FREEBORN TOOL COMPANY, INC.

SUPERIOR GEOMETRY

PROUDLY MADE IN U.S.A.

HIGH LEVEL OF PRECISION
AND CUSTOMIZATION



(800) 523-8988

WWW.FREEBORNTOOL.COM

Freeborn Tool Company has built a reputation on

Precision, Repeatability, Value and Customer Support - unequaled in the tooling industry.

Thank you for choosing Freeborn Tool Co. for your tooling needs. Since the 1970's, Freeborn Tool Co. has been a leading manufacturer of shaper cutters in the United States. Throughout the years, Freeborn has become known for the quality of their cutters as well as their ability to make custom tooling to fit the woodworker's requirements, quickly.

As the industry has progressed, Freeborn has kept up with current technology. Hand turning of bodies has been replaced with 5 axis machining centers, and CNC milling centers. No longer are profiles ground using manual profile machines. Instead, state of the art 5-axis profile grinders are used for all profiles, ensuring exact repeatability cutter after cutter.

Freeborn Tool Co. was one of the first cutter manufacturers to offer both carbide and alloy tipping to their cutters. T-alloy is superior in cutting most natural woods. Carbide cuts well with natural wood as well as man made materials.

All Freeborn cutters go through a stringent quality assurance program throughout the manufacturing process. Multiple checks throughout the production process ensure accuracy, balance, and a perfect fit every time. Unlike some of our competition, our Cope and Pattern sets are not just six cutters pulled from the shelf. Each set is individually matched on an optical comparator to guarantee the proper fit.

Initial quality is only the first step at Freeborn. We are available to work with the customer to determine their needs, and our after-sale customer service is of the highest standard. Whether professional or novice we will provide the information you need to resolve any cutter issues you face. Call us to discuss how we can help you.

We offer brazed shaper cutters, insert cutters, spiral inserts, router bits, custom tooling, and tool holders for CNC tooling. If you don't see what you need here, give us a call and we will help you find it.





Freeborn Tool Company is proud to present its latest collection of high quality Carbide and T-Alloy tipped shaper cutters. We are confident that here you will find numerous solutions to your woodworking needs. Your input is appreciated.

This catalog depicts all of our stock cutters including new profiles and wood cutting tools.

We list both our MINI-PRO and PRO-LINE series cutters that share the same profile on the same page. Opposite rotation is available at an additional 20% over the suggested list price. Wood samples are shown actual size unless otherwise indicated.

By offering the woodworker a choice in tipping materials, finding the tool best suited for the job becomes simpler.

T-ALLOY TIPPED

Freeborn offers a complete line of shaper cutters with T-Alloy tips, uniquely designed for cutting natural woods (not to be used for man-made materials). T-Alloy is one of the most advanced cutting materials on the market today. It is extremely durable to better resist chipping and cracking, as well as corrosion from wood acids. They can also be face-honed between sharpenings for extra long life. T-Alloy cutters are painted bright yellow.

Minor voids in the face of our alloy tips sometimes occur and will not affect the cut qualities.

CARBIDE TIPPED

Carbide tipped cutters are still unsurpassed while working with man-made materials such as particle board, plywood and fiberboard, as well as natural wood. The time-tested, orange colored Freeborn cutters offer a geometrically precise design that provides long life and unmatched results in a variety of applications.

ORDERING INFORMATION

Product numbers are simple to understand by following the "Product Order Code" interspersed through the catalog.

MINI-PRO SERIES

Our 3 wing cutters with a 3/4" bore.

PRO-LINE SERIES

Our 3 wing cutters with a 1-1/4" bore.

CUSTOM

Of course, if you don't see exactly what you need, please give us a call to discuss custom cutters (see the Custom Made Tooling page in the back of the catalog).

RETURN POLICY

All returns to Freeborn Tool Co. must be approved in advance. Returns must be unused and are subject to a 15% restocking fee. Exchanges of unused cutters will be exempt from the 15% restocking fee.

CANCELLATIONS

Stock orders may be canceled prior to shipping without penalty. Custom orders will be charged a prorated fee based on completion status.

