Made TiCo™ Carbide Provides Longer Cutting Life

Freud's proprietary carbide is comprised of micro grains, smaller in size than other carbides, and consists of over twenty unique carbide formulations designed for each shaper cutter application. In addition, titanium is added to the carbide, making it impervious to chemical attack. This slows down the wearing process so the Freud cutter will maintain a sharp edge.



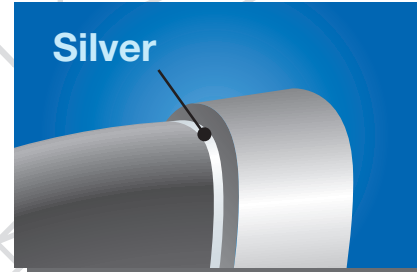
Standard Off-The-Shelf Carbide

Most manufacturers create shaper cutters with standard off-the-shelf carbide, which is not specifically designed for wood cutting applications. These carbides will not maintain the proper tooth geometry or sharp edge. After a few cuts these standard carbides might not show imperfections; however, without the proper carbide formulation, material finish and cutting life will suffer.



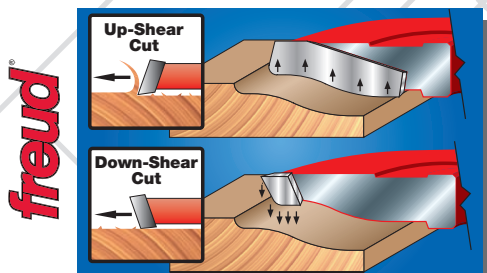
Advanced Tri-Metal Brazing

Freud's innovative Tri-Metal Brazing process bonds the carbide tips to the cutter body. This method consists of copper alloy sandwiched between layers of silver alloy. The copper allows for flexibility and impact resistance to protect the carbide tips and steel shoulders when cutting knots, laminates, hardwoods, etc.



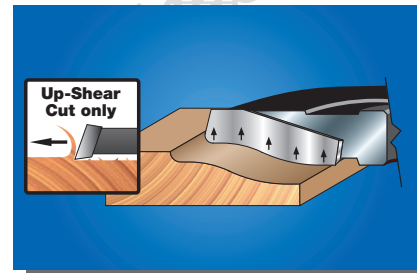
Standard Brazing

Other manufacturers use silver alloy alone, which does not allow for expansion during operation. This causes the bond to develop stresses, leading to cracks in the carbide and failed joints.



Freud's 2 + 2 Raised Panel Cutter

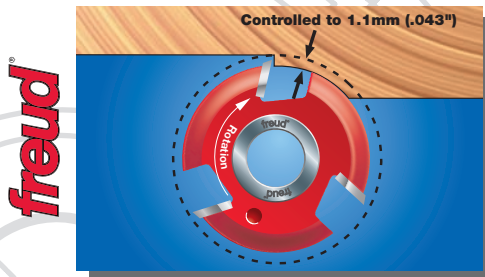
Freud offers a four-wing raised panel cutter that will revolutionize the way raised panel doors are made. Freud's exclusive 2 + 2 Raised Panel Shaper Cutters produce glass-smooth cuts, even on the cross grain. This ingenious configuration of both positive and negative shear angles eliminates the fuzz on the top edge of the profile and reduces the need for sanding.



Others Raised Panel Cutter Designs

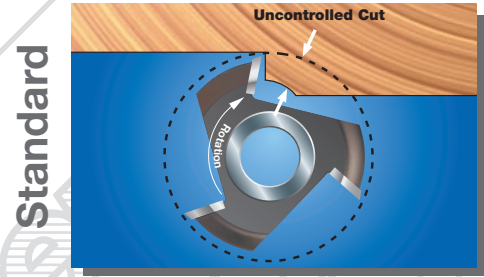
No other raised panel cutters have the Freud 2 + 2 cutting system. Without the small down-shear cutter, other panel cutters leave fuzz at the top edge of the profile creating additional rework which alters the original profile.

Freud—Shaper Cutters Features And Benefits



Kickback-Reducing Design

Kickbacks are one of the most dangerous hazards in woodworking. This happens so quickly that it can be impossible to react before injury occurs. Freud's kickback-reducing shoulder design restricts the tooth bite to 1.1 mm, reducing the effects of kickback from overfeeding. This design helps ensure a safer working environment.



Standard Shaper Cutter Design

Standard shaper cutter designs do not include a kickback reducing shoulder. The cutters do not have extra support behind the cutting flute. This limitation allows the cutter to take large bites out of the material which can lead to uncontrolled, rough cuts, particularly when operating at lower speeds.



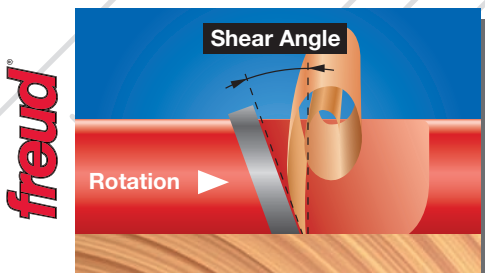
Computer Balancing Prevents Chattering And Vibration

A shaper cutter that is even slightly out of balance will vibrate and chatter while cutting, and it can be extremely dangerous if it is far out of balance. All Freud shaper cutters are computer balanced to ensure vibration-free operation.



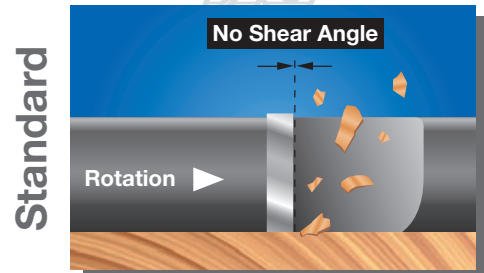
Unbalanced Shaper Cutters Cause Chattering And Vibration

Shaper cutters that are not spin balanced often have a side that is heavier than the other. At high speeds, the cutters will begin to vibrate causing noise or chatter. An unbalanced shaper cutter can cause damage to the shaper.



Superior Shear Angle Design

The shear angle is the angle that the cutting edge makes with the spindle of the shaper. Freud carbide tips are angled to slice through the wood fibers similar in principle to using a hand plane at an angle to the direction of the motion. This slicing action becomes even more important when cutting across the grain. Freud's high shear angle cutters leave a cross-grain cut that requires virtually no sanding.



Standard Shaper Cutters Have Little Or No Shear Angle

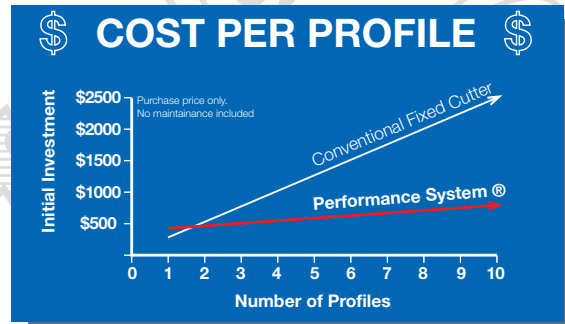
Cutters without shear or with too little shear chop the wood and are more likely to produce tear-out and chatter marks. In addition, not having the proper shear angle causes premature wearing of the carbide and puts more strain on the shaper.

Freud—Performance System® Shaper Cutters

The Performance System® Cost Advantage Over Conventional Fixed Cutters

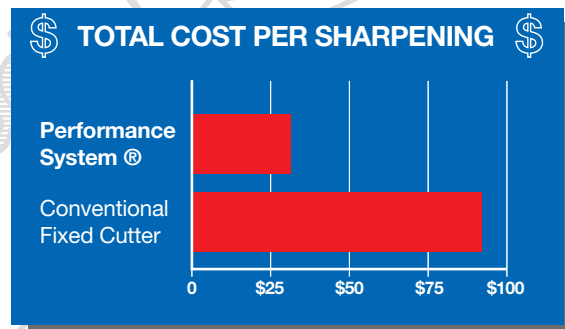
Cost Per Profile

Freud's Performance System® cutters are designed for maximum performance, flexibility and savings. When a new profile cutter is needed, the investment cost of the Performance System® drops well below that of conventional fixed wing cutters. With the Performance System®, all that is required is a set of profile knives. With conventional cutters a complete new cutter must be purchased. The graph to the right illustrates the savings of using this system.



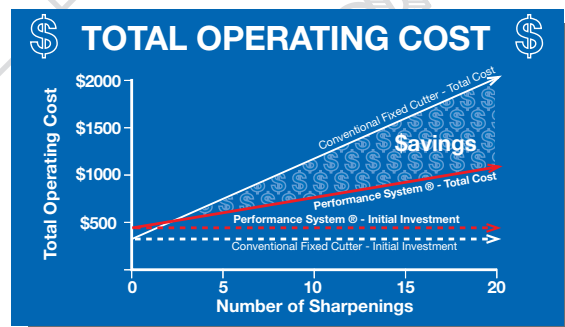
Operating Cost Per Sharpening

Freud's Performance System® cutters are less expensive to operate. With the patented sharpening system, all that is required is face grinding the insert knives on a surface grinder. This method is both fast and inexpensive. When the knives can no longer be sharpened, they are easily replaced. With conventional fixed wing cutters, a completely new cutter must be purchased. The chart to the right shows the Total Operating Cost Per Sharpening.



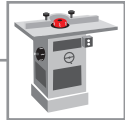
Total Operating Cost

When examining the overall operating cost of conventional fixed wing cutters vs. the savings with Freud's Performance System®, the amount saved grows rapidly. The chart to the right shows the true operating cost through twenty sharpenings. Freud's Performance System® makes up the difference in the initial investment, well before the fifth sharpening. The longer it is used, the more the Performance System® investment pays off.



NOTE: To determine the operating cost the following parameters were used: The average cost to sharpen a conventional fixed cutter rail & stile set is \$29.00, and the average cost to sharpen a pair of knives is \$12.00. After five sharpenings the knives and fixed cutters were expended and replaced. The Performance System® will last longer between sharpenings due to the system's ability to use a harder micrograin carbide. The cost for cutterheads, knives and conventional cutters is at list price.

RP1000 & RP2000 Panel Raising Systems



Freud now has a revolutionary system for making cabinet doors. This system combines the flexibility of standard insert tooling with the performance of resharpenable TiCo™ Hi-Density Carbide knives. This gives cabinet manufacturers the ability to offer over 10 different styles of raised panels for cabinet doors at a fraction of the cost of fixed knife cutters. Plus, these cutters have a specially designed raised panel knife that will leave cross grain cuts as smooth and splinter-free as cuts with the grain. The head is manufactured out of a high grade aircraft aluminum, so weight is kept to a minimum while strength is maintained. The Anti-Kickback Design of the head reduces the likelihood of kickbacks.

The basic system, RP1000, consists of the cutter head only. Profile knives can be purchased separately. The RP2000, contains the cutter head, straight profile back cutter RP-OPS, and 5 sets of profile knives for 5/8" stock and 3/4" stock when using the back cutter. Both sets are packaged in a sturdy case for convenient storage.

This raised panel cutter system can be used either with the Performance System® Rail and Stile cutter or with standard fixed wing rail and stile cutters.

Raised Panel Head: RP1000

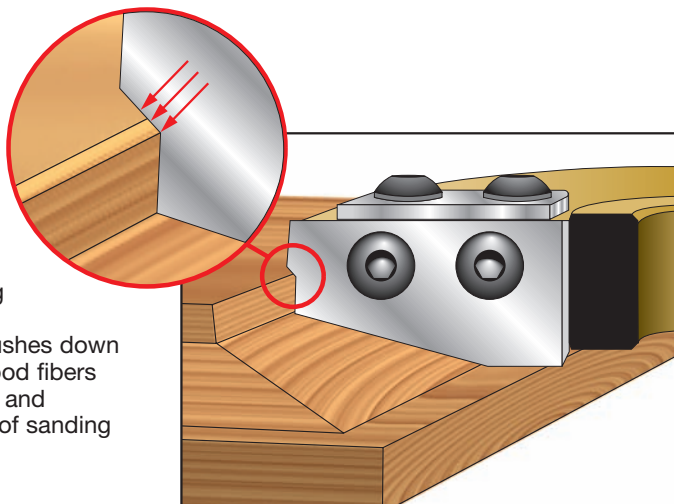
Item Number	Overall Dia.	Bore Diameter	Rub Collar Number
RP1000	5-1/2"	1-1/4"	RC10#

Set: RP2000

Heads Included	Backcutter Included	Knives Included	Bore Diameter
RP1000	RP-OPS	RP-A	1-1/4"
		RP-B	
		RP-C	
		RP-D	
		RP-E	

Splinter Free Cuts

Typical raised panel cutters leave splinters when cutting across the end grain. Freud's new cutter pushes down and shears off the wood fibers leaving it splinter-free and reducing the amount of sanding required.

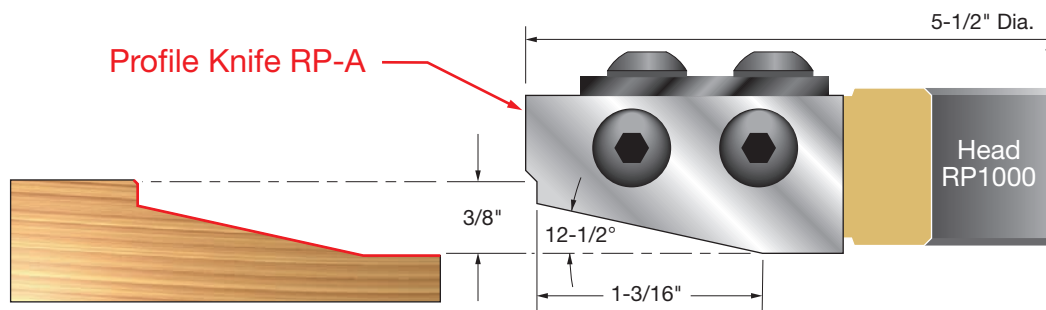




Profile Knife RP-A

This knife is designed for raising 5/8" thick panels with 1/4" tongues. Can be used for raising 3/4" panels when using optional back cutters RP-OPS or RP-OPB. The specially designed knife removes all splinters on cross grain cuts.

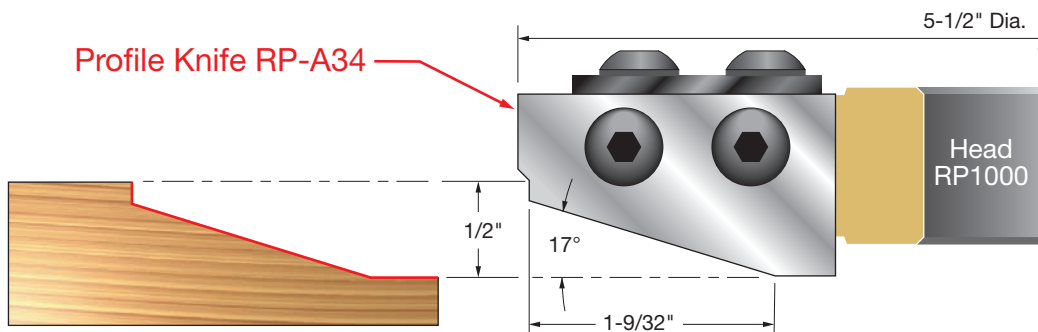
Uses: Knife RP-A and Head **RP1000**



Profile Knife RP-A34

This knife is designed for raising 3/4" thick panels with 1/4" tongues. When used with 3/4" rail and stiles, the panel will extend outside the door frame. The specially designed knife removes all splinters on cross grain cuts.

Uses: Knife RP-A34 and Head **RP1000**

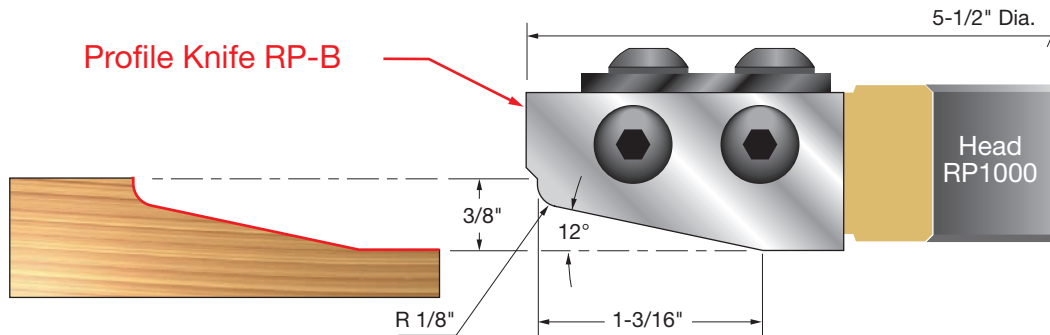


Profile Knife RP-B



This knife is designed for raising 5/8" thick panels with 1/4" tongues. Can be used for raising 3/4" panels when using optional back cutters RP-OPS or RP-OPB. The specially designed knife removes all splinters on cross grain cuts.

Uses: Knife RP-B and Head **RP1000**

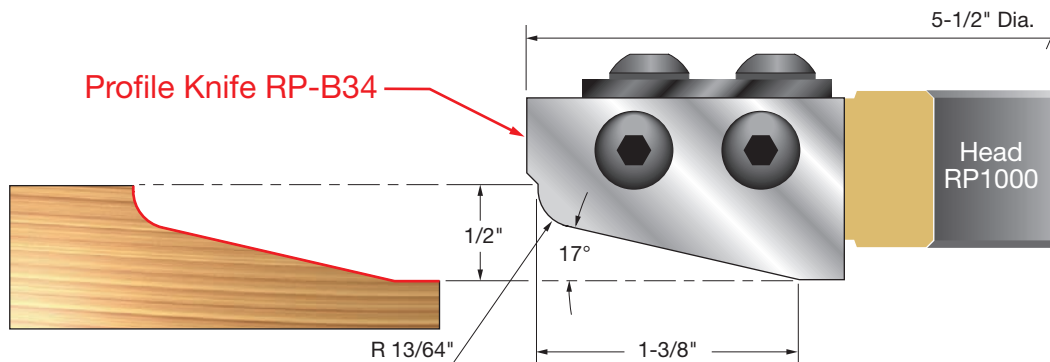


Profile Knife RP-B34



This knife is designed for raising 3/4" thick panels with 1/4" tongues. When used with 3/4" rail and stiles, the panel will extend outside the door frame. The specially designed knife removes all splinters on cross grain cuts.

Uses: Knife RP-B34 and Head **RP1000**

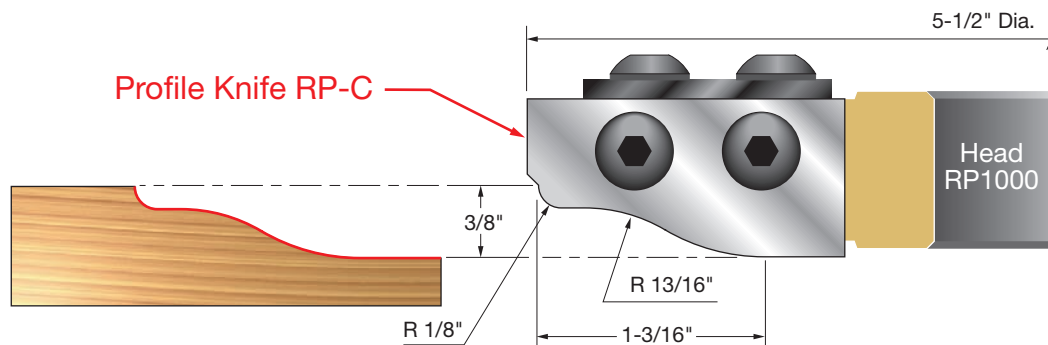




Profile Knife RP-C

This knife is designed for raising 5/8" thick panels with 1/4" tongues. Can be used for raising 3/4" panels when using optional back cutters RP-OPS or RP-OPB. The specially designed knife removes all splinters on cross grain cuts.

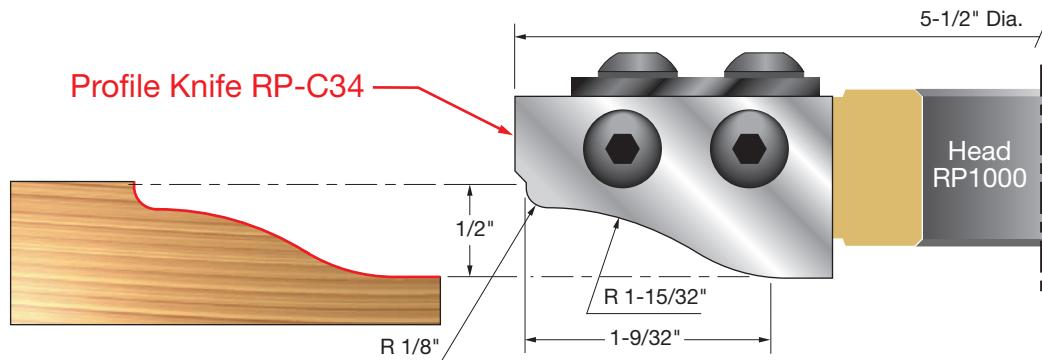
Uses: Knife RP-C and Head **RP1000**



Profile Knife RP-C34

This knife is designed for raising 3/4" thick panels with 1/4" tongues. When used with 3/4" rail and stiles, the panel will extend outside the door frame. The specially designed knife removes all splinters on cross grain cuts.

Uses: Knife RP-C34 and Head **RP1000**

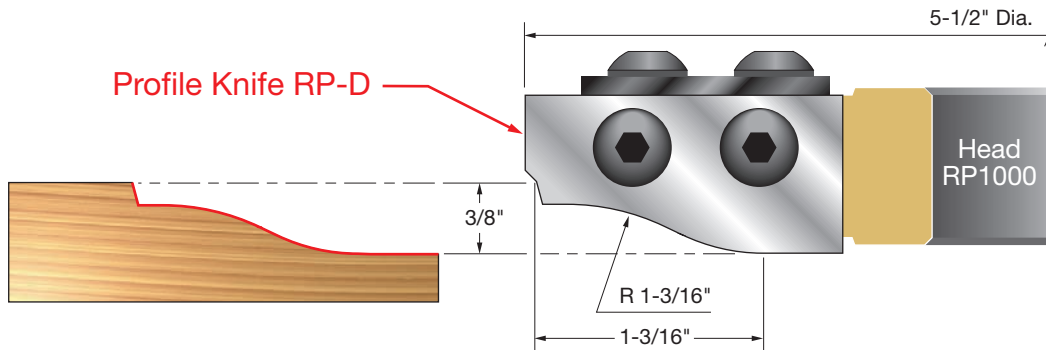


Profile Knife RP-D

This knife is designed for raising 5/8" thick panels with 1/4" tongues. Can be used for raising 3/4" panels when using optional back cutters RP-OPS or RP-OPB. The specially designed knife removes all splinters on cross grain cuts.



Uses: Knife RP-D and Head **RP1000**

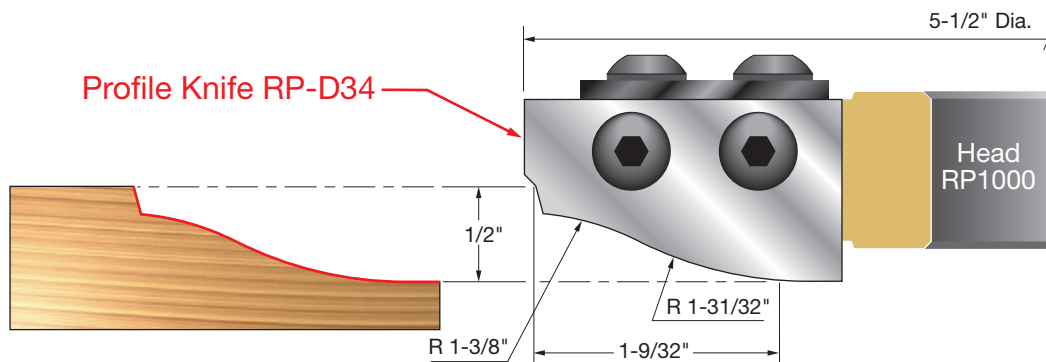


Profile Knife RP-D34

This knife is designed for raising 3/4" thick panels with 1/4" tongues. When used with 3/4" rail and stiles, the panel will extend outside the door frame. The specially designed knife removes all splinters on cross grain cuts.



Uses: Knife RP-D34 and Head **RP1000**

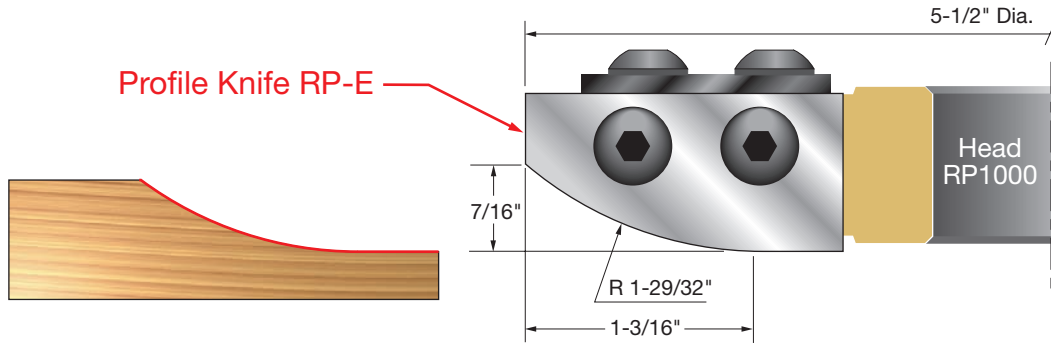




Profile Knife RP-E

This knife is designed for raising 5/8" thick panels with 1/4" tongues. Can be used for raising 3/4" panels when using optional back cutters RP-OPS or RP-OPB. The specially designed knife removes all splinters on cross grain cuts.

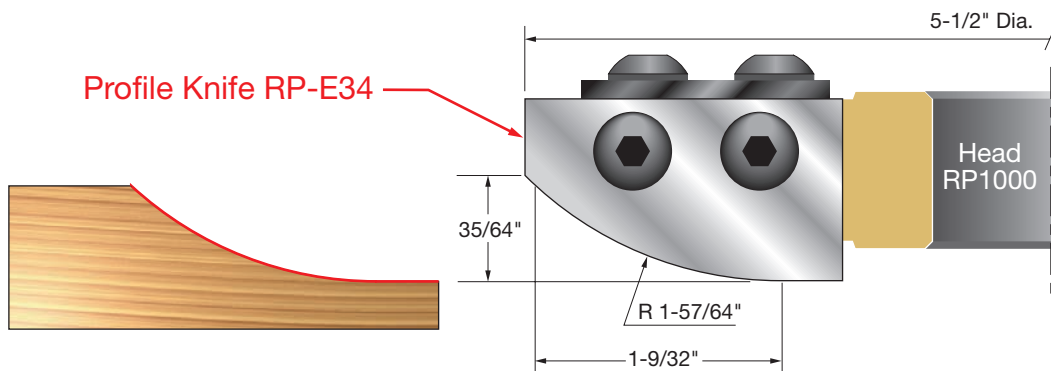
Uses: Knife RP-E and Head **RP1000**



Profile Knife RP-E34

This knife is designed for raising 3/4" thick panels with 1/4" tongues. When used with 3/4" rail and stiles, the panel will extend outside the door frame. The specially designed knife removes all splinters on cross grain cuts.

Uses: Knife RP-E34 and Head **RP1000**

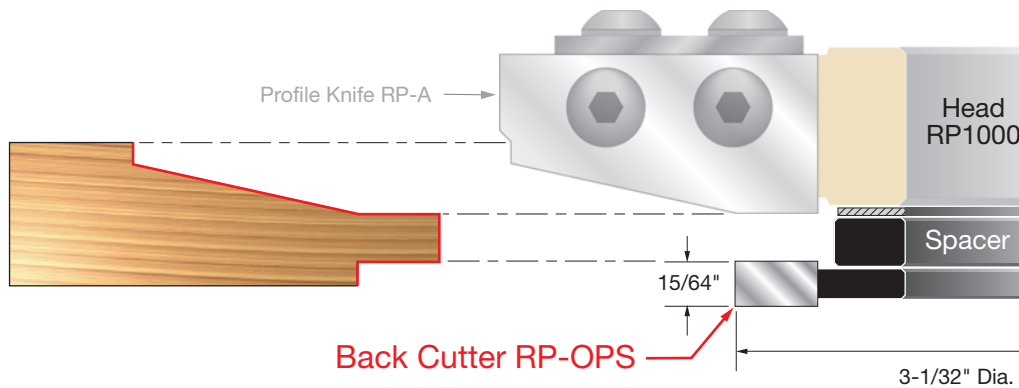


RP-OPS Back-Cutter For Performance System®

Raised Panel Cutters



This back-cutter is designed to be used with knives RP-A, RP-B, RP-C, RP-D, or RP-E on the RP1000 head. This allows the use of 3/4" to 13/16" thick panels while maintaining a 1/4" tongue.

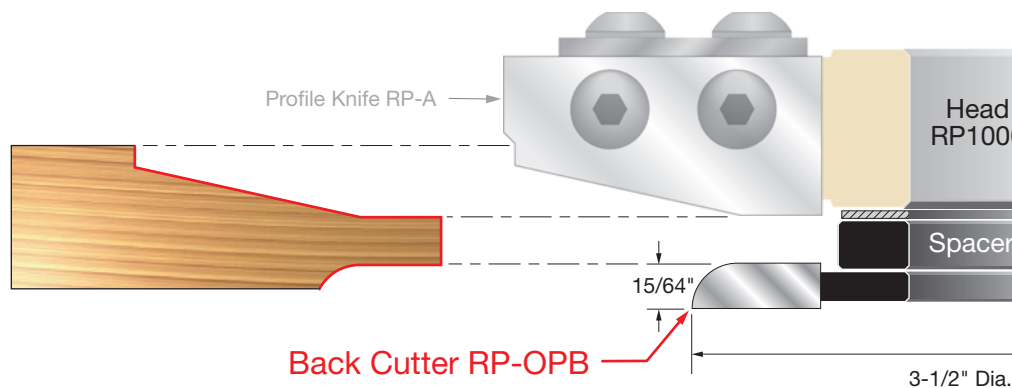


RP-OPB Back-Cutter For Performance System®

Raised Panel Cutters



This back-cutter is designed to be used with knives RP-A, RP-B, RP-C, RP-D, or RP-E on the RP1000 head. This allows the use of 3/4" to 13/16" thick panels while maintaining a 1/4" tongue.





RS1000 & RS2000 Rail & Stile Door Systems



Freud's revolutionary system for making cabinet doors combines the flexibility of standard insert tooling with the performance of resharpenable TiCo™ Hi-Density Carbide knives. This gives cabinetmakers the ability to offer over 18 profiles of rail and stiles for cabinet doors at a fraction of the cost of fixed knife cutters.

These cutters are packed with special features like: eased panel slot edges to prevent splintering and improve finishing, zero down time to switch from the moulding cut to the cope cut with matched reverse sets, and profiles that always match even after resharpening.

The RS1000 set contains both cutter heads, groovers, and knives RS-K for cutter head RS-R. Profile knives can be purchased separately.

The RS2000 contains everything in the RS1000, plus nine different pairs of profile knives.

Both sets come with a sample of a rail and stile and complete manual for easy setup. Additional heads can be purchased separately.



(Continued) RS1000 & RS2000 Rail & Stile Door Systems

Set RS1000

Cutter Head	Overall Diameter	Bore Diameter	Rub Collar Number	Groovers Included	Knives Included
RS-S	4-7/16"	1-1/4"	RSC-0#	–	RS-L*
RS-R	4-7/16"	1-1/4"	RSC-0#	RS-K**	–

"#" Determines bore size. See Bushing & Rub Collars for bore selection

*Glass Door and Back Tenon knife for Head RS-S

**Groover Knives for Head RS-S

Set RS2000

Item Number	Overall Dia.(D)	Carbide Height(h)	Large Radius(R)	Shank Dia.(A)	Overall Length(H)
RS-S	4-7/16"	1-1/4"	RSC-0#	–	RS-L*
RS-R	4-7/16"	1-1/4"	RSC-0#	RS-K**	RS-A
					RS-B
					RS-C
					RS-D
					RS-E
					RS-F
					RS-G
					RS-H
					RS-I

"#" Determines bore size. See Bushing & Rub Collars for bore selection

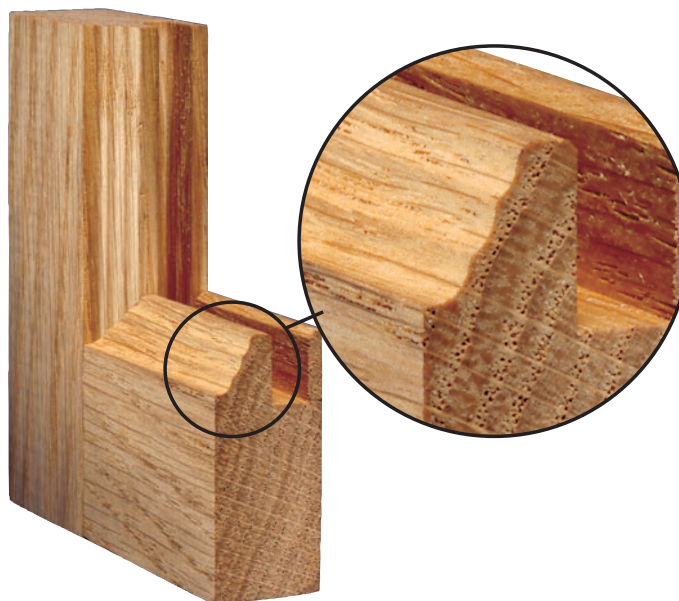
*Glass Door and Back Tenon knife for Head RS-S

**Groover Knives for Head RS-S



Back View of Tenon Joint

This system makes perfect tenon joints, even after it has been sharpened.



The End of Splintering

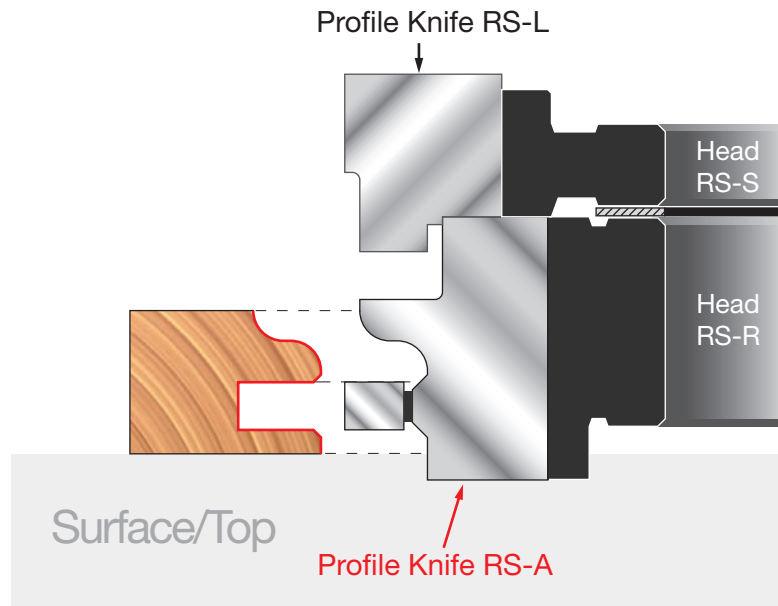
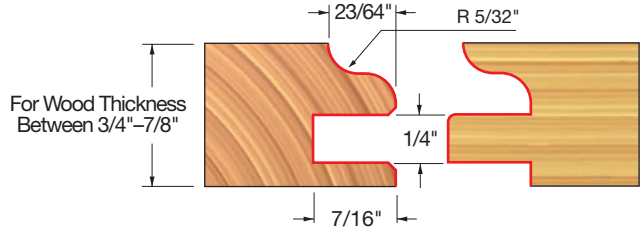
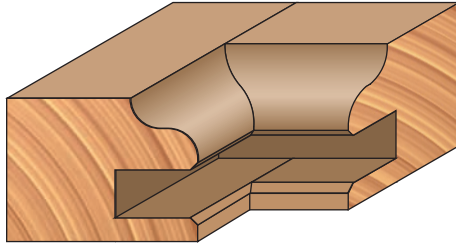
Freud's specially designed cutter eliminates the possibility of splintering with oak and other popular woods, by easing edges on the inside of the panel groove. This feature aids finishing by preventing finish build-up at the panel joint which is common with other rail and stile cutters.



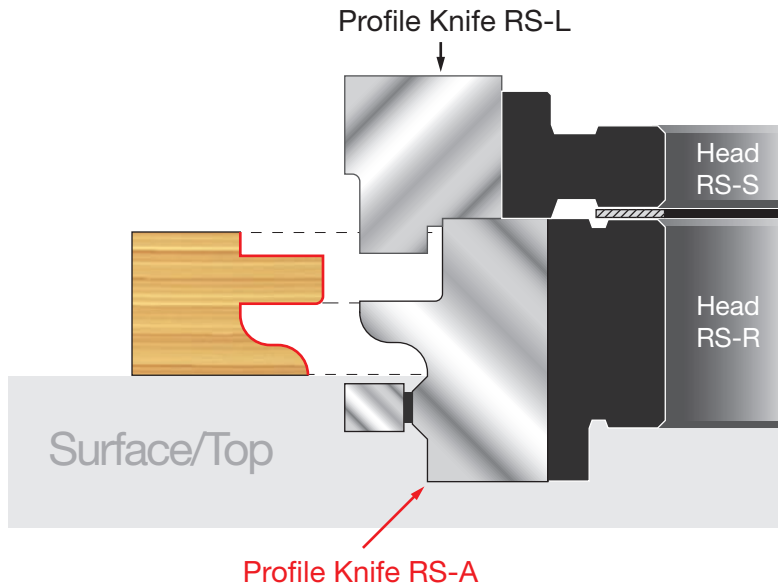
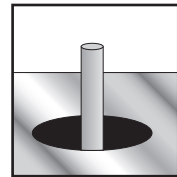
Profile Knife RS-A Raised Panel Door Set-Up

Use this set-up when constructing raised panel doors. Eased over edges on inside of panel groove provide less splintering, easier finishing, and easier insertion of panels. Shimming should be done between the cutter heads to achieve the fit required.

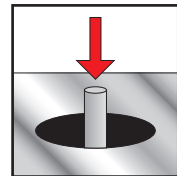
Uses: Knife RS-A, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

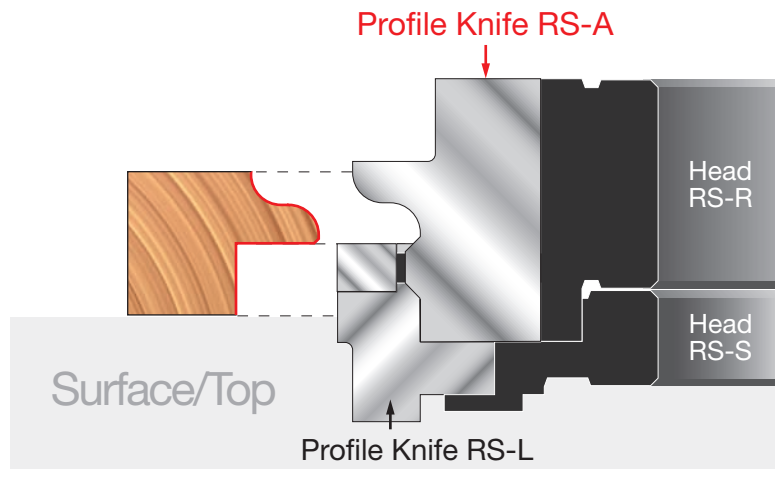
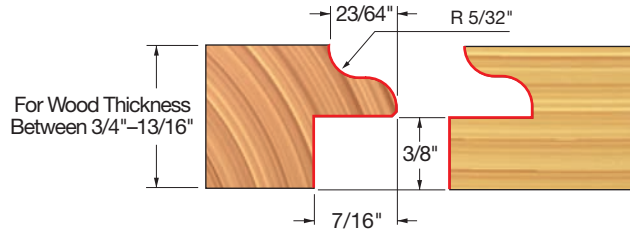
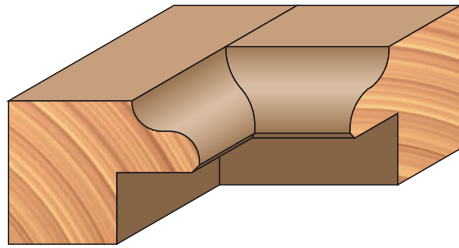


Profile Knife RS-A Glass Panel Door Set-Up

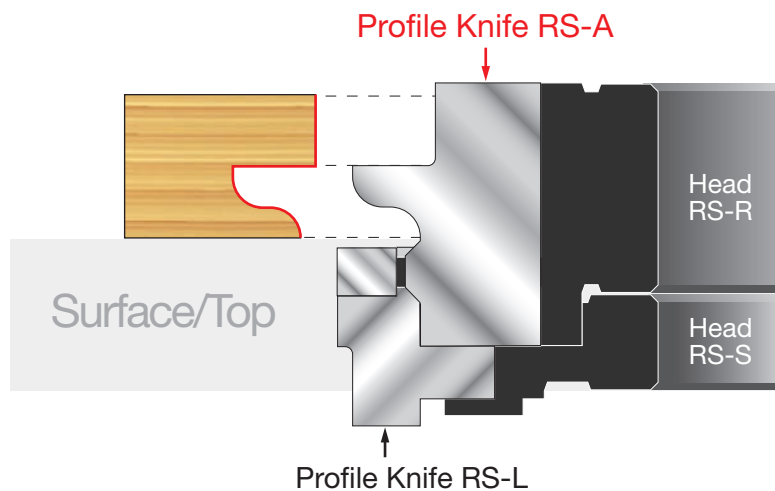
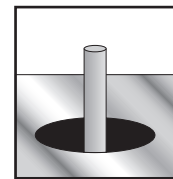


Use this set-up when a rabbeted groove is required to allow the insertion and removal of a glass panel. Use small molding to hold glass in place. No shimming should be needed.

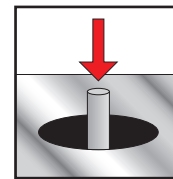
Uses: Knife RS-A, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

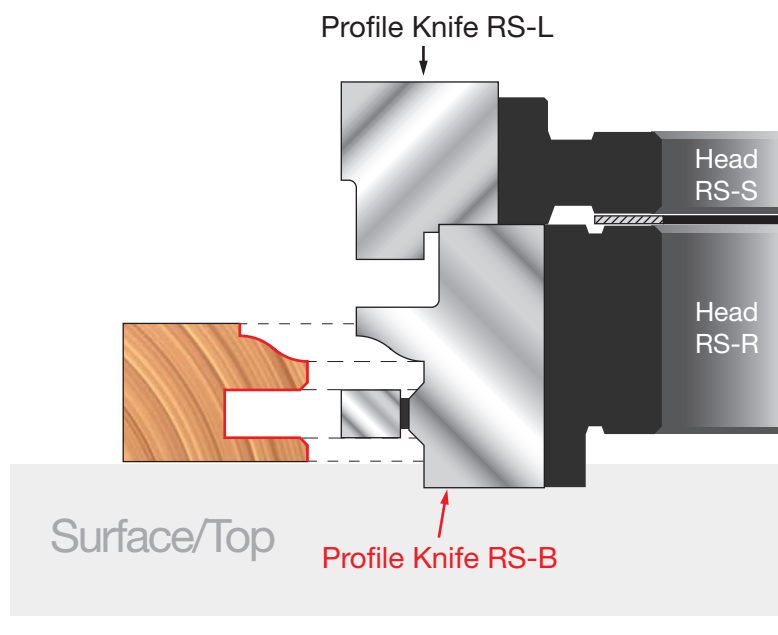
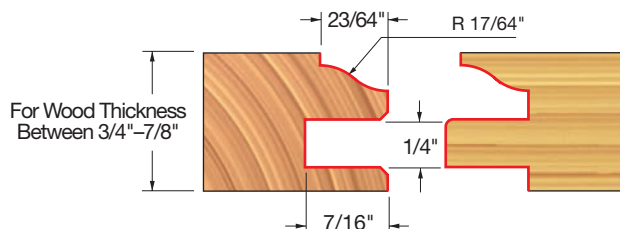
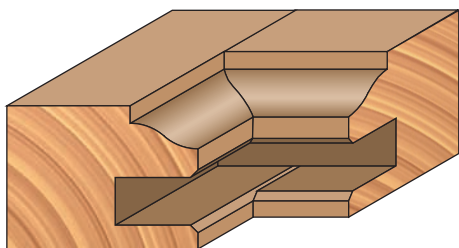




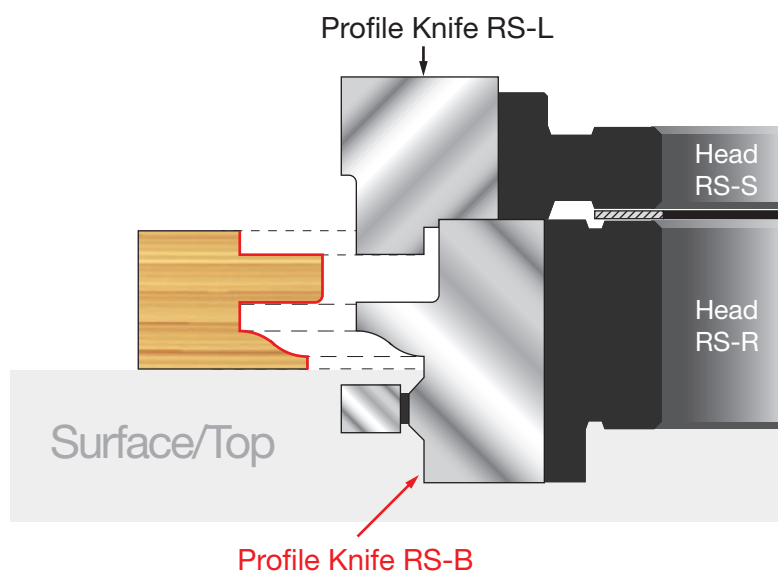
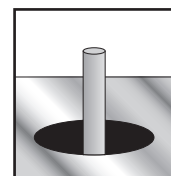
Profile Knife RS-B Raised Panel Door Set-Up

Use this set-up when constructing raised panel doors. Eased over edges on inside of panel groove provide less splintering, easier finishing, and easier insertion of panels. Shimming should be done between the cutter heads to achieve the fit required.