PRODUCT ORDER CODE							
		Μ	С	00-000			
		Ρ	С	00-000			
		Ρ	Т	00-000			
	M - I	MIN	I-PR	(0 0. 0)			
	P - F	PRC)-LIN	NE (1-1/4" Bore)			
	C - (Carb	ide	Tip (Orange)			
	T - T	-Alle	ру Т	īp (Yellow)	Ϊ		

Address:

3304 E. Ferry Ave. Spokane, WA 99202

Phone:

(509) 484-3033

Toll Free in U.S. and Canada 1-800-523-8988

Fax:

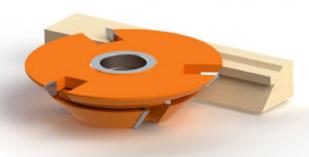
(509) 484-9932

E-mail:

sales@freeborntool.com

Website:

www.freeborntool.com



 Common minor diameters and vertical profile centering eliminate the need to adjust the spindle height or fence position when switching from cope to pattern cuts

DEDICATED PROFILE INSERT CUTTERS

I-10-055-2

I-10-055-2-E

- · Heads will accept both square and eased edges
- For 3/4" to 7/8" material



1/4 x 1/2 tongue and groove standard

I-10-500-2

I-10-500-2-E

- 4-1/2" outside diameter, 3-1/2 minor diameter
- 4" diameter for unique 250/265 available by special order
- 5.5mm x 1/2" tongue available by special order
- 1-1/4" bore
- CCW rotation, material fed face down

2 PC. SETS



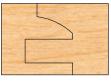
I-10-535-2



I-10-535-2-E

For oversized jobs, the IC-10-500-35 can cut up to 1-1/4" material

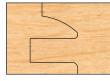
MULTI PROFILE INSERT CUTTERS 2 PC. SETS



I-10-010-2

I-10-010-2-E

I-10-011-2



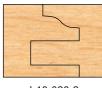
I-10-011-2-E



I-10-050-2



I-10-050-2-E



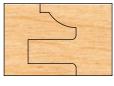
I-10-020-2



I-10-020-2-E



I-10-070-2



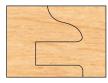
I-10-070-2-E



I-10-060-2

I-10-060-2-E

I-10-030-2



I-10-030-2-E



I-10-080-2



I-10-080-2-E

Our multi profile head will accept any of these 14 profiles

I-10-040-2



I-10-040-2-E

Our 2 piece Cope and Pattern insert sets do not offer the adjustability of our 3 piece sets. (page 6-7). As a result, it is critical that your spindle be square to your table. (see page 42 for instructions to check your spindle.) Also, when changing your tips you must clean the heads of any wood residue to allow proper alignment. Failure to do so may result in a loose fit between your Cope and Pattern cuts.

3 Piece insert Cope and Pattern sets to allow easy fit adjustment.

- A two piece cope head with shims allow you to adjust your fit as needed
- Common minor diameters and vertical profile centering eliminate the need to adjust the spindle height or fence position when switching from cope to pattern cuts
- · Heads will accept both square and eased edges
- For 3/4" 7/8" material
- · 4-1/2" outside diameter, 3-1/2" minor diameter
- 4" diameter for unique 250/265 available by special order
- 5.5mm x 1/2" tongue available by special order
- 1-1/4" bore
- 1/4 x 1/2 tongue and groove standard
- CCW rotation, material fed face down



When changing your tips, you must clean the heads of any wood residue to allow proper alignment. Failure to do so may result in a loose fit between your Cope and Pattern cuts.

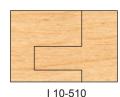
DEDICATED PROFILE INSERT CUTTERS 3 PC. SETS



I-10-010









I-10-010 E



I-10-055-E



I-10-060-E



I-10-510-E

Each of the above profiles has its own dedicated heads

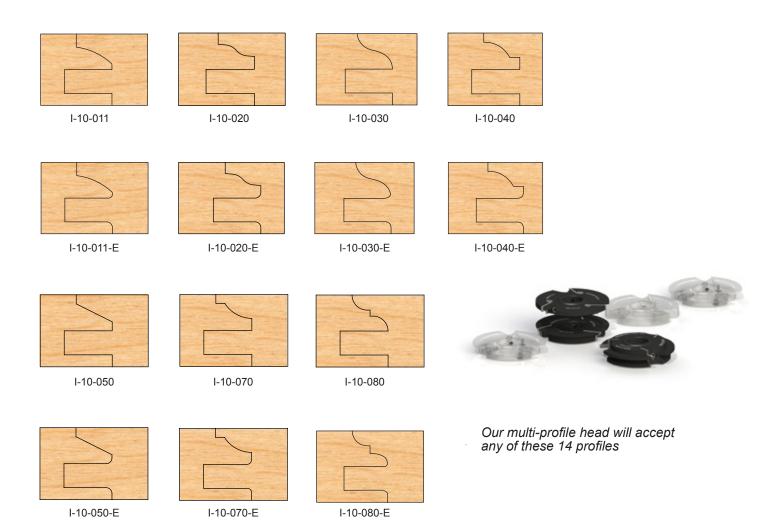
3 Piece insert Cope and Pattern sets to allow easy fit adjustment.

- A two piece cope head with shims allow you to adjust your fit as needed
- Common minor diameters and vertical profile centering eliminate the need to adjust the spindle height or fence position when switching from cope to pattern cuts
- · Heads will accept both square and eased edges
- For 3/4" to 7/8" material
- 4-1/2" outside diameter, 3-1/2" minor diameter
- 4" diameter for unique 250/265 available by special order
- 5.5mm x 1/2" tongue available by special order
- 1-1/4" bore
- 1/4 x 1/2 tongue and groove standard
- · CCW rotation, material fed face down



When changing your tips, you must clean the heads of any wood residue to allow proper alignment. Failure to do so may result in a loose fit between your Cope and Pattern cuts.

MULTI PROFILE INSERT CUTTERS 3 PC. SETS



For a more pronounced profile, our 1/2" depth of pattern sets are a great choice, with all of the benefits of our other sets. The tip sets of these profiles are not interchangeable with our other 3 piece sets.

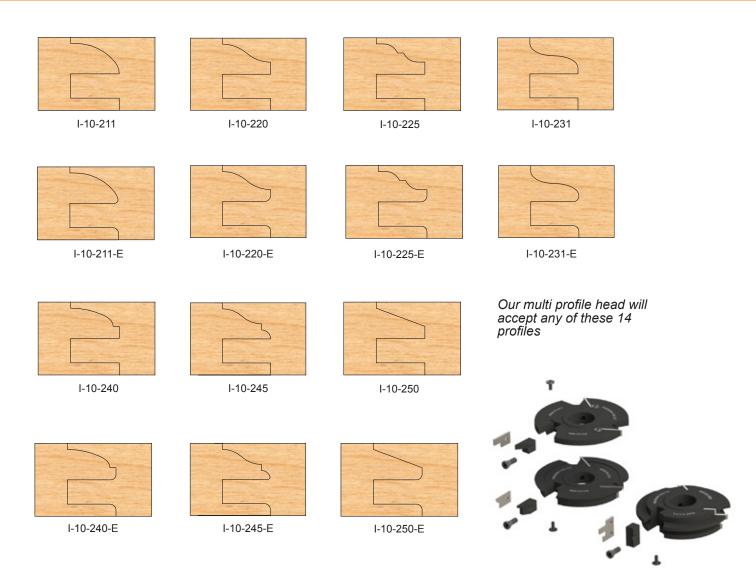
3 Piece insert Cope and Pattern sets to allow easy fit adjustment.

- Common minor diameters and vertical Profile Centering eliminate the need to adjust the spindle height or fence position when switching from cope to pattern cuts
- · Heads will accept both square and eased edges
- For 3/4" 7/8" material

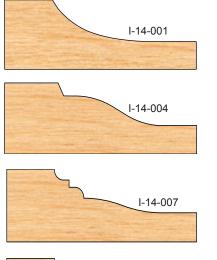
- 4-1/2" outside diameter, 3-1/2 minor diameter
- 4" diameter for unique 250/265 available by special order
- 5.5mm x 1/2" tongue available by special order
- 1-1/4" bore
- 1/4 x 1/2 tongue and groove standard
- · CCW rotation, material fed face down

When changing your tips, you must clean the heads of any wood residue to allow proper alignment. Failure to do so may result in a loose fit between your Cope and Pattern cuts.