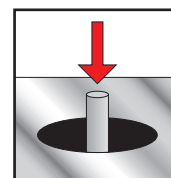
Uses: Knife RS-B, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

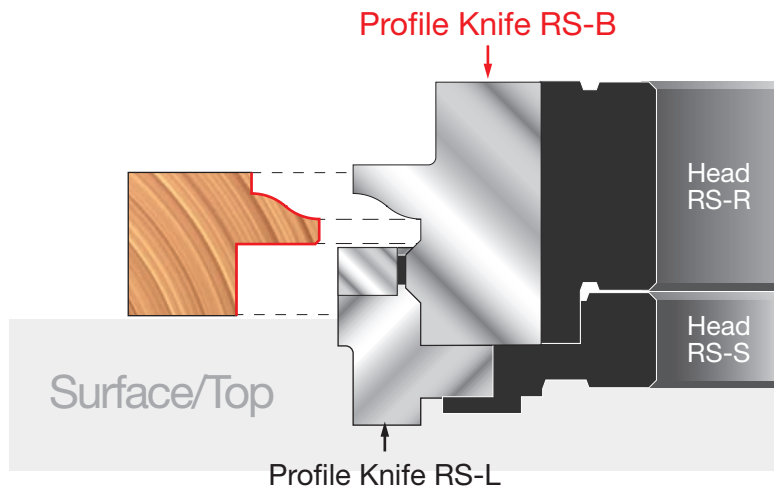
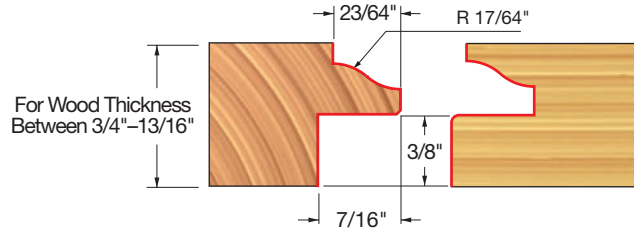
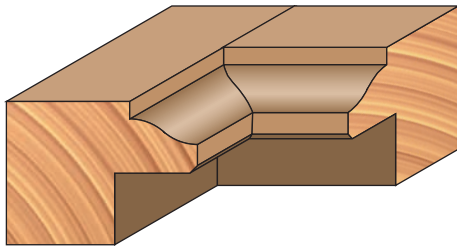


Profile Knife RS-B Glass Panel Door Set-Up

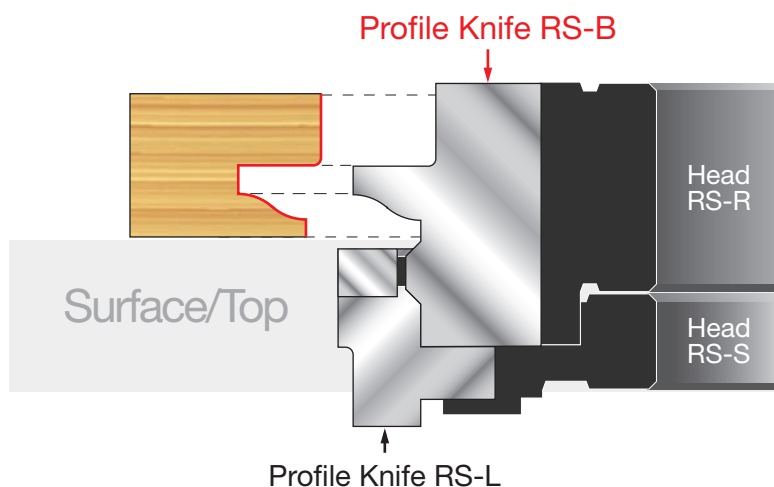
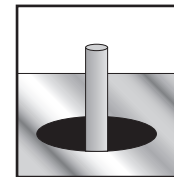


Use this set-up when a rabbeted groove is required to allow the insertion and removal of a glass panel. Use small molding to hold glass in place. No shimming should be needed.

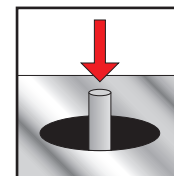
Uses: Knife RS-B, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

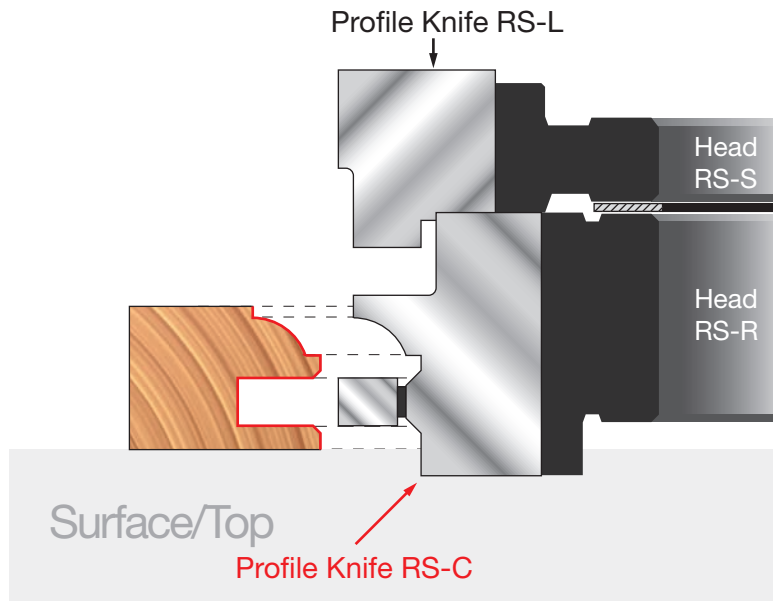
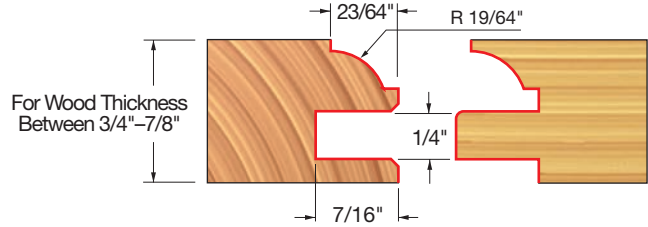
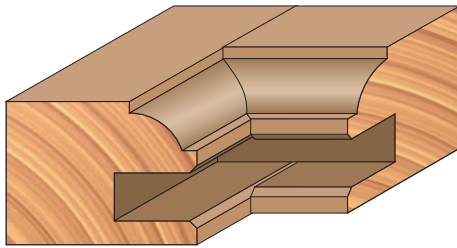




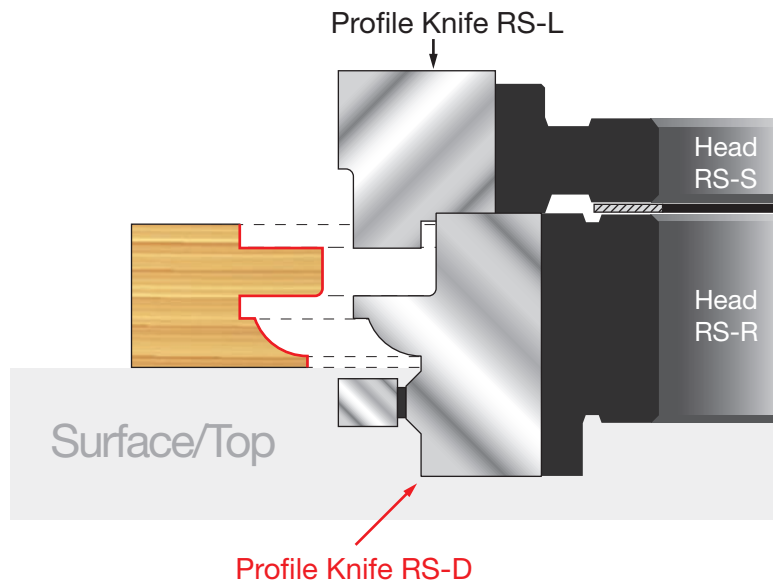
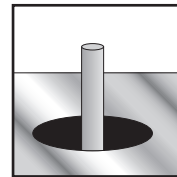
Profile Knife RS-C Raised Panel Door Set-Up

Use this set-up when constructing raised panel doors. Eased over edges on inside of panel groove provide less splintering, easier finishing, and easier insertion of panels. Shimming should be done between the cutter heads to achieve the fit required.

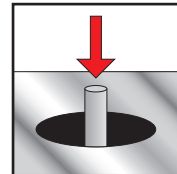
Uses: Knife RS-C, Knife RS-D, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

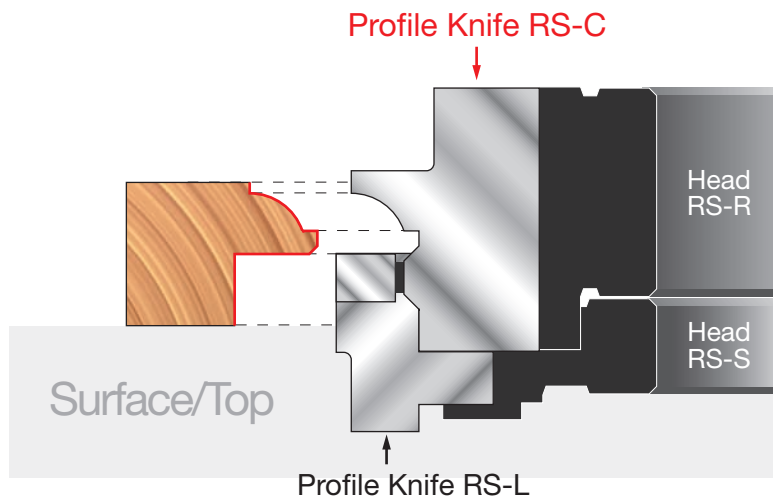
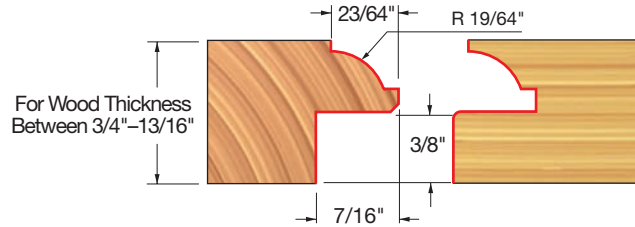
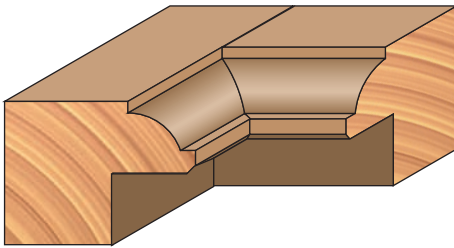


Profile Knife RS-C Glass Panel Door Set-Up

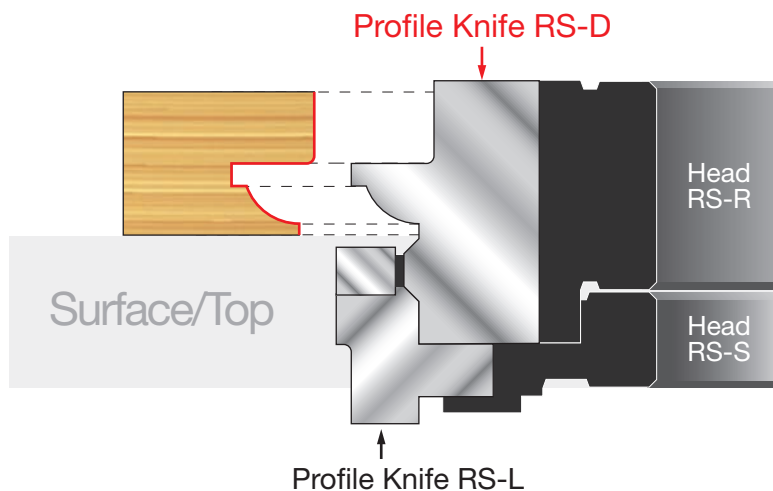
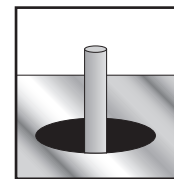


Use this set-up when a rabbeted groove is required to allow the insertion and removal of a glass panel. Use small molding to hold glass in place. No shimming should be needed.

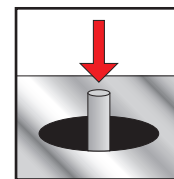
Uses: Knife RS-C, Knife RS-D, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

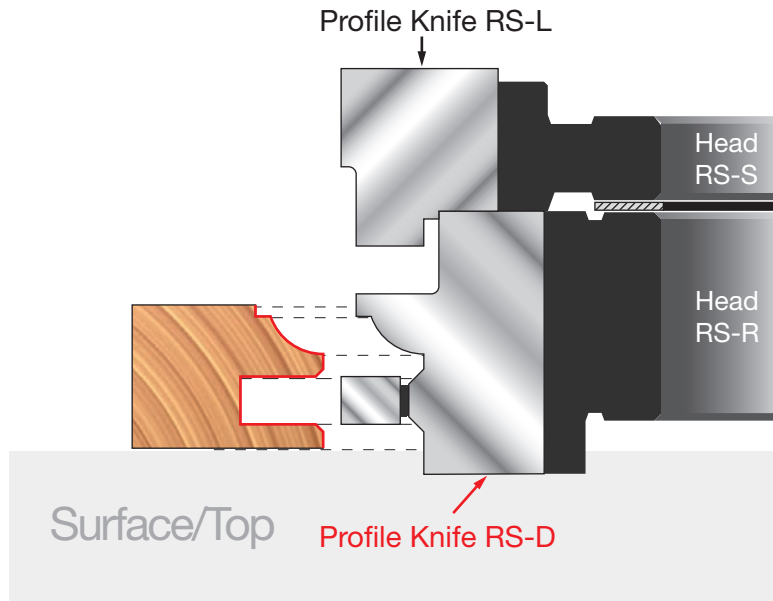
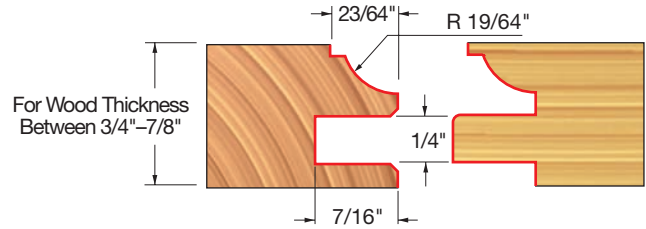
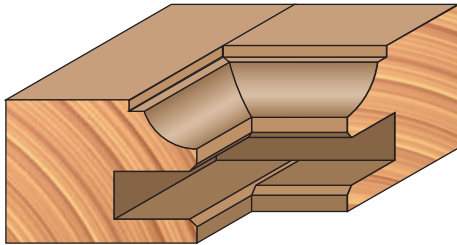




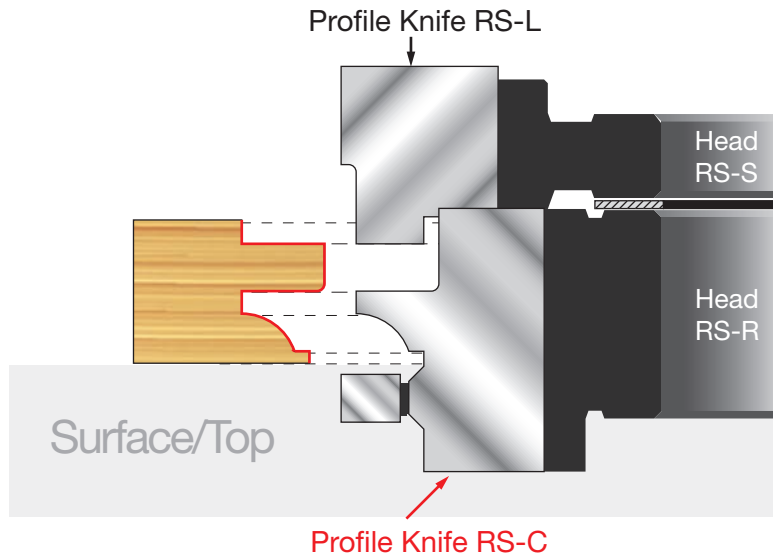
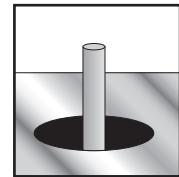
Profile Knife RS-D Raised Panel Door Set-Up

Use this set-up when constructing raised panel doors. Eased over edges on inside of panel groove provide less splintering, easier finishing, and easier insertion of panels. Shimming should be done between the cutter heads to achieve the fit required.

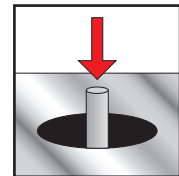
Uses: Knife RS-D, Knife RS-C, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

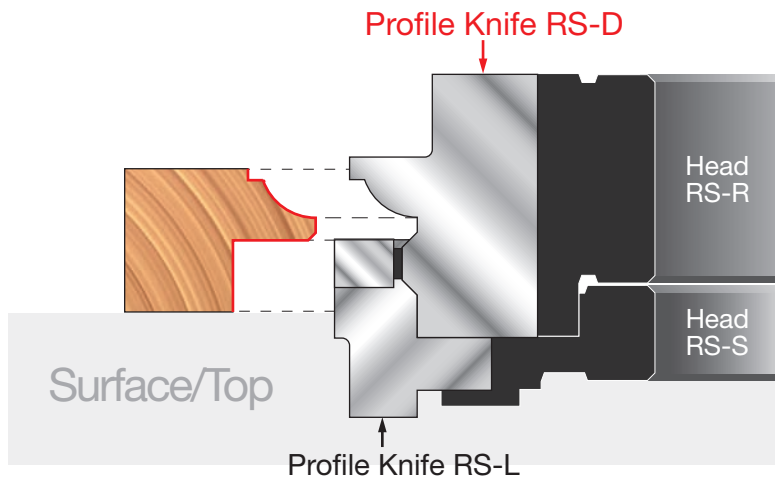
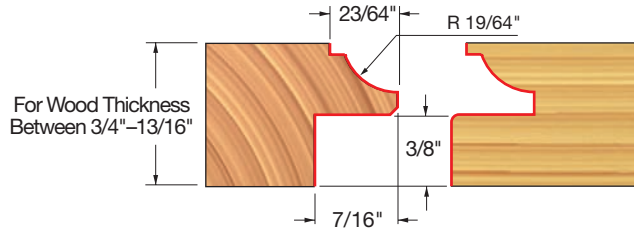
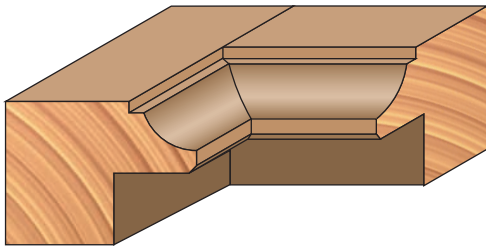


Profile Knife RS-D Glass Panel Door Set-Up

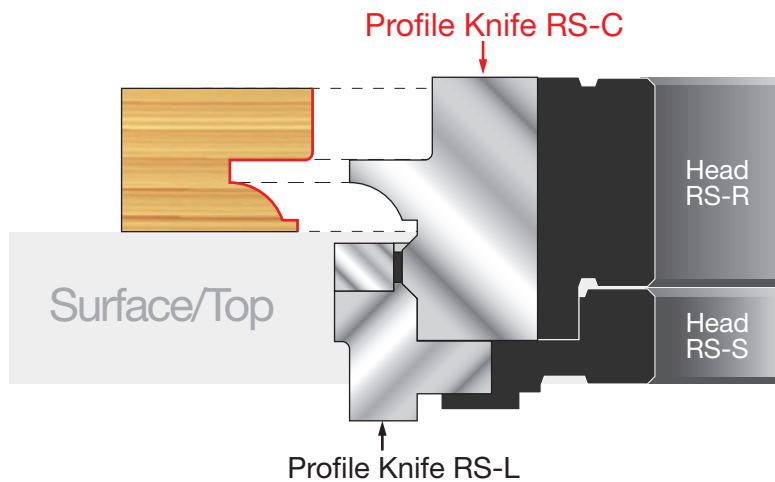
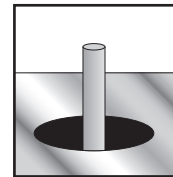


Use this set-up when a rabbeted groove is required to allow the insertion and removal of a glass panel. Use small molding to hold glass in place. No shimming should be needed.

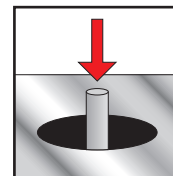
Uses: Knife RS-D, Knife RS-C, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

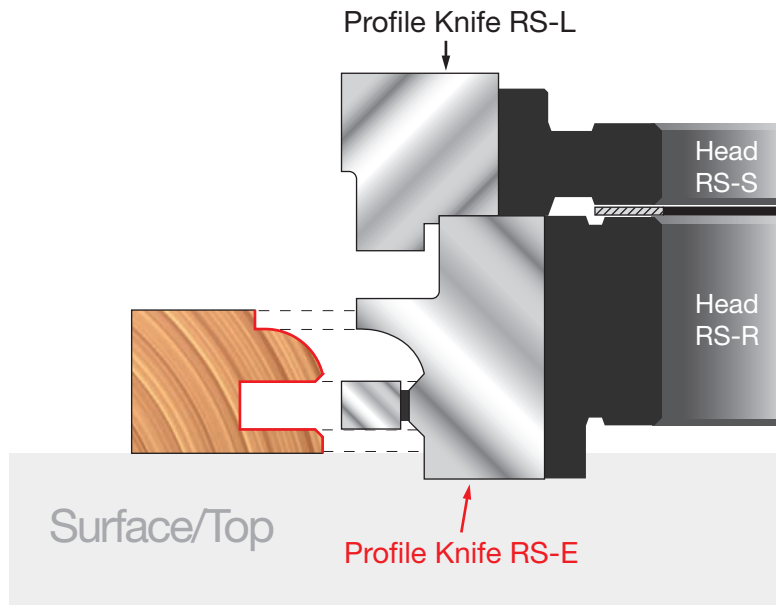
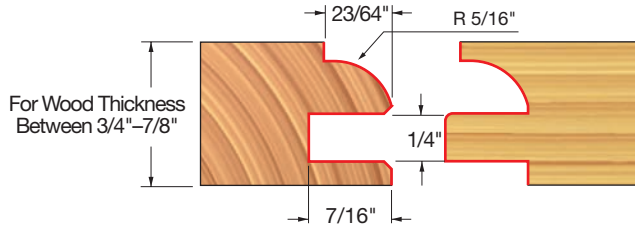
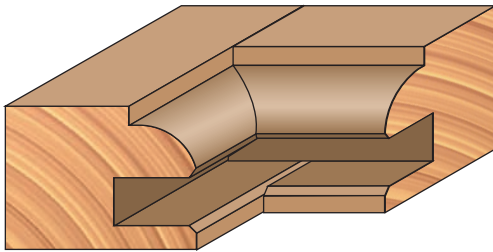




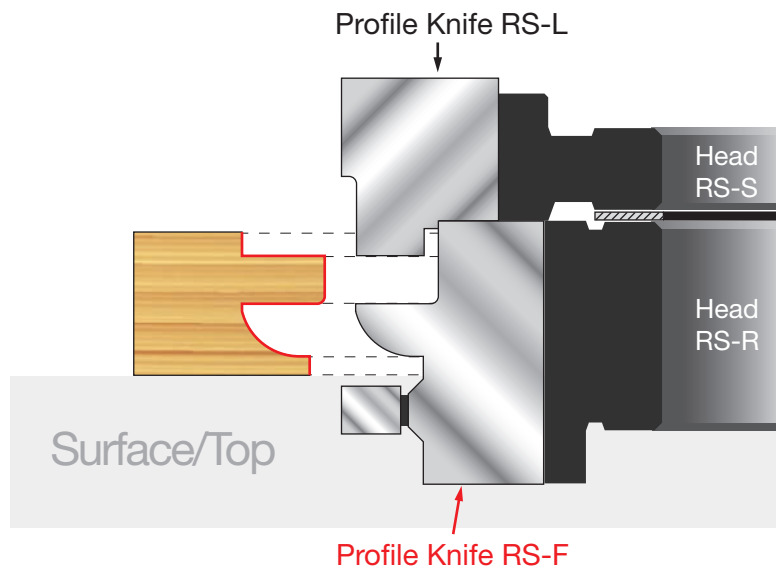
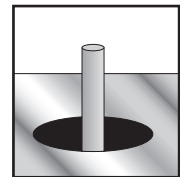
Profile Knife RS-E Raised Panel Door Set-Up

Use this set-up when constructing raised panel doors. Eased over edges on inside of panel groove provide less splintering, easier finishing, and easier insertion of panels. Shimming should be done between the cutter heads to achieve the fit required.

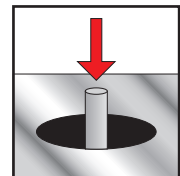
Uses: Knife RS-E, Knife RS-F, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

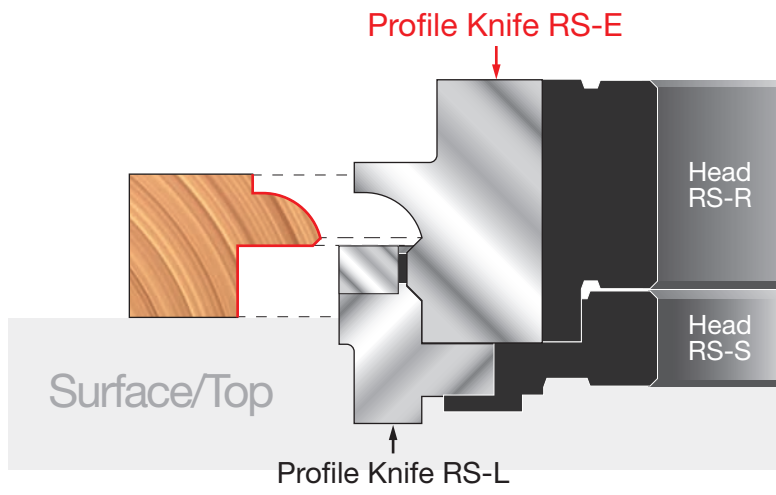
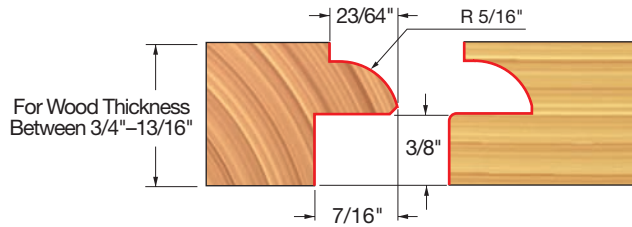
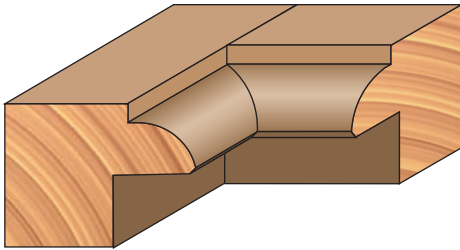


Profile Knife RS-E Glass Panel Door Set-Up

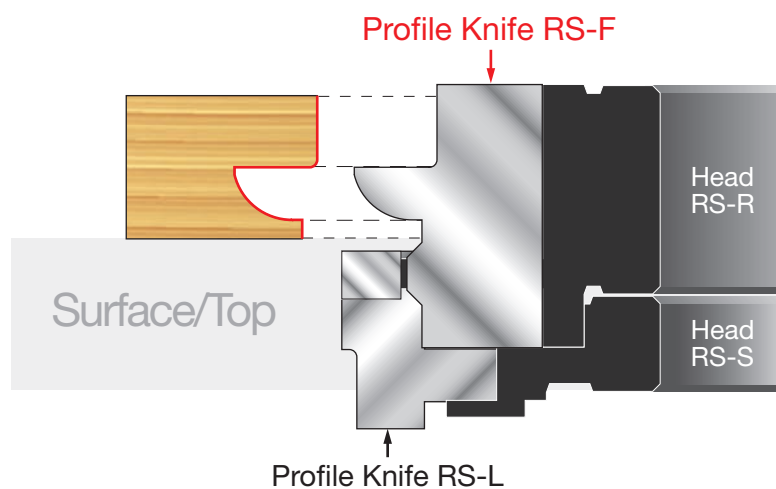
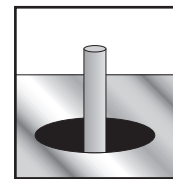


Use this set-up when a rabbeted groove is required to allow the insertion and removal of a glass panel. Use small molding to hold glass in place. No shimming should be needed.

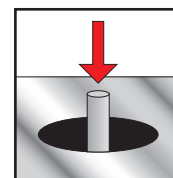
Uses: Knife RS-E, Knife RS-F, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

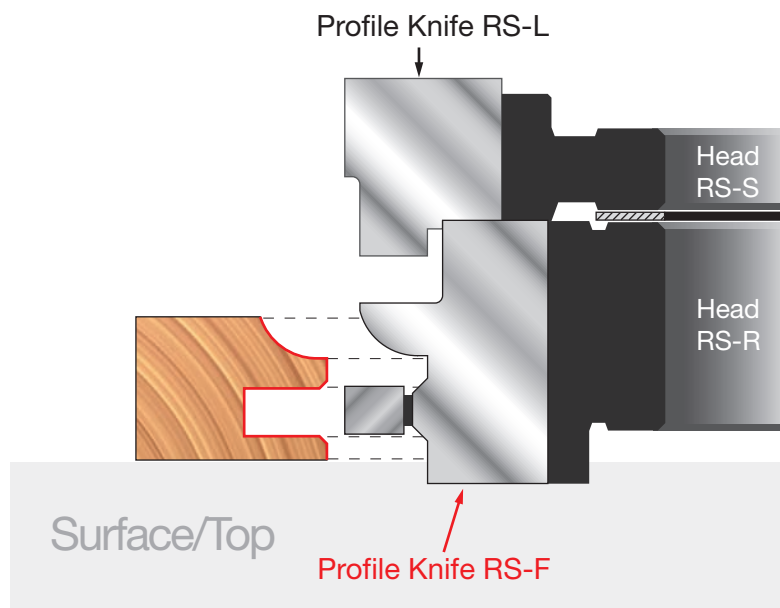
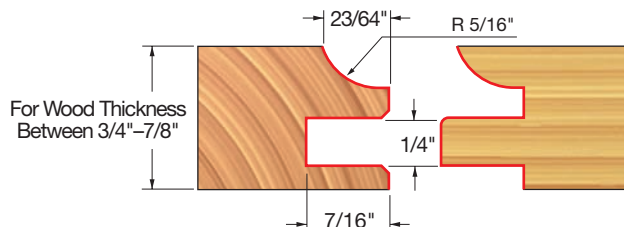
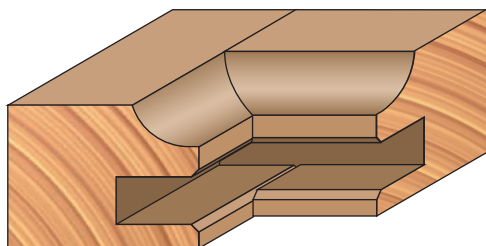




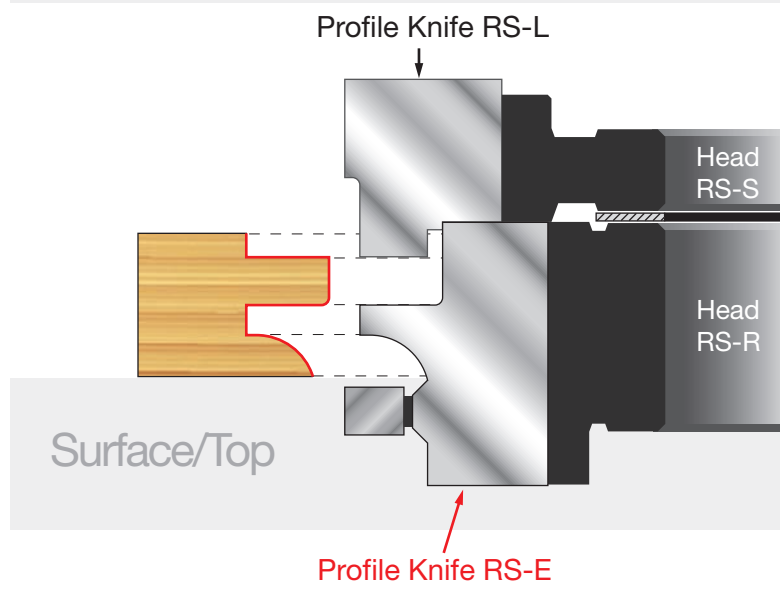
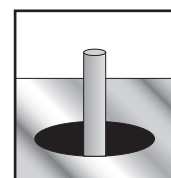
Profile Knife RS-F Raised Panel Door Set-Up

Use this set-up when constructing raised panel doors. Eased over edges on inside of panel groove provide less splintering, easier finishing, and easier insertion of panels. Shimming should be done between the cutter heads to achieve the fit required.

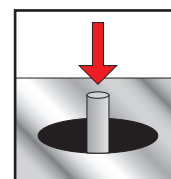
Uses: Knife RS-F, Knife RS-E, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

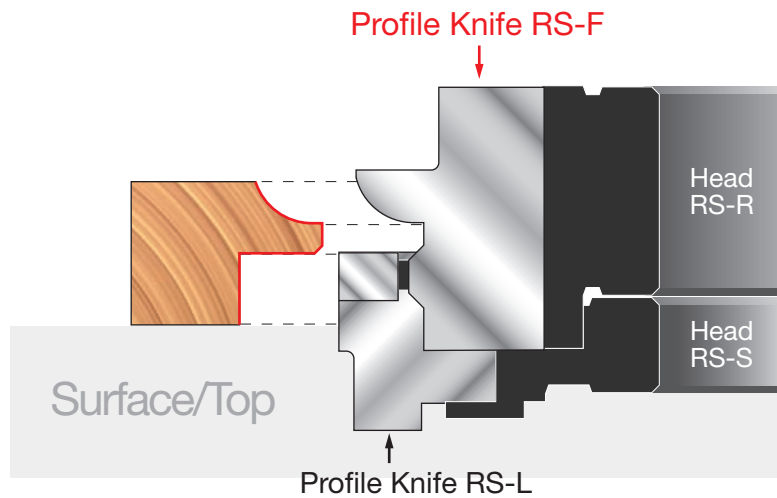
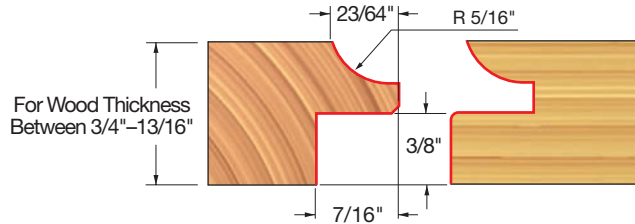
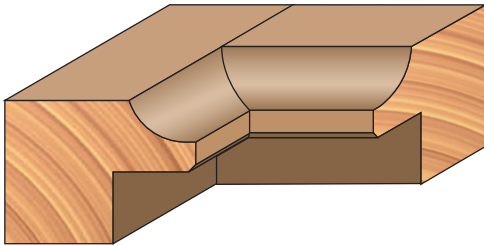


Profile Knife RS-F Glass Panel Door Set-Up

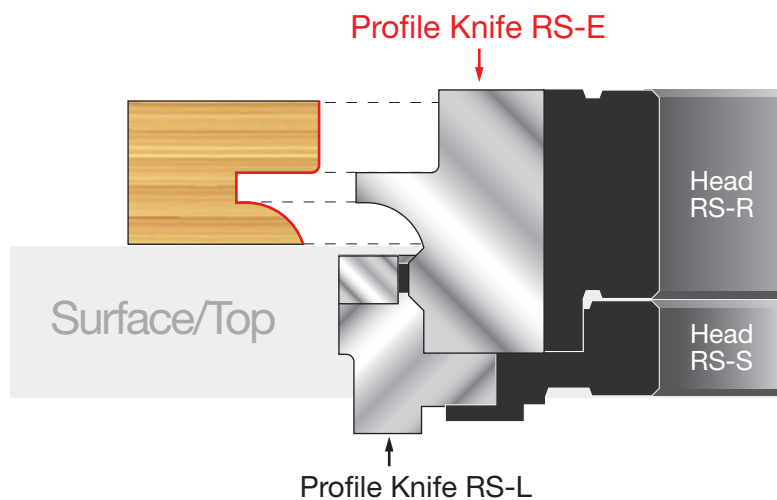
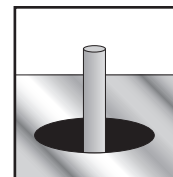


Use this set-up when a rabbeted groove is required to allow the insertion and removal of a glass panel. Use small molding to hold glass in place. No shimming should be needed.

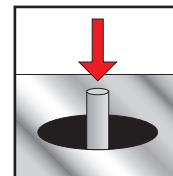
Uses: Knife RS-F, Knife RS-E, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

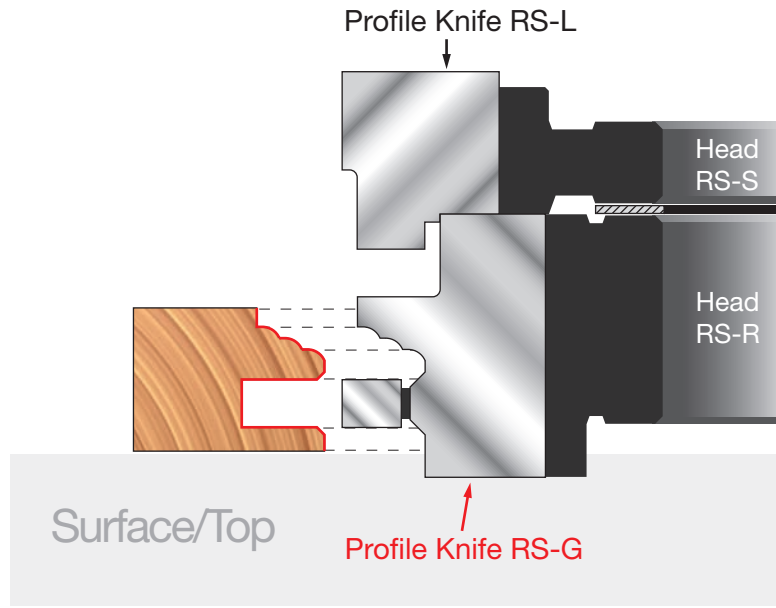
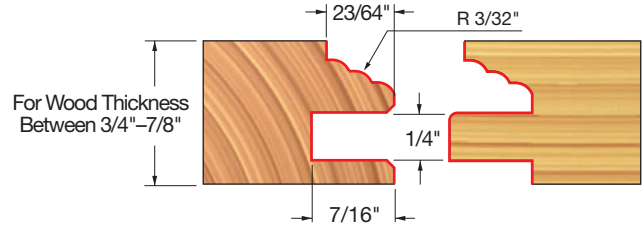
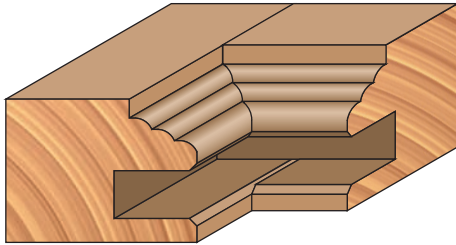




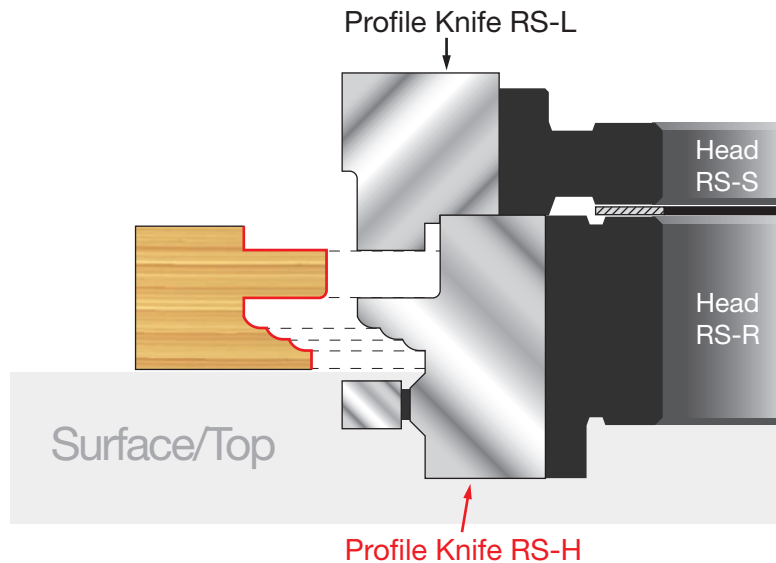
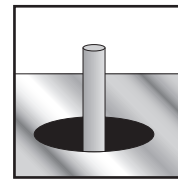
Profile Knife RS-G Raised Panel Door Set-Up

Use this set-up when constructing raised panel doors. Eased over edges on inside of panel groove provide less splintering, easier finishing, and easier insertion of panels. Shimming should be done between the cutter heads to achieve the fit required.

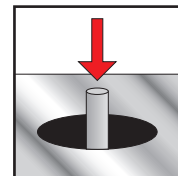
Uses: Knife RS-G, Knife RS-H, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

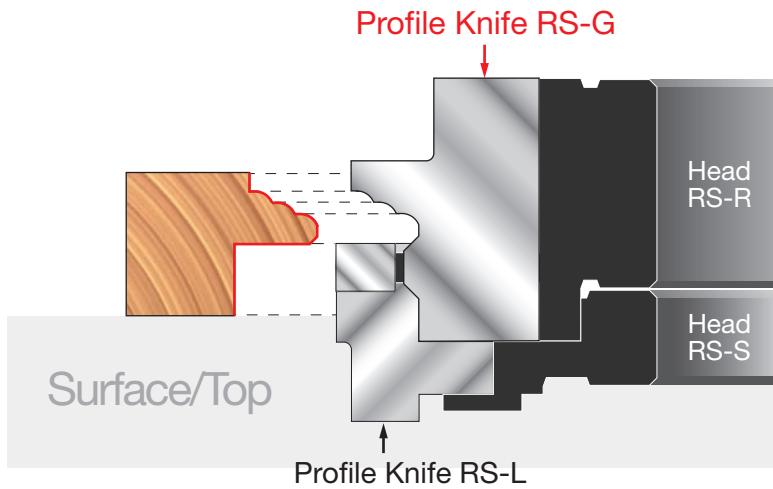
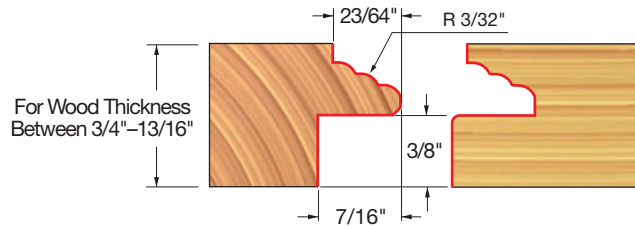
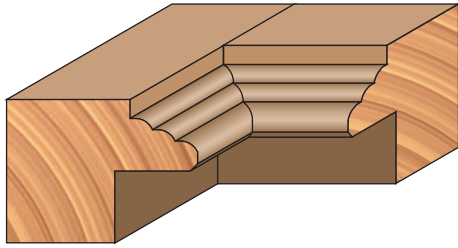


Profile Knife RS-G Glass Panel Door Set-Up

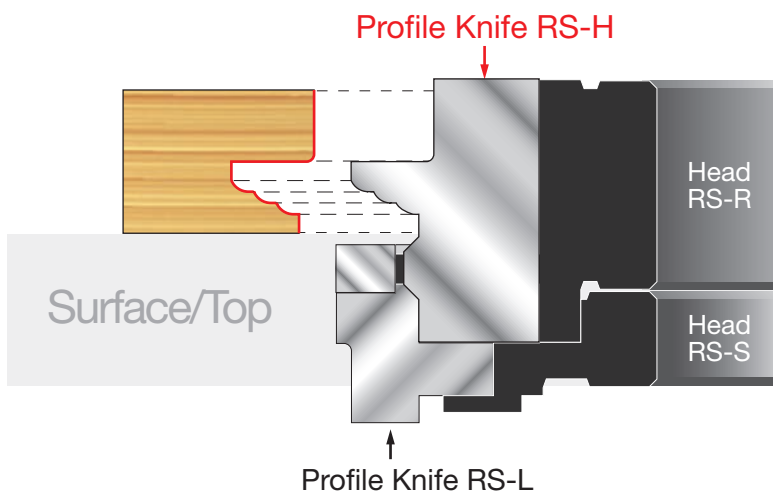
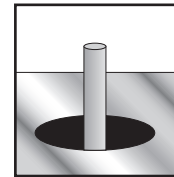


Use this set-up when a rabbeted groove is required to allow the insertion and removal of a glass panel. Use small molding to hold glass in place. No shimming should be needed.

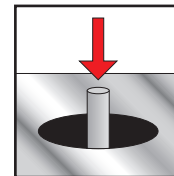
Uses: Knife RS-G, Knife RS-H, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

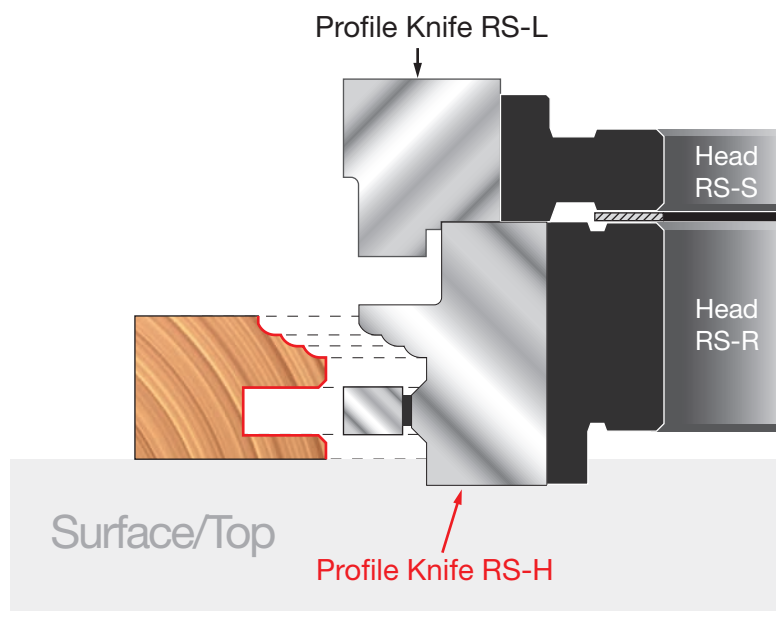
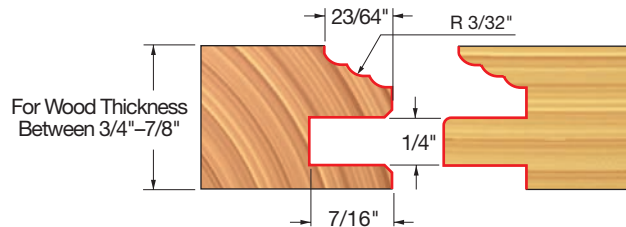
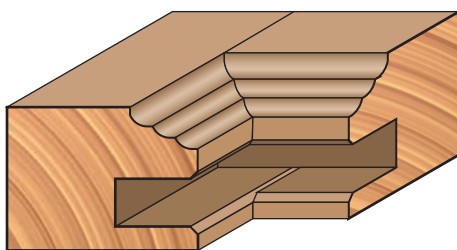




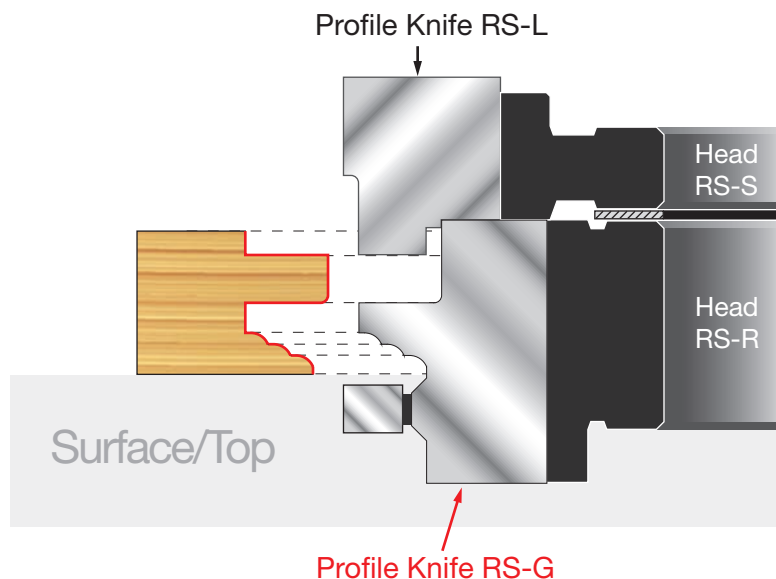
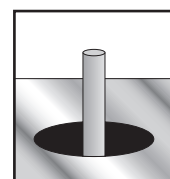
Profile Knife RS-H Glass Panel Door Set-Up

Use this set-up when constructing raised panel doors. Eased over edges on inside of panel groove provide less splintering, easier finishing, and easier insertion of panels. Shimming should be done between the cutter heads to achieve the fit required.