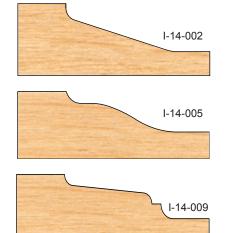
MULTI PROFILE INSERT CUTTERS 3 PIECE - 1/2" DEPTH OF PATTERN

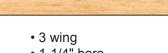


RAISED PANEL INSERT CUTTERS (3/4" MATERIAL)

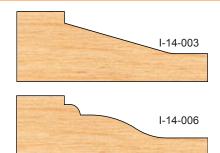


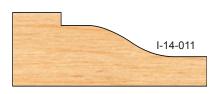






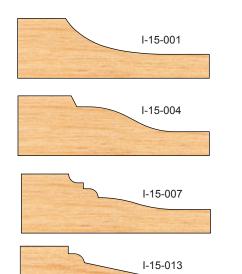
- 1-1/4" bore
- 6" diameter
- Runs with (AP-90-048) bearing
- · CCW, material fed face up

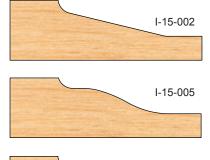




• These are dedicated profile heads (one profile per head)

RAISED PANEL INSERT CUTTERS (5/8" MATERIAL)





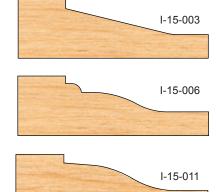


Use with I-16-001 for 3/4" material
Runs with (AP-90-048) bearing

3 wing

• 1-1/4" bore

• 6" diameter

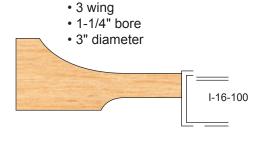


- CCW, material fed face up
- These are dedicated profile
- heads (one profile per head)

- **INSERT BACK & TRIM CUTTERS**
 - 3 wing

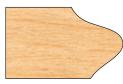
I-16-001

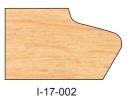
- 1-1/4" bore
- 4-3/4" diameter
- 3/4" material
- Runs with a(I-15-xxx) panel cutter



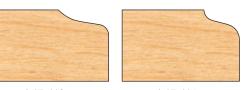
CARBIDE ONLY

DEDICATED DOOR EDGE DETAIL INSERT CUTTERS



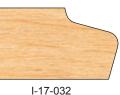


I-17-001



I-17-113

I-17-114



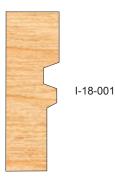




3 wing

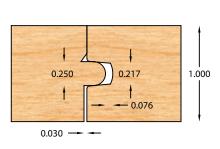
- 1-1/4" bore
- 3-1/2" minor diameter
- 30 mm tips
- CCW, material fed face up
- These are dedicated profile heads (one profile per head)

REVERSIBLE GLUE JOINT INSERT CUTTER



- · Creates an incredibly strong joint by interlocking the glue surfaces
- 3 wing
- 3-1/2" minor diameter
- 1-1/4" bore
- Cuts from 1/4" to 1-7/8" material
- 50 mm tips
- · CCW, fed as shown

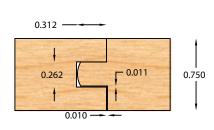
FLOORING SET INSERT CUTTERS 2 PC. SETS



- 3 wing
- 1-1/4" bore
- 3-1/2" minor diameter

I-19-030

- Cuts up to 1" material
- 30 mm tips
- · CCW, material fed face down



I-19-500

- 3 wing
- 1-1/4" bore
- 3-1/2" minor diameter
- 30 mm tips
- Cuts up to 1" material
- · CCW, material fed face down

STRAIGHT CUTTER INSERTS





Using standard 30mm or 60mm carbide inserts, this is an easy and inexpensive way to perform trim or rabbet cuts.

PLEASE NOTE: spurs are required for all cuts except trimming.

IC-22-016-SP

- 4" Outer Diameter
- 1-1/4" Bore
- 30mm Tip: IC-0300-050
- Spur: IC-0140-060

IC-22-032-SP

- 4" Outer Diameter
- 1-1/4" Bore
- 30mm Tip: IC-0600-050
- Spur: IC-0140-060

STRAIGHT CUTTER INSERTS



IC-22-ADJ

2 piece expandable groover set using 14 x 14 inserts. Set your cut from 12.5mm - 24mm by using the included spacer or shims.