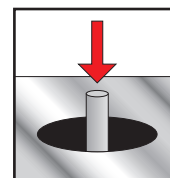
Uses: Knife RS-H, Knife RS-G, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

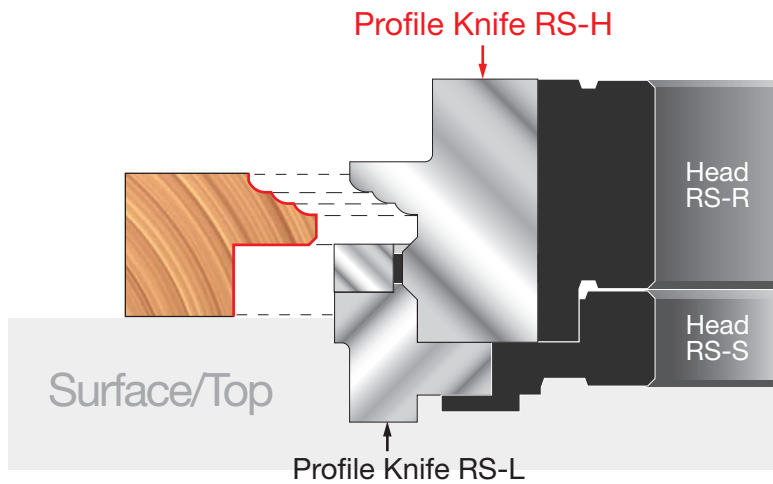
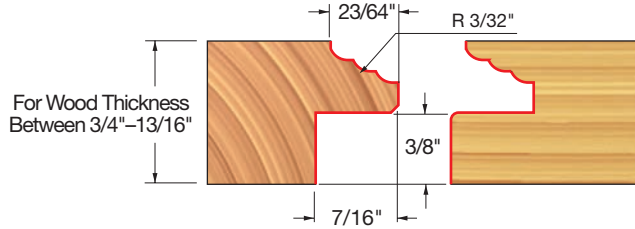
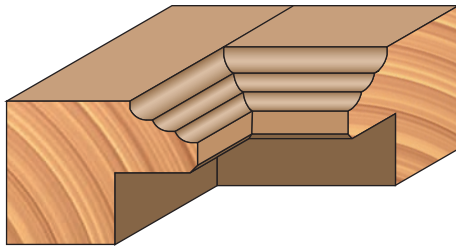


Profile Knife RS-H Glass Panel Door Set-Up

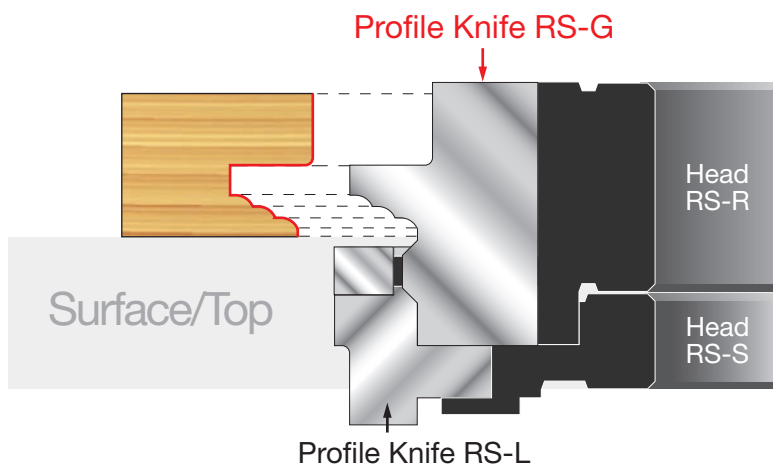
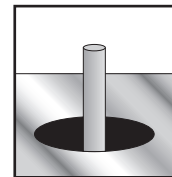


Use this set-up when a rabbeted groove is required to allow the insertion and removal of a glass panel. Use small molding to hold glass in place. No shimming should be needed.

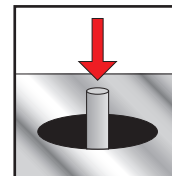
Uses: Knife RS-H, Knife RS-G, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

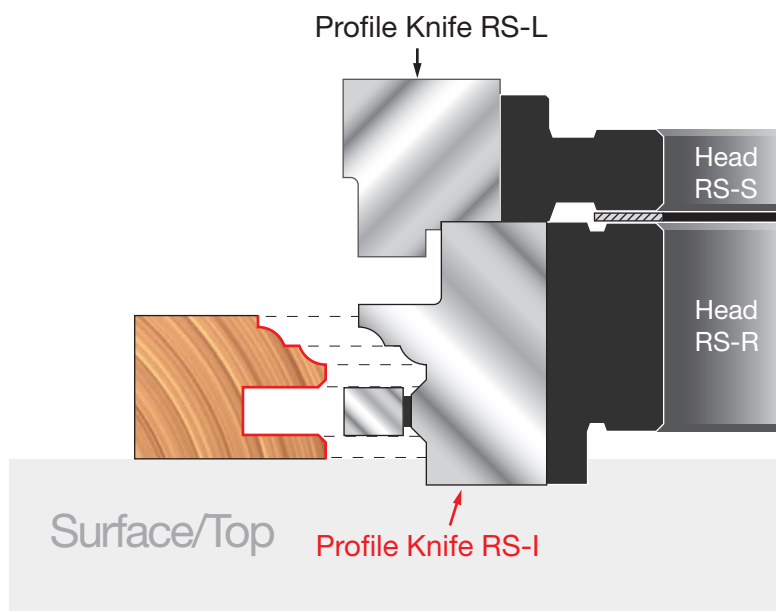
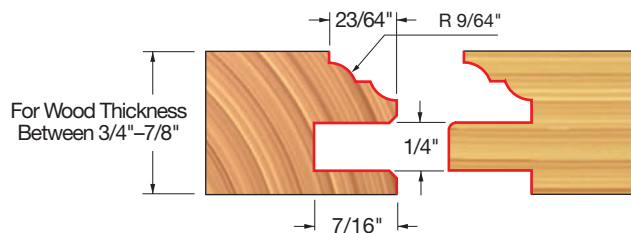
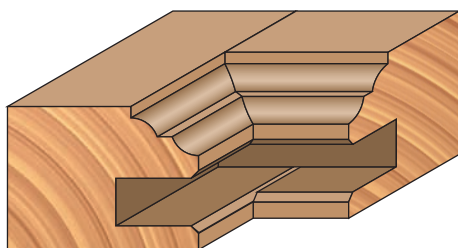




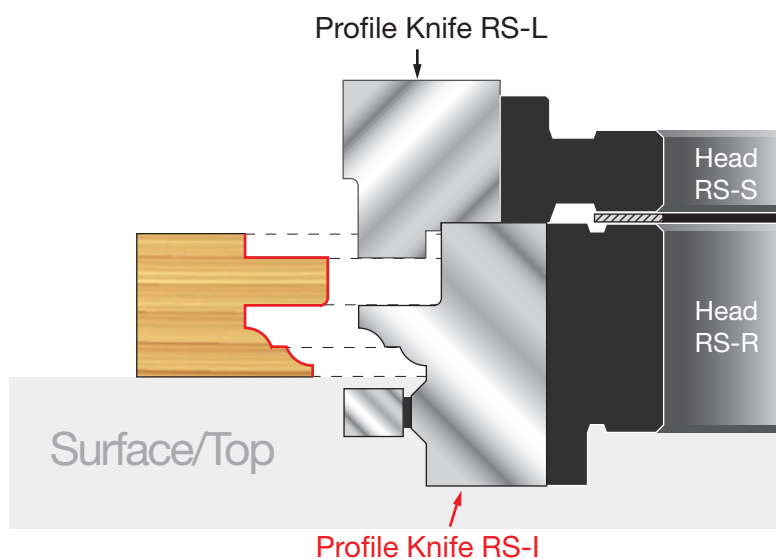
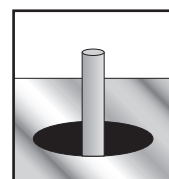
Profile Knife RS-I Raised Panel Door Set-Up

Use this set-up when constructing raised panel doors. Eased over edges on inside of panel groove provide less splintering, easier finishing, and easier insertion of panels. Shimming should be done between the cutter heads to achieve the fit required.

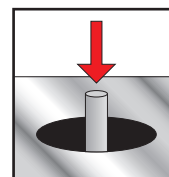
Uses: Knife RS-I, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut

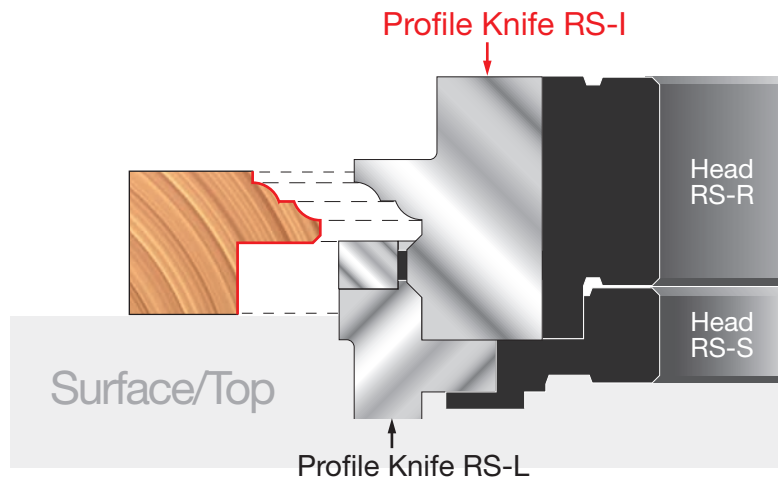
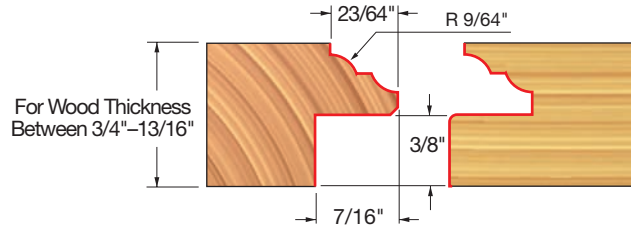
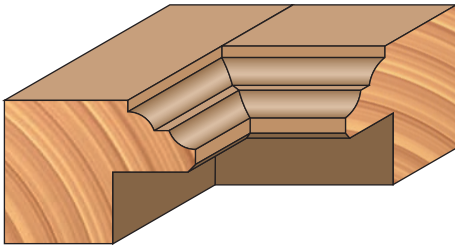


Profile Knife RS-I Glass Panel Door Set-Up

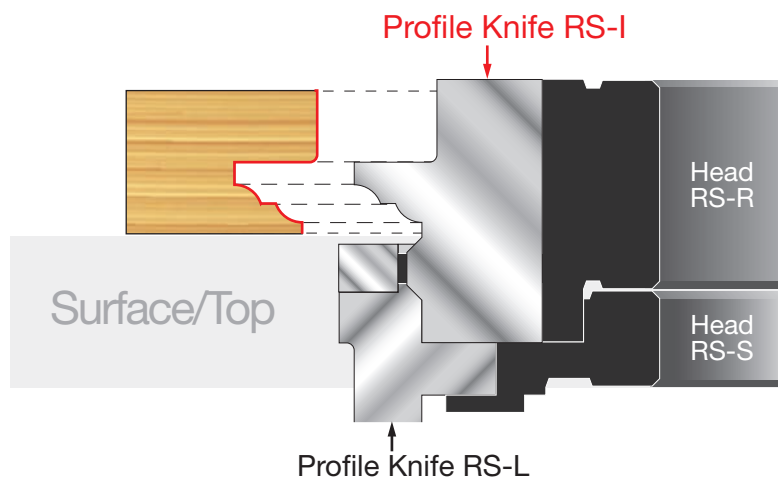
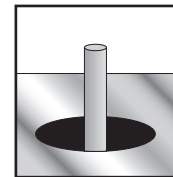


Use this set-up when a rabbeted groove is required to allow the insertion and removal of a glass panel. Use small molding to hold glass in place. No shimming should be needed.

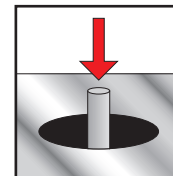
Uses: Knife RS-I, Knife RS-L, Head RS-R, and Head RS-S



Spindle
in Starting
Position for
Profile Cut



Spindle
Lowered
for Cope Cut



One Piece Door Edge Profile Cutters



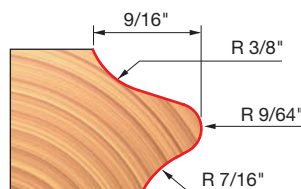
These profile knives are used with cutterhead DE-1000 to provide a smooth edge treatment on cabinet doors. Profile allows opening of cabinet doors and drawers without pulls.

Uses: Head **DE-1000** and Selected Profile Knives

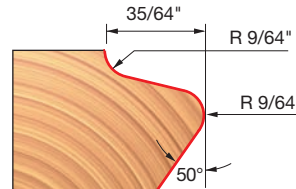
Cutterhead
DE-1000



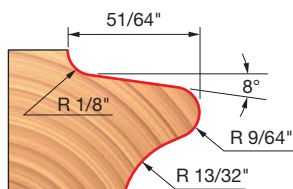
Item Number	Overall Dia.	Carbide Height	Bore Diameter
DE-1000	3-63/64"	1-37/64"	1-1/4"



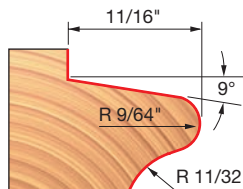
Profile Knife DE-A
Head DE-1000



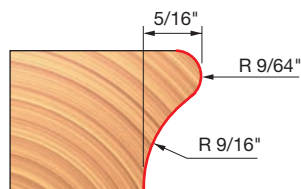
Profile Knife DE-B
Head DE-1000



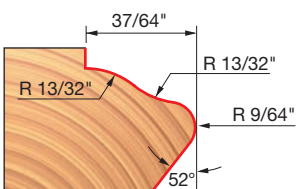
Profile Knife DE-C
Head DE-1000



Profile Knife DE-D
Head DE-1000



Profile Knife DE-E
Head DE-1000



Profile Knife DE-F
Head DE-1000

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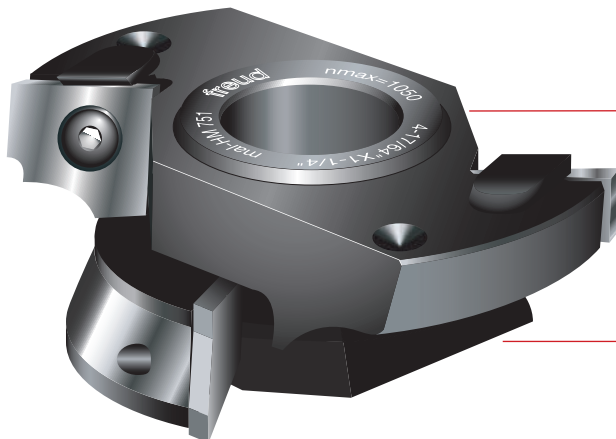
Two Piece 32mm Door Edge Profile Cutters



This flexible system will cut a wide variety of door edge profiles particularly suited for cabinets using the 32mm system. The heads can be used alone or in combination with each other. Profile allows opening of cabinet doors and drawers without pulls.

Uses: Head **DE320-U**, and selected profile knives for under cut
and Head **DE320-T** and selected profile knives for door edge profile.

Item Number	Overall Dia.	Carbide Height	Bore Diameter
DE320-T	4-17/64"	63/64"	1-1/4"
DE320-U	3-1/2"	25/32"	1-1/4"



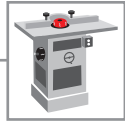
(Top)
Cutterhead
DE320-T

(Bottom)
Cutterhead
DE320-U

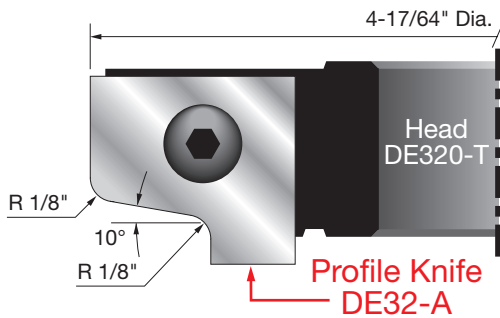
All Profile Drawings 1:1 Scale

Red Item Numbers Indicate 1-1/4" Bore

(Continued) Two Piece 32mm Door Edge Profile Cutters



Top Profile Cutter Knives For Cutterhead DE320-T:



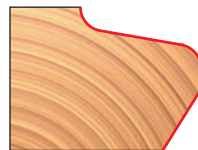
Profile Knife DE32-A
Head DE320-T (Top)



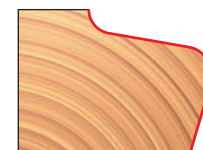
Profile Knife DE32-A
Head DE320-T (Top)
Profile Knife DE32-J
Head DE320-U (Bottom)



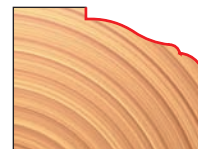
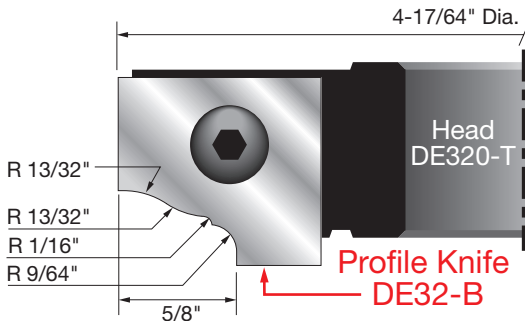
Profile Knife DE32-A
Head DE320-T (Top)
Profile Knife DE32-K
Head DE320-U (Bottom)



Profile Knife DE32-A
Head DE320-T (Top)
Profile Knife DE32-L
Head DE320-U (Bottom)



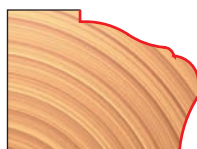
Profile Knife DE32-A
Head DE320-T (Top)
Profile Knife DE32-M
Head DE320-U (Bottom)



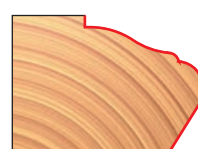
Profile Knife DE32-B
Head DE320-T (Top)



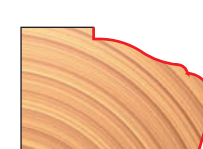
Profile Knife DE32-B
Head DE320-T (Top)
Profile Knife DE32-J
Head DE320-U (Bottom)



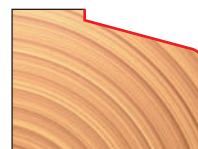
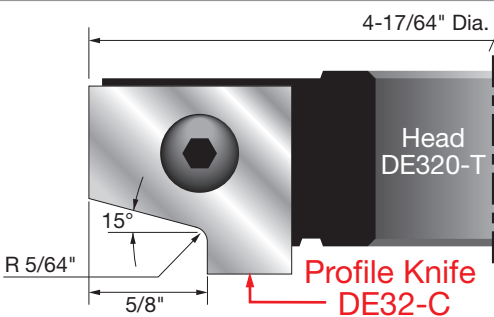
Profile Knife DE32-B
Head DE320-T (Top)
Profile Knife DE32-K
Head DE320-U (Bottom)



Profile Knife DE32-B
Head DE320-T (Top)
Profile Knife DE32-L
Head DE320-U (Bottom)



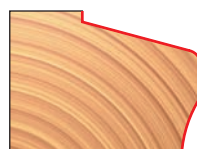
Profile Knife DE32-B
Head DE320-T (Top)
Profile Knife DE32-M
Head DE320-U (Bottom)



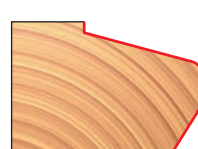
Profile Knife DE32-C
Head DE320-T (Top)



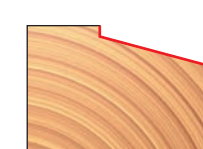
Profile Knife DE32-C
Head DE320-T (Top)
Profile Knife DE32-J
Head DE320-U (Bottom)



Profile Knife DE32-C
Head DE320-T (Top)
Profile Knife DE32-K
Head DE320-U (Bottom)



Profile Knife DE32-C
Head DE320-T (Top)
Profile Knife DE32-L
Head DE320-U (Bottom)



Profile Knife DE32-C
Head DE320-T (Top)
Profile Knife DE32-M
Head DE320-U (Bottom)

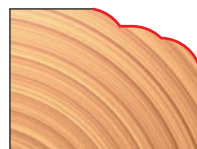
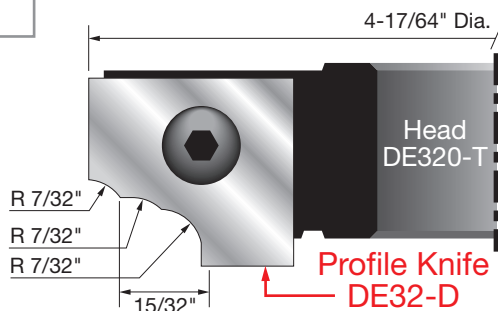
Red Item Numbers Indicate 1-1/4" Bore

All Profile Drawings 1:1 Scale



(Continued)

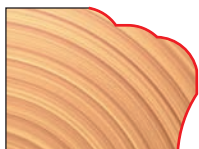
Two Piece 32mm Door Edge Profile Cutters



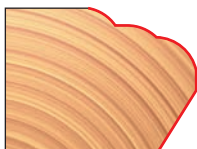
Profile Knife DE32-D
Head DE320-T (Top)



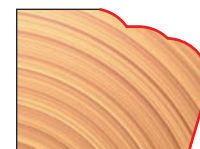
Profile Knife DE32-D
Head DE320-T (Top)
Profile Knife DE32-J
Head DE320-U (Bottom)



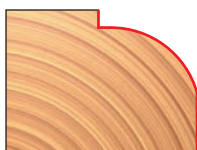
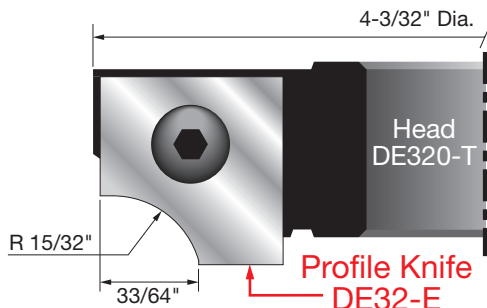
Profile Knife DE32-D
Head DE320-T (Top)
Profile Knife DE32-K
Head DE320-U (Bottom)



Profile Knife DE32-D
Head DE320-T (Top)
Profile Knife DE32-L
Head DE320-U (Bottom)



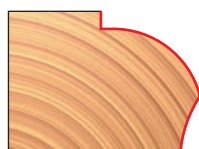
Profile Knife DE32-D
Head DE320-T (Top)
Profile Knife DE32-M
Head DE320-U (Bottom)



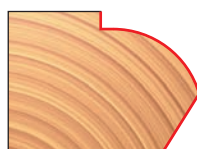
Profile Knife DE32-E
Head DE320-T (Top)



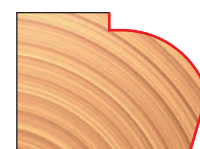
Profile Knife DE32-E
Head DE320-T (Top)
Profile Knife DE32-J
Head DE320-U (Bottom)



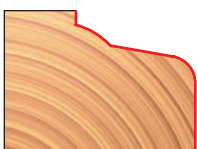
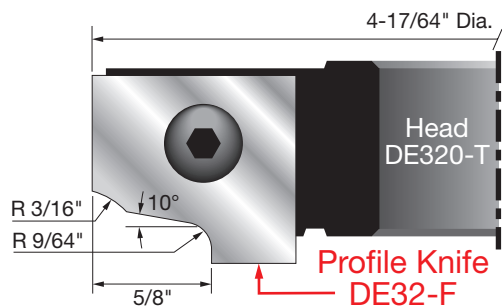
Profile Knife DE32-E
Head DE320-T (Top)
Profile Knife DE32-K
Head DE320-U (Bottom)



Profile Knife DE32-E
Head DE320-T (Top)
Profile Knife DE32-L
Head DE320-U (Bottom)



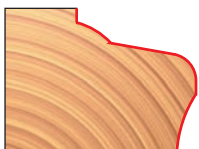
Profile Knife DE32-E
Head DE320-T (Top)
Profile Knife DE32-M
Head DE320-U (Bottom)



Profile Knife DE32-F
Head DE320-T (Top)



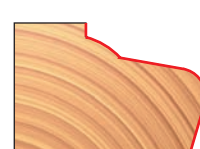
Profile Knife DE32-F
Head DE320-T (Top)
Profile Knife DE32-J
Head DE320-U (Bottom)



Profile Knife DE32-F
Head DE320-T (Top)
Profile Knife DE32-K
Head DE320-U (Bottom)

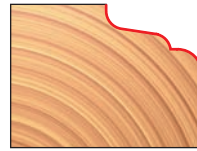
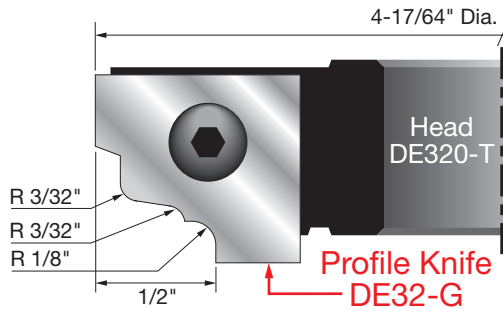
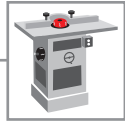


Profile Knife DE32-F
Head DE320-T (Top)
Profile Knife DE32-L
Head DE320-U (Bottom)



Profile Knife DE32-F
Head DE320-T (Top)
Profile Knife DE32-M
Head DE320-U (Bottom)

(Continued) Two Piece 32mm Door Edge Profile Cutters



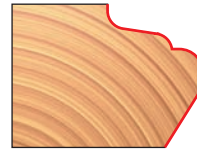
Profile Knife DE32-G
Head DE320-T (Top)



Profile Knife DE32-G
Head DE320-T (Top)
Profile Knife DE32-J
Head DE320-U (Bottom)



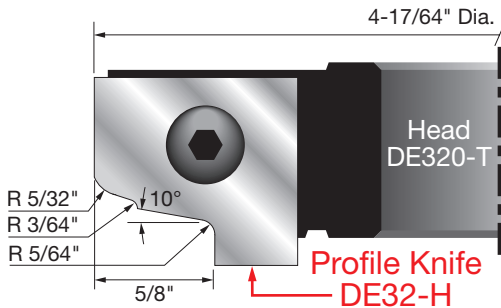
Profile Knife DE32-G
Head DE320-T (Top)
Profile Knife DE32-K
Head DE320-U (Bottom)



Profile Knife DE32-G
Head DE320-T (Top)
Profile Knife DE32-L
Head DE320-U (Bottom)



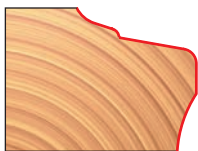
Profile Knife DE32-G
Head DE320-T (Top)
Profile Knife DE32-M
Head DE320-U (Bottom)



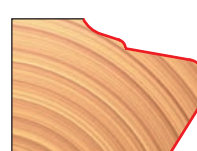
Profile Knife DE32-H
Head DE320-T (Top)



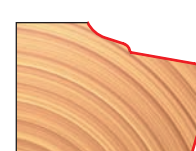
Profile Knife DE32-H
Head DE320-T (Top)
Profile Knife DE32-J
Head DE320-U (Bottom)



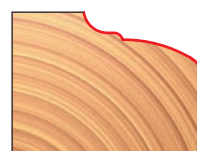
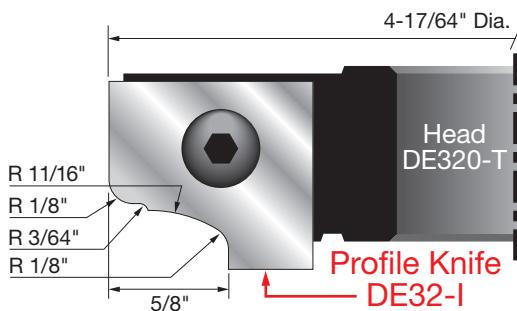
Profile Knife DE32-H
Head DE320-T (Top)
Profile Knife DE32-K
Head DE320-U (Bottom)



Profile Knife DE32-H
Head DE320-T (Top)
Profile Knife DE32-L
Head DE320-U (Bottom)



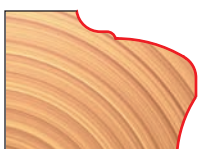
Profile Knife DE32-H
Head DE320-T (Top)
Profile Knife DE32-M
Head DE320-U (Bottom)



Profile Knife DE32-I
Head DE320-T (Top)



Profile Knife DE32-I
Head DE320-T (Top)
Profile Knife DE32-J
Head DE320-U (Bottom)



Profile Knife DE32-I
Head DE320-T (Top)
Profile Knife DE32-K
Head DE320-U (Bottom)



Profile Knife DE32-I
Head DE320-T (Top)
Profile Knife DE32-L
Head DE320-U (Bottom)



Profile Knife DE32-I
Head DE320-T (Top)
Profile Knife DE32-M
Head DE320-U (Bottom)

Red Item Numbers Indicate 1-1/4" Bore

All Profile Drawings 1:1 Scale



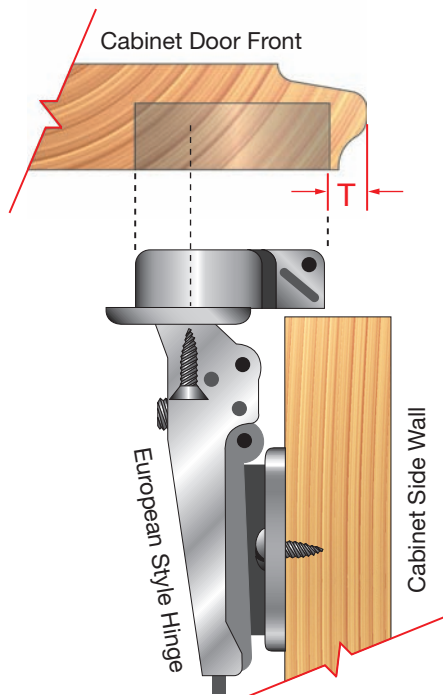
(Continued)

Two Piece 32mm Door Edge Profile Cutters

Bottom Profile Cutter Knives For Cutterhead DE320-U:

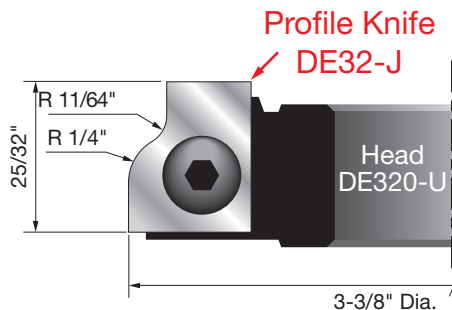
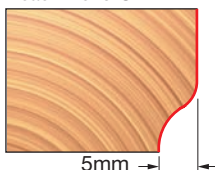
How to Select the Proper Bottom Profile

The bottom edge profiles were designed to work with today's European concealed boss hinges used in 32mm style cabinets. These profiles provide the maximum aesthetic look while maintaining door integrity. From the illustration below, if T is 3mm or more, then bottom profile knives DE32-K and DE32-M can be used (typical with standard hinges). If T is 6mm or more, then bottom profile knives DE32-J and DE32-L can be used.

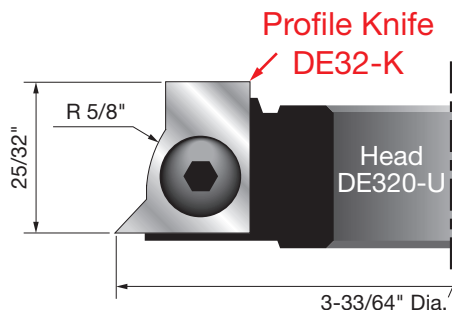
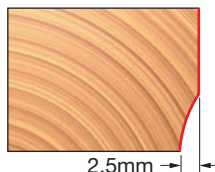


Drawing Not To Scale

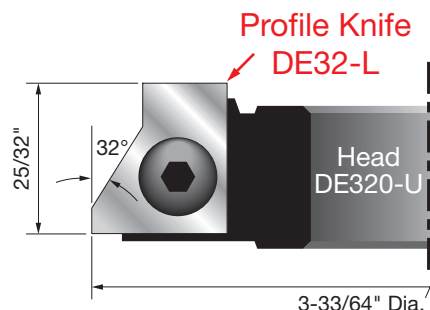
Profile Knife DE32-J
Head DE320-U



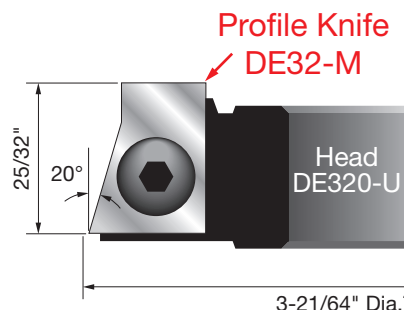
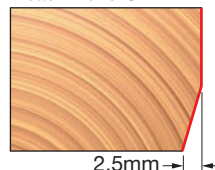
Profile Knife DE32-K
Head DE320-U



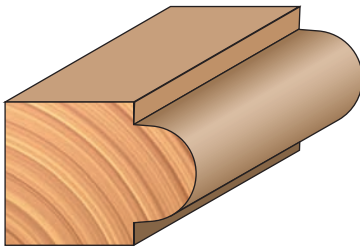
Profile Knife DE32-L
Head DE320-U



Profile Knife DE32-M
Head DE320-U



Concave Radius Knives & Head



These resharpenable carbide knives are designed to cut a bead, or round the end of a board. Head is computer balanced and is sold separately from the knives.

Concave Radius Head

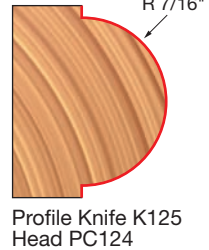
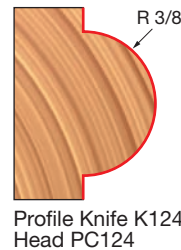
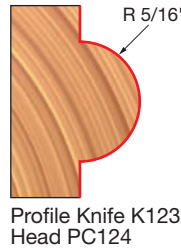
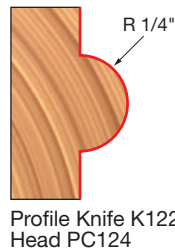
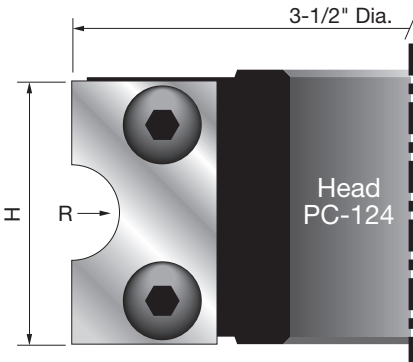
Item Number	Overall Diameter	Number of Knives Required	Bore Diameter
PC124	3-1/2"	2	1-1/4"

Knives sold separately

Concave Radius Knives

Item Number	Carbide Height	Large Radius	Head Required
K122	1-3/8"	1/4"	PC124
K123	1-3/8"	5/16"	PC124
K124	1-3/8"	3/8"	PC124
K125	1-3/8"	7/16"	PC124

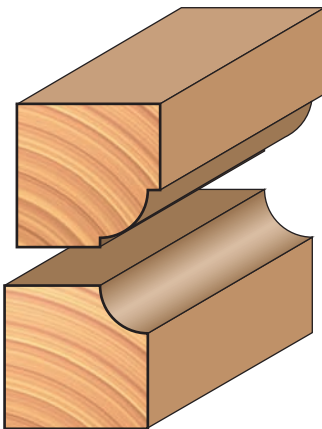
Head sold separately



Combination Quarter Round Convex & Concave Radius Knives & Head



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These resharpenable carbide knives are designed to cut the same radius either concave or convex. Head is computer balanced and is sold separately from the knives.

Combination Quarter Round Convex & Concave Radius Head

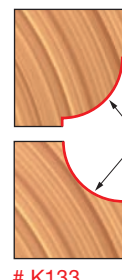
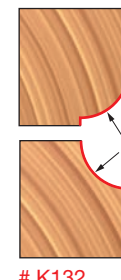
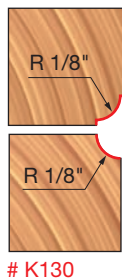
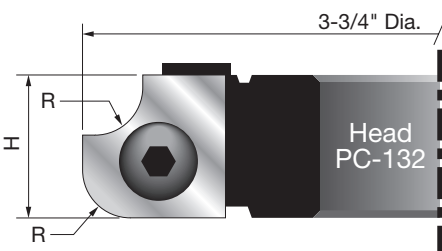
Item Number	Overall Diameter	Number of Knives Required	Bore Diameter
PC132	3-3/4"	2	1-1/4"

Knives sold separately

Combination Quarter Round Convex & Concave Radius Knives

Item Number	Carbide Height	Large Radius	Head Required
K130	3/4"	1/8"	PC132
K131	3/4"	3/16"	PC132
K132	3/4"	1/4"	PC132
K133	3/4"	5/16"	PC132

Head sold separately



Red Item Numbers Indicate 1-1/4" Bore

All Profile Drawings 1:1 Scale

SHAPER CUTTERS

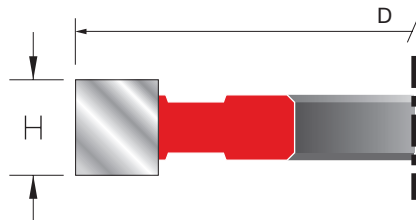
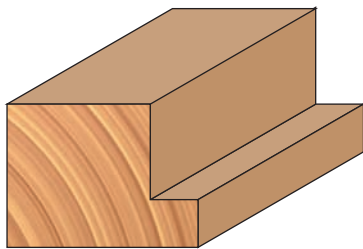
freud

Performance System® Cutters



Straight Edge Cutters

These cutters are computer balanced for super smooth, chatter-free cutting. Straight profile for making precise rabbets and dadoes.



Item Number	Overall Dia.(D)	Carbide Height	Bore Diameter	Rub Collar Number
EC140	27/8"	1/4"	3/4"	RC-003
EC141	2-7/8"	3/8"	3/4"	RC-003
EC142	2-7/8"	1/2"	3/4"	RC-003
EC143	2-7/8"	5/8"	3/4"	RC-003
EC144	2-7/8"	3/4"	3/4"	RC-003
EC146	2-7/8"	1"	3/4"	RC-003
UP140	3-9/16"	1/4"	1-1/4"	RC50#
UP141	3-9/16"	3/8"	1-1/4"	RC50#
UP142	3-9/16"	1/2"	1-1/4"	RC50#
UP143	3-9/16"	5/8"	1-1/4"	RC50#
UP144	3-9/16"	3/4"	1-1/4"	RC50#
UP145	3-9/16"	7/8"	1-1/4"	RC50#
UP146	3-9/16"	1"	1-1/4"	RC50#
UP147	3-9/16"	1-1/4"	1-1/4"	RC50#
UP148	3-9/16"	1-1/2"	1-1/4"	RC50#
UP149	3-9/16"	1-3/4"	1-1/4"	RC50#
UP150	3-9/16"	2"	1-1/4"	RC50#
UP151	3-9/16"	2-1/4"	1-1/4"	RC50#
UP152	3-9/16"	2-1/2"	1-1/4"	RC50#
UP153	3-9/16"	3"	1-1/4"	RC50#

See Bushing & Rub Collars for Bore Size
"#" Determines Bore Size
Number of Wings = 3



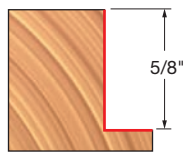
EC140
UP140



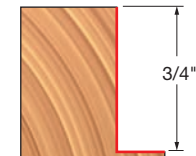
EC141
UP141



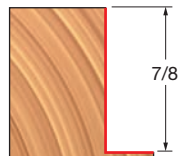
EC142
UP142



EC143
UP143



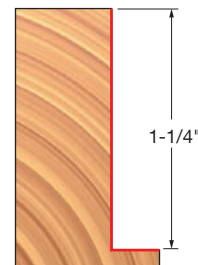
EC144
UP144



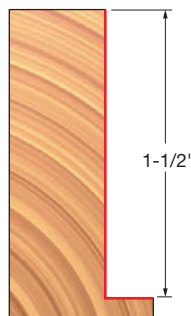
UP145



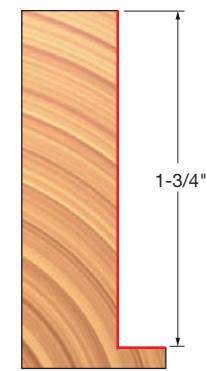
EC146
UP146



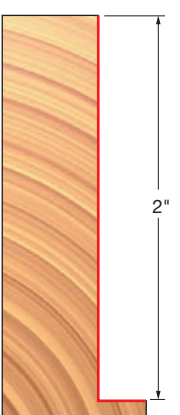
UP147



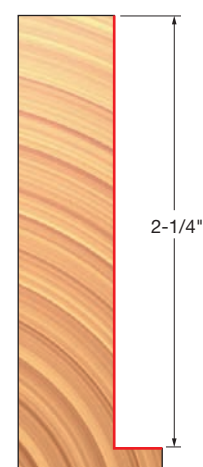
UP148



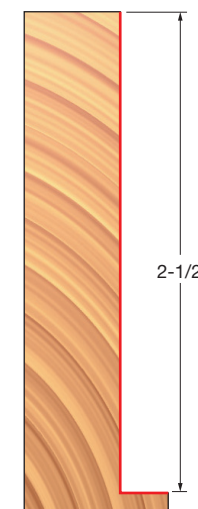
UP149



UP150



UP151

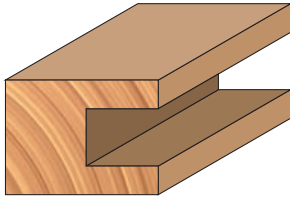


UP152



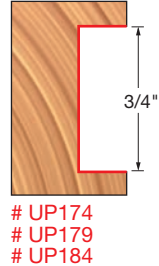
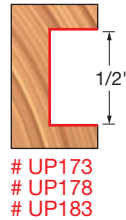
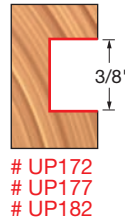
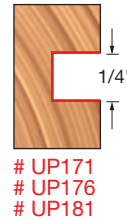
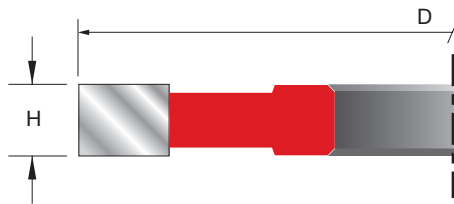
UP153

Groovers

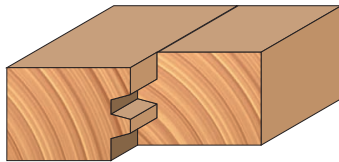


Excellent for use on shapers and cope spindles of double end tenoners. Suitable for grooving hardwood, softwood, and composition board.

Item Number	Overall Dia.(D)	Number of Wings	Carbide Height(H)	Bore Diameter
UP170	4"	6	1/8"	1-1/4"
UP171	4"	6	1/4"	1-1/4"
UP172	4"	6	3/8"	1-1/4"
UP173	4"	6	1/2"	1-1/4"
UP174	4"	6	3/4"	1-1/4"
UP175	6"	8	1/8"	1-1/4"
UP176	6"	8	1/4"	1-1/4"
UP177	6"	8	3/8"	1-1/4"
UP178	6"	8	1/2"	1-1/4"
UP179	6"	8	3/4"	1-1/4"
UP181	8"	12	1/4"	1-1/4"
UP182	8"	12	3/8"	1-1/4"
UP183	8"	12	1/2"	1-1/4"
UP184	8"	12	3/4"	1-1/4"

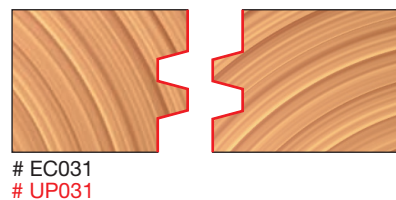
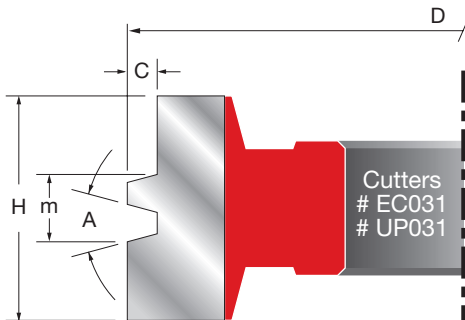


Reversible Glue Joint Cutters



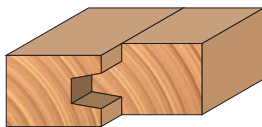
Freud's Reversible Glue Joint Cutters will produce a strong joint by increasing the surface area for the glue. Boards should be planed to a uniform thickness. Cutter should be aligned to the center of the board, then reverse each board for a perfect glue joint.

Item Number	Overall Diameter	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Angle (A)	Bore Diameter
EC031	2-7/8"	5/32"	1-17/64"	23/64"	30°	3/4"
UP031	3-9/16"	5/32"	1-3/16"	23/64"	30°	1-1/4"



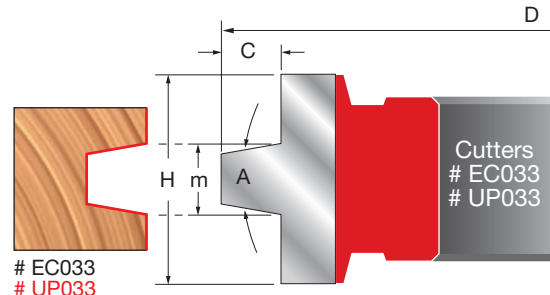
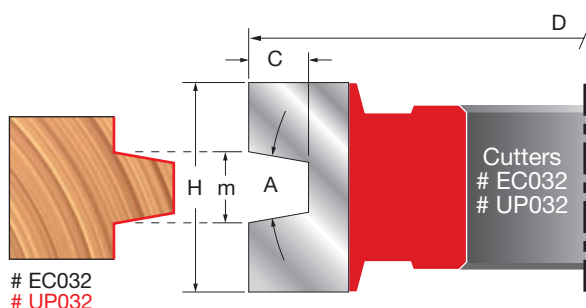


Wedge Tongue & Groove Cutters

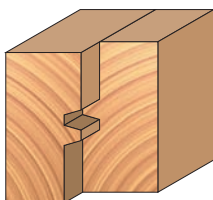


These cutters produce exceptionally strong joints when gluing up boards edge to edge. This design gives an increased amount of gluing area for maximum strength.

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Angle (A)	Bore Diameter
EC032	2-7/8"	5/16"	1-7/64"	3/8"	20°	3/4"
EC033	2-7/8"	5/16"	1-7/64"	3/8"	20°	3/4"
UP032	3-9/16"	5/16"	1-3/32"	3/8"	20°	1-1/4"
UP033	3-9/16"	5/16"	1-3/32"	3/8"	20°	1-1/4"



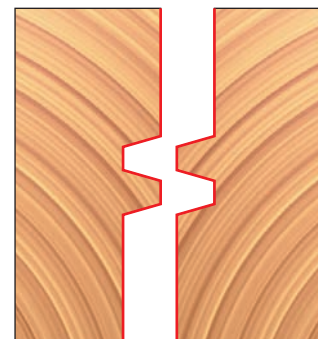
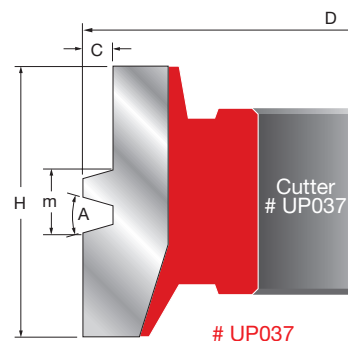
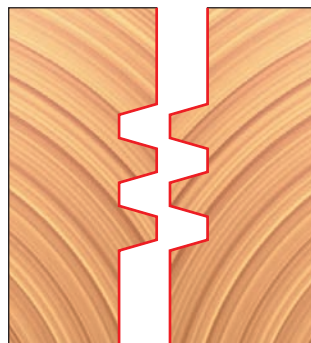
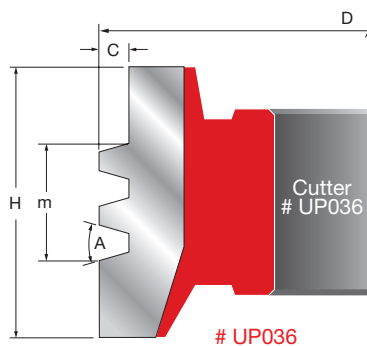
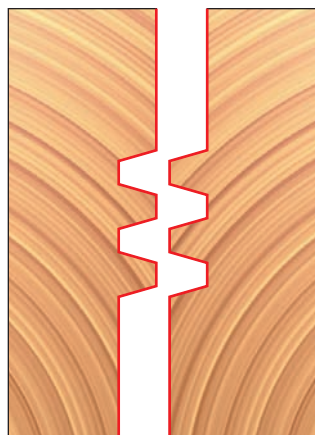
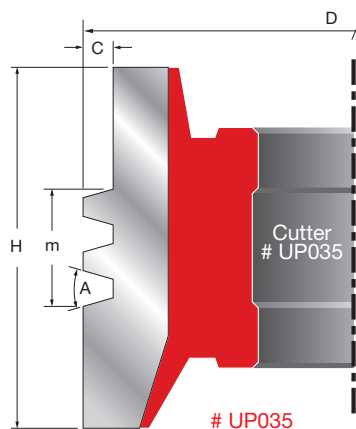
Glue Joint Cutters



Freud's Glue Joint Cutters produce a strong joint in thick stock by increasing the surface area for the glue. Boards should be planed to a uniform thickness. Cutter should be aligned to the center of the board, then reverse each board for a perfect glue joint.

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Angle (A)	Minor Height(m)	Bore Diameter
UP035	3-9/16"	13/64"	23/8"	32°	49/64"	1-1/4"
UP036	3-9/16"	13/64"	1-23/32"	32°	49/64"	1-1/4"
UP037	3-9/16"	13/64"	1-23/32"	32°	13/32"	1-1/4"

Number of wings = 3



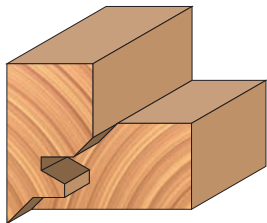
All Profile Drawings 1:1 Scale

Red Item Numbers Indicate 1-1/4" Bore

Tongue & Groove Lock Miter Cutters

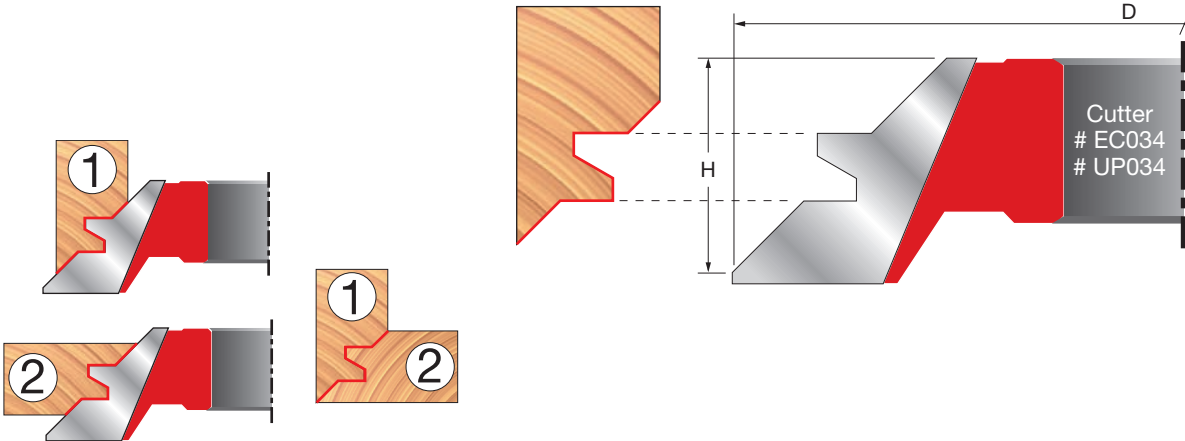


These cutters are designed to make lock miter joints with ease. All you do is run one board vertically and the piece to be joined vertically.



Item Number	Overall Dia.(D)	Carbide Height(H)	Bore Diameter
EC034	4-5/32"	1-5/32"	3/4"
UP034	4-3/4"	1-3/16"	1-1/4"

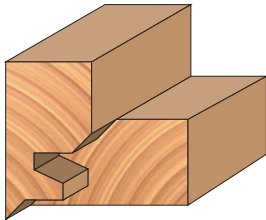
Number of Wings = 3



Double Tongue & Groove Lock Miter Set



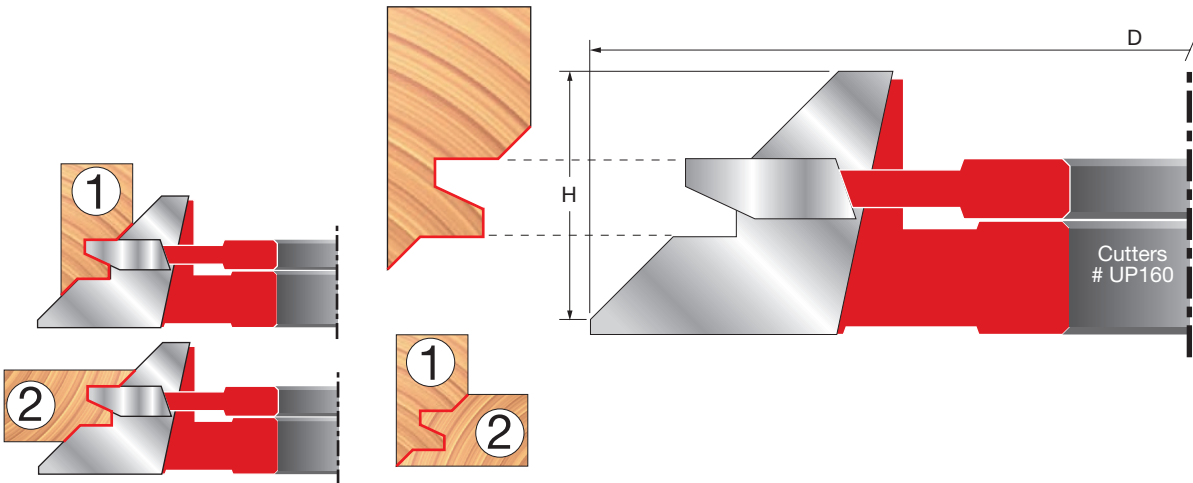
This Lock Miter Set consists of two three-wing cutters. One sits inside the other to allow the joining of boards from 5/8" thick to 1-3/16" thick. After mounting the head on the spindle, a test piece should be made. One piece is run horizontally and the second is run vertically. Shims are included to allow for adjusting joint tightness.



Item Number	Overall Dia.(D)	Carbide Height(H)	Bore Diameter
UP160	7-3/32"	1-5/16"	1-1/4"

Number of pieces = 2

Number of Wings = 3

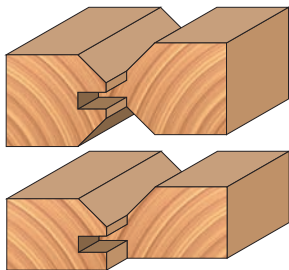


Red Item Numbers Indicate 1-1/4" Bore

All Profile Drawings 1:1 Scale



V-Paneling Cutter Sets



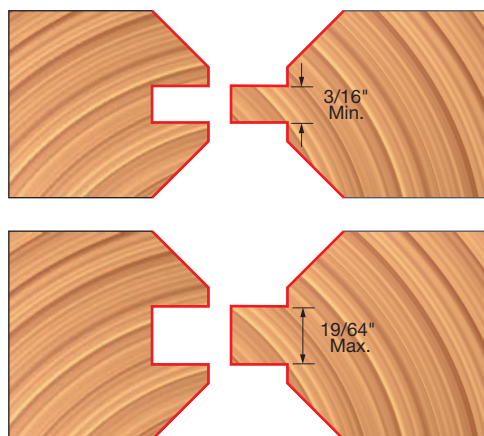
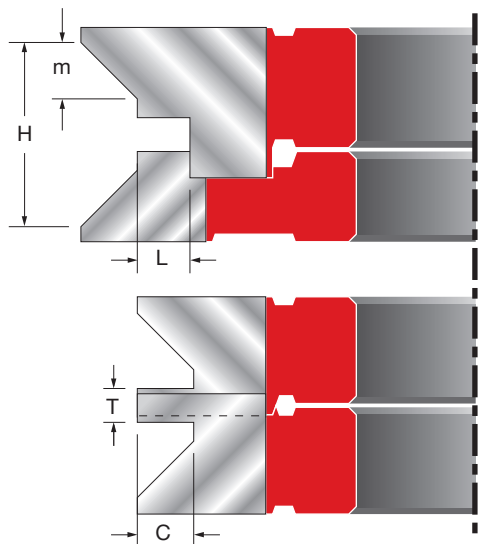
These cutters sets are designed to make V-groove paneling with a strong tongue and groove joint. Each set can be used with 1/2", 3/4", and 1" stock. Shims are included to allow the thickness of the tongue to increase as stock increases. UP190 cuts a V-groove on both sides of the paneling, while UP191 only cuts a V-groove on one side.

	Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Tenon Thickness(R)	Tenon Length(L)	Bore Dia.
NEW	UC190	3-35/64"	19/64"	1-5/16"-1-5/64"	19/64"	3/16"-19/64"	19/64"	3/4"
	UP190	4-1/8"	19/64"	31/32"-1-5/64"	19/64"	3/16"-19/64"	19/64"	1-1/4"
NEW	UC191	3-35/64"	9/32"	1-1/32"-1-5/32"	19/64"	3/16"-5/16"	9/32"	3/4"
	UP191	4-1/8"	9/32"	1-1/16"-1-3/16"	19/64"	3/16"-5/16"	9/32"	1-1/4"

Number of pieces = 4

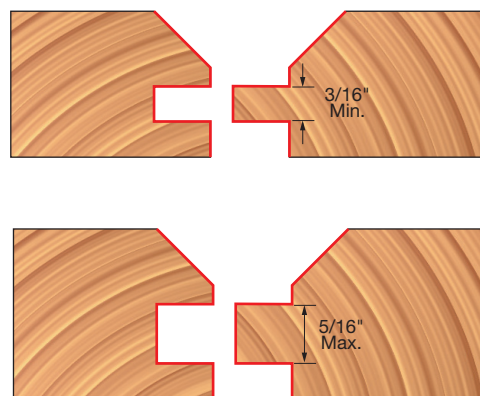
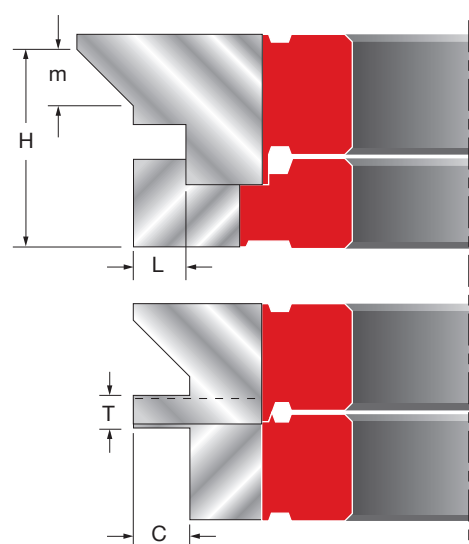
Number of wings = 3

Cutter Set #UC190 & #UP190



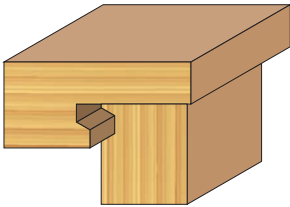
UC190
UP190

Cutter Set #UC191 & #UP191



UC191
UP191

Drawer Lock Cutters

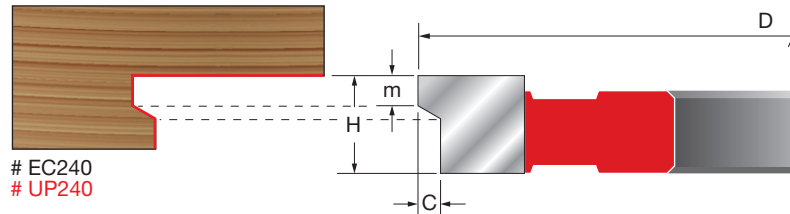


Designed for 1/2" and 3/4" thick stock, these cutters provide a strong joint for drawer fronts. Run the drawer face flat on the shaper table, and the drawer sides vertically on the fence. Once correct setup is attained for drawer front, height of cutter does not need to be changed to run drawer sides.

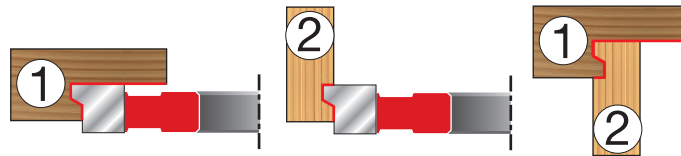


Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Bore Diameter
EC240	2-7/8"	1/8"	33/64"	5/32"	3/4"
UP240	3-15/16"	1/8"	33/64"	5/32"	1-1/4"

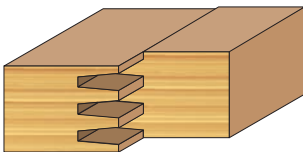
Number of Wings = 3



EC240
UP240



Finger Joint Cutter

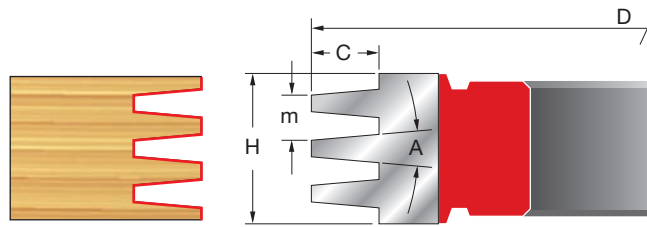


This cutter is used where very strong joining is needed. The cutter has three balanced wings and will join wood up to 5/8" thick. Wider boards can be joined by stacking multiple cutters on the spindle. After the first board is cut, the spindle should be raised or lowered 1/8" to make the mating cut.



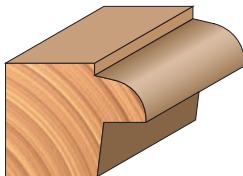
Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Angle (A)	Bore Diameter
NEW UC250	2-61/64"	11/32"	25/32"	15/64"	10°	3/4"
UP250	3-9/16"	11/32"	25/32"	15/64"	10°	1-1/4"

Number of Wings = 3



UC250
UP250



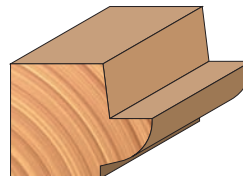
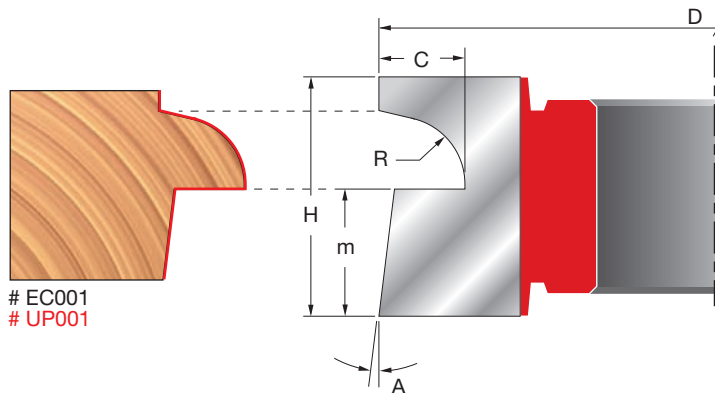


Door Lip Cutters

These cutters are designed for counter-clockwise rotation with the rabbet down, popular with raised panel doors where the panel extends further than the door frame. With clockwise rotation they can be used with the face down, so inconsistency in door thickness will not show when doors are closed.

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Large Radius(R)	Angle (A)	Bore Diameter
EC001	2-7/8"	29/64"	1-1/4"	43/64"	23/64"	7°	3/4"
UP001	3-9/16"	29/64"	1-1/4"	43/64"	23/64"	7°	1-1/4"

Number of Wings = 3

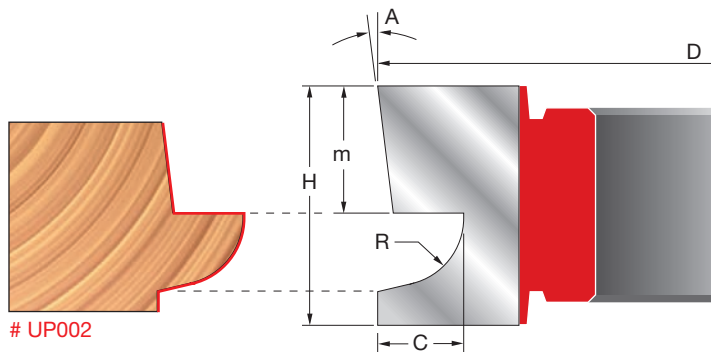


Door Lip Cutter

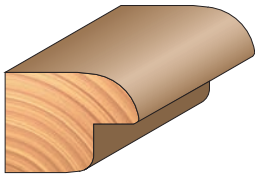
This cutter is designed for clockwise rotation with the rabbet down, popular with raised panel doors where the panel extends further than the door frame. With counter-clockwise rotation it can be used with the face down, so inconsistency in door thickness will not show when doors are closed.

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Large Radius(R)	Angle (A)	Bore Diameter
UP002	3-9/16"	29/64"	1-1/4"	43/64"	23/64"	7°	1-1/4"

Number of Wings = 3



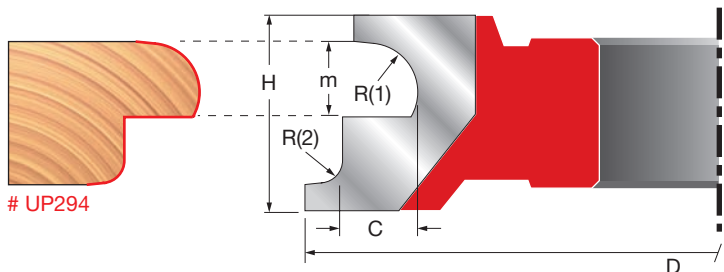
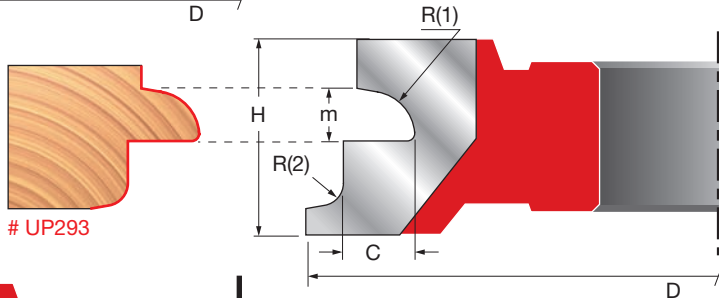
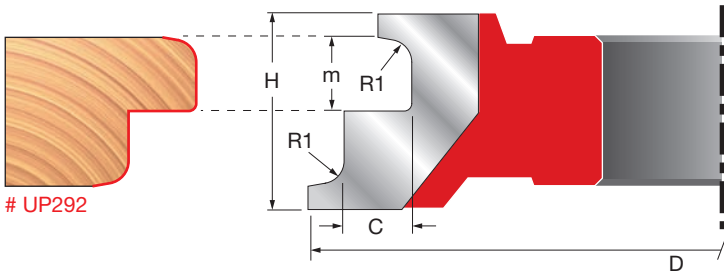
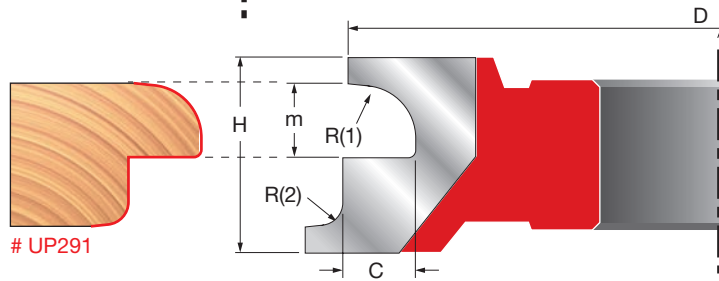
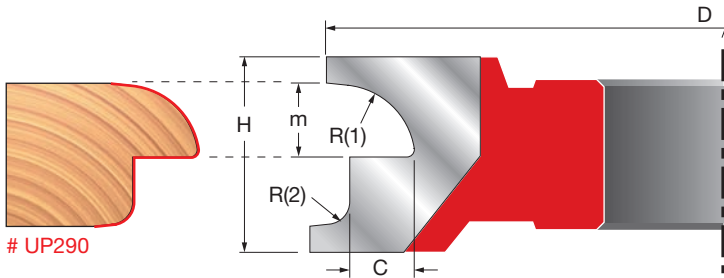
Door Lip Cutters



All of these door lip cutters leave a smooth radius on the back of the rabbet for easier finishing. By varying the height and fence settings these door lip cutters can provide different profiles.

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Bore Diameter
UP290	4-21/64"	7/16"	1-1/32"	25/64"	25/64"	—	1-1/4"
UP291	3-15/16"	3/8"	1-1/32"	25/64"	9/32"	1/8"	1-1/4"
UP292	4-21/64"	23/64"	1-1/32"	25/64"	1/8"	—	1-1/4"
UP293	4-21/64"	3/8"	1-1/32"	9/32"	15/64"	1/8"	1-1/4"
UP294	4-21/64"	25/64"	1-1/32"	25/64"	1/4"	1/8"	1-1/4"
UP295	4-21/64"	13/32"	1-1/32"	25/64"	1/8"	1/8"	1-1/4"
UP296	4-21/64"	13/32"	1-1/32"	25/64"	1/8"	5/64"	1-1/4"
UP297	4-21/64"	7/16"	1-1/32"	23/64"	19/32"	1/8"	1-1/4"

Number of Wings = 3



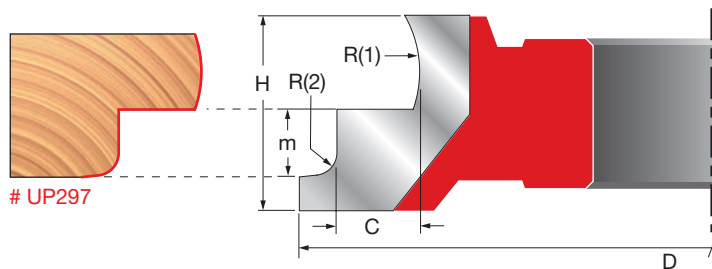
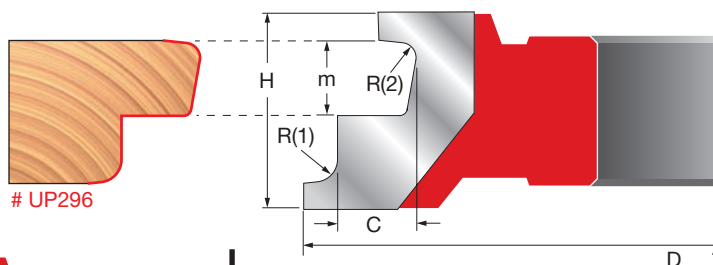
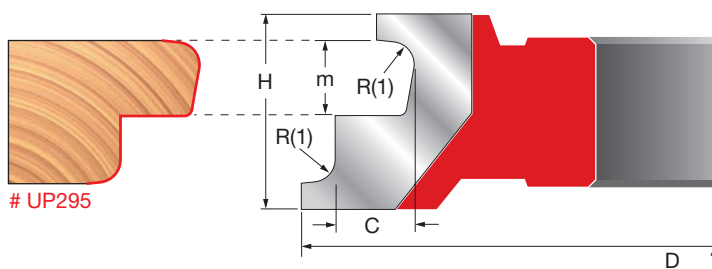
Red Item Numbers Indicate 1-1/4" Bore

All Profile Drawings 1:1 Scale

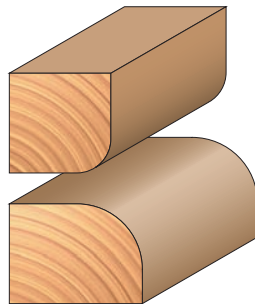


(Continued)

Door Lip Cutters



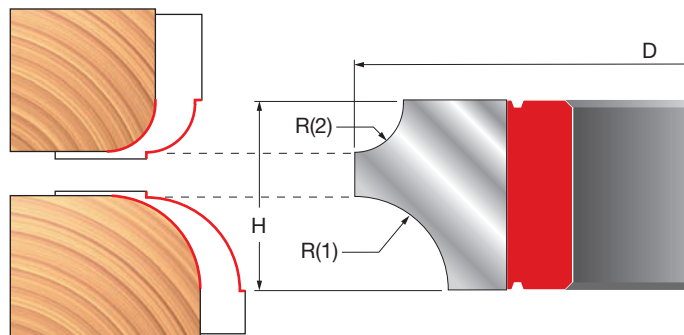
Combination 1/4" & 1/2" Round Over Cutters



This cutter is actually two cutters in one. One part is a 1/4" rounding over cutter and the other is a 1/2" rounding over cutter. It can also be used as a molding profile cutter and a beading cutter.

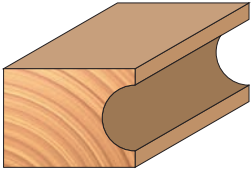
Item Number	Overall Dia.(D)	Carbide Height(H)	Large Radius(R1)	Small Radius(R2)	Bore Diameter
EC044	2-7/8"	1"	1/2"	1/4"	3/4"
UP004	3-9/16"	1"	1/2"	1/4"	1-1/4"

Number of Wings = 3



EC044
UP004

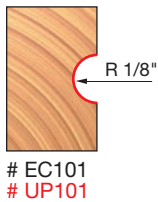
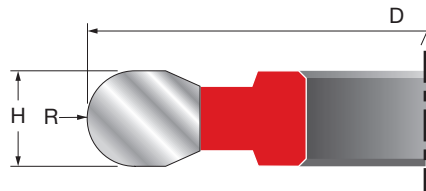
Convex Radius Cutters



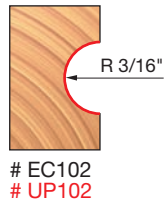
These computer balanced three-wing cutters are a necessity to anyone who has a shaper. They can be used for cutting flutes and coves. Available in the most popular sizes in both 3/4" and 1-1/4" bore.

Item Number	Overall Dia.(D)	Carbide Height(H)	Large Radius(R)	Bore Diameter
EC101	2-7/8"	1/4"	1/8"	3/4"
EC102	2-7/8"	3/8"	3/16"	3/4"
EC103	2-7/8"	1/2"	1/4"	3/4"
EC104	2-7/8"	5/8"	5/16"	3/4"
EC105	2-7/8"	3/4"	3/8"	3/4"
UP101	3-9/16"	1/4"	1/8"	1-1/4"
UP102	3-9/16"	3/8"	3/16"	1-1/4"
UP103	3-9/16"	1/2"	1/4"	1-1/4"
UP104	3-9/16"	5/8"	5/16"	1-1/4"
UP105	3-9/16"	3/4"	3/8"	1-1/4"
UP106	3-9/16"	7/8"	7/16"	1-1/4"
UP107	3-9/16"	1"	1/2"	1-1/4"
UP108	3-9/16"	1-1/4"	5/8"	1-1/4"
UP109	3-5/8"	1-1/2"	3/4"	1-1/4"
UP110	4"	2"	1"	1-1/4"

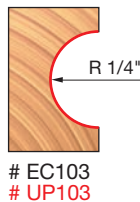
Number of Wings = 3



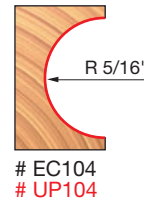
EC101
UP101



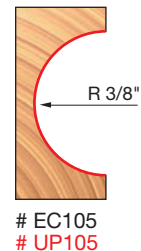
EC102
UP102



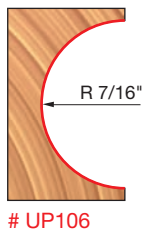
EC103
UP103



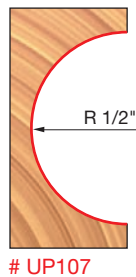
EC104
UP104



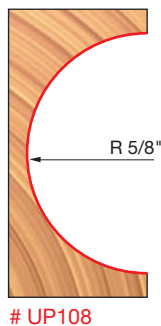
EC105
UP105



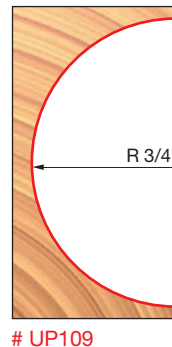
UP106



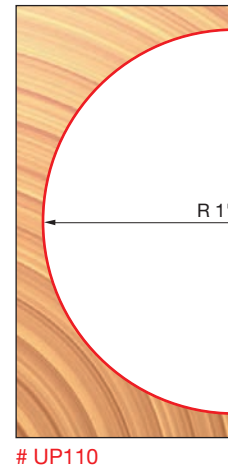
UP107



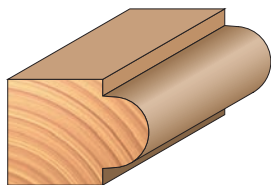
UP108



UP109



UP110

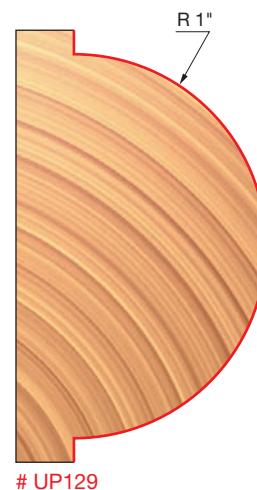
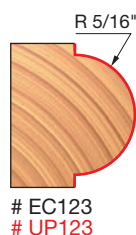
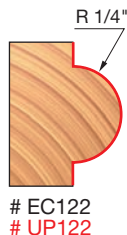
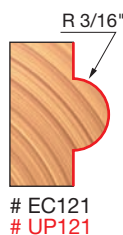
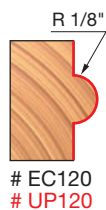
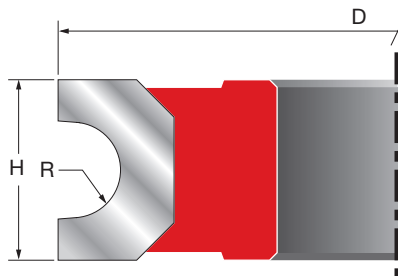


Concave Radius Cutters

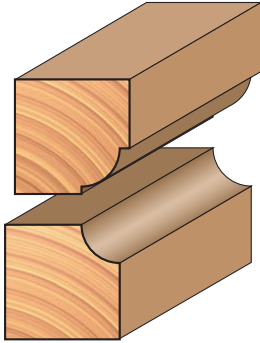
These computer balanced three-wing cutters are a necessity to anyone who has a shaper. They can be used for cutting beads and rounding the end of boards. Available in the most popular sizes for both 3/4" and 1-1/4" bore.

Item Number	Overall Dia.(D)	Carbide Height(H)	Large Radius(R)	Bore Diameter
EC120	2-7/8"	5/8"	1/8"	3/4"
EC121	2-7/8"	25/32"	3/16"	3/4"
EC122	2-7/8"	15/16"	1/4"	3/4"
EC123	2-7/8"	1-1/8"	5/16"	3/4"
EC124	2-7/8"	1-1/4"	3/8"	3/4"
UP120	3-9/16"	21/32"	1/8"	1-1/4"
UP121	3-9/16"	13/16"	3/16"	1-1/4"
UP122	3-9/16"	31/32"	1/4"	1-1/4"
UP123	3-9/16"	1-1/8"	5/16"	1-1/4"
UP124	3-9/16"	1-9/32"	3/8"	1-1/4"
UP125	3-5/8"	1-13/32"	7/16"	1-1/4"
UP126	4"	1-39/64"	1/2"	1-1/4"
UP127	4-3/8"	1-51/64"	5/8"	1-1/4"
UP128	4-11/16"	2-7/64"	3/4"	1-1/4"
UP129	5-1/8"	2-39/64"	1"	1-1/4"

Number of Wings = 3



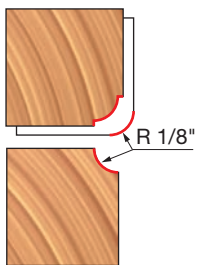
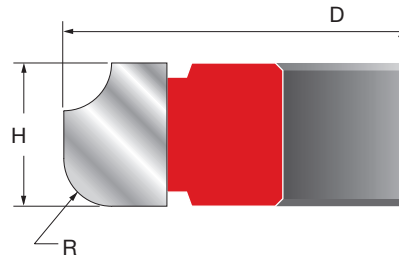
Combination Convex & Concave Cutters



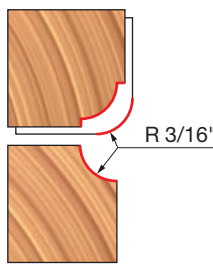
Freud's Combination Convex & Concave Cutters offer maximum versatility because they will cut half round beads, quarter round beads, coves, and rounding over cuts. These bits are great for making drop leaf tables by creating mating profiles with one cutter.

Item Number	Overall Dia.(D)	Carbide Height(H)	Large Radius(R)	Bore Diameter
UP130	3-9/16"	9/16"	1/8"	1-1/4"
UP131	3-9/16"	19/32"	3/16"	1-1/4"
UP132	3-9/16"	3/4"	1/4"	1-1/4"
UP133	3-9/16"	63/64"	5/16"	1-1/4"
UP134	3-9/16"	1-1/64"	3/8"	1-1/4"
UP135	3-5/8"	1-1/8"	7/16"	1-1/4"
UP136	4-1/4"	1-23/64"	1/2"	1-1/4"
UP137	4-11/16"	1-35/64"	5/8"	1-1/4"
UP138	4-11/16"	1-53/64"	3/4"	1-1/4"
UP139	5-1/8"	2-1/4"	1"	1-1/4"

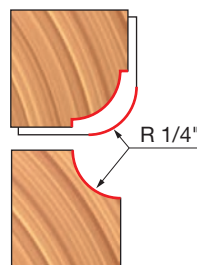
Number of Wings = 3



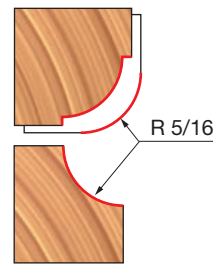
UP130



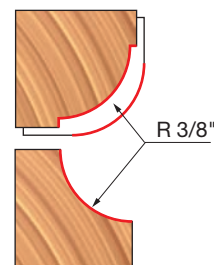
UP131



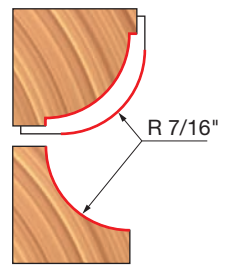
UP132



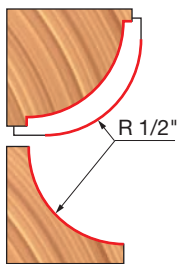
UP133



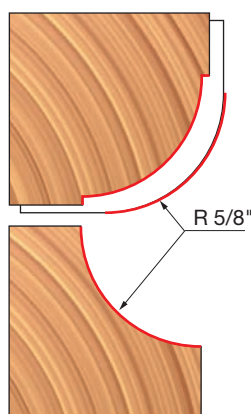
UP134



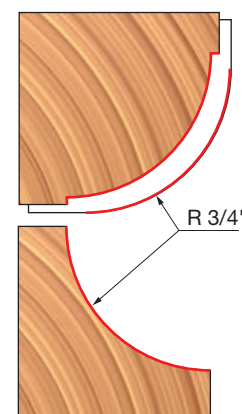
UP135



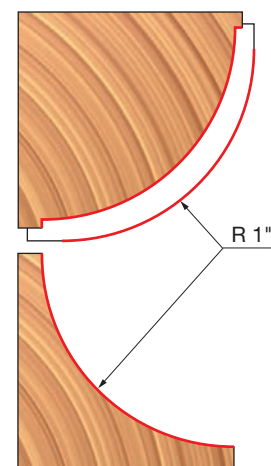
UP136



UP137



UP138



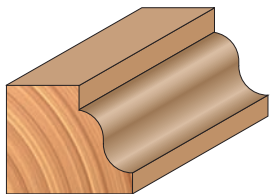
UP139

Red Item Numbers Indicate 1-1/4" Bore

All Profile Drawings 1:1 Scale



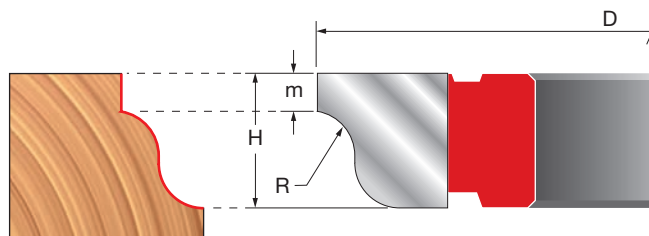
Roman Ogee Cutters



The Roman Ogee pattern of edge treatments will lend an air of classical styling to any piece. The pattern can also be changed by raising or lowering the spindle.

Item Number	Overall Dia.(D)	Carbide Height(H)	Minor Height(m)	Large Radius(R)	Bore Diameter
EC005	2-7/8"	25/32"	9/32"	15/64"	3/4"
UP005	3-5/8"	45/64"	13/64"	15/64"	1-1/4"

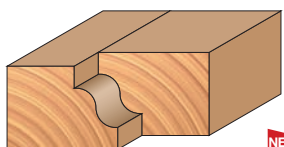
Number of Wings = 3



EC005
UP005



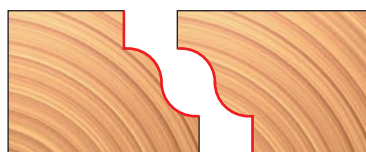
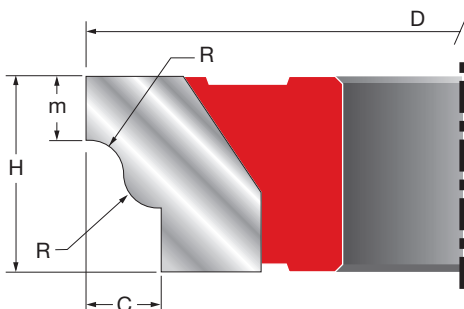
Matched Reverse Detail Cutters



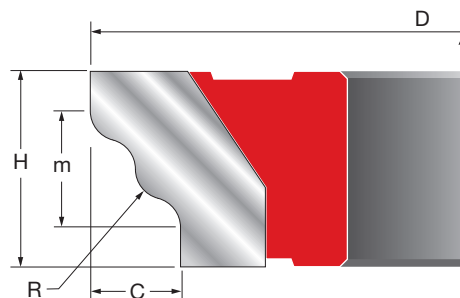
These cutters have perfectly matched profiles which enable both the molding cut and a matching coping cut with the same cutter.

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Large Radius(R)	Angle (A)	Bore Diameter
NEW UC282	3-11/32"	5/8"	1-1/32"	1/2"	15/64"	—	3/4"
NEW UC285	3-11/32"	15/32"	1"	19/32"	15/64"	—	3/4"
UP280	3-15/16"	25/64"	1-3/32"	23/64"	11/64"	—	1-1/4"
UP281	3-15/16"	15/32"	1-3/32"	5/16"	5/32"	—	1-1/4"
UP282	3-15/16"	5/8"	1-3/32"	1/2"	15/64"	—	1-1/4"
UP283	3-15/16"	33/64"	63/64"	33/64"	13/64"	—	1-1/4"
UP284	3-15/16"	43/64"	63/64"	33/64"	23/64"	—	1-1/4"
UP285	3-15/16"	15/32"	63/64"	19/32"	15/64"	—	1-1/4"
UP286	3-15/16"	3/4"	63/64"	23/64"	23/64"	—	1-1/4"
UP287	3-15/16"	19/32"	63/64"	3/4"	5/16"	—	1-1/4"
UP288	4-1/8"	5/8"	63/64"	17/64"	—	23°	1-1/4"

Number of Wings = 3

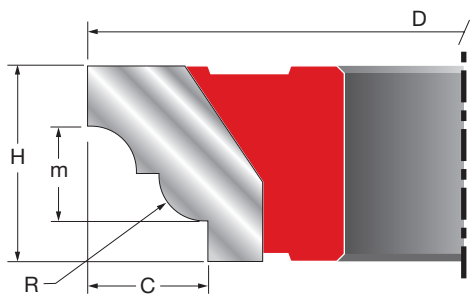
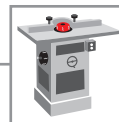


UP280

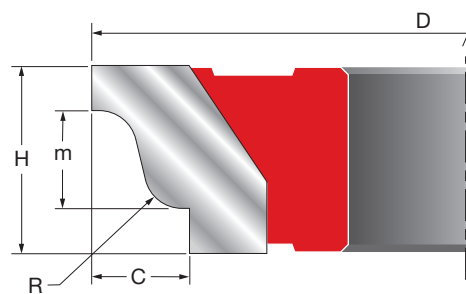


UP281

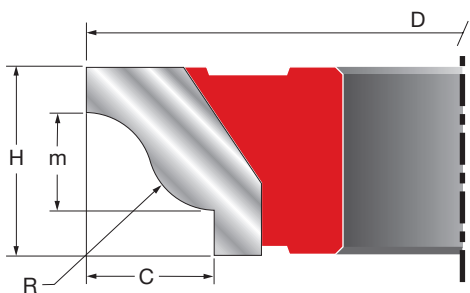
(Continued) Matched Reverse Detail Cutters



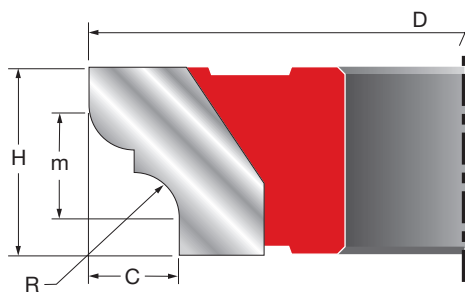
#UC282, #UP282



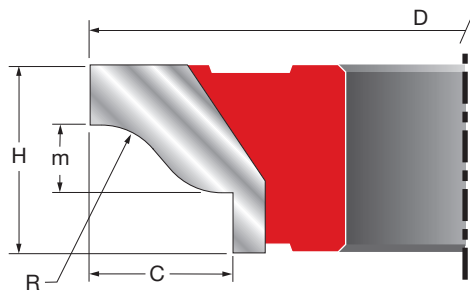
UP283



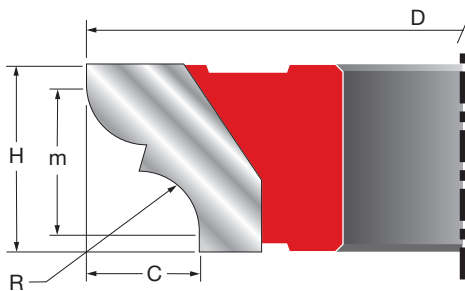
UP284



#UC285, #UP285



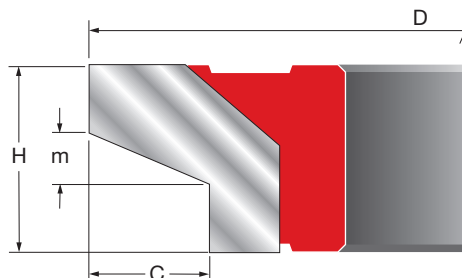
UP286



UP287



UP288

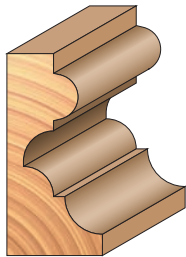


Red Item Numbers Indicate 1-1/4" Bore

All Profile Drawings 1:1 Scale



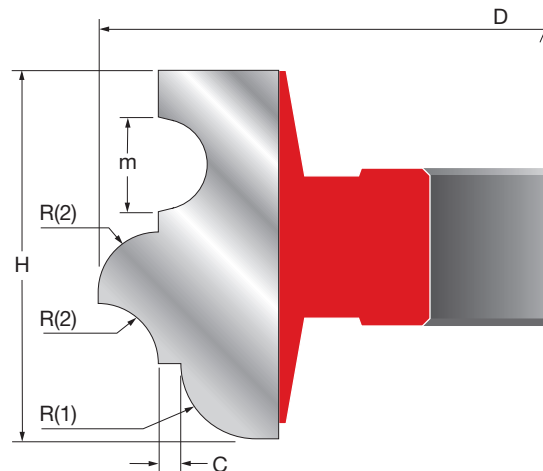
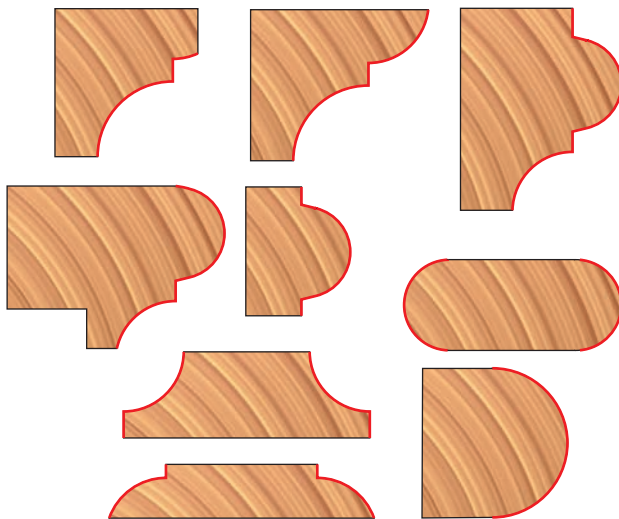
Multi-Profile Cutters



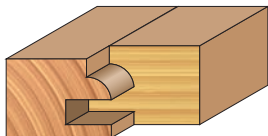
These cutters produce a countless number of molding profiles. The beautiful profiles are created by varying the height and fence setting. By making multiple passes, a countless number of moldings can be made.