- 6" outer diameter
- 1-1/4" Bore
- 4 cutting / 4 spur
- Tip: IC-0120-050
- Spur: IC-0140-060

SPIRAL CUTTERS INSERTS WITH SPURS



IS-22-032-SP

- 4" Outer Diameter
- 1-1/4" Bore
- 4 Wing
- 2" Height
- Aluminum Body
- Tip: IC-0150-060
- Spur: IC-0140-060



IS-22-048-SP

- 4" Outer Diameter
- 1-1/4" Bore
- 4 Wing
- 3" Height
- Aluminum Body
- Tip: IC-0150-060
- Spur: IC-0140-060



IS-22-064-SP

- 4" Outer Diameter
- 1-1/4" Bore
- 4 Wing
- 4" Height
- Aluminum Body
- Tip: IC-0150-060
- Spur: IC-0140-060

BRAZED TOOLING

COPE & PATTERN (6 Piece Cutter Sets)

Versatile and easy-to-use. These 6 piece cutter sets are designed to perform the 3 functions shown. Our standard sets cut 1/4" wide x 3/8" deep tongue and groove.

Our common minor diameter requires NO fence adjustment when changing from cope to pattern cuts (3/8" tongue only).

Counterclockwise rotation with wood fed face down.

For optional tongue and groove cutters and eased edge option, see page 13 and 14.



For **opposite rotation**, add 20% to the suggested list price.

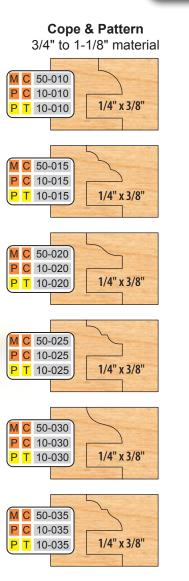
To order **custom profiles**, see our Custom Made Tooling page in the back of the catalog. Same day quoting.

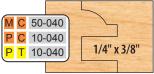
Wood samples shown actual size.

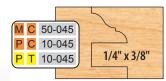
For eased edges add 20% to the suggested list price.

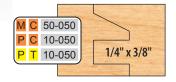


See stacking instructions on page 42.









MINI-PRO cutters

- 3 wing 2-15/16" diameter
- 3/4" bore Runs with a 2-3/16"
- diameter rub bearing (AM-90-035)

CCW, material face down

Glass Panel

3/4" to 7/8" material

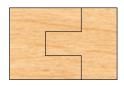
PRO-LINE cutters

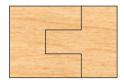
- 3 wing 4" diameter
- 1-1/4" bore Runs with a 3-1/4" diameter rub bearing (AP-90-052)
- ice down

Tongue & Groove 3/4" material

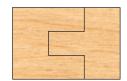


















COPE & PATTERN (6 Piece Cutter Sets)

PRODUCT ORDER CODE					
	Μ	С	00-000		
	Ρ	С	00-000		
	Ρ	Т	00-000		

Tongue & Groove

3/4" material

 M - MINI-PRO
 (3/4" E

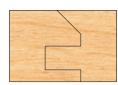
 P - PRO-LINE
 (1-1/4

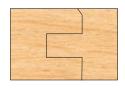
 C - Carbide Tip
 (Oranget)

 T - T-Alloy Tip
 (Yellow)

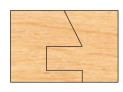
(3/4" Bore) (1-1/4" Bore) (Orange) (Yellow)

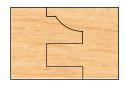
Cope & Pattern 3/4" to 1-1/8" material

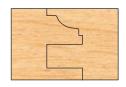


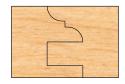




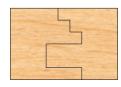








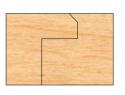




3/4" to 7/8" material

Glass Panel







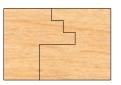






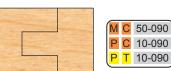




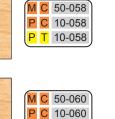












P T 10-060

M C 50-065

PC 10-065

P T 10-065

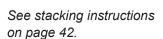
MC 50-070

 P
 C
 10-070

 P
 T
 10-070

M C 50-075 P C 10-075 P T 10-075

M C 50-055 P C 10-055 P T 10-055



For **opposite rotation**, add 20% to the suggested list price.

To order **custom profiles**, see our Custom Made Tooling page in the back of the catalog. Same day quoting.

Wood samples shown actual size.

For eased edges add 20% to the suggested list price.



COPE & PATTERN (6 Piece Cutter Sets)

Glass Panel

MINI-PRO cutters • 3 wing • 2-15/16" diameter

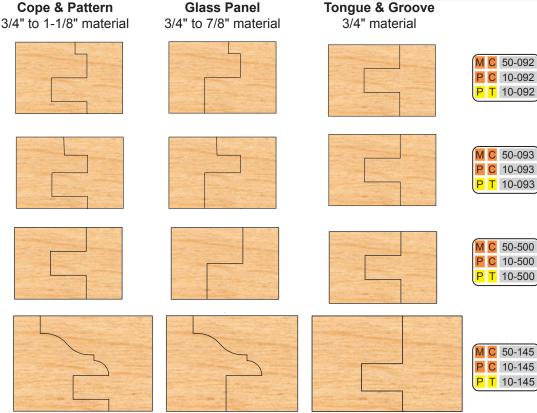
PRO-LINE cutters

- 3 wing 4" diameter
- 1-1/4" bore Runs with a 3-1/4"
- diameter rub bearing (AP-90-052)
- · CCW, material face down

• 3/4" bore • Runs with a 2-3/16"

diameter rub bearing (AM-90-035)

Tongue & Groove



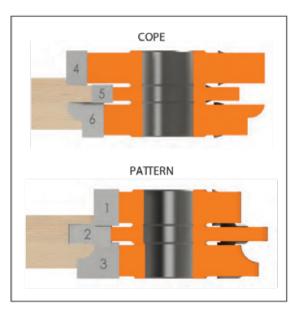
OPTIONAL EASED EDGE SETS

Eased edges are available on all 10 and 50 series cope and patterns. However, you cannot do glass panel or tongue and groove without optional groovers from page 14. Add 20% to the suggested list price.

PLEASE NOTE: Freeborn Tool Co. will be not responsible for bent center groovers due to incorrect stacking. Be sure to read the stacking instructions included with your cutters.



REMEMBER: Always stagger cutters when stacking. Never stack wing-to-wing or you will bend the center groover.



CENTER GROOVER SETS (2 Piece Cutter Sets)

At time of purchase, you may substitute the following tongue & groove cutters for the standard tongue & groove cutters in your cope & pattern set, at no additional charge. If you choose an optional center groover set other than 3/8" depth, you will be unable to do the tongue & groove option.

Available on all M-50 and P-10 series cope & patterns.

For options other than 3/8" depth, diameters will no longer be the same, requiring fence adjustments between cuts.

1/4" x 1/2"

1/4" x 5/8"

1/4" x 3/8"

5.5mm x 3/8"

M C 50-501

PC 10-501

P T 10-501

M C 50-502

PC 10-502

P T 10-502

M C 50-503

PC 10-503

P T 10-503

M C 50-601

PC 10-601

P T 10-601

Center Groovers Only - Profile cutters not included

Ρ

PRODUCT ORDER CODE M - MINI-PRO

M C 00-000

P T 00-000

C 00-000

(3/4" Bore)

(Orange)

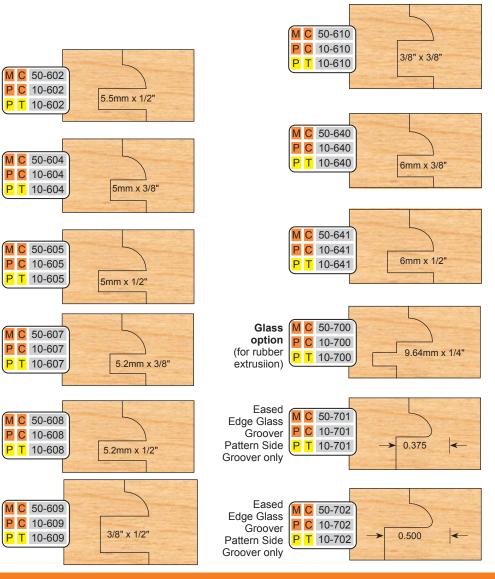
(Yellow)

(1-1/4" Bore)

P - PRO-LINE

C - Carbide Tip

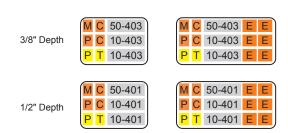
T - T-Alloy Tip



CENTER GROOVER SETS (4 Piece Cutter Sets)

These 4 piece split groover sets are used in the 10 and 50 series cope and pattern sets to allow you to cut between 3/16" and just under 3/8" with shims.