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Large Radius(R)	Angle (A)	Bore Diameter
PK1	3-3/4"	1/8"	1-15/16"	1/2"	25/64"	5/16"	3/4"
PK2	4-23/32"	1/8"	1-15/16"	1/2"	25/64"	5/16"	1-1/4"

Number of Wings = 3



3/4" Stock Male & Female Cabinet Door Cutter Sets

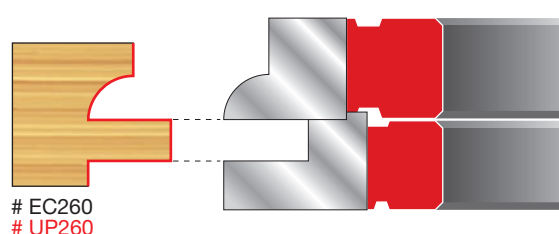
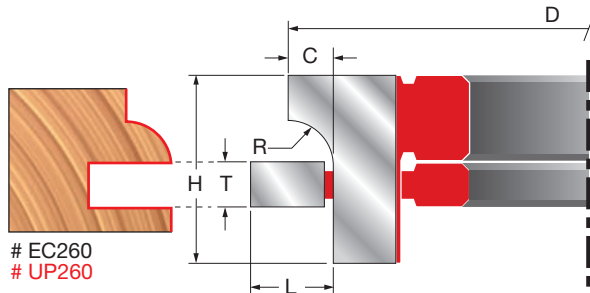


These male & female cutter sets are perfect for the high production needs of a cabinet or door shop. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.

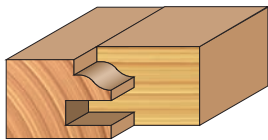
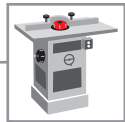
Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Dia.	Rub Collar Number
EC260	2-7/16"	15/64"	1"	15/64"	7/16"	15/64"	3/4"	RC-001
UP260	3-9/16"	15/64"	1"	15/64"	7/16"	15/64"	1-1/4"	RC30#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=4



3/4" Stock Male & Female Cabinet Door Cutter Sets

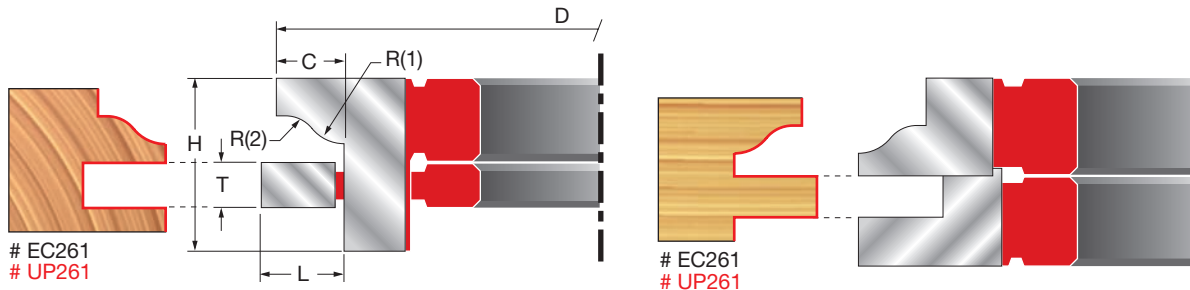


These male & female cutter sets are perfect for the high production needs of a cabinet or door shop. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.

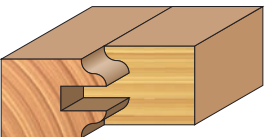
Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R1)	Small Radius(R2)	Bore Dia.	Rub Collar Number
EC261	2-11/16"	11/32"	1"	15/64"	7/16"	9/32"	11/64"	3/4"	RC-001
UP261	3-9/16"	11/32"	29/32"	15/64"	7/16"	9/32"	11/64"	1-1/4"	RC30#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=4



3/4" Stock Male & Female Cabinet Door Cutter Sets

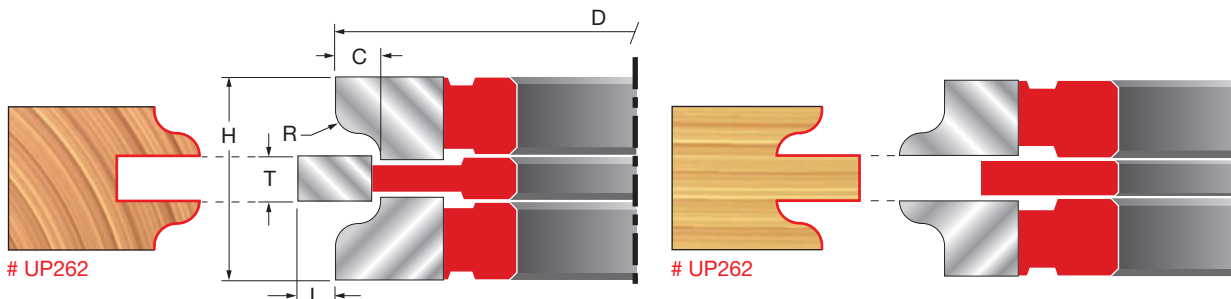


These male & female cutter sets are perfect for the high production needs of a cabinet or door shop. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Dia.	Rub Collar Number
UP262	3-9/16"	15/64"	1-1/16"	15/64"	7/16"	1/8"	1-1/4"	RC30#

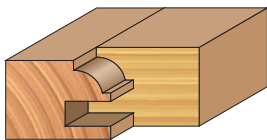
"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=6





3/4" Stock Male & Female Cabinet Door Cutter Sets

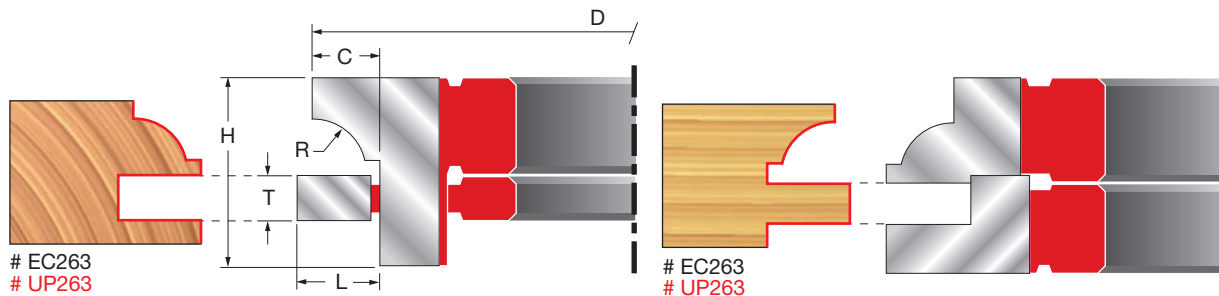


These male & female cutter sets are perfect for the high production needs of a cabinet or door shop. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.

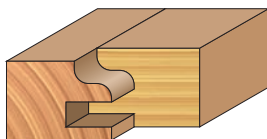
Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Dia.	Rub Collar Number
EC263	2-11/16"	11/32"	1"	15/64"	7/16"	9/32"	3/4"	RC-001
UP263	3-9/16"	11/32"	1"	15/64"	7/16"	9/32"	1-1/4"	RC30#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=4



3/4" Stock Male & Female Cabinet Door Cutter Sets

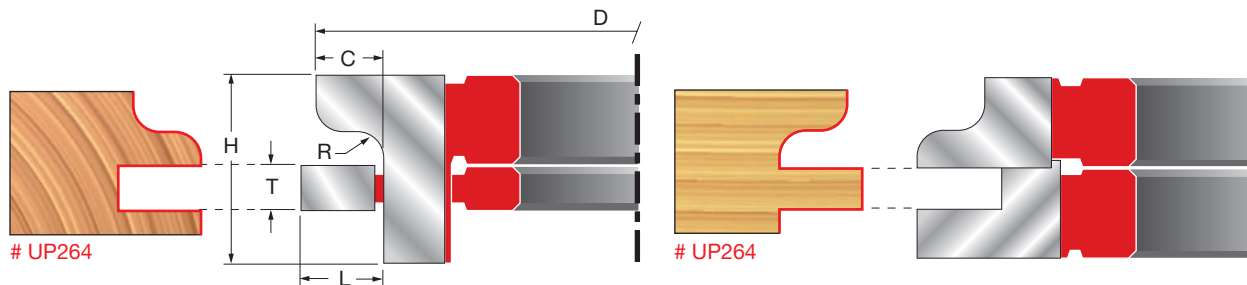


These male & female cutter sets are perfect for the high production needs of a cabinet or door shop. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.

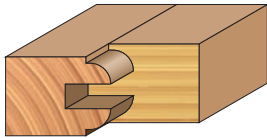
Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Dia.	Rub Collar Number
UP264	3-9/16"	11/32"	1"	15/64"	7/16"	9/64"	1-1/4"	RC30#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=4



3/4" Stock Male & Female Cabinet Door Cutter Sets

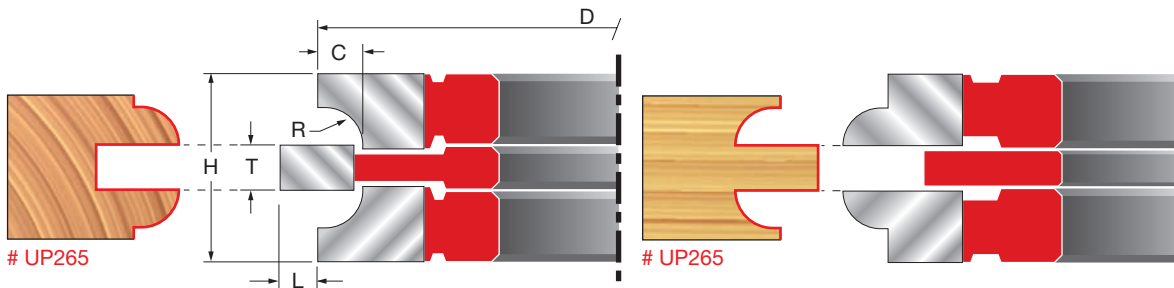


These male & female cutter sets are perfect for the high production needs of a cabinet or door shop. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.

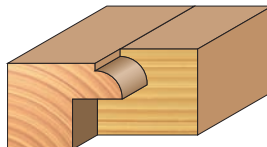
Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Dia.	Rub Collar Number
UP265	3-9/16"	15/64"	63/64"	15/64"	7/16"	13/64"	1-1/4"	RC30#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=4



Glass Door Cutter For EC260, EC261, & EC263

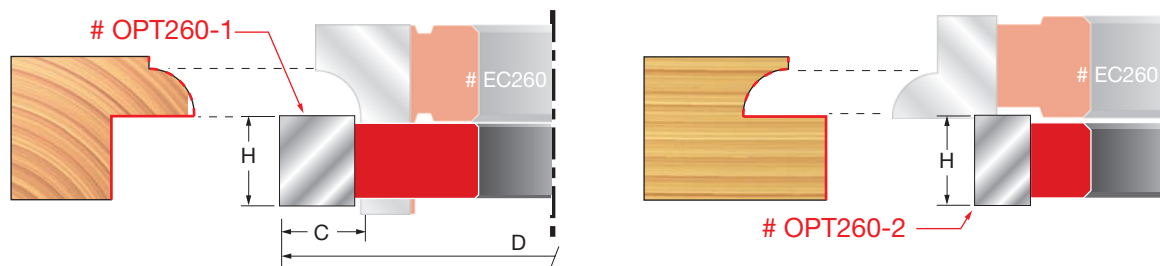


Use this set of cutters with EC260, EC261, or EC263 to make rabbets required in the back of doors for glass panels. Secure glass in place with a small piece of molding.

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Bore Diameter
OPT260	2-53/64"	7/16"	15/32"	3/4"

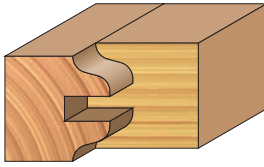
Number of Wings = 3

Number of pieces = 2





1" Stock Male & Female Door Cutter Set

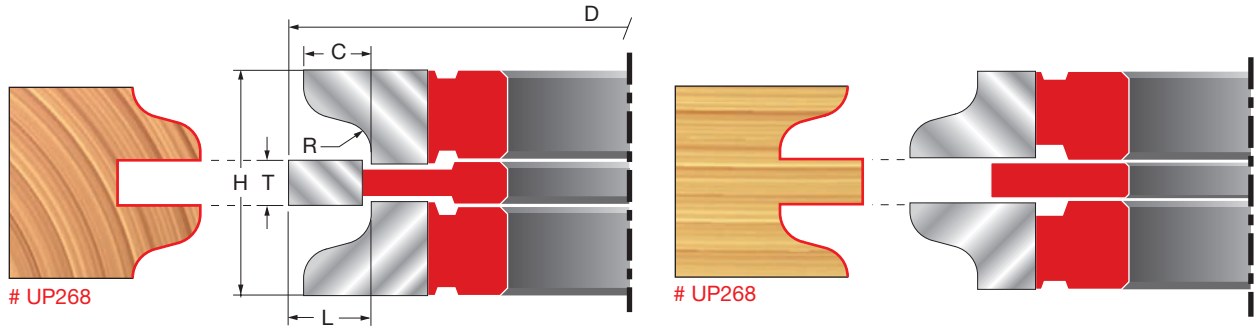


This male & female cutter set makes a molding cut on both sides of the rail and stile. Ideal for lightweight doors or divider screens. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.

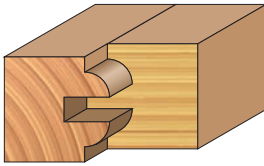
Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Dia.	Rub Collar Number
UP268	3-9/16"	23/64"	1-3/16"	15/64"	7/16"	5/32"	1-1/4"	RC30#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=6



1" Stock Male & Female Door Cutter Sets

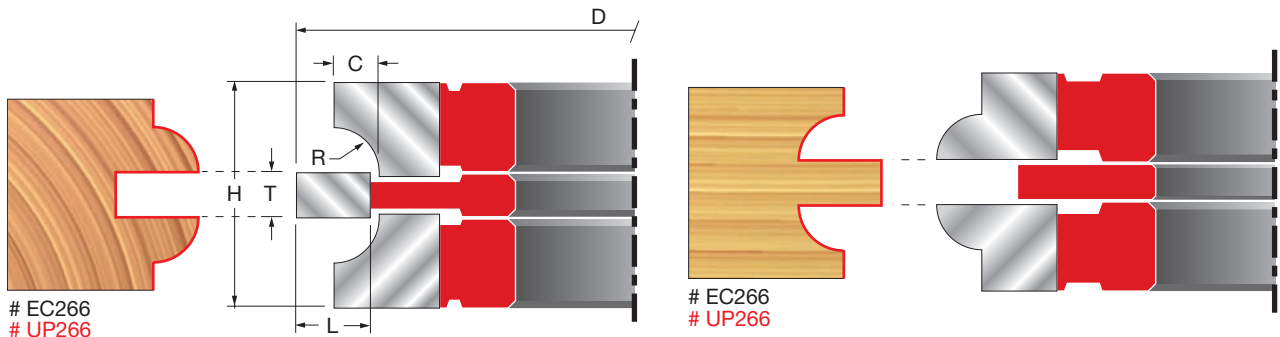


These male & female cutter sets makes a molding cut on both sides of the rail and stile. Ideal for lightweight doors or divider screens. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.

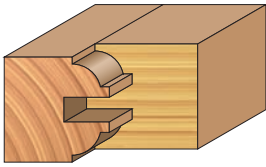
Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Dia.	Rub Collar Number
EC266	2-27/32"	15/64"	1-3/16"	15/64"	7/16"	15/64"	3/4"	RC-001
UP266	3-9/16"	15/64"	1-3/16"	15/64"	7/16"	15/64"	1-1/4"	RC30#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=6



1" Stock Male & Female Door Cutter Set



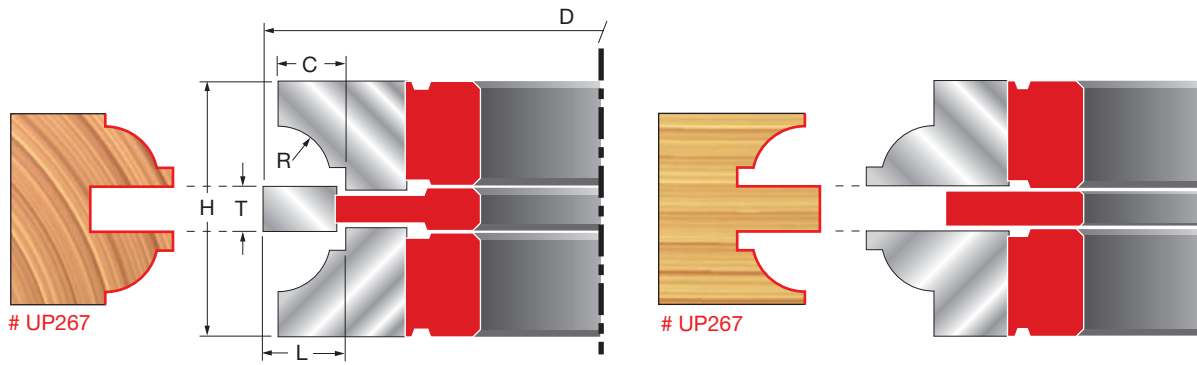
This male & female cutter set makes a molding cut on both sides of the rail and stile. Ideal for lightweight doors or divider screens. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.



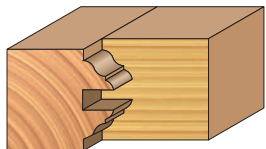
Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Dia.	Rub Collar Number
UP267	3-9/16"	11/32"	1-11/32"	15/64"	7/16"	9/32"	1-1/4"	RC30#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=6



Classical Profile Interior Door Cutter Sets

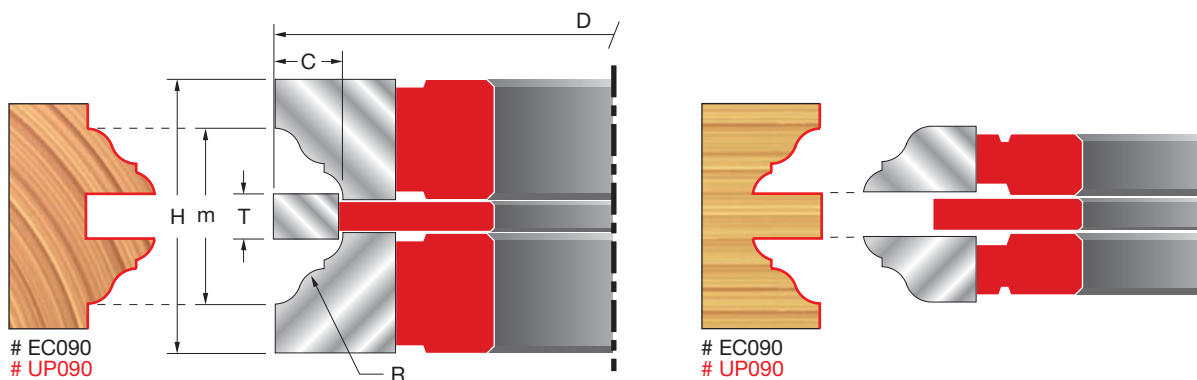


These cutter sets cut a classical pattern rail and stile for standard 1-3/8" thick interior doors. Cuts both the molding cut and the coping cut. Shims are included to ensure perfectly fitted joints through many sharpenings.



Item Number	Overall Dia.(D)	Carbide Height(H)	Minor Height(m)	Tenon Thickness(T)	Large Radius(R)	Bore Diameter
EC090	2-7/8"	23/64"	1-37/64"	15/64"	9/64"	3/4"
UP090	3-9/16"	23/64"	1-27/64"	15/64"	1/8"	1-1/4"

Number of Wings=3
Number of Pieces=6



Fixed Wing Cutters



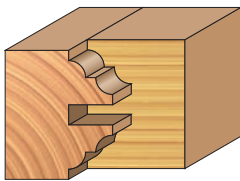
SHAPER CUTTERS

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1-3/8" Stock Male & Female Interior Door Cutter Sets

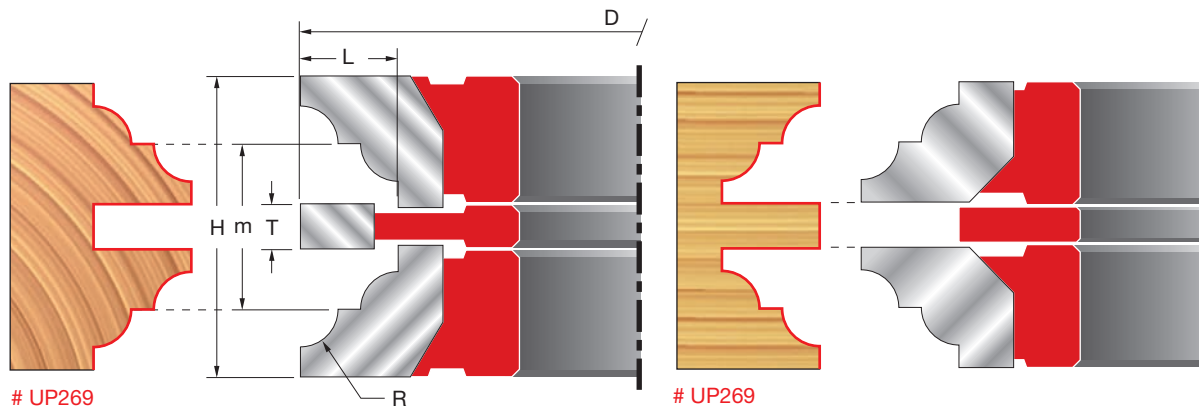


This male & female cutter set cuts a cove and bead pattern on both sides of the rail and stile. Ideal for interior doors. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.

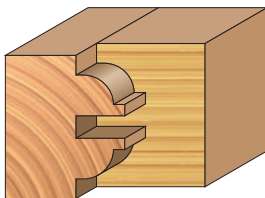
Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Dia.	Rub Collar Number
UP269	3-9/16"	1-37/64"	7/8"	15/64"	33/64"	13/64"	1-1/4"	RC20#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=6



1-3/8" Stock Male & Female Interior Door Cutter Sets

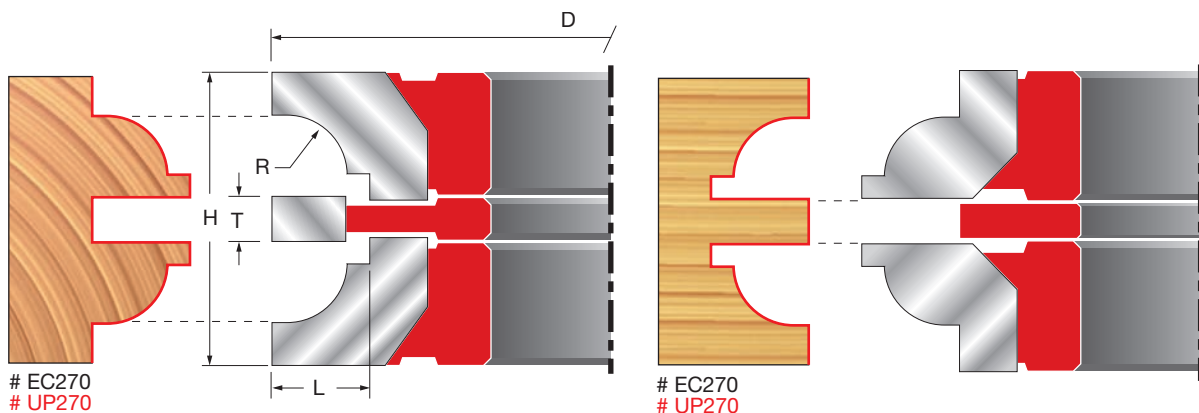


These male & female cutter sets cut a bead pattern on both sides of the rail and stile. Ideal for interior doors. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.

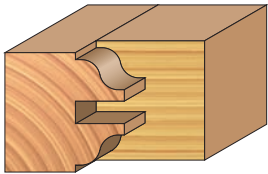
Item Number	Overall Dia.(D)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Diameter	Rub Col. Number
EC270	2-27/32"	1-37/64"	15/64"	33/64"	5/16"	3/4"	RC-001
UP270	3-9/16"	1-37/64"	15/64"	33/64"	5/16"	1-1/4"	RC20#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

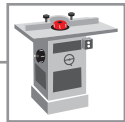
Number of Wings=3
Number of Pieces=6



1-3/8" Stock Male & Female Interior Door Cutter Set



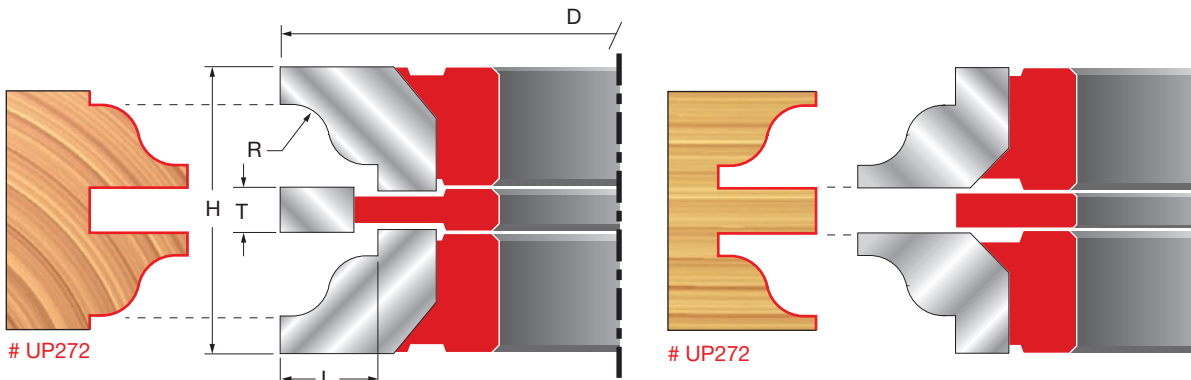
This male & female cutter set cuts an ogee pattern on both sides of the rail and stile. Ideal for interior doors. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.



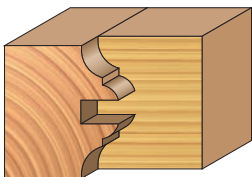
Item Number	Overall Dia.(D)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Diameter	Rub Col. Number
UP272	3-9/16"	1-1/2"	15/64"	17/32"	3/16"	1-1/4"	RC20#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=6



Cove & Bead Exterior Door Cutter Sets

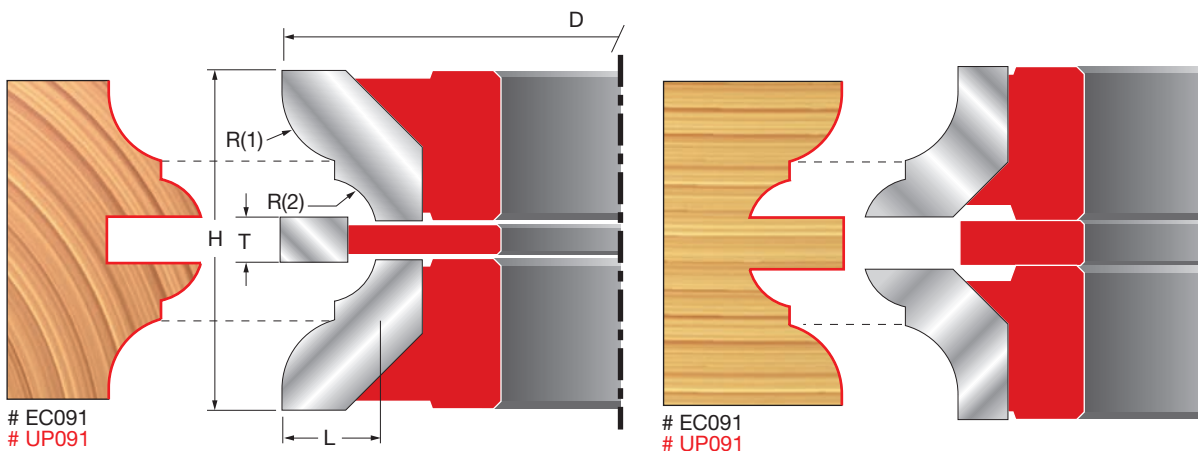


Make beautiful exterior doors with these cutter sets. Designed for the rails and stiles of standard 1-3/4" thick exterior doors, these cutters will cut both the molding cut and the coping cut. Shims included for precise adjustment.



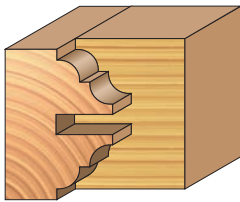
Item Number	Overall Dia.(D)	Tenon Length(L)	Carbide Height(H)	Tenon Thickness(T)	Large Radius(R)	Small Radius(2)	Bore Dia.
EC091	2-7/8"	1/2"	1-47/64"	15/64"	21/64"	9/32"	3/4"
UP091	3-9/16"	1/2"	1-47/64"	15/64"	21/64"	9/32"	1-1/4"

Number of Wings=3
Number of Pieces=6





1-3/4" Stock Male & Female Exterior Door Cutter Set

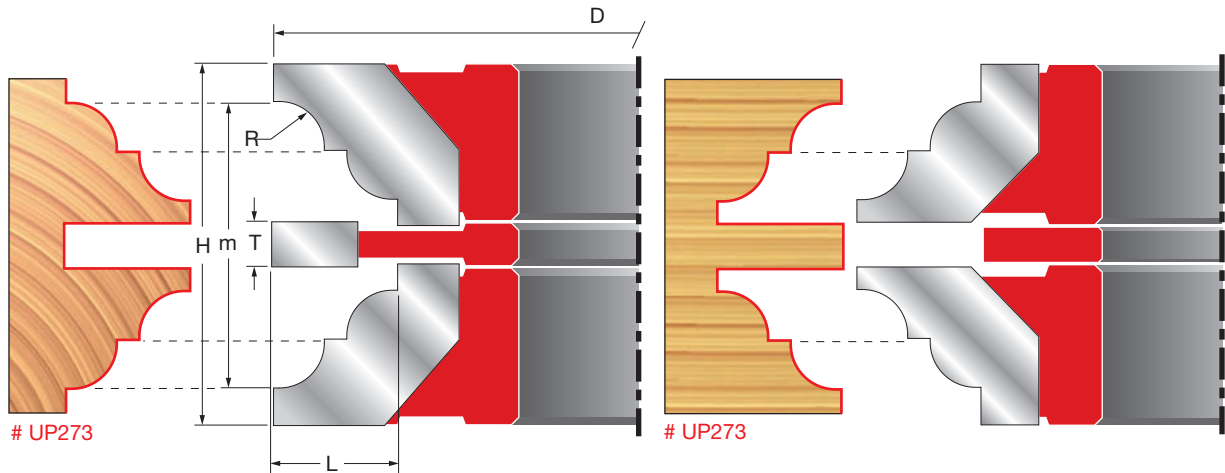


This male & female cutter set cuts a cove and bead pattern on both sides of the rail and stile. Ideal for exterior doors. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.

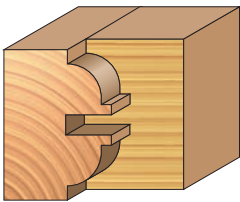
Item Number	Overall Dia.(D)	Carbide Height(H)	Minor Height(m)	Tenon Thickness(T)	Large Radius(R)	Tenon Length(L)	Bore Dia.	Rub Collar Number
UP273	3-13/16"	1-27/32"	1-29/64"	15/64"	43/64"	15/64"	1-1/4"	RC20#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=6



1-3/4" Stock Male & Female Exterior Door Cutter Sets

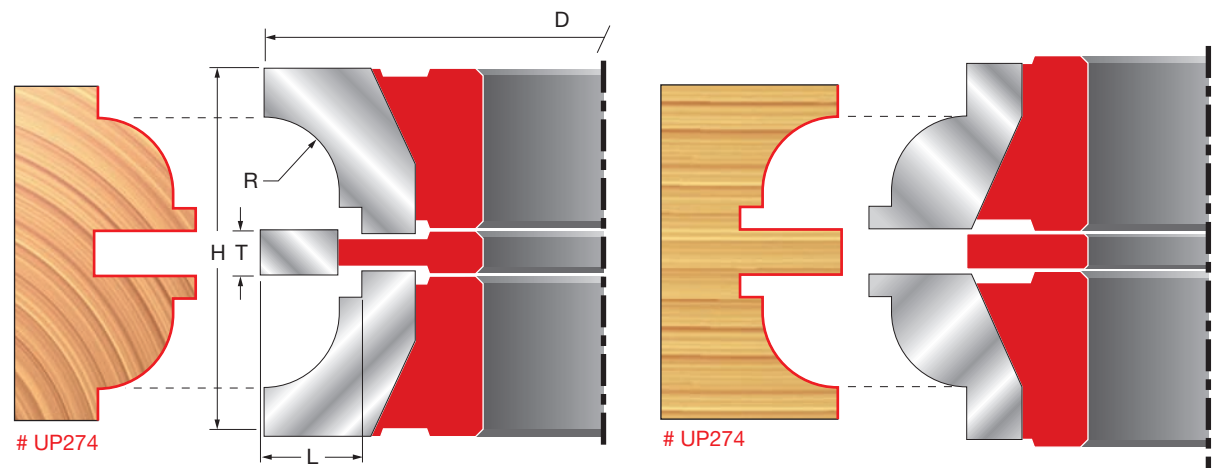


These male & female cutter sets cut a bead pattern on both sides of the rail and stile. Ideal for exterior doors. Shims are included which ensures perfect joint maintenance through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.

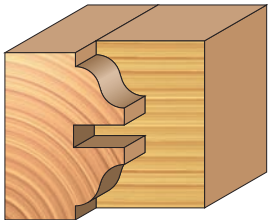
Item Number	Overall Dia.(D)	Carbide Height(H)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Diameter	Rub Col. Number
EC274	2-27/32"	1-31/32"	15/64"	33/64"	25/64"	3/4"	RC-001
UP274	3-9/16"	1-31/32"	15/64"	33/64"	25/64"	1-1/4"	RC20#

"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings=3
Number of Pieces=6



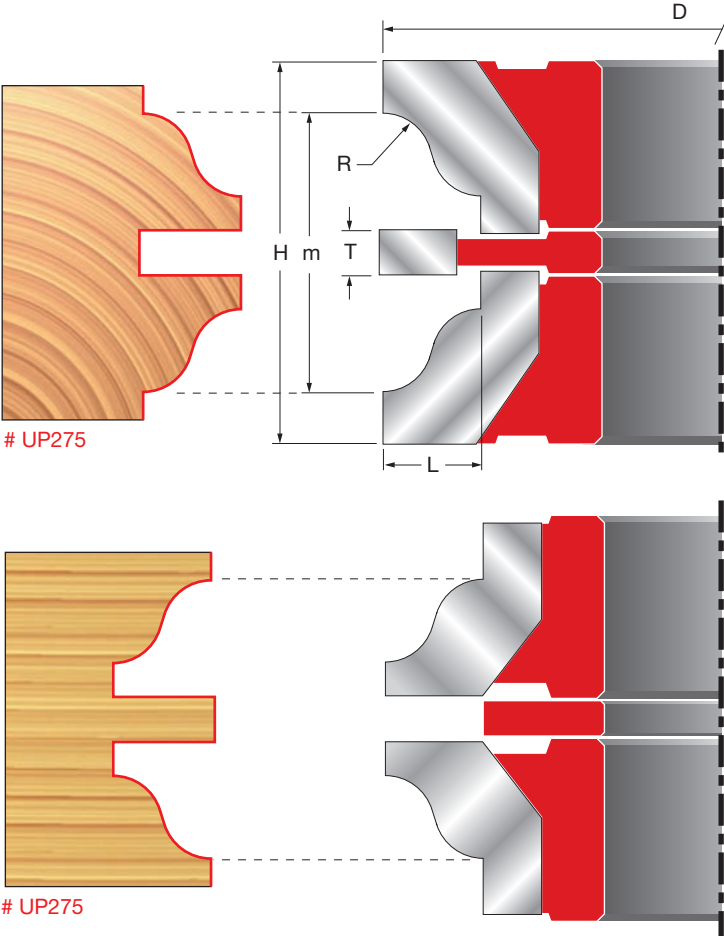
1-3/4" Stock Male & Female Exterior Door Cutter Set



This male & female cutter set cuts an ogee pattern on both sides of the rail and stile. Ideal for exterior doors. Shims are included to ensure perfectly fitted joints through many sharpenings. Each cutter is balanced, and has thick carbide tips for maximum sharpening life.



Item Number	Overall Dia.(D)	Carbide Height(H)	Minor Height(m)	Tenon Thickness(T)	Tenon Length(L)	Large Radius(R)	Bore Dia.	Rub Collar Number
UP275	3-9/16"	2-3/64"	1-29/64"	15/64"	33/64"	1/4"	1-1/4"	RC20#
“#” Determines Bore Size See Bushing & Rub Collars for Bore Selection							Number of Wings=3 Number of Pieces=6	



Red Item Numbers Indicate 1-1/4" Bore

All Profile Drawings 1:1 Scale

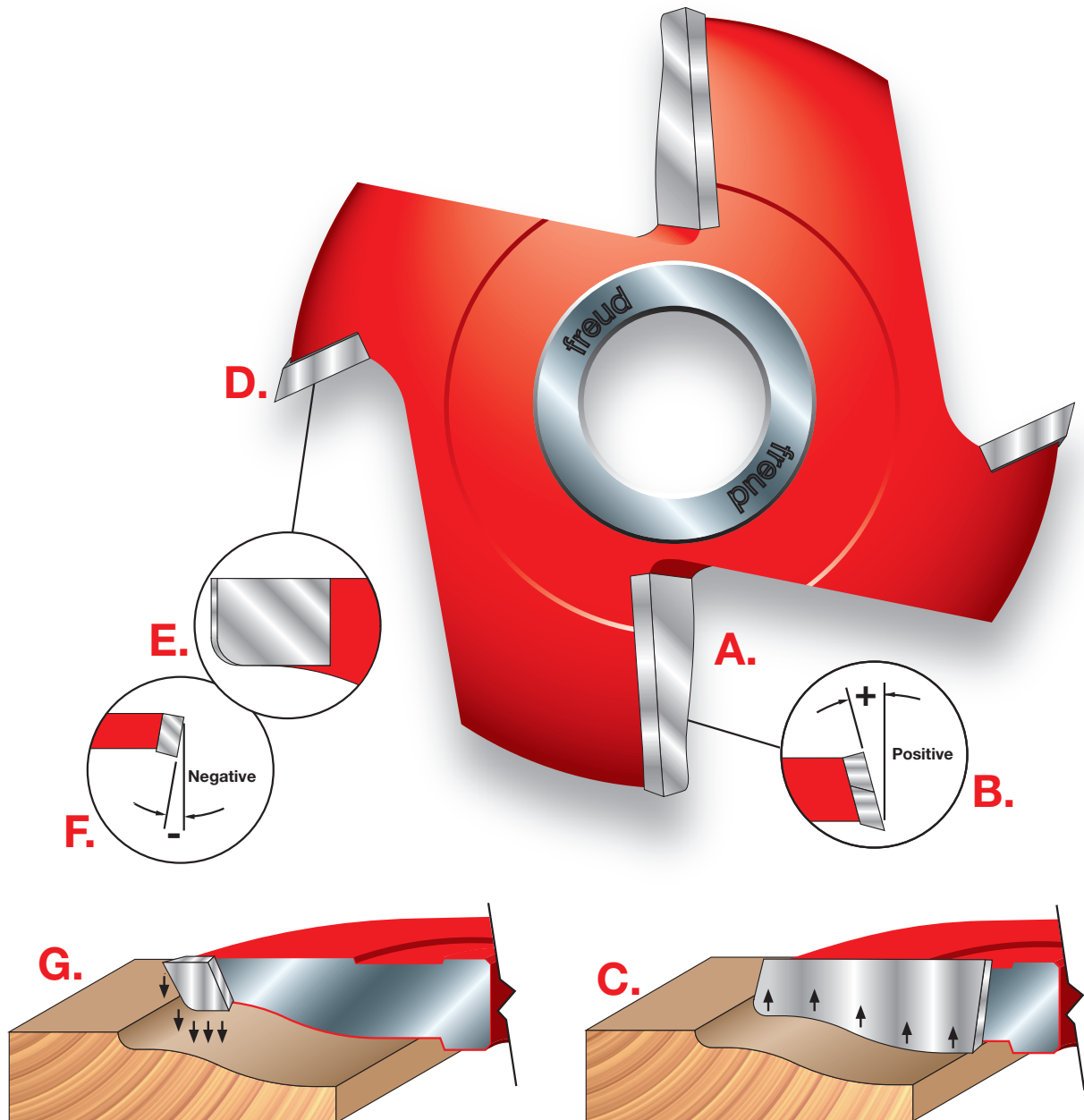




2+2 Raised Panel Cutters

Freud's exclusive 2+2 Raised Panel Cutters produce raised panels that are glass smooth, even on cross grain with no splintering at the top of the profile edge.

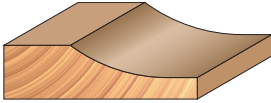
Freud's engineers have set two wings to do the main cutting of the profile, while two others cut the top part of the profile. As seen in the illustration below, the large wing is set at a slightly positive hook angle **(A)**, and a positive shear angle **(B)**. This slices the wood from the main part of the profile **(C)**, leaving a glass smooth finish. The two smaller wings, set at a steep positive hook angle **(D)**, are sized so the outside diameter is slightly larger than the large wings **(E)**. These small wings are also designed with a negative sheer angle **(F)**. This allows the small wing to cut the vertical part of the profile with a down slicing action **(G)**, pushing down all the wood fibers at the top of the panel and cleanly slicing them off. This leaves none of the fuzz associated with standard three-wing cutters.



The small wing pushes down on the wood fibers to shear them off for a perfect splinter free edge.

The large wing shears up for a perfect finish on the raised panel profile.

2+2 Raised Panel Cutters For 5/8" Stock



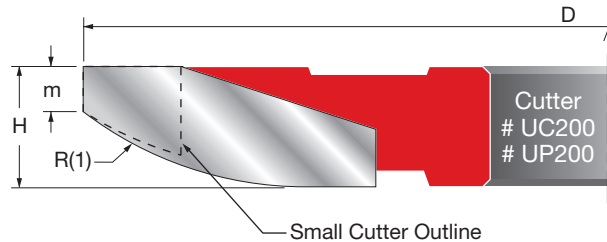
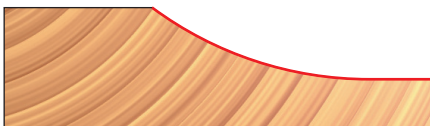
These 2+2 raised panel cutters are designed for 5/8" thick panels. All 1-1/4" bore cutters can be used with back-cutters UP230 and UP231 when using 3/4" stock. All 3/4" bore cutters can be used with back-cutters UC230 and UC231 when using with 3/4" stock.