NOTE: Provides adjustment for spindle alignment issues. Exchange for standard center groovers for an additional fee.





COPE & PATTERN (6 Piece Cutter Sets)

1/2" DEPTH OF PATTERN

Deeper **Profile Sets**

Versatile and easy-to-use. These 6 piece cutter sets are designed to perform the 3 functions shown. Our standard sets cut 1/4" wide by 1/2" deep tongue and groove.

Our common minor diameter requires NO fence adjustment when changing from cope to pattern cuts. (1/2" tongue only)

Counterclockwise rotation with wood fed face down.



For opposite rotation add 20% to the suggested list price.

Wood samples shown actual size. M C 50-240

For eased edges add 20% to the suggested list price.

See page 13 for eased edge information



See page 16 for Tongue and Groove options

	and the second
MC 50-290	
M C 50-290 P C 10-290	

MINI-PRO (cutters
------------	---------

• 3 wing • 3.19" diameter • 3/4" bore • Runs with rub bearing (AM-90-035)

· CCW, material face down

Cope & Pattern

3/4" to 1-1/8" material

M C 50-211

PC 10-211

P T 10-211

M C 50-220

PC 10-220

P T 10-220

M C 50-225

PC 10-240

P T 10-240

MC 50-245 PC 10-245 P T 10-245

MC 50-250 PC 10-250 P T 10-250

P T 10-290

• 3 wing • 4.25" diameter • 1-1/4" bore • Runs with a rub bearing (AP-90-052)

PRO-LINE cutters

3/4" to 1-1/8" material

Glass Panel

Tongue & Groove 3/4" to 7/8" material 3/4" material











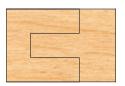






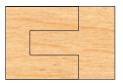




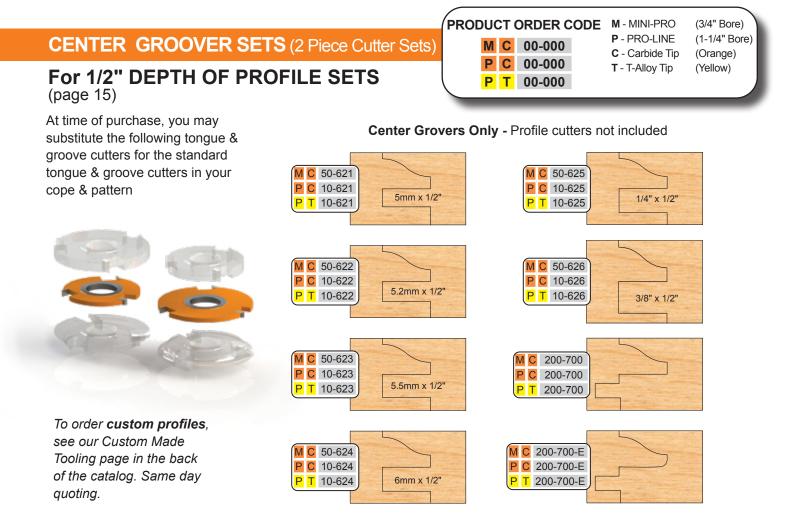












SPLIT GROOVER SET

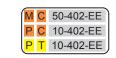
For 1/2" DEPTH OF PROFILE SETS (page 15)

These 4 piece split groover sets are used in the 10 and 50 series cope and pattern sets to allow you to cut between 3/16" and just under 3/8" with shims.

NOTE: Provides adjustment for spindle alignment issues. Exchange for standard center groovers for an additional fee.