	Item Number	Overall Dia.(D)	Carbide Height(H)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Angle (A)	Bore Dia.	Rub Collar Number
NEW	UC200	4-15/16"	5/8"	15/64"	1-29/32"	—	—	3/4"	RC-002
	UP200	5-1/2"	5/8"	15/64"	1-29/32"	—	—	1-1/4"	RC10#
NEW	UC201	4-15/16"	5/8"	23/64"	—	—	12°	1-1/4"	RC-002
	UP201	5-1/2"	5/8"	23/64"	—	—	12°	1-1/4"	RC10#
	UC202	4-15/16"	33/64"	—	1/8"	—	12°	3/4"	RC-002
	UP202	5-1/2"	5/8"	3/8"	1/8"	—	—	1-1/4"	RC10#
NEW	UC203	4-15/16"	5/8"	3/8"	1-9/16"	1/8"	—	3/4"	RC-002
	UP203	5-1/2"	5/8"	3/8"	1-9/16"	1/8"	—	1-1/4"	RC10#
NEW	UC204	4-15/16"	5/8"	5/32"	9/16"	—	7°	3/4"	RC-002
	UP204	5-1/2"	5/8"	5/32"	9/16"	—	7°	1-1/4"	RC10#
	UP205	5-1/2"	5/8"	9/64"	1/8"	—	—	1-1/4"	RC10#
	UP206	5-1/2"	5/8"	3/8"	9/64"	—	—	1-1/4"	RC10#
NEW	UC207	4-15/16"	5/8"	3/8"	5/32"	—	4°	3/4"	RC-002
	UP207	5-1/2"	5/8"	3/8"	5/32"	—	4°	1-1/4"	RC10#
NEW	UC208	4-15/16"	5/8"	13/32"	1-5/16"	1-15/16"	28°	3/4"	RC-002
	UP208	5-1/2"	5/8"	13/32"	1-5/16"	1-15/16"	28°	1-1/4"	RC10#

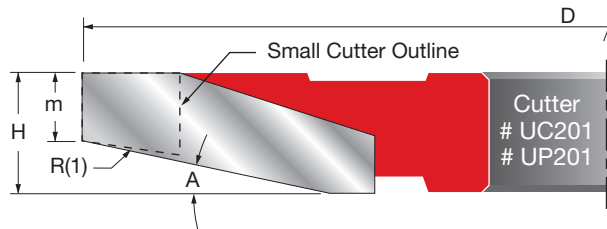
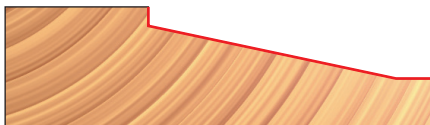
"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings= 2+2

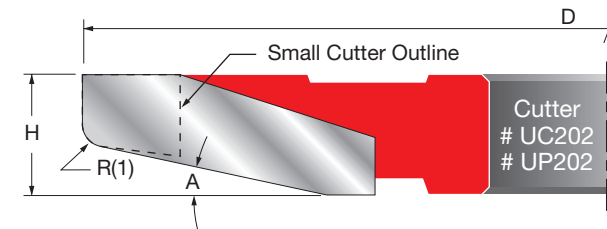
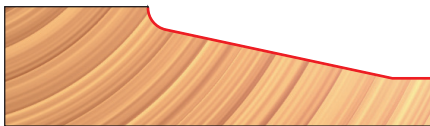
#UC200
#UP200



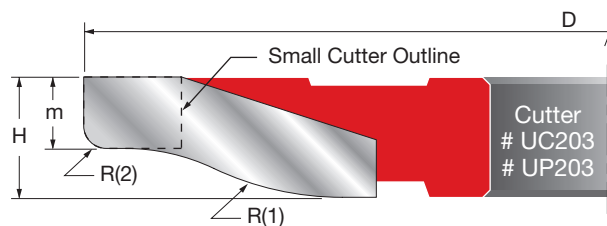
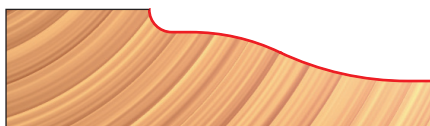
#UC201
#UP201



UC202
UP202



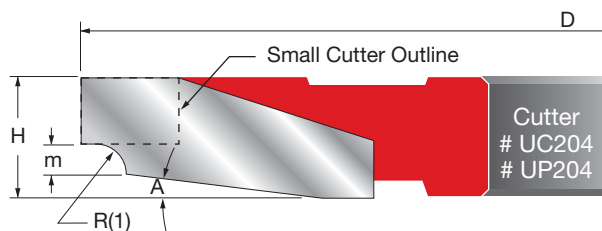
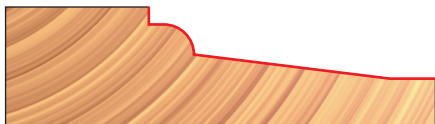
UC203
UP203



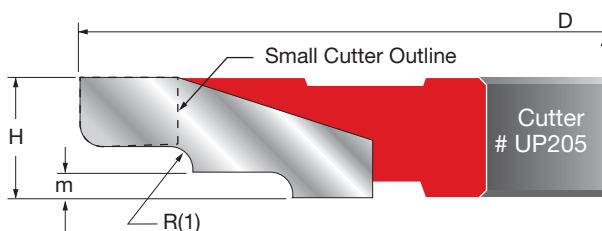


(Continued) 2+2 Raised Panel Cutters For 5/8" Stock

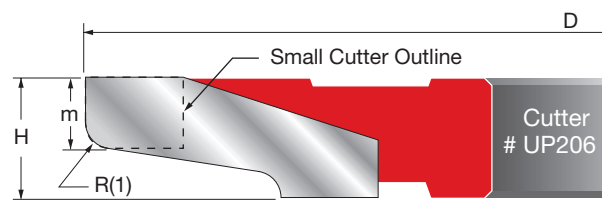
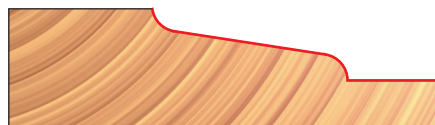
UC204
UP204



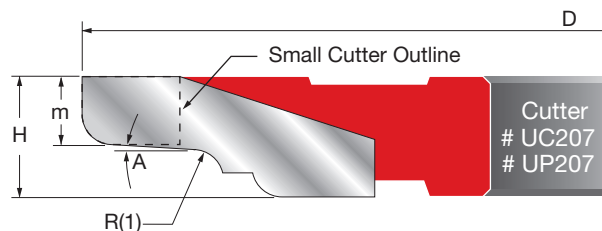
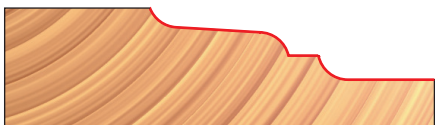
UP205



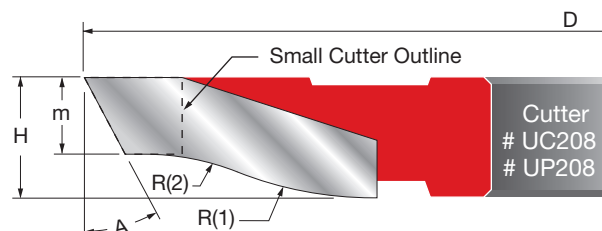
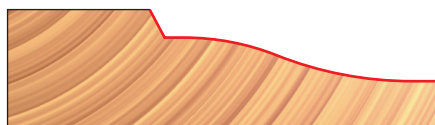
UP206



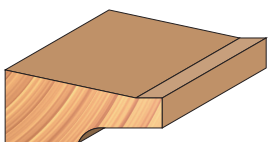
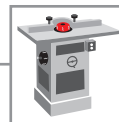
UC207
UP207



UC208
UP208



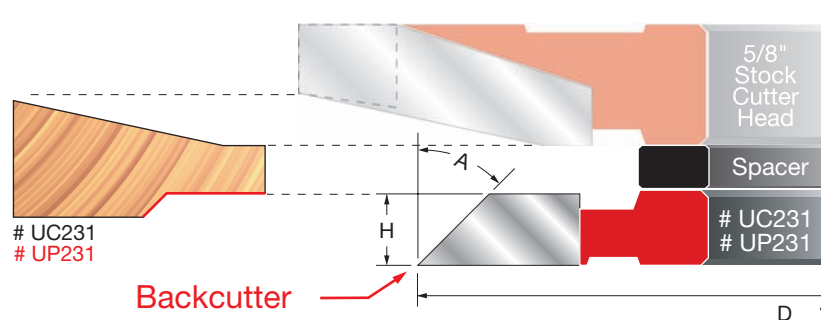
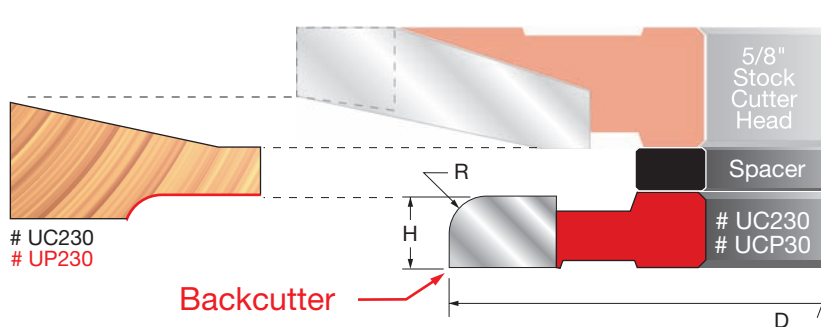
(Continued) Backcutter For Double Raised Panels



Freud's back-cutters are designed to be used with Freud's 2+2 Raised Panel Cutters when cutting 3/4" stock. Use the 1-1/4" bore cutters with Panel Cutters UP200 through UP208. Use 3/4" bore cutters with Panel Cutters UC200 through UC208. These cutters leave a decorative profile on the back side of the panel making the panel flush with both the front and back of the rails and stiles.

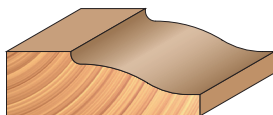
	Item Number	Overall Dia.(D)	Carbide Height(H)	Large Radius(R)	Angle	Bore Diameter
NEW	UC230	3-11/32"	3/8"	13/64"	—	3/4"
	UP230	3-15/16"	3/8"	13/64"	—	1-1/4"
NEW	UC231	3-45/64"	3/8"	—	45°	3/4"
	UP231	4-9/32"	3/8"	—	45°	1-1/4"

Number of Wings = 3





2+2 Raised Panel Cutters For 3/4" Stock



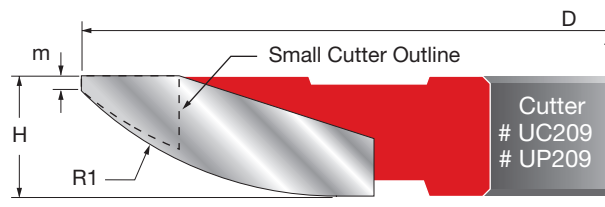
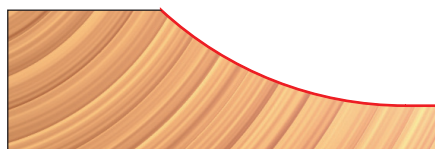
These 2+2 raised panel cutters are designed for 3/4" thick panels. The small cutter, with opposite shear angle, will push wood fibers down and shear them off leaving a crisp edge at the top of the panel, even on cross grain.

Item Number	Overall Dia.(D)	Carbide Height(H)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Angle (A)	Bore Dia.	Rub Collar Number
UC209	4-15/16"	43/64"	1/8"	1-57/64"	—	—	3/4"	RC-002
UP209	5-1/2"	5/8"	5/64"	1-57/64"	—	—	1-1/4"	RC10#
UC210	4-15/16"	23/32"	23/64"	1-15/32"	1/8"	—	3/4"	RC-002
UP210	5-1/2"	5/8"	9/32"	1-15/32"	1/8"	—	1-1/4"	RC10#
UC211	4-15/16"	5/8"	15/64"	—	—	17°	3/4"	RC-002
UP211	5-1/2"	5/8"	15/64"	—	—	17°	1-1/4"	RC10#
UC212	4-15/16"	17/32"	—	13/64"	—	13°	3/4"	RC-002
UP212	5-1/2"	5/8"	—	13/64"	—	13°	1-1/4"	RC10#
UC213	4-15/16"	11/16"	21/64"	1-31/32"	1-3/8"	23°	3/4"	RC-002
UP213	5-1/2"	5/8"	9/32"	1-31/32"	1-3/8"	23°	1-1/4"	RC10#
UP214	5-1/2"	5/8"	21/64"	13/64"	1/8"	—	1-1/4"	RC10#
NEW UC215	4-15/16"	5/8"	15/64"	13/64"	—	10°	3/4"	RC-002
UP215	5-1/2"	5/8"	15/64"	13/64"	—	10°	1-1/4"	RC10#
UP216	5-1/2"	5/8"	1/4"	9/64"	—	—	1-1/4"	RC10#
UP217	5-1/2"	5/8"	15/64"	11/64"	9/64"	7.5°	1-1/4"	RC10#
UP218	5-1/2"	5/8"	1/4"	5/32"	9/64"	—	1-1/4"	RC10#
UP219	5-1/2"	5/8"	9/32"	1/8"	—	—	1-1/4"	RC10#
UP220	5-1/2"	5/8"	15/64"	9/32"	5/32"	—	1-1/4"	RC10#
NEW UC221	4-15/16"	5/8"	15/64"	9/64"	1/8"	4°	3/4"	RC-002
UP221	5-1/2"	5/8"	15/64"	9/64"	1/8"	4°	1-1/4"	RC10#
UP222	5-1/2"	5/8"	15/64"	1/8"	—	—	1-1/4"	RC10#
NEW UC223	4-15/16"	5/8"	13/64"	5/32"	1/8"	10°	3/4"	RC-002
UP223	5-1/2"	5/8"	13/64"	5/32"	1/8"	10°	1-1/4"	RC10#

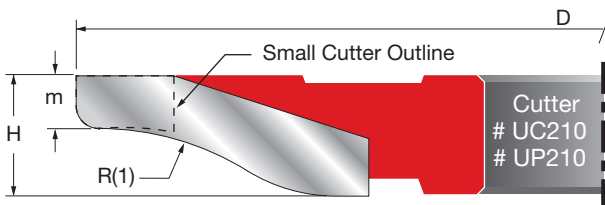
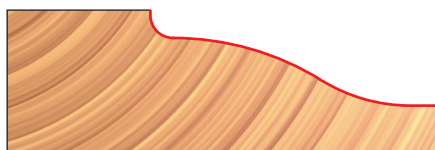
"#" Determines Bore Size
See Bushing & Rub Collars for Bore Selection

Number of Wings= 2+2

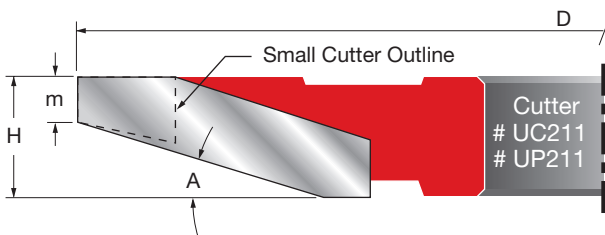
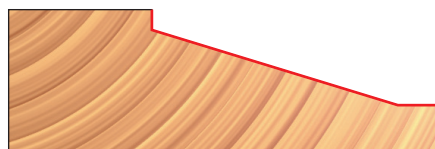
UC209
UP209



UC210
UP210



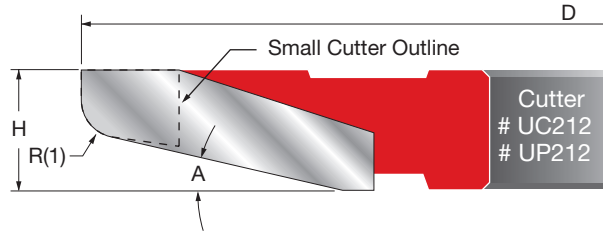
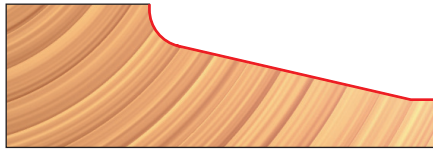
UC211
UP211



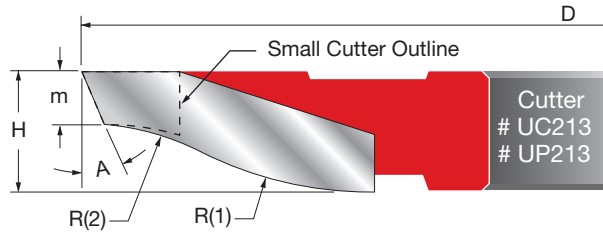
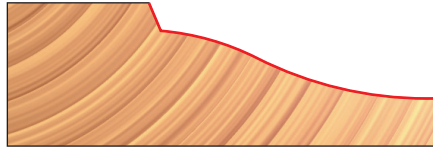
(Continued) 2+2 Raised Panel Cutters For 3/4" Stock



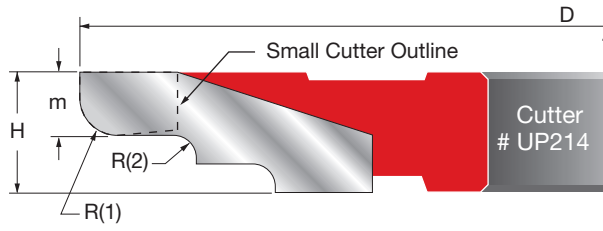
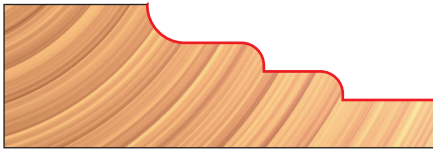
UC212
UP212



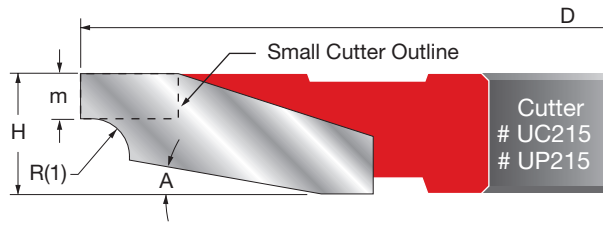
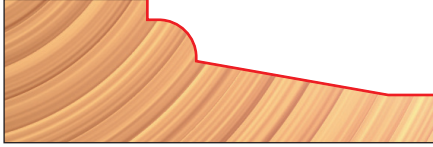
UC213
UP213



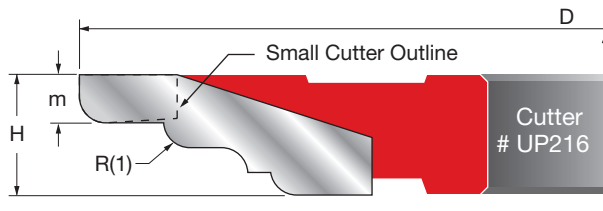
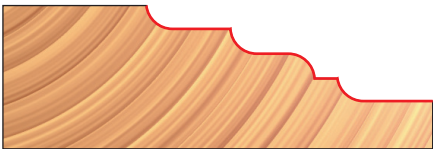
UP214



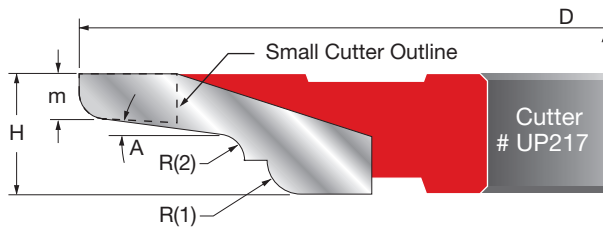
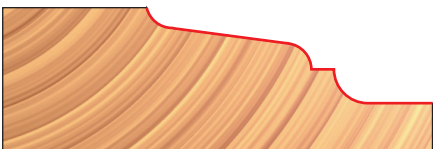
UC215
UP215



UP216



UP217



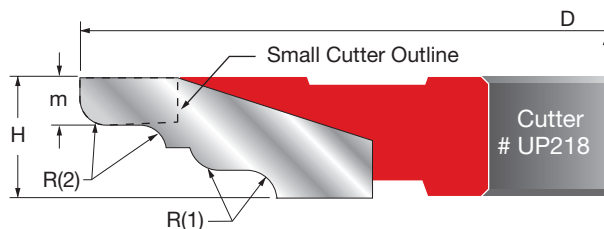
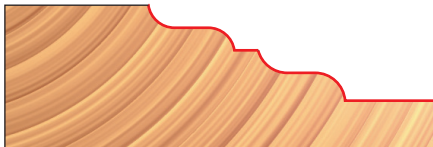
Red Item Numbers Indicate 1-1/4" Bore

All Profile Drawings 1:1 Scale

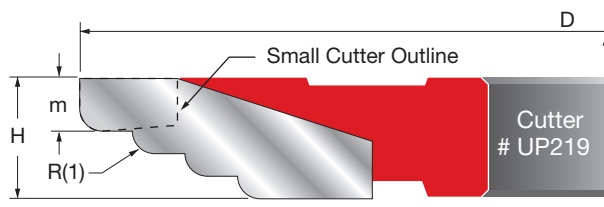
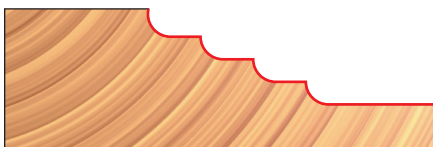


(Continued) 2+2 Raised Panel Cutters For 3/4" Stock

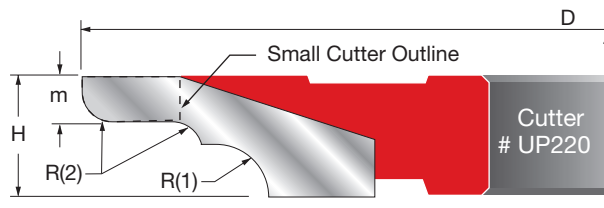
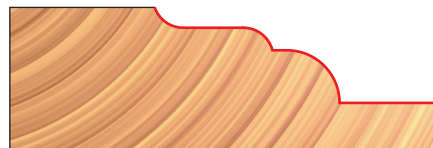
UP218



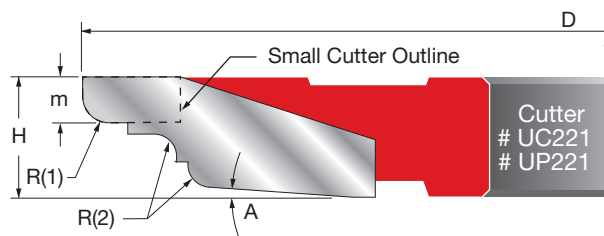
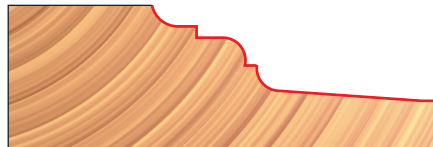
UP219



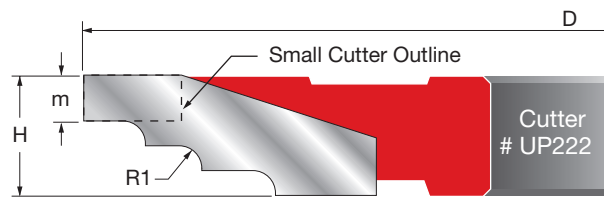
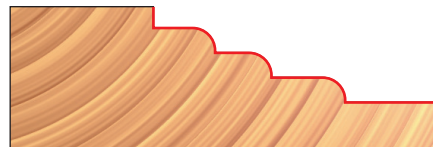
UP220



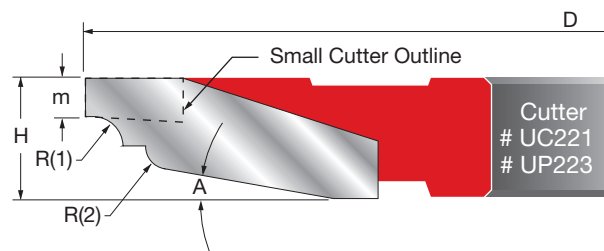
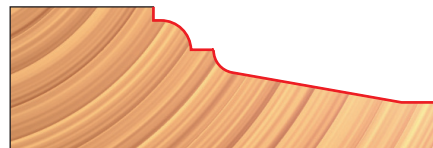
UC221
UP221



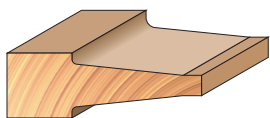
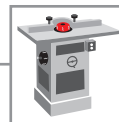
UP222



UC223
UP223



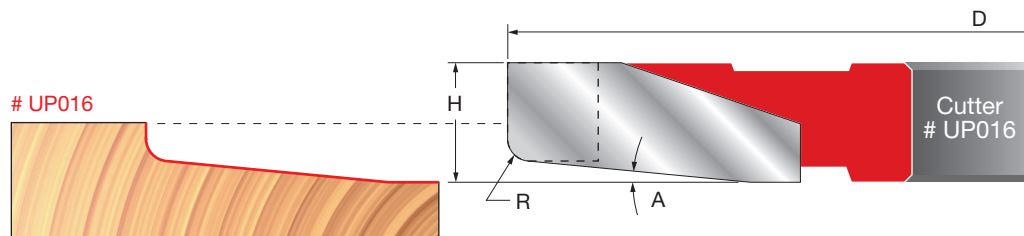
2+2 Raised Panel Cutter For Double-Sided Panels



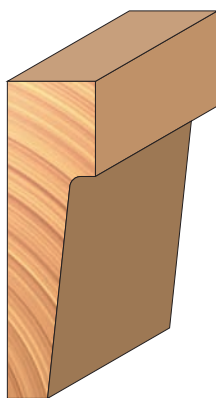
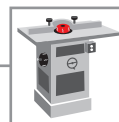
This 2+2 Raised Panel cutter is ideal for double-sided raised panel interior and exterior doors.

Item Number	Overall Dia.(D)	Carbide Height(H)	Large Radius(R)	Angle	Bore Diameter
UP016	5-1/2"	5/8"	1/8"	6°	1-1/4"

Number of Wings = 2+2



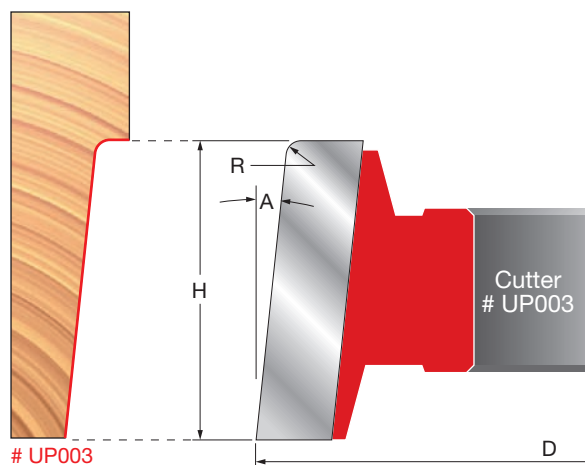
Vertical Raised Panel Cutter



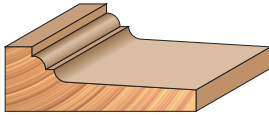
Freud's Vertical Raised Panel Cutters are designed to provide a full profile reveal, while keeping cutter diameter to a minimum. This reduces the stress on the spindle and will work well on lower powered shapers.

Item Number	Overall Dia.(D)	Carbide Height(H)	Large Radius(R)	Angle	Bore Diameter
UP003	3-9/16"	1-57/64"	5/64"	6°	1-1/4"

Number of Wings = 3



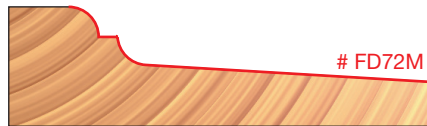
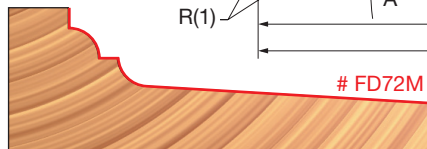
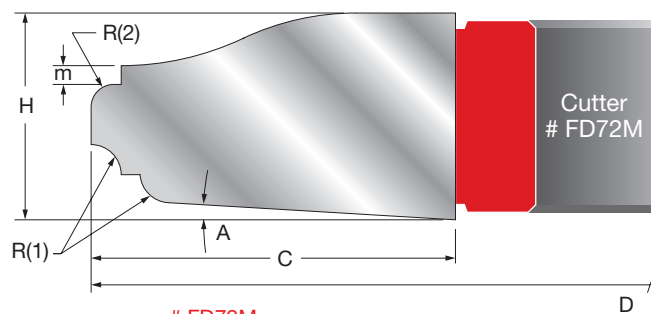
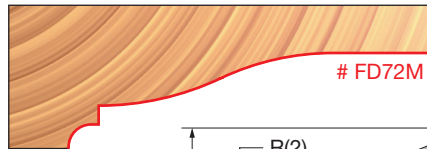
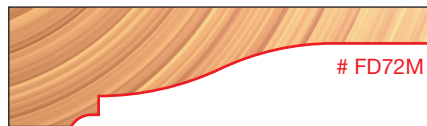
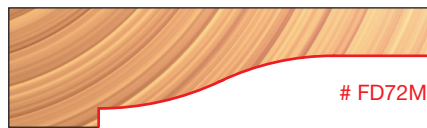
The "Duplex" Multi-Profile Raised Panel Cutter



The Duplex Raised Panel Cutter has the flexibility to create custom raised panel profiles using just one cutter. It can create eight different profiles using only one pass. Different profiles can be obtained by running the stock over or under the head and changing the height of the cutter.

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Angle	Bore Dia.
FD72M	5-29/32"	1-7/8"	1-5/64"	3/32"	5/32"	1/8"	3.5°	1-1/4"

Number of Wings = 3



Fixed Wing Cutters



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SHAPER CUTTERS

freud®

UC900 Raised Panel Door System

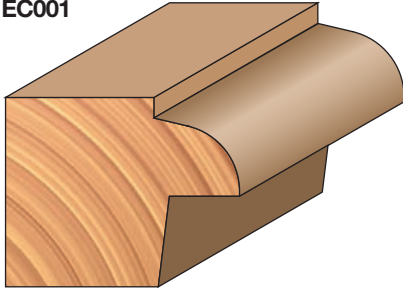


This one box contains all the cutters needed to make raised panel doors on a 3/4" shaper. Included is a set of male and female rail and stile door cutters for making door frames, a door lip cutter for inset doors, a glue joint cutter for gluing up panels, and a 2+2 raised panel cutter with our most popular profile. All the cutters come packaged in a wooden storage case with necessary shims included.

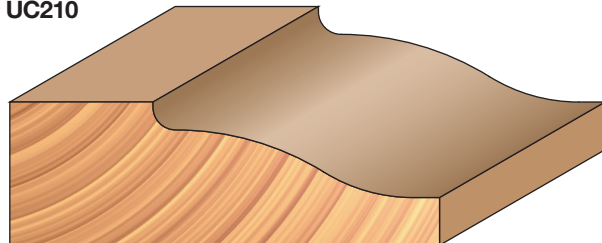
Cutter Type	Item Number	Overall Diameter	Cut Depth	Carbide Height	Tenon Thickness	Page Number
Door Lip Cutter	EC001	2-7/8"	29/64"	1-1/4"	—	284
Rev. Glue Joint	EC031	2-7/8"	5/32"	1-17/64"	—	279
Raised Panel	UC210	4-15/16"	—	23/32"	15/64"	306
Stile & Rail*	EC260	2-7/16"	15/64"	1"	15/64"	292

*Tenon Length = 7/16"

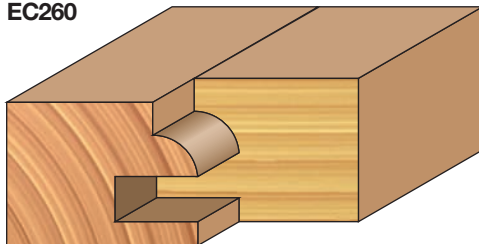
EC001



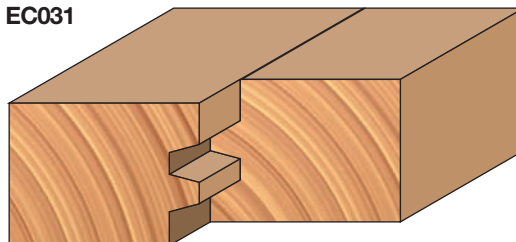
UC210



EC260



EC031





Futura 2000 Custom Door Shop Cutter Set

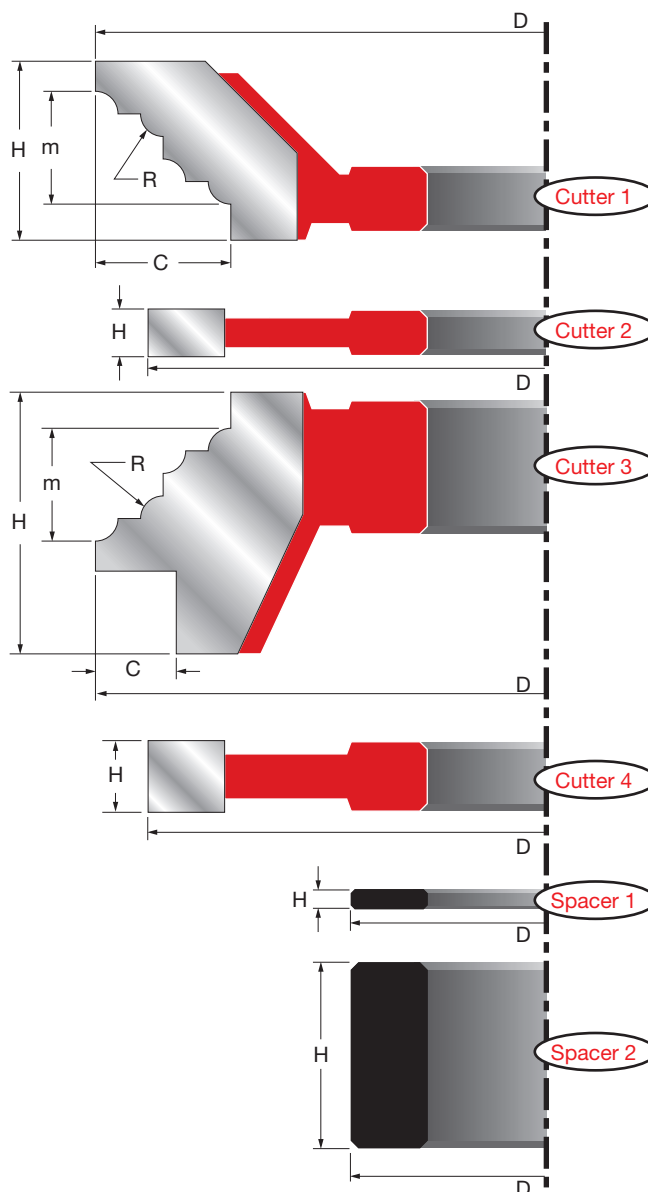


This set of cutters can shape doors from a wide range of stock. Stock from 5/8" to 2-1/8" can easily be shaped with the Futura 2000.

Each set contains four cutters: two two-wing profile cutters, one 1/4" four-wing grooving cutter, and one 3/8" four-wing grooving cutter. The profile cutters are reversed to cut the mating stile and rail profiles. The 1/4" and 3/8" groovers are stackable to cut mortises 1/4", 3/8", and 5/8" wide.

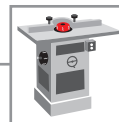
Also included are shims and spacers to adjust the cutters so they produce the precise tenon thickness desired to compensate for any change that occurs when the cutters are face ground.

The cutters come in a sturdy storage case. All cutters are 1-1/4" bore but may be bushed down for any spindle size down to 3/4".



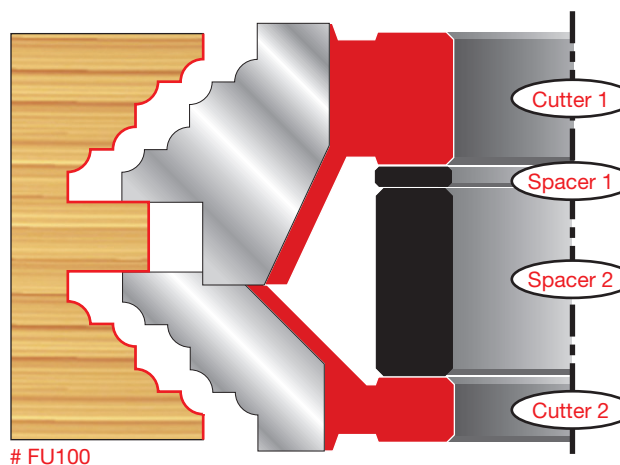
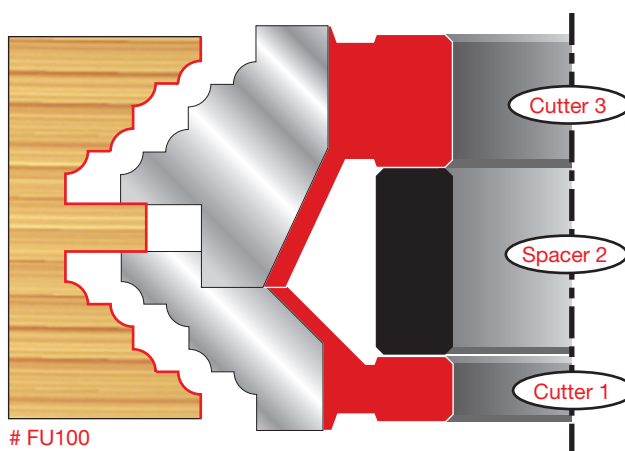
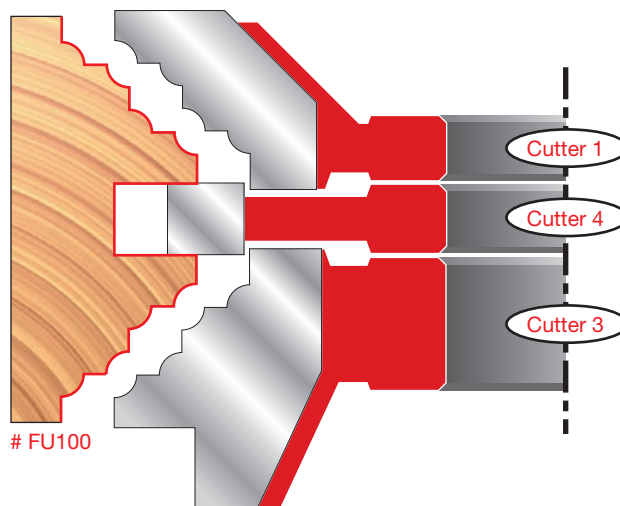
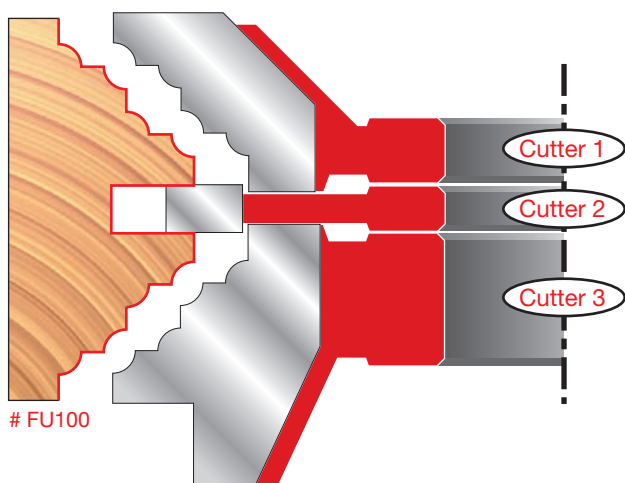
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Futura 2000 Custom Door Shop Cutter Set



Item Number: FU100

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Tenon Length(L)	Large Radius(R1)	Number of Wings	Bore Dia.
Cutter 1	4-23/32"	45/64"	15/16"	19/32"	—	1/8"	2	1-1/4"
Cutter 2	4-11/16"	—	1/4"	—	—	—	4	1-1/4"
Cutter 3	4-23/32"	—	1-3/8"	19/32"	27/64"	1/8"	2	1-1/4"
Cutter 4	4-11/64"	—	3/8"	—	—	—	4	1-1/4"
Spacer 1	2-3/64"	—	1/8"	—	—	—	—	1-1/4"
Spacer 2	2-3/64"	—	63/64"	—	—	—	—	1-1/4"



Fixed Wing Cutters



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SHAPER CUTTERS

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Red Item Numbers Indicate 1-1/4" Bore

All Profile Drawings 1:1 Scale



Cassette 65



These cutters work together to produce over 65 different moldings including: beads, ogees, half rounds, corner rounds, rabbets, coves, grooves, crown molding, chair rail, and many more. By changing the height of the cutters, number of passes, and fence position, the number of possible moldings is endless. This set comes with three three-wing carbide tipped profile cutters, spacers and shims, all packed in a sturdy wooden storage case. For 3/4" bore order CS71MAA3, and for 1-1/4" bore order CS71MBA3.

Item Number: CS71MAA3 (3/4" Bore)

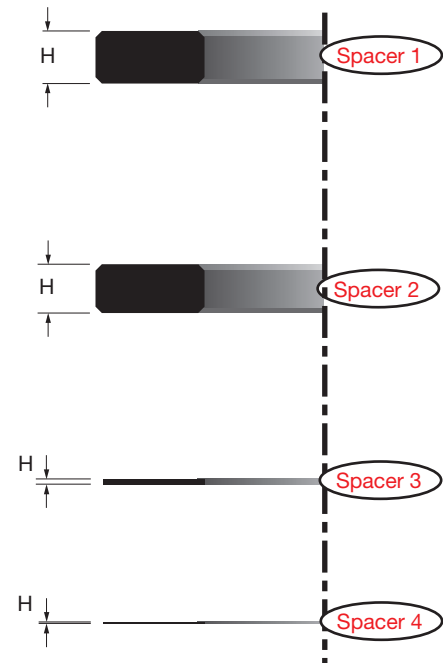
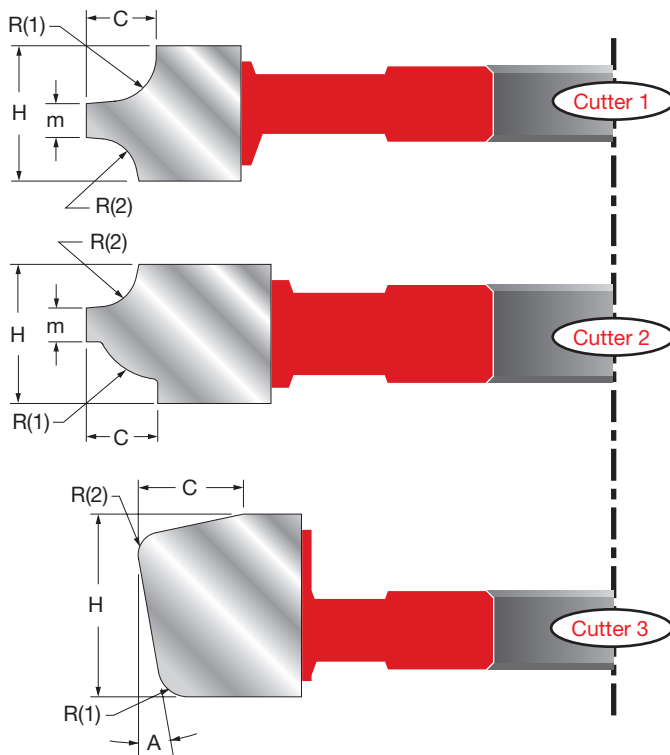
Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Angle (A)
Cutter 1	3-15/16"	23/64"	45/64"	3/16"	15/64"	13/64"	—
Cutter 2	3-15/16"	3/8"	47/64"	3/16"	23/64"	13/64"	—
Cutter 3	3-13/32"	35/64"	61/64"	—	5/32"	1/8"	10°
Spacer 1	1-13/32"	—	19/64"	—	—	—	—
Spacer 2	1-13/32"	—	17/64"	—	—	—	—
Spacer 3	1-13/32"	—	3/64"	—	—	—	—
Spacer 4	1-13/32"	—	1/64"	—	—	—	—

Number of Wings = 3

Item Number: CS71MBA3 (1-1/4" Bore)

Item Number	Overall Dia.(D)	Cut Depth(C)	Carbide Height(H)	Minor Height(m)	Large Radius(R1)	Small Radius(R2)	Angle (A)
Cutter 1	5-1/2"	23/64"	45/64"	3/16"	15/64"	13/64"	—
Cutter 2	5-1/2"	3/8"	47/64"	3/16"	23/64"	13/64"	—
Cutter 3	4-31/32"	35/64"	61/64"	—	5/32"	1/8"	10°
Spacer 1	2-3/8"	—	19/64"	—	—	—	—
Spacer 2	2-3/8"	—	17/64"	—	—	—	—
Spacer 3	2-3/8"	—	3/64"	—	—	—	—
Spacer 4	2-3/8"	—	1/64"	—	—	—	—

Number of Wings = 3



(Continued)

Cassette 65



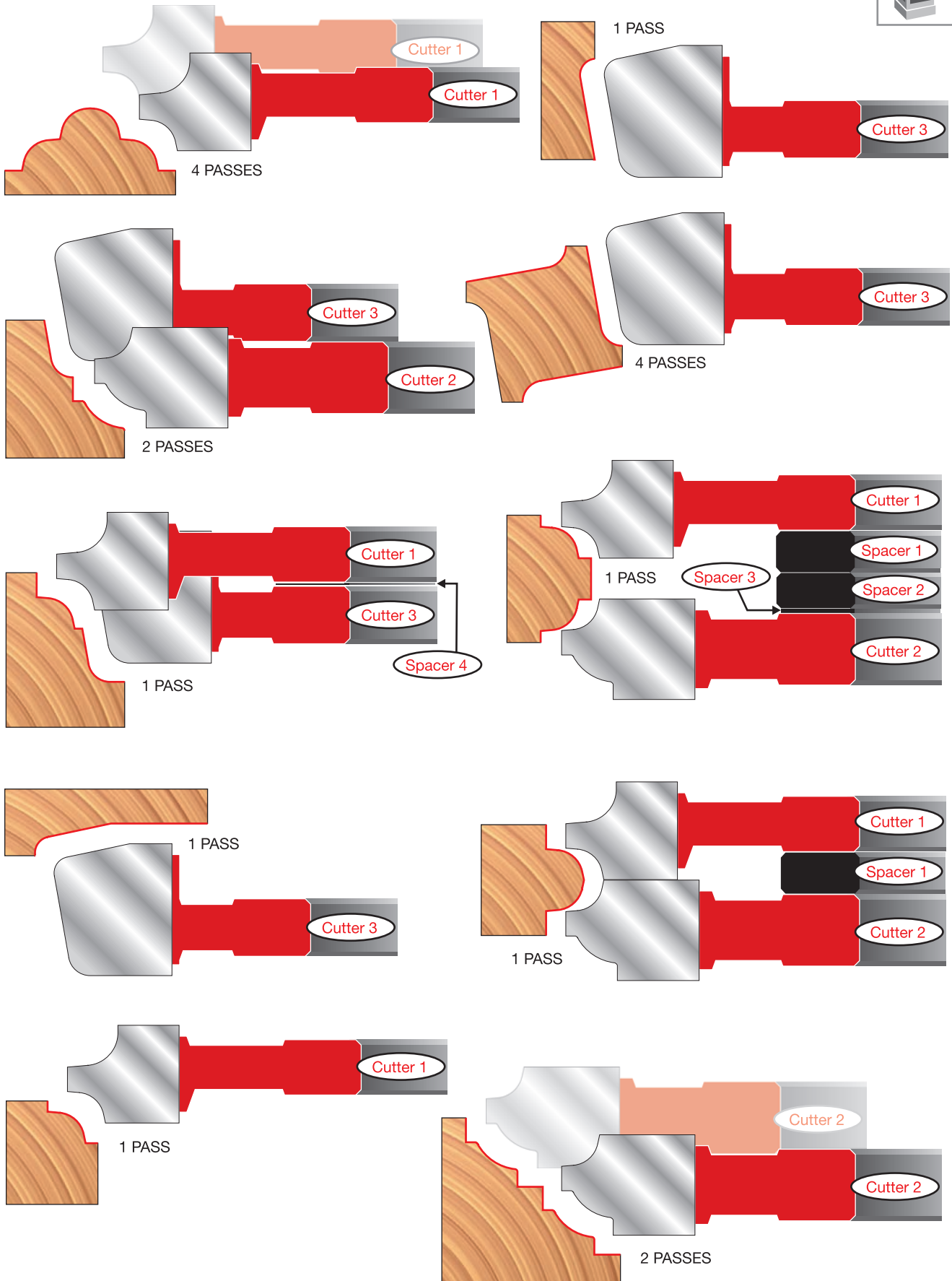
Fixed Wing Cutters



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SHAPER CUTTERS

freud®



Red Item Numbers Indicate 1-1/4" Bore

All Profile Drawings 1:1 Scale



The Woodworking Box



These complete sets of four carbide tipped profile cutters will make many moldings and rails and stiles for raised panel doors. By combining different cutters, changing height and fence position, and making multiple passes the cutters can produce many different profiles. Profiles include: beads, ogees, half rounds, corner rounds, rabbets, coves, grooves, crown molding, chair rail, and many more. This set will also make rail and stile doors both in 3/4" stock and 1" stock with interlocking profiles.

This set is so versatile that it can make a complete raised panel door including the door lip. Set comes with four carbide tipped three-wing profile cutters, two spacers and an assortment of shims for precise cut adjustment. All of this comes in a sturdy wooden storage case.

Order WB101 for 3/4" bore, and WB102 for 1-1/4" bore.

Item Number: WB101 (3/4" Bore)

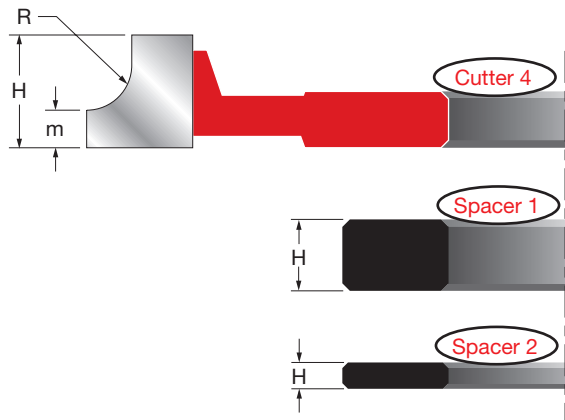
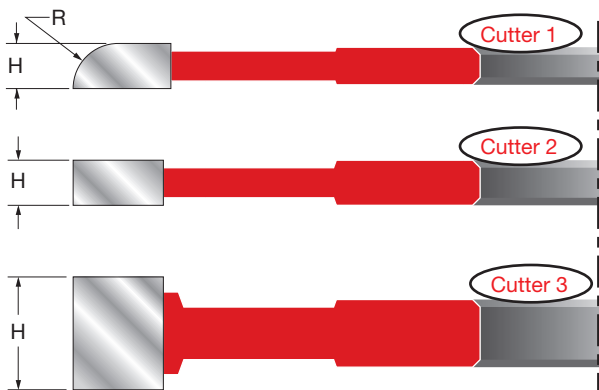
Item Number	Overall Dia.(D)	Carbide Height(H)	Minor Height(m)	Large Radius(R)	Rub Collar Number
Cutter 1	4-1/8"	15/64"	—	15/64"	RC601
Cutter 2	4-1/8"	15/64"	—	—	RC601
Cutter 3	4-1/8"	19/32"	—	—	RC601
Cutter 4	3-21/32"	19/32"	13/64"	15/64"	RC601
Spacer 1	1-37/64"	3/8"	—	—	RC601
Spacer 2	1-37/64"	9/64"	—	—	RC601

Number of Wings = 3

Item Number: WB102 (1-1/4" Bore)

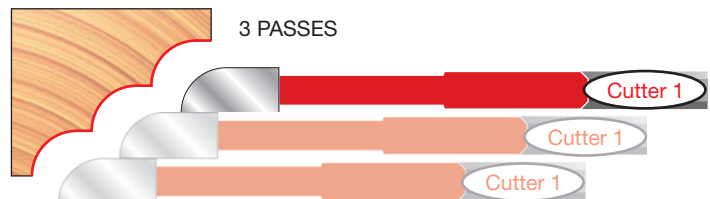
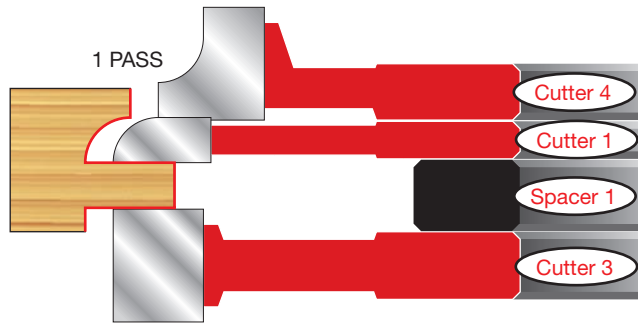
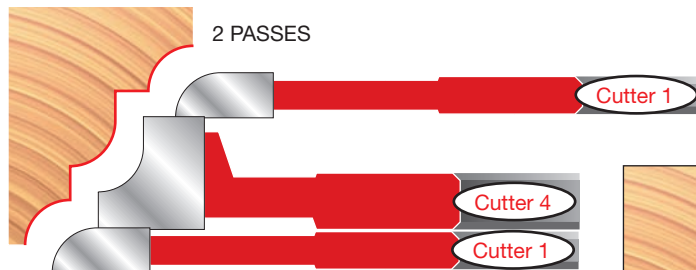
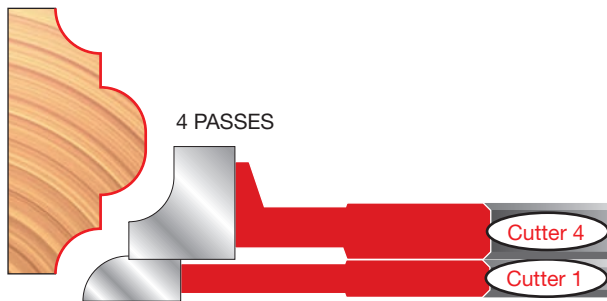
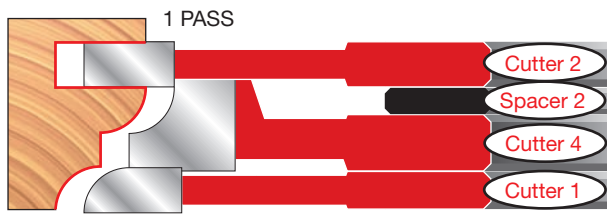
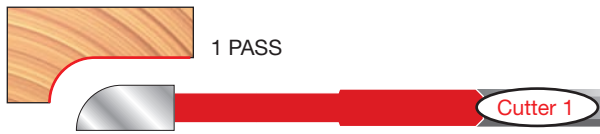
Item Number	Overall Dia.(D)	Carbide Height(H)	Minor Height(m)	Large Radius(R)	Rub Collar Number
Cutter 1	5-1/2"	15/64"	—	3/16"	RC701
Cutter 2	5-1/2"	15/64"	—	—	RC701
Cutter 3	5-1/2"	19/32"	—	—	RC701
Cutter 4	5-1/32"	19/32"	13/64"	15/64"	RC701
Spacer 1	2-3/8"	3/8"	—	—	RC701
Spacer 2	2-3/8"	9/64"	—	—	RC701

Number of Wings = 3



(Continued)

The Woodworking Box



Fixed Wing Cutters



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SHAPER CUTTERS

freud®

Red Item Numbers Indicate 1-1/4" Bore

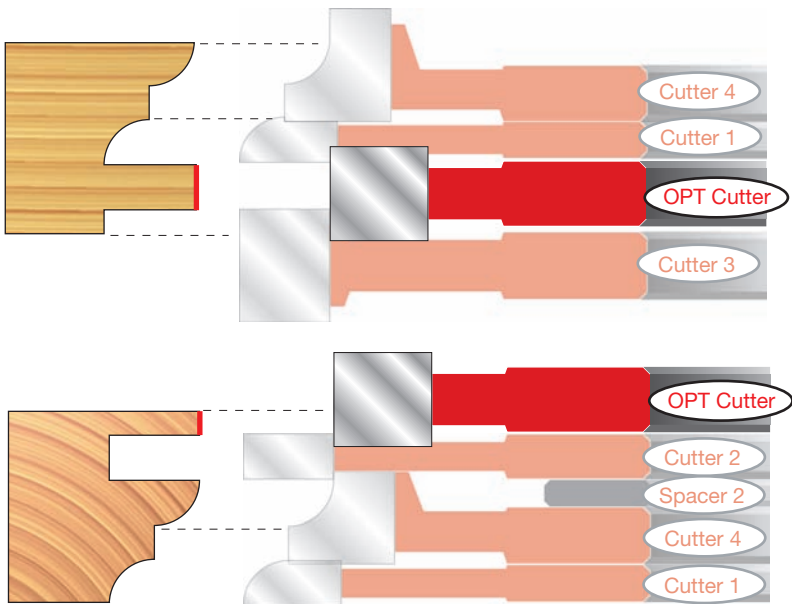
All Profile Drawings 1:1 Scale



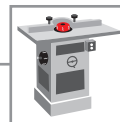
Optional Cutters For Woodworking Box

These optional cutters allow the Woodworking Box to be set up to fully clean the edge of the material while shaping. This eliminates the need for jointing the stock prior to shaping.

Item Number	Overall Dia.(D)	Carbide Height(H)	Number of Pieces	Number of Wings	Bore Diameter	Rub Collar Number
OPT101	3-3/16"	25/64"	1	3	3/4"	RC601
OPT102	4-9/16"	25/64"	1	3	1-1/4"	RC701



Bushing Selection



Freud Shaper Cutters can be fitted with bushings to allow the use of 1-1/4" bore cutters on spindles as small as 3/4". Single cutters require the use of a pair of flange bushings in the appropriate bore in order to lock the cutter onto the spindle. Multiple cutter stacks such as stile and rail cutter sets require flange bushings as well as center cutter bushings.

To determine which bushings are required, first determine the total thickness of the stacked cutter hubs, which is often equal to carbide height, and subtract the height of both flange bushings. The result is the maximum total height of center bushings required. Select bushing sizes that equal most nearly to this amount.

IMPORTANT: Never use center bushings that will equal or exceed the maximum total center bushing height.

Note that the Performance System® Stile and Rail cutter sets and Raised Panel cutter sets include center cutter bushings for 3/4" spindles and Freud 3/4" bore cutters include all necessary bushings for use on 1/2" spindles.

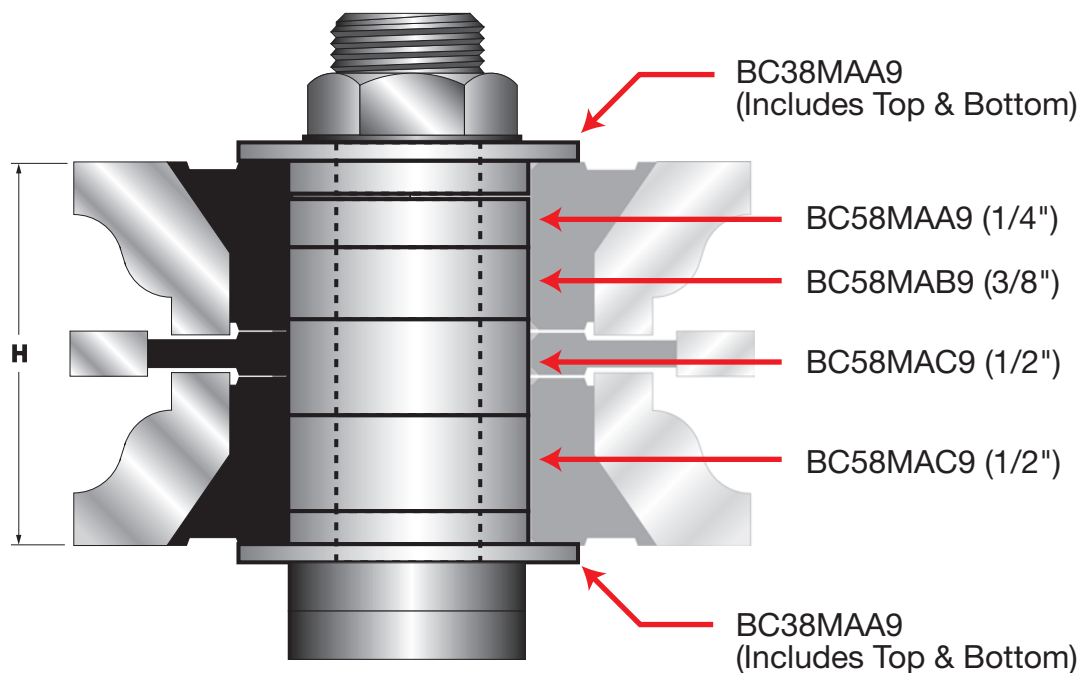
Example of Bushing UP275 to 3/4" Spindle:

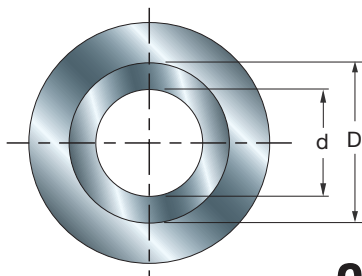
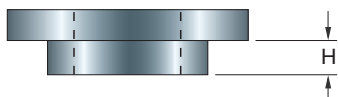
The carbide height of the UP275 is 23/64". After subtracting the height of the BC38MAA9 flange bushings, the maximum center bushing height is obtained:
 $23/64" - 11/64" - 11/64" = 145/64"$

By choosing one BC58MAA9, one BC58MAB9 and two BC58MAC9 center bushings the total center bushing height is:

$$1/4" + 3/8" + 1/2" + 1/2" = 15/8"$$

This will leave a space of only 1/16" and allow the cutters to be securely tightened on the spindle.

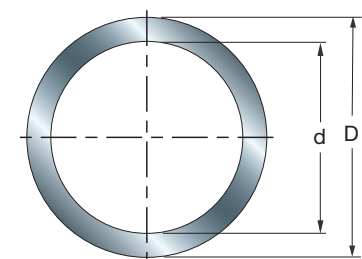
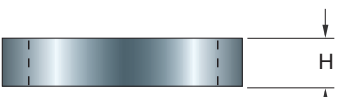




Flange Bushings

Freud's Standard Flange Bushings are manufactured to the highest precision to ensure a cut equal to that of the cutter without the bushing. Be sure to clean the cutter, bushing, and spindle prior to assembly.

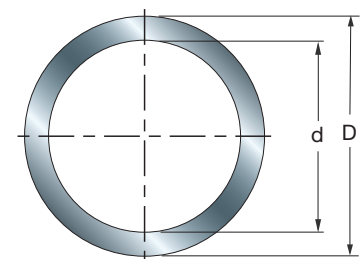
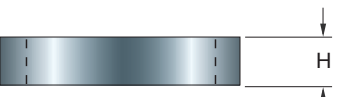
Item Number	Outside Dia.(D)	Height (H)	Bore Diameter(d)
BC20MAA9	1-1/4"	11/64"	20mm
BC30MAA9	1-1/4"	11/64"	30mm
BC36MAA9	1-1/4"	13/64"	1-1/8"
BC37MAA9	1-1/4"	15/64"	1"
BC38MAA9	1-1/4"	11/64"	3/4"
EC000	3/4"	3/16"	1/2"



Center Cutter Bushings

Freud's Center Cutter Bushings are manufactured to the highest precision to ensure a cut equal to that of the cutter without the bushing. These are designed for the center cutters of the male and female rail and stile sets. Be sure to clean the cutter, bushing, and spindle prior to assembly.

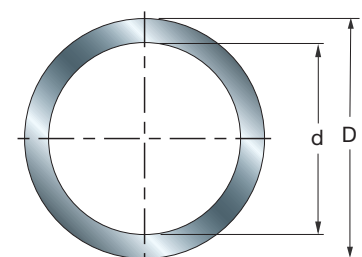
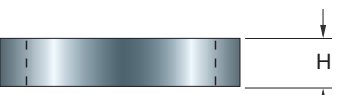
Item Number	Outside Dia.(D)	Height (H)	Bore Diameter(d)
BC56MAA9	1-1/4"	1/4"	1-1/8"
BC56MAB9	1-1/4"	3/8"	1-1/8"
BC56MAC9	1-1/4"	1/2"	1-1/8"
BC57MAA9	1-1/4"	1/4"	1"
BC57MAB9	1-1/4"	3/8"	1"
BC57MAC9	1-1/4"	1/2"	1"
BC58MAA9	1-1/4"	1/4"	3/4"
BC58MAB9	1-1/4"	3/8"	3/4"
BC58MAC9	1-1/4"	1/2"	3/4"



Cassette 65 Bushings

Use these bushings sets with the Cassette 65 Cutter Set. Be sure to clean the cutter, bushing, and spindle prior to assembly.

Item Number	Outside Dia.(D)	Height (H)	Number of Pieces	Bore Dia.(d)
BS71MAA9	1-1/4"	15/64", 9/32", & 3/8"	3	1-1/8"
BS71MAB9	1-1/4"	15/64", 9/32", & 3/8"	3	1"
BS71MBA9	3/4"	15/64", 9/32", & 3/8"	3	5/8"
BS71MBB9	3/4"	15/64", 9/32", & 3/8"	3	1/2"
BS71M030	1-1/4"	15/64", 9/32", & 3/8"	3	30mm

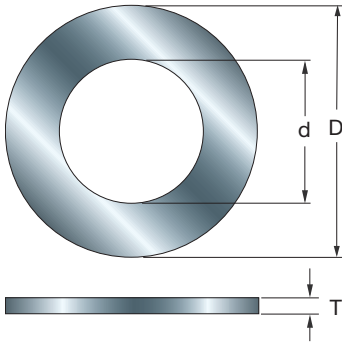


Woodworking Box Bushings

These bushings sets are designed for use with the Woodworking Box Cutter Set. Be sure to clean the cutter, bushing, and spindle prior to assembling.

Item Number	Outside Dia.(D)	Height (H)	Bore Diameter(d)
BS20MAA9	1-1/4"	3/16" (2), 15/64", 9/32", & 11/32"	20mm
BS30MAA9	1-1/4"	3/16" (2), 15/64", 9/32", & 11/32"	30mm
BS72MAA9	1-1/4"	3/16" (2), 15/64", 9/32", & 11/32"	1-1/8"
BS72MAB9	1-1/4"	3/16" (2), 15/64", 9/32", & 11/32"	1"
BS72MBA9	3/4"	3/16" (2), 15/64", 9/32", & 11/32"	5/8"
BS72MBB9	3/4"	3/16" (2), 15/64", 9/32", & 11/32"	1/2"

Shim Sets

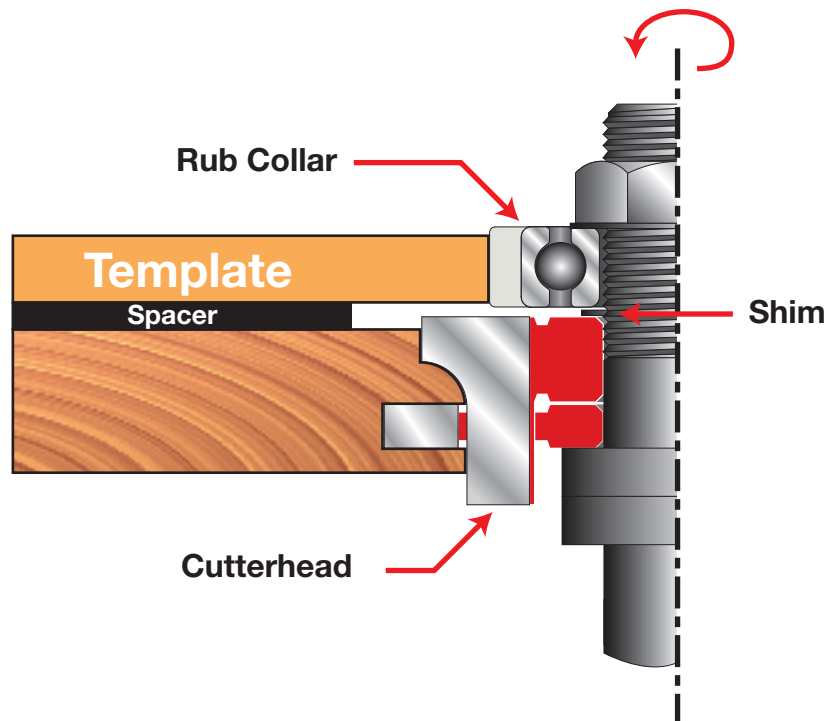


To adjust a cut for a precise fit, Freud's Precision Shim Set is a quick and easy solution. These shims allow adjustment of your cutter spacing by as little as .004" (1/250") up to .370".

Precision Shim Sets

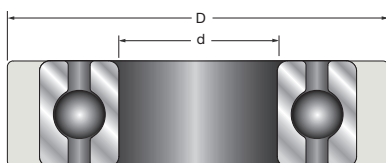
Item Number	Arbor	Outside Dia.(D)	Number of Each Thickness						
			.004	.008	.012	.020	.040	.142	.370
AN73MEA9	1-1/4"	1-7/8"	1	1	1	1	1	1	1
AN73MFA9	3/4"	1-5/16"	1	1	1	1	1	1	1

Rub Collar Setup & Selection Chart





Ball Bearing Rub Collars



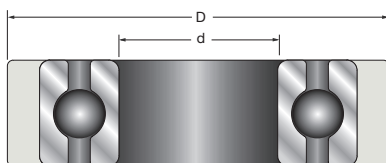
Freud's Ball Bearing Rub Collars are made using precision industrial ball bearings, and are ideal for doing template work or making cathedral doors.

Item Number	Outside Dia.(D)	Bore Dia.(d)
RC-001	48mm	3/4"
RC-002	1-3/4"	3/4"
RC-003	72mm	3/4"
RC101	2-1/4"	1-1/4"
RC102	2-1/4"	1-1/8"
RC105	2-1/4"	1/2"
RC201	2-1/2"	1-1/4"
RC202	2-1/2"	1-1/8"
RC205	2-1/2"	1/2"
RC301	2-3/4"	1-1/4"
RC302	2-3/4"	1-1/8"

Item Number	Outside Dia.(D)	Bore Dia.(d)
RC305	2-3/4"	1/2"
RC401	3"	1-1/4"
RC402	3"	1-1/8"
RC405	3"	1/2"
RC501	3-1/2"	1-1/4"
RC502	3-1/2"	1-1/8"
RC505	3-1/2"	1/2"
RC601	3-1/4"	3/4"
RC701	4-9/16"	1-1/4"
RSC-3	85mm	1-1/4"



Ball Bearing Rub Collars Reference Chart



Item Number	Rub Collar Number
EC091	RC-001
EC140	RC-003
EC141	RC-003
EC142	RC-003
EC143	RC-003
EC144	RC-003
EC146	RC-003
EC260	RC-001
EC266	RC-001
EC270	RC-001
EC274	RC-001
OPT101	RC601
OPT102	RC701
RP1000	RC10#
RP2000	RC10#
RS1000	RSC-#
RS2000	RSC-#
UC200	RC-002
UC201	RC-002
UC202	RC-002
UC203	RC-002
UC204	RC-002
UC207	RC-002
UC208	RC-002
UC209	RC-002
UC210	RC-002
UC211	RC-002
UC212	RC-002
UC213	RC-002
UC215	RC-002

Item Number	Rub Collar Number
UC221	RC-002
UC223	RC-002
UP016	RC10#
UP140	RC50#
UP141	RC50#
UP142	RC50#
UP143	RC50#
UP144	RC50#
UP145	RC50#
UP146	RC50#
UP147	RC50#
UP148	RC50#
UP149	RC50#
UP150	RC50#
UP151	RC50#
UP152	RC50#
UP153	RC50#
UP200	RC10#
UP201	RC10#
UP202	RC10#
UP203	RC10#
UP204	RC10#
UP205	RC10#
UP206	RC10#
UP207	RC10#
UP208	RC10#
UP209	RC10#
UP210	RC10#
UP211	RC10#
UP212	RC10#

Item Number	Rub Collar Number
UP213	RC10#
UP214	RC10#
UP215	RC10#
UP216	RC10#
UP217	RC10#
UP218	RC10#
UP219	RC10#
UP220	RC10#
UP221	RC10#
UP222	RC10#
UP223	RC10#
UP260	RC30#
UP261	RC30#
UP262	RC30#
UP263	RC30#
UP264	RC30#
UP265	RC30#
UP266	RC30#
UP267	RC30#
UP268	RC30#
UP269	RC20#
UP270	RC20#
UP272	RC20#
UP273	RC20#
UP274	RC20#
UP275	RC20#
WB101	RC601
WB102	RC701

See previous page for bore selection
"#" determines bore size

Industrial Power Tools



Freud manufactures a wide assortment of quality power tools and accessories to suit any woodworking project. Freud power tools have gained recognition from several of the industry's trade publications, including the coveted "Top 10 Innovative Tool" award from Workbench for our FJ85K Heavy Duty Variable Speed Jigsaw and the prestigious "Best Buy" award from American Woodworker magazine for our JS100A Biscuit Joiner.



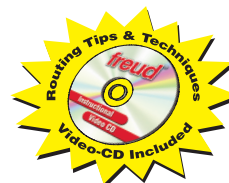


FT1700VCEK 2-1/4 HP Variable Speed Router

Freud's Ultimate 2-1/4 HP Variable Speed Fixed Base Router features above-the-table micro-adjustability for quick, accurate adjustments. The FT1700VCEK also features an extended spindle shaft with through the base locking system for easy, safe above table bit changes. The router also features a powerful 13 amp motor with soft start to reduce start up torque. The electronic cruise control system ensures that the speed remains constant under varying loads. The electronic regulator and power switch are sealed from dust and debris, so it is as durable as it is versatile!



Micro-adjustment accurate to 1/128".



Includes an instructional Video-CD for Routing Tips & Techniques.



Electronic Speed Control maintains constant speed under load.



8 position rotating handles for superior comfort and control.



Simple above the table micro-adjustment capability.



Extended spindle shaft with simple above table locking capability.



Easy one hand above the table bit change.





• FT1700VCEK 2-1/4 HP Router

- Above-table micro-adjustability accurate to 1/128" increments for quick, easy, and precise adjustments.
- Extended spindle shaft with through base locking feature for fast, easy, bit changes above the table.
- Powerful 13 amp motor for extreme strength and durability.
- 10,000-23,000 RPM with soft-start for reduced start up torque.
- Unique ergonomic design for better balance and control when cutting .
- Sealed electronic regulator and power switch for superior protection from dust and debris.
- Includes 1/4" and 1/2" collet and above table height adjustment knob.



FT1700VCEK

Amps:	.13
Volts:	120
Watts:	1,500
RPM Range:	10,000 - 23,000
Speed Controls:	Electronic Soft Start
Collet Diameter:	1/4" & 1/2"
Fixed Base Diameter:	.6"
Weight:	7.5 lbs



• FT1702VCEK 2-1/4 HP Router with 2 Base Combo Kit

- Above-table micro-adjustability accurate to 1/128" increments for quick, easy, and precise adjustments.
- Extended spindle shaft with through base locking feature for fast, easy, bit changes above the table (fixed base only).
- Powerful 13 amp motor for extreme strength and durability.
- 10,000-23,000 RPM with soft-start for reduced start up torque.
- Unique ergonomic design for better balance and control when cutting.
- Sealed electronic regulator and power switch for superior protection from dust and debris.
- Includes 2 bases, one fixed base and one plunge base.
- Includes 1/4" and 1/2" collets and above table height adjustment knob.



FT1702VCEK

Amps:	.13
Volts:	120
Watts:	1,500
RPM Range:	10,000 - 23,000
Speed Controls:	Electronic Soft Start
Collet Diameter:	1/4" & 1/2"
Plunge Capacity:	.2-1/2"
Fixed Base Diameter:	.6"
Plunge Base Diameter:	.6"
Weight:	7.5 lbs



Plunge base available separately as item #FT1760.

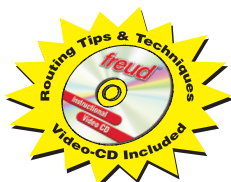


FT3000VCE 3-1/4 HP Variable Speed Plunge Router

Boasting a powerful 15 amp motor, Freud's newest plunge router is a heavy-duty champ—but this is no ordinary full-sized router. The FT3000VCE also features above table height adjustments and bit changes. The height adjustment system is accessible through the base for quick, accurate adjustments. The FT3000VCE also features an extended spindle shaft with through the base locking system for easy, safe above table bit changes. The unit also features soft-start to reduce start up torque and the electronic cruise control system ensures that the speed remains constant under varying loads. The power switch and electronic regulator are sealed from dust and debris for extreme durability.

FT3000VCE

Amps:15
Volts:120
Watts:1,900
RPM Range:8,000 - 21,000
Speed Controls: . . .Electronic Soft Start
Collet Diameter:1/4" & 1/2"
Plunge Capacity:2-9/16"
Base Diameter:7-1/2"
Weight:13 lbs



Includes an instructional Video-CD for Routing Tips & Techniques.



Electronic Speed Control maintains constant speed under load.



Ergonomic handles provide superior comfort during use.



Micro-adjustments accurate to 1/128".



Simple above the table micro-adjustment capability.



Easy one hand above the table bit change.



Base includes 4 position rotating turret stop, and 3-5/8" opening for large diameter bits.



FT2200E 3-1/4 HP Variable Speed Plunge Router



Freud's FT2200E, the Variable Speed 3-1/4 HP Plunge Router, can serve as a hand held router, and when mounted under a table, the router can take the place of a more expensive spindle shaper. It has a powerful 15 amp motor, and electronic speed control with Soft Start that adjusts the output RPM from 10,000 to 22,500 RPM. The electronic speed control maintains a more constant torque and RPM than most other routers. The 1-3/8" long collet is one of the longest in the industry. Micro-Adjustment Depth Control makes accurate vertical settings quick and easy.

Other features include: Freud's Sliding Shaft Lock, Large On/Off Switch, Convenient Plunge Lock, Quick Release Depth Stop, 1/4" Collet Reducer, 3 Position Depth Stop Turret.

FT2200E packaged without edge guide

FT2200EP packaged with edge guide.



Electronic Speed Control maintains constant speed under load.

FT2200E

Amps:	15
Volts:	120
Watts:	1,800
RPM Range:	10,000 - 22,500
Speed Controls:	Electronic Soft Start
Collet Diameter:	1/4" & 1/2"
Plunge Capacity:	2-9/16"
Base Diameter:	6-9/16"
Weight:	13 lbs

Routers



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FT750T 1 HP Laminate Trimmer

Freud's FT750T 1 HP Laminate Trimmer Router with it's 6.6 amp, 27,000 RPM motor cuts easily through the toughest woods and laminates. The FT750T micro-adjustable base allows for easy adjustment and accuracy along with its lightweight design for extended use with out fatigue.



FT750T

Amps:	6.5
Volts:	120
Watts:	750
RPM Range:	27,000
Collet Diameter:	1/4"
Base Diameter:	3-7/8" x 2-13/16"
Weight:	4.4 lbs



Precision machined fixed base with micro-adjustability for better accuracy.



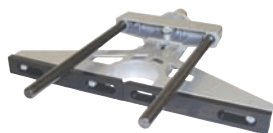
Ideal for: Trimming, Edge Molding, Hinge Mortising, Dovetailing, Grooving, and Sign Making.

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Router Accessories



FT2010 Edge Guide

This edge guide fits the Freud FT2000E, FT2200E, and FT3000 routers as well as many other popular routers. The micro-adjustment feature makes set-up a snap.



FT1710 Edge Guide for FT1700

This edge guide fits the Freud FT1700VCEK & FT1702VCEK routers. The micro-adjustment feature makes set up easy.



FT2050 Edge Guide Bearing

Used with Freud's FT2010 Edge Guide, this edge guide bearing is ideal for following contour templates.

Template Guides

Template guides are great for cutting complex designs with the router, and are a must for doing production work where many identical pieces are needed. Just select a template guide slightly larger than the bit you will be using, and then size your template accordingly.

Application: Adaptor plate can be used on Freud FT1700VCE, FT2000E, FT2200E, and FT3000 routers as well as many other popular routers. Template guides will work with any router or adaptor which accepts universal template guides.

Item Number	Outside Dia.	Inside Dia.	Guide Height
FT1301	5/16"	1/4"	5/32"
FT1302	3/8"	9/32"	5/16"
FT1303	7/16"	11/32"	5/32"
FT1304	1/2"	13/32"	5/16"
FT1305	5/8"	17/32"	9/16"
FT1306	51/64"	5/8"	9/16"
FT1307	3/4"	21/32"	9/16"
FT1100	Template Guide Adapter Plate		
FT1200	Template Guide Lock Nut		



FT2020 Template Guide Set

With this set, you will always have the correct guide when you need it. The guides and adaptor are machined out of a special brass alloy for precision and long life. Set contains all the above template guides, an adaptor plate, and lock nut, all in a sturdy carrying case.

Application: Adaptor plate can be used with Freud FT1700VCE, FT2000E, FT2200E, and FT3000 routers as well as many other popular routers. Template guides will work with any router or adaptor which accepts universal template guides.



FT1500 Inlay Template Guide Set

Always get professional looking inlays with Freud's Inlay Template Guide Set. Only one template is required. That is what makes this system so easy to use and produce such accurate results. To go from cutting the recess to cutting the piece for the inlay is as easy as sliding off and on a collar over the template guide.

This set is machined from a special grade of high strength brass alloy and includes a 1/8" solid carbide spiral bit with a 1/4" shank. Comes with complete easy to follow instructions which tell you how to size your template and use the system.

Application: Inlay Template Guides will work with any router or adaptor that accepts universal template guides. Use Freud's FT1100 Template Guide Adapter Plate (sold separately).



BF3510 Feather Board

Freud's universal Feather Board can be used vertically or horizontally and can be adjusted for that perfect amount of tension that any task may require. The Freud BF3510 Feather Board comes with all necessary hardware and track insert to fit standard 3/4" T-track.

RTP1000 Ultimate Portable Router Table System

Freud's New Ultimate Portable Router Table features a sturdy folding stand for easy storage and portability. Table top has a larger center opening to allow the router to be removed from above the table and features standard 3/4" T-track for infinite adjustability. The dual adjusting Freud SH-5 fence has Shaper/Joiner capabilities and be quickly adjusted or removed from the table to accommodate many different types of tasks.



Router Tables



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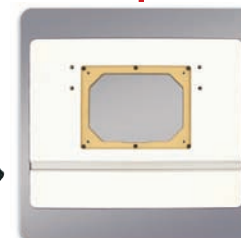
Dual micro-adjustable fence is accurate to .001" on both in-feed & out-feed fences.



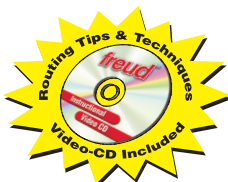
Large 9"x12" insert plate allows router to be installed and removed through the table. Includes leveling system.



Folding leg system is light weight and extremely sturdy.



23.5" x 18.5" work surface provides ample space for your materials.



Includes an instructional Video-CD for Routing Tips & Techniques.

RTP1000

Table Height14"
Top Dimensions:23.5" x 18.5"
Plate Dimensions:9" x 12"
Fence:Dual Micro-Adjustable

System Includes:

- Folding leg system
- Insert plate with leveling screws, 2 snap down rings, and starter pin
- Sturdy table top with 3/4" T-track
- SH-5 micro-adjustable fence system with dust port



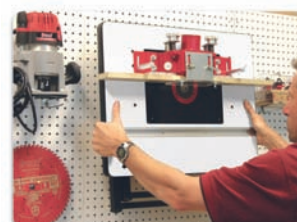
Quick and easy to assemble



Lighweight and portable



Convenient for any location



Folds flat for easy storage



RTS5000 Stationary Router Table

Freud's New RTS5000 Router Table and Fence Combo Package makes it easy to set up a professional router table system. For one price you receive the Freud SH-5 Router Table Fence, Table Top, sturdy leg system, and Router Insert Plate. The 31.5" x 23.5" x 1" table top, constructed of high pressure laminate with MDF core, provides stability for large projects and it's 3/4" aluminum T-track accepts standard miter gauges and accessories. The large 9" x 12" Router Insert Plate has snap-in reduction rings and a starter pin. Also included is the new SH-5 Premium Router Table Fence System with micro-adjustability for precise positioning of the in-feed and out-feed fences and built-in dust collection port.

Router Tables



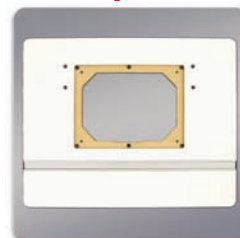
Dual micro-adjustable fence is accurate to .001" on both in-feed & out-feed fences.



Large 9"x12" insert plate allows router to be installed and removed through the table. Includes leveling system.



Sturdy 16 gauge legs



31.5" x 23.5" x 1" work surface provides ample space for your materials.



RTS5000

Table Height32" to 38"
Top Dimensions:31.5" x 23.5" x 1"
Plate Dimensions:9" x 12"
Fence:Dual Micro-Adjustable

System Includes:

- Adjustable steel stand
- Insert plate with leveling screws, 2 snap down rings, and starter pin
- Sturdy table top with 3/4" T-track
- SH-5 micro-adjustable fence system with dust port

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PKG0026 Ultimate Router Table System



Instructional Video
CD's included.



Freud's New PKG0026 Router Table and Fence Combo package makes it easy to set up a professional router table system. For one price you receive the Freud FT2200E Router, SH-5 router table fence, sturdy leg system, table top, and router insert plate. The included, award winning FT2200E 3-1/4 HP Variable Speed Plunge router features easy, precise height adjustment and plenty of power for the most demanding jobs. The 31.5" x 23.5" x 1" table top, constructed of high pressure laminate with MDF core, provides stability for large projects and it's 3/4" aluminum T-track accepts standard miter gauges and accessories. The large 9" x 12" Router Insert Plate has snap-in reduction rings and a starter pin. Also included is the new SH-5 Premium Router Table Fence System with micro-adjustability for precise positioning of the in-feed and out-feed fences and built-in dust collection port.

PKG0024

System Includes:

- Adjustable steel stand
- Insert plate with leveling screws, 2 snap down rings, and starter pin
- Sturdy table top with 3/4" T-track
- SH-5 micro-adjustable fence system with dust port
- FT2200E Plunge Router

PKG0024 Router Table System

Freud's New PKG0024 Router Table and Fence Combo package makes it easy to set up a professional router table system. For one price you receive the Freud FT2200E Router, SH-5 router table fence, table top, and router insert plate. The included, award winning FT2200E 3-1/4 HP Variable Speed Plunge router features easy, precise height adjustment and plenty of power for the most demanding jobs. The 31.5" x 23.5" x 1" table top, constructed of high pressure laminate with MDF core, provides stability for large projects and it's 3/4" aluminum T-track accepts standard miter gauges and accessories. The large 9" x 12" Router Insert Plate has snap-in reduction rings and a starter pin. Also included is the new SH-5 Premium Router Table Fence System with micro-adjustability for precise positioning of the in-feed and out-feed fences and built-in dust collection port.



PKG0024

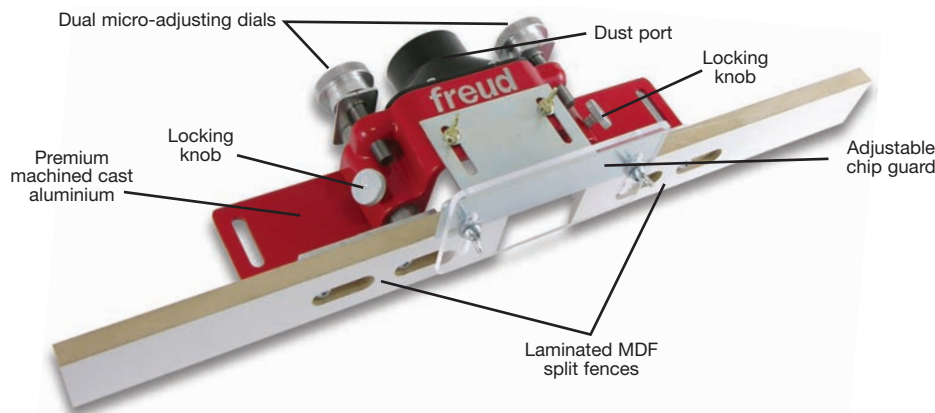
System Includes:

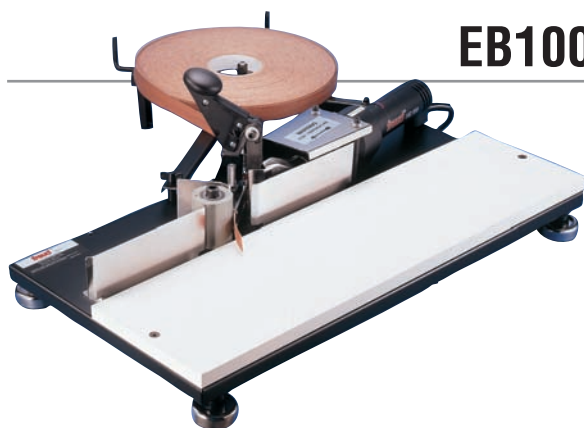
- Insert plate with leveling screws, 2 snap down rings, and starter pin
- Sturdy table top with 3/4" T-track
- SH-5 micro-adjustable fence system with dust port
- FT2200E Plunge Router

SH-5 Premium Router Table Fence System

Freud's SH-5 Premium Router Table Fence System models high-end industrial shaper fences at an attractive price. The SH-5 features a split fence for versatility and micro-adjustment for precision. This system, constructed of machined cast aluminum and steel for durability and features twin micro-adjusting knobs with .001" accuracy and 7/8" range. This individual adjusting system permits the infeed and outfeed fences to adjust separately for jointer use and other specialty applications.

Includes: Dust Collection Port, Two Laminated MDF Fence Faces, Chip Guard, and Mounting Screws.





EB100 Edge Bander

The Freud Edge Banding System can handle hot-melt adhesive wood and polyester edge banding and comes complete with a heavy-duty industrial heat gun. The guides are completely adjustable and will accommodate materials as wide as 2-1/4". It is capable of applying edge banding to straight and curved edges.

Edge Banding Accessories

Edge Banding Tape



The wood veneers are 1/2" thick, finger jointed, bonded to a fleece backer, sanded and coated with hot melt adhesive. Polyester bandings are laminated to a .010" thick backer sheet and coated with a high quality hot melt adhesive. Total band thickness is .016". Total length is 250'.

Item #	Width	Description	Item #	Width	Description
EB005	13/16"	Red Oak - Wood	EB035	13/16"	Ski White - Polyester
EB010	13/16"	White Birch - Wood	EB040	13/16"	Almond - Polyester
EB015	13/16"	White Oak - Wood	EB045	13/16"	Black - Polyester
EB020	13/16"	Mahogany -Wood	EB050	13/16"	Grey - Polyester
EB025	13/16"	Walnut - Wood	EB055	13/16"	Light Grey - Polyester
EB030	13/16"	Cherry - Wood	EB060	13/16"	Pine - Wood



EB090 Trimmer

This trimmer can handle two edges at the same time! Easy spring-loaded — requires no adjustments — gives a smooth finish to edge banding on even your most complex projects.

Replacement Knives

EB-090B	Trimmer Replacement Blades
EB-109	Set Replacement Blades

HG100 Heat Gun



This industrial Heat Gun has an IC control circuit and a Type "J" Thermocouple in the nozzle to precisely control nozzle temperature. This is what makes this such a versatile tool. An added bonus, if the nozzle's air flow is restricted, the nozzle will not overheat and burn up like other heat guns.



JS100A Biscuit Joiner

Freud's JS100A Biscuit Joiner features an ergonomic easy-to-grip barrel design to offer improved comfort, and a convenient thumb control power switch. The cutting depth adjustment wheel has 6 settings to regulate biscuit sizes. At 6.8 lbs the powerful 6.5 amp JS100A biscuit joiner includes 4-way angle plates for accurate cuts at 0, 45, 90, and 135 degrees, spindle lock for easy blade change, carrying case and a dust collection port with dust bag for cleaner operation. This joiner also features a Perma-SHIELD® coated base plate for smooth jointing action. The JS100A is ideal for making multi-sided boxes and frames.



JS100A	
Amps:	.6.5
Volts:	.120
RPM Range:	.10,000
Depth Settings:	.6
Biscuit Sizes:	.00, 10, 20, A, B, Max
Max. Depth:	.20mm
Angle Settings:	.0°, 45°, 90°, 135°
Vacuum Port:	.Yes
Dust Bag:	.Yes
Weight (Approx.):	.6.8 lbs

Biscuit Joiners



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JS102 Biscuit Joiner

Freud's JS102 Adjustable Fence Biscuit Joiner features an ergonomic easy-to-grip barrel design to offer improved comfort, and a convenient thumb control power switch. The cutting depth adjustment wheel has 6 settings to regulate biscuit sizes. At 6.8 lbs the powerful 6.5 amp JS102 biscuit joiner includes an adjustable fence for accurate cuts at 0-90 and 135 degrees, with positive detents at 0, 45 and 90 degrees for easy, precise adjustments, spindle lock for easy blade change, carrying case and a dust collection port with dust bag for cleaner operation. This joiner also features a Perma-SHIELD® coated base plate for smooth jointing action. The JS102 is ideal for making multi-sided boxes and frames.



JS102	
Amps:	.6.5
Volts:	.120
RPM Range:	.10,000
Depth Settings:	.6
Biscuit Sizes:	.00, 10, 20, A, B, Max
Max. Depth:	.20mm
Angle Settings:	.0° to 90°, 135°
Vacuum Port:	.Yes
Dust Bag:	.Yes
Weight (Approx.):	.6.8 lbs

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Biscuit Joiner Accessories



Joiner Biscuits

Freud Biscuits are sturdy splines, designed to be used with the Freud JS100, JS102 and most other biscuit joiners on the market. Our biscuits are made of compressed beechwood for strength and stability.

Item #	Description	Size
900-00	1000 Splines Size 0	1-7/8" x 5/8"
900-10	1000 Splines Size 10	2-1/8" x 3/4"
900-20	1000 Splines Size 20	2-3/8" x 7/8"
950-00	50 Splines Size 0	1-7/8" x 5/8"
950-10	50 Splines Size 10	2-1/8" x 3/4"
950-20	50 Splines Size 20	2-3/8" x 7/8"
900-XX	1000 Splines Mixed	Assorted



Replacement Cutters

Our replacement cutters are made using the same carbide technology we put in our saw blades. These can be used in our JS100, or JS102. The FI100 has 6 teeth for fast joining. The FI102 has 8 teeth for smoother joining. Both are equipped with our anti-kickback design.

Item #	Diameter	Teeth	Arbor	Kerf	Plate
FI100	3-15/16"	6 Flat	22mm	.157	.096
FI102	3-15/16"	8 Flat	22mm	.157	.096



G100 Joiner Glue Bottle

Our G100 Biscuit Joiner Gluing System has a flat nozzle, perfect for applying glue into the joint slots. We've included a base that holds the bottle to prevent the glue from drying in the tip, plus, it keeps the glue at the tip, ready for action (base contains a sponge that holds water for moisture). Top it off with the attached cap. Use our gluing system to avoid a sticky situation.

FJ85K Heavy Duty Variable Speed Jigsaw

Freud's FJ85K Heavy-Duty Variable Speed Jigsaw features Electronic Cruise Control so speeds remains constant under different loads. This allows the powerful 6.0 amp motor to handle the most difficult projects, even hard knots without slowing down. This 5.4 lb. jigsaw includes a quick-fix blade change system that allows for easy, tool-free changing of blades. The non-marring base attachment with anti-splintering insert prevents scratching and damage to delicate work pieces. Variable speed and four orbital settings give superior cuts in a wide range of materials. Comes equipped with a built-in dust collection port for easy clean-up.



Electronic Speed Control maintains constant speed under load.



FJ85K	
Amps:	.60
Volts:	120
Speed Controls:	Electronic Cruise Control
Orbital Settings:	.4
Stroke Length:	.1"
Strokes Per Minute:	500 - 3,000
Max. Cutting Depth:	.2-3/8"
Blades:	Accepts Bosch Type Shanks
Weight:	5.4 lbs



3-1/4" Portable Planers

Freud's portable planers are designed to handle beveling, chamfering, rabbeting, and surface planing with ease. Calibrated depth controls with detents allow for precision depth adjustment. Freud's Portable Planers are designed to meet the needs of the jobsite professional as well as the fine woodworker. These planers also include reversible carbide knives for extended life, blade wrench, fence, rabbeting depth stop, and dust collection nozzle.

FE82K

6.0 Amp Portable Planer



Carrying Case Included

FE82K

Amps:6
Volts:120
RPM Range:13,000
Cut Width:3-1/4"
Max. Cut Depth:3/32"
Depth Control: .Calibrated With Detents
Blades:Reversible Carbide
Weight:5.4 lbs

Includes:
Blade Wrench, Rabbeting Depth Stop,
Fence, Dust Collection Nozzle

FE84K

7.5 Amp Portable Planer



Carrying Case Included



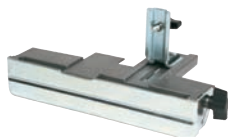
Electronic Speed Control
maintains constant
speed under load.

FE84

Amps:7.5
Volts:120
RPM Range:13,000
Speed Control:Electronic
Cut Width:3-1/4"
Max. Cut Depth:1/8"
Depth Control: .Calibrated With Detents
Blades:Reversible Carbide
Weight:5.4 lbs

Includes:
Blade Wrench, Rabbeting Depth Stop,
Fence, Dust Collection Nozzle

Portable Planer Accessories



CE8210 Angle Fence

Variable-Angle Edge Guide For FE82 Planer. Features a 9" surface for control and range of adjustment from 0° to 45° for versatility.

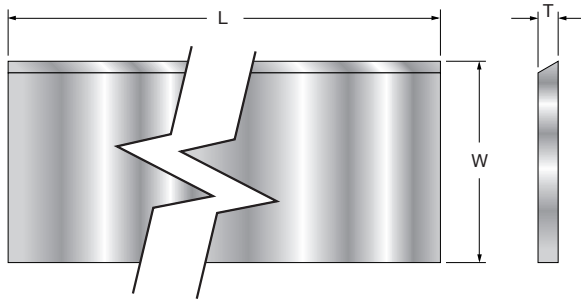


CG080 3-1/4" Carbide Knives

1 pair of reversible, carbide replacement knives for the FE82 Power Planer.



High Speed Steel Industrial Planer & Jointer Knives



These Industrial Planer and Jointer Knives are made from a premium High Speed Steel stock. Each is pre-ground to a razor sharp edge to provide a super smooth cut.

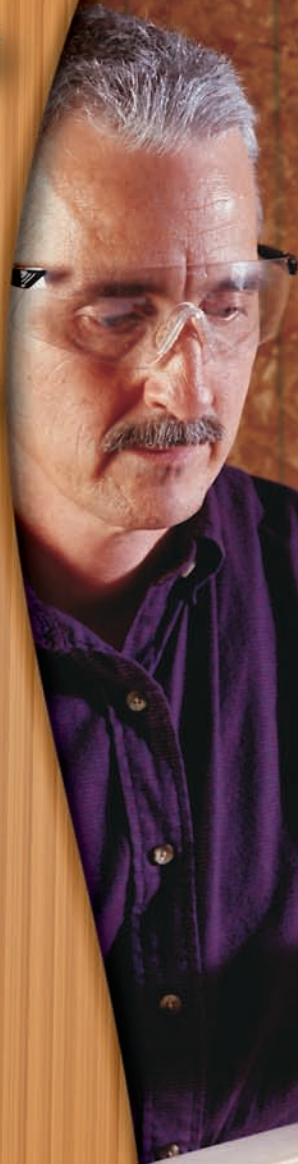
Item Number	Length (L)	Width (W)	Thickness (T)	Number of Pieces	Item Number	Length (L)	Width (W)	Thickness (T)	Number of Pieces
C010	12"	7/8"	1/8"	1	C360	6"	7/8"	1/8"	3
C012	12"	7/8"	1/8"	3	C370	6"	1"	1/8"	2
C020	12-1/2"	15/16"	1/8"	1	C390	6-1/16"	3/4"	1/8"	3
C030	13-1/8"	11/16"	5/32"	1	C400	6-1/8"	11/16"	1/8"	3
C035	18"	1-1/8"	5/32"	1	C410	6-1/8"	3/4"	1/8"	3
C040	19"	11/16"	1/8"	1	C420	6-1/2"	1"	1/8"	3
C045	15"	1"	1/8"	3	C430	8"	5/8"	1/16"	4
C050	20"	1"	1/8"	1	C440	8"	5/8"	1/8"	4
C052	20"	1-3/16"	1/8"	4	C441	8"	5/8"	1/8"	3
C055	20-1/2"	11/16"	1/8"	3	C460	8"	3/4"	1/8"	3
C060	24"	1-1/8"	5/32"	1	C470	8"	7/8"	1/8"	3
C070	24"	1-1/2"	5/32"	1	C480	8"	1"	1/8"	3
C090	25"	5/8"	3/32"	1	C490	8-1/16"	5/8"	3/32"	3
C100	25"	5/8"	1/8"	1	C491	8-1/16"	5/8"	3/32"	4
C110	25"	3/4"	1/8"	1	C500	8-1/4"	11/4"	1/8"	3
C120	25"	1-1/4"	1/8"	1	C510	12"	5/8"	1/8"	3
C130	25"	1-1/4"	5/32"	1	C520	12"	3/4"	1/8"	3
C140	30"	1-1/2"	1/8"	1	C540	12"	1"	1/8"	3
C150	37"	1-1/8"	1/8"	1	C550	12-1/4"	5/8"	1/8"	3
C160	37"	1-3/8"	1/8"	1	C560	12-1/4"	3/4"	1/8"	3
C170	37"	1-3/8"	5/32"	1	C570	12-1/4"	1"	1/8"	3
C180	37"	1-1/4"	5/32"	1	C573	12-1/2"	11/16"	1/8"	3
C190	37"	1-1/2"	5/32"	1	C583	25"	11/16"	1/8"	3
C200	37"	2"	5/32"	1	C593	18-1/2"	11/16"	1/8"	3
C310	4"	5/8"	1/8"	3	C600*	10"	1-3/8"	1/8"	2
C320	4"	7/8"	1/8"	3	C610*	12-1/2"	35mm	1/8"	2
C330	4-3/8"	11/16"	1/8"	3	C620*	15-5/8"	35mm	1/8"	2
C350	6"	5/8"	1/8"	3	C630*	13-1/8"	1"	1/8"	3
C351	6"	5/8"	1/8"	4					

* These knives are designed for the following machines:

C600	Ryobi AP10
C610	Makita 2030N
C620	Makita 2040
C630	Delta RC-33

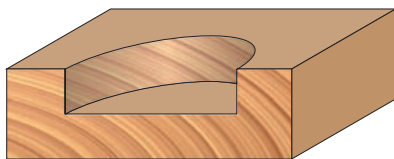
RYOBI® is a registered trademark of Ryobi Limited
 Makita® is a Registered Trademark of Makita Corporation
 Delta® is a Registered Trademark of Black & Decker®

Forstner Boring and Drilling Bits



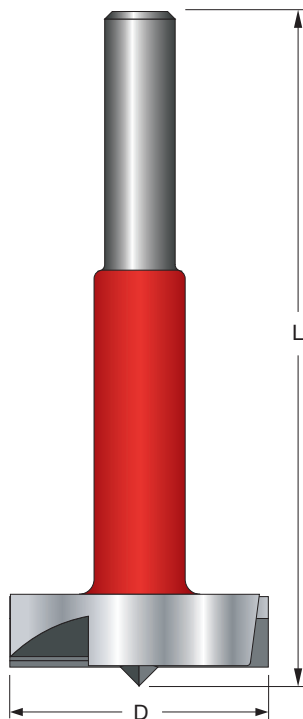
freud®

Carbide Forstner Bits



Freud's Carbide Forstner Bits bring a technical level of excellence not found in a standard high speed steel Forstner Bit. These bits will drill through a multitude of materials. Use to drill pocket holes, angled holes, overlapping holes and flat bottom holes. Best of all, these bits will not burn like a standard forstner and will stay sharp many times longer. These bits can be sharpened by any reputable sharpening service who sharpens router bits.

Application: Drills all composition materials, plywoods, hardwoods, solid surface materials, and softwoods. Use in hand held drills and drill presses.



Item Number	Cut Dia.(D)	Overall Length(L)	Shank Diameter
FC-001	1/4"	3-7/16"	5/32"
FC-002	3/8"	3-7/16"	1/4"
FC-003	1/2"	3-15/32"	5/16"
FC-004	5/8"	3-1/2"	5/16"
FC-005	3/4"	3-1/2"	3/8"
FC-006	7/8"	3-1/2"	3/8"
FC-007	1"	3-1/2"	3/8"
FC-008	1-1/8"	3-1/2"	3/8"
FC-009	1-1/4"	3-1/2"	3/8"
FC-010	1-3/8"	3-1/2"	3/8"
FC-011	1-1/2"	3-1/2"	3/8"
FC-012	1-5/8"	3-1/2"	3/8"
FC-013	1-3/4"	3-1/2"	3/8"
FC-014	1-7/8"	3-1/2"	3/8"
FC-015	2"	3-1/2"	3/8"
FC-016	2-1/8"	3-1/2"	3/8"

Rotation = Right

Seven Piece Carbide Forstner Bit Set



This set contains the seven of our Carbide Forstner Bits. From the 1/4" diameter to the 1-3/8" diameter these bits will outlast standard forstners many times over. These bits come packaged in a sturdy wooden case for protection and storage.

Application: Drills all composition materials, plywoods, hardwoods, solid surface materials and softwoods. Use in hand held drills and drill presses.

Set FC-107

Item Number	Outside Diameter
FC-001	1/4"
FC-002	3/8"
FC-003	1/2"
FC-004	5/8"
FC-005	3/4"
FC-007	1"
FC-010	1-3/8"



Precision Shear™ Forstner Bits

New Precision Shear™ Forstner Bits feature a double-ground, razor-sharp serrated edge that slices throughout the rotation of the bit for less splintering and chipping, producing flawless flat-bottom holes. This unique geometric design has multiple cutting edges that produce greater shearing action, allowing for faster rotational speeds and more efficient cutting.

Competitive Forstner Bit designs produce small chips and dust that collect in the cutting area, increasing friction and heat, thus causing the bit to dull quickly. Those designs also create holes with rough edges that require sanding.

In addition to serrated edges, Precision Shear™ Forstner Bits include:

- **Hardened Steel Body** – warrants a longer life and sharper cutting edge.
- **Ultra Sharp Spur** – ensures an accurate hole and resists “walking” on material.
- **Steep Angled Cutting Edges** – produce holes that are smooth and flat, and create “chisel-like” curls for fast, clean chip removal.
- **Quality Forged Construction** – instead of casting, strengthens bits for extended life.



Item Number	Cut Dia.(D)	Overall Length(L)	Shank Diameter
PB-001	1/4"	3-1/2"	1/4"
PB-002	3/8"	3-1/2"	1/4"
PB-003	1/2"	3-1/2"	5/16"
PB-004	5/8"	3-1/2"	5/16"
PB-005	3/4"	3-1/2"	3/8"
PB-006	7/8"	3-1/2"	3/8"
PB-007	1"	3-1/2"	3/8"
PB-008	1-1/8"	3-1/2"	3/8"
PB-009	1-1/4"	3-1/2"	3/8"
PB-010	1-3/8"	3-1/2"	3/8"
PB-011	1-1/2"	3-1/2"	3/8"
PB-012	1-5/8"	3-1/2"	3/8"
PB-013	1-3/4"	3-1/2"	3/8"
PB-014	1-7/8"	3-1/2"	3/8"
PB-015	2"	3-1/2"	3/8"
PB-016	2-1/8"	3-1/2"	3/8"

Rotation = Right

Sixteen Piece Precision Shear™ Forstner Bit Set



This set contains Freud's entire line of Precision Shear™ Forstner Bits. From the 1/4" diameter to the 2-1/8" diameter these bits will drill flat bottom holes, pocket holes, or overlapping holes.

Application: Drills plywoods, hardwoods, and softwoods. Use in hand held drills and drill presses.

Set PB100

Item Number	Outside Diameter
PB-001	1/4"
PB-002	3/8"
PB-003	1/2"
PB-004	5/8"
PB-005	3/4"
PB-006	7/8"
PB-007	1"
PB-008	1-1/8"
PB-009	1-1/4"
PB-010	1-3/8"
PB-011	1-1/2"
PB-012	1-5/8"
PB-013	1-3/4"
PB-014	1-7/8"
PB-015	2"
PB-016	2-1/8"

Seven Piece Precision Shear™ Forstner Bit Set



This set contains the seven smallest sizes of our Precision Shear™ Carbide Forstner Bits. From the 1/4" diameter to the 1" diameter these bits will drill flat bottom holes, pocket holes, or overlapping holes.

Application: Drills plywoods, hardwoods, and softwoods. Use in hand held drills and drill presses.

Set PB-107B

Item Number	Outside Diameter
PB-001	1/4"
PB-003	1/2"
PB-005	3/4"
PB-007	1"
PB-002	3/8"
PB-004	5/8"
PB-006	7/8"

Four Piece Precision Shear™ Forstner Bit Sets



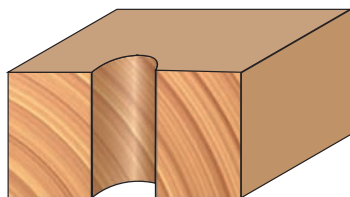
This set contains the four smallest sizes of our Precision Shear™ Carbide Forstner Bits. From the 1/4" diameter to the 1" diameter these bits will drill flat bottom holes, pocket holes, or overlapping holes.

Application: Drills plywoods, hardwoods, and softwoods. Use in hand held drills and drill presses.

Set PB-104

Item Number	Outside Diameter
PB-001	1/4"
PB-003	1/2"
PB-005	3/4"
PB-007	1"

Industrial Carbide Tipped Through Hole Boring Bits



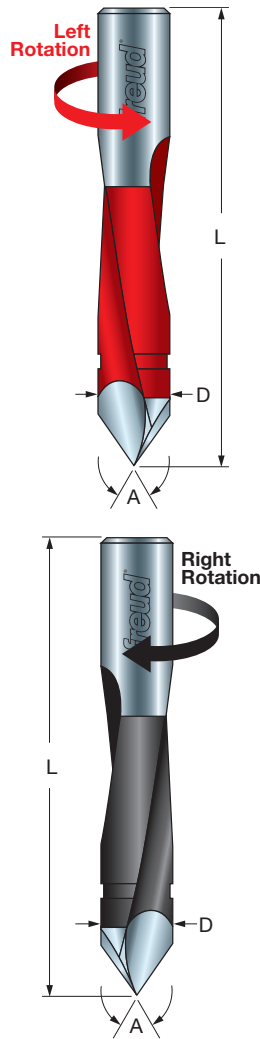
Freud's boring bits are designed for multiple spindle machines. The 10mm x 20mm shank is compatible with most boring machines. The 60° point makes for accurate hole location of through holes.

Application: Drills all composition materials, solid surface materials, plywoods, hardwoods, and softwoods on automatic and manual multi-spindle boring machines.



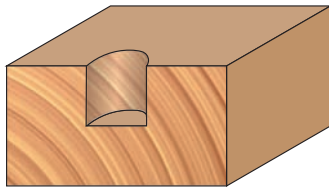
Item Number	Cut Dia.(D)	Overall Length(L)	Max. Hole Depth	Rotation	Angle (A)	Shank Diameter
TH39657R	5/32"	57.5mm	27mm	Right	60°	10mm
TH39657L	5/32"	57.5mm	27mm	Left	60°	10mm
TH40057R	4mm	57.5mm	27mm	Right	60°	10mm
TH40057L	4mm	57.5mm	27mm	Left	60°	10mm
TH47657R	3/16"	57.5mm	27mm	Right	60°	10mm
TH47657L	3/16"	57.5mm	27mm	Left	60°	10mm
TH50057R	5mm	57.5mm	27mm	Right	60°	10mm
TH50057L	5mm	57.5mm	27mm	Left	60°	10mm
TH55557R	7/32"	57.5mm	27mm	Right	60°	10mm
TH55557L	7/32"	57.5mm	27mm	Left	60°	10mm
TH60057R	6mm	57.5mm	27mm	Right	60°	10mm
TH60057L	6mm	57.5mm	27mm	Left	60°	10mm
TH63557R	1/4"	57.5mm	27mm	Right	60°	10mm
TH63557L	1/4"	57.5mm	27mm	Left	60°	10mm
TH70057R	7mm	57.5mm	27mm	Right	60°	10mm
TH70057L	7mm	57.5mm	27mm	Left	60°	10mm
TH80057R	8mm	57.5mm	27mm	Right	60°	10mm

(Continued) Industrial Carbide Tipped Through Hole Boring Bits



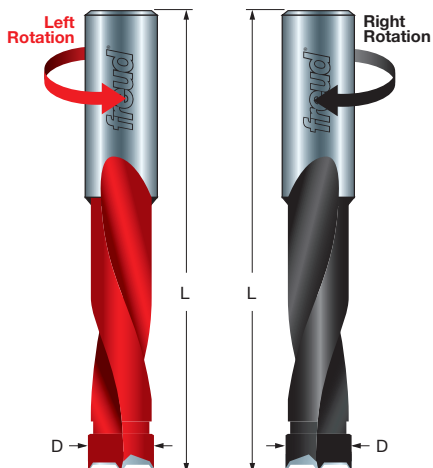
Item Number	Cut Dia.(D)	Overall Length(L)	Max. Hole Depth	Rotation	Angle (A)	Shank Diameter
TH80057L	8mm	57.5mm	27mm	Left	60°	10mm
TH90057R	9mm	57.5mm	27mm	Right	60°	10mm
TH90057L	9mm	57.5mm	27mm	Left	60°	10mm
TH93857R	3/8"	57.5mm	27mm	Right	60°	10mm
TH93857L	3/8"	57.5mm	27mm	Left	60°	10mm
TH10057R	10mm	57.5mm	27mm	Right	60°	10mm
TH10057L	10mm	57.5mm	27mm	Left	60°	10mm
TH12057R	12mm	57.5mm	27mm	Right	60°	10mm
TH12057L	12mm	57.5mm	27mm	Left	60°	10mm
TH39670R	5/32"	70mm	35mm	Right	60°	10mm
TH39670L	5/32"	70mm	35mm	Left	60°	10mm
TH40070R	4mm	70mm	35mm	Right	60°	10mm
TH40070L	4mm	70mm	35mm	Left	60°	10mm
TH47670R	3/16"	70mm	35mm	Right	60°	10mm
TH47670L	3/16"	70mm	35mm	Left	60°	10mm
TH50070R	5mm	70mm	35mm	Right	60°	10mm
TH50070L	5mm	70mm	35mm	Left	60°	10mm
TH55570R	7/32"	70mm	35mm	Right	60°	10mm
TH55570L	7/32"	70mm	35mm	Left	60°	10mm
TH60070R	6mm	70mm	35mm	Right	60°	10mm
TH60070L	6mm	70mm	35mm	Left	60°	10mm
TH63570R	1/4"	70mm	35mm	Right	60°	10mm
TH63570L	1/4"	70mm	35mm	Left	60°	10mm
TH70070R	7mm	70mm	35mm	Right	60°	10mm
TH70070L	7mm	70mm	35mm	Left	60°	10mm
TH80070R	8mm	70mm	35mm	Right	60°	10mm
TH80070L	8mm	70mm	35mm	Left	60°	10mm
TH90070R	9mm	70mm	35mm	Right	60°	10mm
TH90070L	9mm	70mm	35mm	Left	60°	10mm
TH93870R	3/8"	70mm	35mm	Right	60°	10mm
TH93870L	3/8"	70mm	35mm	Left	60°	10mm
TH10070R	10mm	70mm	35mm	Right	60°	10mm
TH10070L	10mm	70mm	35mm	Left	60°	10mm
TH12070R	12mm	70mm	35mm	Right	60°	10mm
TH12070L	12mm	70mm	35mm	Left	60°	10mm
TH12770R	1/2"	70mm	35mm	Right	60°	10mm
TH12770L	1/2"	70mm	35mm	Left	60°	10mm

Industrial Carbide Tipped Brad Point Boring Bits

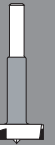


Freud's Boring Bits are designed for multiple spindle machines. The 10mm x 20mm shank are compatible with most boring machines.

Application: Drills all composition materials, solid surface materials, plywoods, hardwoods, and softwoods on automatic or manual multi-spindle boring machines.



Item Number	Cut Dia.(D)	Overall Length(L)	Max. Hole Depth	Rotation	Shank Dia.
BP30057R	3mm	57.5mm	27mm	Right	10mm
BP30057L	3mm	57.5mm	27mm	Left	10mm
BP39657R	5/32"	57.5mm	27mm	Right	10mm
BP39657L	5/32"	57.5mm	27mm	Left	10mm
BP40057R	4mm	57.5mm	27mm	Right	10mm
BP40057L	4mm	57.5mm	27mm	Left	10mm
BP45057R	4.5mm	57.5mm	27mm	Right	10mm
BP45057L	4.5mm	57.5mm	27mm	Left	10mm
BP47657R	3/16"	57.5mm	27mm	Right	10mm
BP47657L	3/16"	57.5mm	27mm	Left	10mm
BP50057R	5mm	57.5mm	27mm	Right	10mm
BP50057L	5mm	57.5mm	27mm	Left	10mm
BP52057R	5.2mm	57.5mm	27mm	Right	10mm
BP52057L	5.2mm	57.5mm	27mm	Left	10mm
BP55557R	7/32"	57.5mm	27mm	Right	10mm
BP55557L	7/32"	57.5mm	27mm	Left	10mm

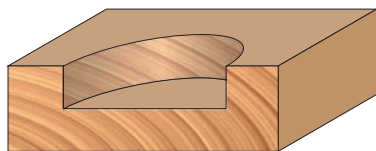


(Continued) Industrial Carbide Tipped Brad Point Boring Bits

Item Number	Cut Dia.(D)	Overall Length(L)	Max. Hole Depth	Rotation	Shank Dia.
BP60057R	6mm	57.5mm	27mm	Right	10mm
BP60057L	6mm	57.5mm	27mm	Left	10mm
BP63557R	1/4"	57.5mm	27mm	Right	10mm
BP63557L	1/4"	57.5mm	27mm	Left	10mm
BP65057R	6.5mm	57.5mm	27mm	Right	10mm
BP65057L	6.5mm	57.5mm	27mm	Left	10mm
BP70057R	7mm	57.5mm	27mm	Right	10mm
BP70057L	7mm	57.5mm	27mm	Left	10mm
BP80057R	8mm	57.5mm	27mm	Right	10mm
BP80057L	8mm	57.5mm	27mm	Left	10mm
BP82057R	8.2mm	57.5mm	27mm	Right	10mm
BP82057L	8.2mm	57.5mm	27mm	Left	10mm
BP90057R	9mm	57.5mm	27mm	Right	10mm
BP90057L	9mm	57.5mm	27mm	Left	10mm
BP93857R	3/8"	57.5mm	27mm	Right	10mm
BP93857L	3/8"	57.5mm	27mm	Left	10mm
BP10057R	10mm	57.5mm	27mm	Right	10mm
BP10057L	10mm	57.5mm	27mm	Left	10mm
BP11057R	11mm	57.5mm	27mm	Right	10mm
BP11057L	11mm	57.5mm	27mm	Left	10mm
BP11157R	7/16"	57.5mm	27mm	Right	10mm
BP11157L	7/16"	57.5mm	27mm	Left	10mm
BP12057R	12mm	57.5mm	27mm	Right	10mm
BP12057L	12mm	57.5mm	27mm	Left	10mm
BP12757R	1/2"	57.5mm	27mm	Right	10mm
BP12757L	1/2"	57.5mm	27mm	Left	10mm
BP13057R	13mm	57.5mm	27mm	Right	10mm
BP13057L	13mm	57.5mm	27mm	Left	10mm
BP14057R	14mm	57.5mm	27mm	Right	10mm
BP14057L	14mm	57.5mm	27mm	Left	10mm
BP15057R	15mm	57.5mm	27mm	Right	10mm
BP15057L	15mm	57.5mm	27mm	Left	10mm
BP16057R	16mm	57.5mm	27mm	Right	10mm
BP16057L	16mm	57.5mm	27mm	Left	10mm
BP39670R	5/32"	70mm	35mm	Right	10mm
BP39670L	5/32"	70mm	35mm	Left	10mm
BP40070R	4mm	70mm	35mm	Right	10mm
BP40070L	4mm	70mm	35mm	Left	10mm
BP47670R	3/16"	70mm	35mm	Right	10mm
BP47670L	3/16"	70mm	35mm	Left	10mm

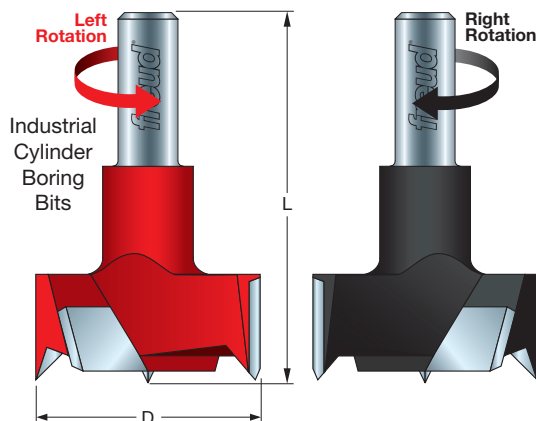
Item Number	Cut Dia.(D)	Overall Length(L)	Max. Hole Depth	Rotation	Shank Dia.
BP50070R	5mm	70mm	35mm	Right	10mm
BP50070L	5mm	70mm	35mm	Left	10mm
BP51070R	5.1mm	70mm	35mm	Right	10mm
BP51070L	5.1mm	70mm	35mm	Left	10mm
BP52070R	5.2mm	70mm	35mm	Right	10mm
BP52070L	5.2mm	70mm	35mm	Left	10mm
BP55570R	7/32"	70mm	35mm	Right	10mm
BP55570L	7/32"	70mm	35mm	Left	10mm
BP60070R	6mm	70mm	35mm	Right	10mm
BP60070L	6mm	70mm	35mm	Left	10mm
BP63570R	1/4"	70mm	35mm	Right	10mm
BP63570L	1/4"	70mm	35mm	Left	10mm
BP65070R	6.5mm	70mm	35mm	Right	10mm
BP65070L	6.5mm	70mm	35mm	Left	10mm
BP70070R	7mm	70mm	35mm	Right	10mm
BP70070L	7mm	70mm	35mm	Left	10mm
BP80070R	8mm	70mm	35mm	Right	10mm
BP80070L	8mm	70mm	35mm	Left	10mm
BP82070R	8.2mm	70mm	35mm	Right	10mm
BP82070L	8.2mm	70mm	35mm	Left	10mm
BP90070R	9mm	70mm	35mm	Right	10mm
BP90070L	9mm	70mm	35mm	Left	10mm
BP93870R	3/8"	70mm	35mm	Right	10mm
BP93870L	3/8"	70mm	35mm	Left	10mm
BP10070R	10mm	70mm	35mm	Right	10mm
BP10070L	10mm	70mm	35mm	Left	10mm
BP11070R	11mm	70mm	35mm	Right	10mm
BP11070L	11mm	70mm	35mm	Left	10mm
BP11170R	7/16"	70mm	35mm	Right	10mm
BP11170L	7/16"	70mm	35mm	Left	10mm
BP12070R	12mm	70mm	35mm	Right	10mm
BP12070L	12mm	70mm	35mm	Left	10mm
BP12770R	1/2"	70mm	35mm	Right	10mm
BP12770L	1/2"	70mm	35mm	Left	10mm
BP14070R	14mm	70mm	35mm	Right	10mm
BP14070L	14mm	70mm	35mm	Left	10mm
BP15070R	15mm	70mm	35mm	Right	10mm
BP15070L	15mm	70mm	35mm	Left	10mm
BP16070R	16mm	70mm	35mm	Right	10mm
BP16070L	16mm	70mm	35mm	Left	10mm

Industrial Carbide Tipped Cylinder (Hinge) Boring Bits



These boring bits are designed for accurate boring and the two wing cutters and two spur cutters prevent bottom side tear out. All 6" long bits come in a wooden case and the 57mm long bits have a 10mm x 20mm shank with an adjustable top screw making them compatible with most boring machines. The 3557E is designed with a 3/8" shaft to fit in most drill presses.

Application: Drills all composition materials, solid surface materials, plywoods, hardwoods, and softwoods. Use on automatic and manual multi-spindle boring machines.



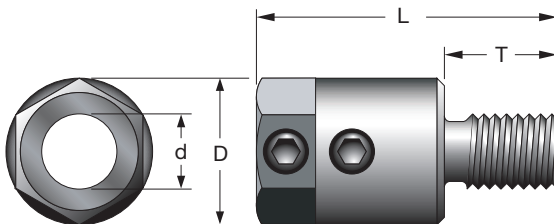
Item Number	Cut Dia.(D)	Overall Length(L)	Rotation	Shank Dia.
06100	1"	6"	Right	1/2"
06118	1-1/8"	6"	Right	1/2"
06114	1-1/4"	6"	Right	1/2"
06138	1-3/8"	6"	Right	1/2"
06112	1-1/2"	6"	Right	1/2"
06158	1-5/8"	6"	Right	1/2"
06134	1-3/4"	6"	Right	1/2"
06178	1-7/8"	6"	Right	1/2"
06200	2"	6"	Right	1/2"
06218	2-1/8"	6"	Right	1/2"
06214	2-1/4"	6"	Right	1/2"

(Continued) Industrial Carbide Tipped Cylinder (Hinge) Boring Bits

Item Number	Cut Dia.(D)	Overall Length(L)	Rotation	Shank Dia.
06212	2-1/2"	6"	Right	1/2"
06234	2-3/4"	6"	Right	1/2"
06300	3"	6"	Right	1/2"
CB12057R	12mm	57.5mm	Right	10mm
CB12057L	12mm	57.5mm	Left	10mm
CB14057R	14mm	57.5mm	Right	10mm
CB14057L	14mm	57.5mm	Left	10mm
CB15057R	15mm	57.5mm	Right	10mm
CB15057L	15mm	57.5mm	Left	10mm
CB16057R	16mm	57.5mm	Right	10mm
CB16057L	16mm	57.5mm	Left	10mm
CB17057R	17mm	57.5mm	Right	10mm
CB17057L	17mm	57.5mm	Left	10mm
CB18057R	19mm	57.5mm	Right	10mm
CB18057L	18mm	57.5mm	Left	10mm
CB19057R	19mm	57.5mm	Right	10mm
CB19057L	19mm	57.5mm	Left	10mm
CB20057R	20mm	57.5mm	Right	10mm
CB20057L	20mm	57.5mm	Left	10mm
CB22057R	22mm	57.5mm	Right	10mm
CB22057L	22mm	57.5mm	Left	10mm
CB24057R	24mm	57.5mm	Right	10mm
CB24057L	24mm	57.5mm	Left	10mm
CB25057R	25mm	57.5mm	Right	10mm
CB25057L	25mm	57.5mm	Left	10mm
CB26057R	26mm	57.5mm	Right	10mm
CB26057L	26mm	57.5mm	Left	10mm
CB28057R	28mm	57.5mm	Right	10mm
CB28057L	28mm	57.5mm	Left	10mm
CB30057R	30mm	57.5mm	Right	10mm
CB30057L	30mm	57.5mm	Left	10mm
CB32057R	32mm	57.5mm	Right	10mm
CB32057L	32mm	57.5mm	Left	10mm
CB35057R	35mm	57.5mm	Right	10mm
CB35057L	35mm	57.5mm	Left	10mm
3557E	35mm	57.5mm	Right	3/8"

Item Number	Cut Dia.(D)	Overall Length(L)	Rotation	Shank Dia.
CB38057R	38mm	57.5mm	Right	10mm
CB38057L	38mm	57.5mm	Left	10mm
CB40057R	40mm	57.5mm	Right	10mm
CB40057L	40mm	57.5mm	Left	10mm
CB12070R	12mm	70mm	Right	10mm
CB12070L	12mm	70mm	Left	10mm
CB12770R	1/2"	70mm	Right	10mm
CB12770L	1/2"	70mm	Left	10mm
CB14070R	14mm	70mm	Right	10mm
CB14070L	14mm	70mm	Left	10mm
CB15070R	15mm	70mm	Right	10mm
CB15070L	15mm	70mm	Left	10mm
CB16070R	16mm	70mm	Right	10mm
CB16070L	16mm	70mm	Left	10mm
CB17070R	17mm	70mm	Right	10mm
CB17070L	17mm	70mm	Left	10mm
CB18070R	18mm	70mm	Right	10mm
CB18070L	18mm	70mm	Left	10mm
CB19570R	3/4"	70mm	Right	10mm
CB19570L	3/4"	70mm	Left	10mm
CB20070R	20mm	70mm	Right	10mm
CB20070L	20mm	70mm	Left	10mm
CB22070R	22mm	70mm	Right	10mm
CB22070L	22mm	70mm	Left	10mm
CB25070R	25mm	70mm	Right	10mm
CB25070L	25mm	70mm	Left	10mm
CB26070R	26mm	70mm	Right	10mm
CB26070L	26mm	70mm	Left	10mm
CB30070R	30mm	70mm	Right	10mm
CB30070L	30mm	70mm	Left	10mm
CB35070R	35mm	70mm	Right	10mm
CB35070L	35mm	70mm	Left	10mm
CB38070R	38mm	70mm	Right	10mm
CB38070L	38mm	70mm	Left	10mm
CB40070R	40mm	70mm	Right	10mm
CB40070L	40mm	70mm	Left	10mm

Boring Machine Chucks



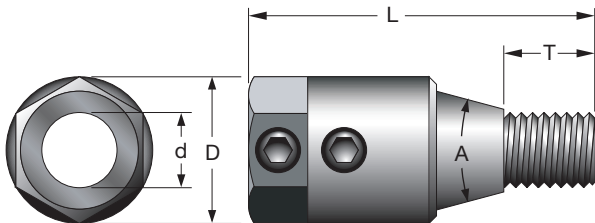
These chucks are made to exacting specifications for Multi-Spindle Boring machines. Will fit all 10mm X 20mm shank bits.

Application: 6010L and 6010R fit Nottmeyer machines. 6015L and 6015R fit Ayen®, Holtzma®, Mayer®, Knoevenagel®, and Towegge® machines.

Item Number	Outside Dia.(D)	Inside Dia.(d)	Overall Length(L)	Rotation	Shank Dia.	Shank Length(T)
6010L	19.5mm	10mm	40mm	Left	M8	15mm
6010R	19.5mm	10mm	40mm	Right	M8	15mm
6015L	19.5mm	10mm	40mm	Left	M10	15mm
6015R	19.5mm	10mm	40mm	Right	M10	15mm



Boring Machine Chucks

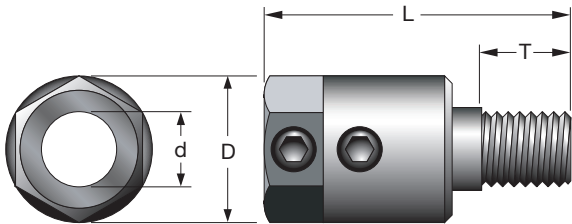


These chucks are made to exacting specifications for Multi-Spindle Boring machines. Will fit all 10mm X 20mm shank bits.

Application: 6020L and 6020R fit Vitap®, Busellato®, Schleicher®, Piccolo®, Ompec®, Dubelfix®, Alberti®, and SCMI® machines. 6025L and 6025R fit Bilek machines.

Item Number	Outside Dia.(D)	Inside Dia.(d)	Overall Length(L)	Rotation	Angle (A)	Shank Dia.	Shank Length(T)
6020L	19.5mm	10mm	46mm	Left	30°	M10	12mm
6020R	19.5mm	10mm	46mm	Right	30°	M10	12mm
6025L	19.5mm	10mm	51mm	Left	20.8°	M8	12mm
6025R	19.5mm	10mm	51mm	Right	20.8°	M8	12mm

Boring Machine Chucks

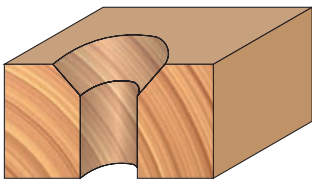


These chucks are made to exacting specifications for Multi-Spindle Boring machines. Will fit all 10mm X 20mm shank bits.

Application: 6030L and 6030R fit Morbidelli®, Biesse®, Gessner®, Weeke®, Bottcher®, Reimall® and Towegge® machines. 6035L and 6035R fit Nottmeyer® and Morbidelli® machines.

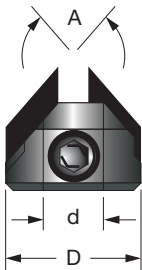
Item Number	Outside Dia.(D)	Inside Dia.(d)	Overall Length(L)	Rotation	Shank Dia.	Shank Length(T)
6030L	19.5mm	10mm	41mm	Left	M10	12mm
6030R	19.5mm	10mm	41mm	Right	M10	12mm
6035L	19.5mm	10mm	41mm	Left	M8	12mm
6035R	19.5mm	10mm	41mm	Right	M8	12mm

Carbide Tipped Boring Bit Countersinks



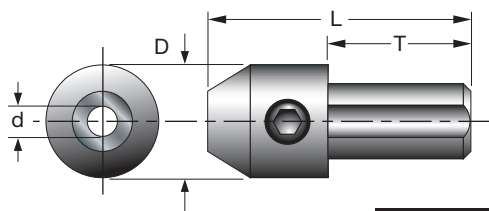
Freud's Carbide Tipped Boring Bit Countersinks are engineered to meet the most demanding industrial applications. They simply slip over the body of boring bits, and are held in place with a set screw.

Application: Countersinks all composition materials, solid surface materials, plywoods, hardwoods, and softwoods. Use with carbide tipped boring bits on automatic or manual multi-spindle boring machines.



Item Number	Outside Dia.(D)	Inside Dia.(d)	Rotation	Angle (A)
7010L	15.5mm	5mm	Left	82°
7010R	15.5mm	5mm	Right	82°
7012L	15.5mm	6mm	Left	82°
7012R	15.5mm	6mm	Right	82°
7013L	18mm	7mm	Left	82°
7013R	18mm	7mm	Right	82°
7014L	18mm	8mm	Left	82°
7014R	18mm	8mm	Right	82°
7015L	18mm	9mm	Left	82°
7015R	18mm	9mm	Right	82°
7016L	20mm	10mm	Left	82°
7016R	20mm	10mm	Right	82°
7018L	20mm	12mm	Left	82°
7018R	20mm	12mm	Right	82°

10mm Drill Adaptors

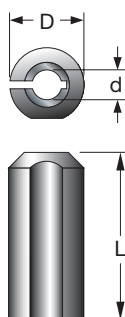


Use these adaptors with solid carbide drill bits for multiple spindle boring machines. The 10mm x 20mm shank is compatible with most boring machines.

Application: Converts Freud Solid Carbide Drill Bits as well as other manufacturers bits for use in automatic and manual multi-spindle boring machines.

Item Number	Outside Dia.(D)	Inside Dia.(d)	Overall Length(L)	Shank Diameter	Shank Length(T)
7120	15mm	2mm	35mm	10mm	19mm
7125	15mm	2.5mm	35mm	10mm	19mm
7130	15mm	3mm	35mm	10mm	19mm
7132	15mm	3.2mm	35mm	10mm	19mm
7135	15mm	3.5mm	35mm	10mm	19mm
7140	15mm	4mm	35mm	10mm	19mm

10mm Drill Bushings

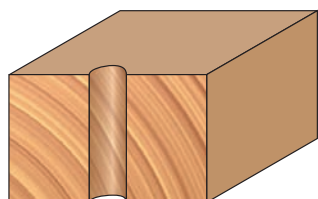


Use these bushings with solid carbide drill bits for multiple spindle boring machines. The 10mm x 20mm shank is compatible with most boring machines.

Application: Converts Freud Solid Carbide Drill Bits as well as other manufacturers bits for use in automatic and manual multi-spindle boring machines.

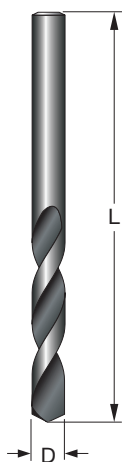
Item Number	Inside Dia.(d)	Shank Dia.(D)	Overall Length(L)
7520	2mm	10mm	22mm
7525	2.5mm	10mm	22mm
7530	3mm	10mm	22mm
7532	3.2mm	10mm	22mm
7535	3.5mm	10mm	22mm
7540	4mm	10mm	22mm

Solid Carbide Drill Bits



Solid Carbide Drill Bits are ideal for drilling small diameter holes with multiple spindle machines. Use with adaptors for 10mm x 20mm shank that is compatible with most European boring machines.

Application: Drills all composition materials, solid surface materials, plywoods, hardwoods, and softwoods on automatic or manual multi-spindle boring machines.



Item Number	Cut Dia.(D)	Overall Length(L)	Max. Hole Depth(H)	Rotation	Shank Diameter
7620L	2mm	49mm	18mm	Left	2mm
7620R	2mm	49mm	18mm	Right	2mm
7625L	2.5mm	55mm	22mm	Left	2.5mm
7625R	2.5mm	55mm	22mm	Right	2.5mm
7630L	3mm	55mm	22mm	Left	3mm
7630R	3mm	55mm	22mm	Right	3mm
7632L	3.2mm	55mm	22mm	Left	3.2mm
7632R	3.2mm	55mm	22mm	Right	3.2mm
7635L	3.5mm	55mm	25mm	Left	3.5mm
7635R	3.5mm	55mm	25mm	Right	3.5mm
7640L	4mm	55mm	25mm	Left	4mm
7640R	4mm	55mm	25mm	Right	4mm

Item	Page	Item	Page	Item	Page	Item	Page	Item	Page
7120	.345	6118	.342	13-142	.96	20-301	.144	34-106	.120
7125	.345	6134	.342	13-148	.96	20-502	.111	34-108	.120
7130	.345	6138	.342	13-150	.96	20-508	.111	34-110	.120
7132	.345	6158	.342	13-154	.96	20-574	.110	34-112	.120
7135	.345	6178	.342	13-156	.96	22-100	.156	34-114	.120
7140	.345	6200	.342	13-158	.96	22-101	.156	34-116	.120
7520	.345	6212	.343	14-102	.91	22-102	.156	34-117	.120
7525	.345	6214	.342	14-104	.91	22-103	.156	34-118	.120
7530	.345	6218	.342	14-106	.91	22-104	.156	34-119	.120
7532	.345	6234	.343	14-204	.91	22-105	.156	34-120	.120
7535	.345	6300	.343	16-094	.90	22-106	.156	34-122	.120
7540	.345	08-106	.82	16-096	.90	22-107	.156	34-124	.120
03-112	.88	08-124	.82	16-098	.90	22-108	.156	34-126	.120
03-116	.88	08-132	.82	16-100	.90	22-110	.156	34-127	.120
03-120	.88	08-136	.82	16-102	.90	22-112	.156	34-128	.120
03-124	.88	08-152	.82	16-103	.90	22-113	.156	34-130	.120
03-128	.88	08-166	.82	16-104	.90	22-114	.156	34-132	.120
03-132	.88	11-136	.88	16-106	.90	22-115	.156	34-134	.120
03-136	.88	11-152	.88	16-107	.90	22-119	.156	34-136	.120
03-140	.88	11-158	.88	16-108	.90	22-120	.156	34-138	.120
03-144	.88	11-160	.88	16-109	.90	22-121	.156	34-140	.120
03-148	.88	11-164	.88	16-110	.90	22-122	.156	34-208	.121
03-152	.88	11-168	.88	16-116	.90	22-123	.156	34-210	.121
03-156	.88	11-172	.88	16-118	.90	22-124	.156	34-214	.121
04-096	.82	11-176	.88	16-122	.90	22-125	.156	3557E	.343
04-098	.82	11-180	.88	16-128	.90	22-126	.156	36-100	.123
04-100	.82	11-184	.88	16-500	.90	22-128	.156	36-104	.123
04-101	.82	11-188	.88	16-502	.90	22-129	.156	36-106	.123
04-102	.82	12-096	.82	16-504	.90	22-130	.156	36-108	.123
04-103	.82	12-100	.82	16-510	.90	22-132	.156	36-110	.123
04-104	.82	12-102	.82	16-520	.90	22-134	.156	36-112	.123
04-105	.82	12-106	.82	16-522	.90	22-505	.156	36-114	.123
04-106	.82	12-108	.82	16-523	.90	22-506	.156	36-116	.123
04-107	.82	12-110	.82	16-524	.90	22-507	.156	36-117	.123
04-108	.82	12-112	.82	16-528	.90	22-508	.156	36-118	.123
04-109	.82	12-113	.82	16-560	.90	24-106	.158	36-119	.123
04-110	.82	12-114	.82	18-100	.108	26-100	.99	36-120	.123
04-111	.83	12-115	.82	18-102	.108	26-104	.99	36-122	.123
04-112	.82	12-116	.82	18-104	.108	28-100	.99	36-124	.123
04-118	.82	12-118	.82	18-106	.108	28-104	.99	36-126	.123
04-120	.82	12-122	.82	18-108	.108	30-094	.118	36-127	.123
04-124	.82	12-124	.82	18-110	.108	30-098	.118	36-128	.123
04-126	.82	12-128	.82	18-112	.108	30-100	.118	36-130	.123
04-127	.83	12-130	.82	18-113	.108	30-102	.118	36-132	.123
04-128	.83	12-134	.82	18-114	.108	30-103	.118	36-134	.123
04-129	.82	12-135	.82	18-115	.108	30-104	.118	36-136	.123
04-130	.82	12-136	.82	18-116	.108	30-106	.118	36-138	.123
04-131	.82	12-138	.82	18-122	.108	30-107	.118	36-140	.123
04-132	.82	12-140	.82	18-126	.108	30-108	.118	36-208	.122
04-133	.82	12-142	.82	18-130	.108	30-109	.118	36-210	.122
04-134	.82	12-148	.83	18-134	.108	30-110	.118	36-214	.122
04-136	.82	12-150	.83	18-138	.108	30-111	.118	36-216	.122
04-137	.82	12-152	.83	18-508	.108	30-112	.118	38-100	.127
04-138	.82	12-154	.83	18-510	.108	30-114	.118	38-102	.127
04-140	.82	12-156	.83	18-512	.108	30-202	.118	38-104	.127
04-144	.82	12-158	.83	18-522	.108	30-270	.118	38-106	.127
04-148	.82	12-162	.83	19-102	.109	30-280	.118	38-152	.127
04-152	.82	12-168	.83	19-104	.109	30-282	.118	38-154	.127
04-156	.82	12-172	.83	19-106	.109	30-400	.119	38-172	.127
04-502	.83	12-178	.83	19-126	.109	30-404	.119	38-202	.127
04-508	.83	12-182	.83	19-506	.109	32-096	.158	38-204	.127
04-512	.83	12-186	.83	19-576	.109	32-098	.158	38-222	.127
04-516	.83	12-190	.83	19-578	.109	32-100	.158	38-224	.127
04-520	.83	12-194	.83	20-100	.111	32-101	.158	38-250	.119
04-524	.83	12-518	.83	20-102	.111	32-102	.158	38-252	.119
04-528	.83	12-520	.83	20-104	.111	32-106	.158	38-260	.119
04-532	.83	12-526	.83	20-106	.111	32-110	.158	38-262	.119
04-536	.83	12-530	.83	20-107	.111	32-302	.158	38-302	.128
04-540	.83	12-542	.83	20-108	.111	32-306	.158	38-304	.128
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04-548	.83	13-113	.96	20-110	.111	32-504	.159	38-314	.128
04-552	.83	13-114	.96	20-112	.111	32-522	.159	38-352	.128
05-136	.88	13-116	.96	20-116	.111	32-524	.159	38-362	.128
05-160	.88	13-122	.96	20-120	.111	32-526	.159	38-402	.128
05-164	.88	13-128	.96	20-152	.111	33-106	.122	38-452	.128
6100	.342	13-132	.96	20-154	.111	33-116	.122	38-502	.128
6112	.342	13-134	.96	20-172	.110	34-100	.120	38-504	.128
6114	.342	13-136	.96	20-174	.110	34-104	.120	38-522	.128

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38-612	128	42-310	101	62-109	172, 238	74-210	96	80-130	133
38-613	128	43-106	106	62-110	238	74-214	96	80-552	131
38-614	128	43-108	106	62-111	238	75-100	92	80-558	130
38-622	128	43-128	106	62-112	238	75-101	92	80-564	130
38-632	128	43-204	106	62-113	238	75-102	92	80-572	131
38-713	128	43-208	106	62-114	238	75-103	92	80-578	130
39-100	112	43-212	106	62-116	238	75-104	92	80-584	130
39-101	112	43-216	106	62-118	238	75-105	92	82-100	126
39-102	112	44-100	101	62-120	160, 238	75-106	92	82-102	126
39-112	112	44-102	101	62-121	160, 238	75-108	92	82-104	126
39-202	113	44-104	101	62-122	160, 238	75-109	92	82-106	126
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Print 10/2006 PNWLT 1