1/2" Depth







DOUBLE SIDED COPE & PATTERN (8 Piece Cutter Sets)

MINI-PRO cutters

- 3 wing 2-15/16" diameter
- 3/4" bore Runs with a 1-11/16"
- diameter rub bearing (AM-90-027)

PRO-LINE cutters

• 3 wing • 4" diameter

M C 51-011

P C 11-011

P T 11-011

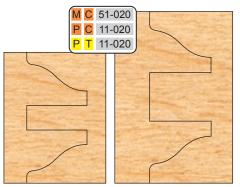
- 1-1/4" bore Runs with a 3-1/4"
- diameter rub bearing (AP-90-044)

Standard sets cut 1/4" x 5/8" or 1/2" x 5/8" deep tongue and groove. Mini-Pro is not to be used on 1/2" spindle.

These 8 piece cutter sets are built to cut both 1-3/8" passage doors and 1-3/4" entry doors simply by changing the center cutters.

A 2 piece glass panel groover set is also available to run with these sets (see page 19).

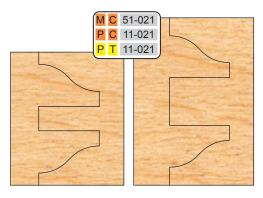




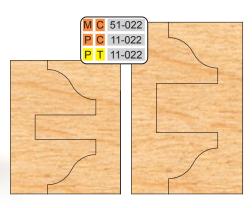
MC 51-010

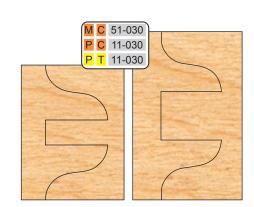
PC 11-010

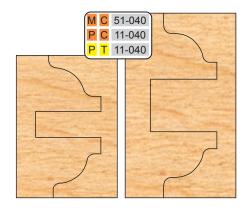
P T 11-010

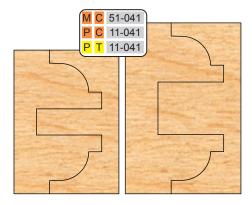












DOUBLE SIDED COPE & PATTERN (8 Piece Cutter Sets)

PROE	RODUCT ORDER CODE				
	Μ	С	00-000		
	Ρ	С	00-000		
	Ρ	Т	00-000		

 M - MINI-PRO
 (3/4

 P - PRO-LINE
 (1-7

 C - Carbide Tip
 (Or

 T - T-Alloy Tip
 (Ye

(3/4" Bore) (1-1/4" Bore) (Orange) (Yellow)

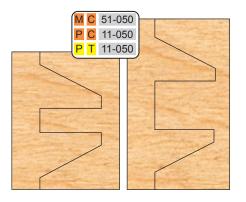
Eased edges are available for an additional 20%.

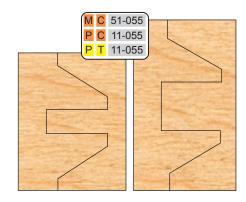
See custom cutter ordering information on inside back cover. Same day quoting.

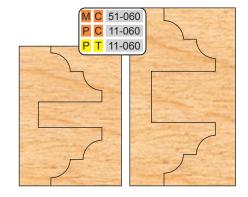
Standard sets cut 1/4" x 5/8" or 1/2" x 5/8" deep tongue and groove. Mini-Pro is not to be used on 1/2" spindle.

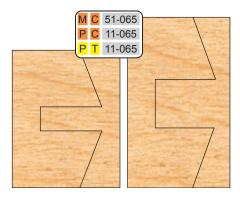
These 8 piece cutter sets are built to cut both 1-3/8" passage doors and 1-3/4" entry doors simply by changing the center cutters.

A 2 piece glass panel groover set is also available to run with these sets (see page 19).

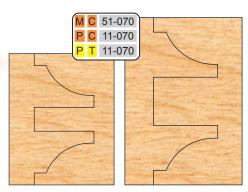


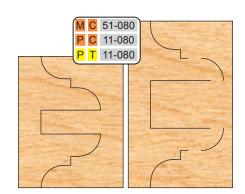


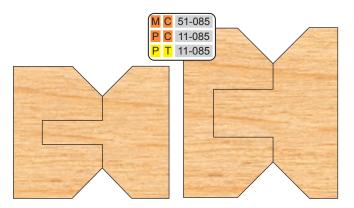


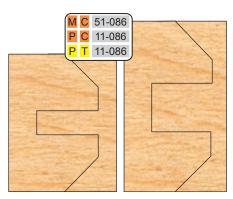












DOUBLE SIDED COPE & PATTERN (8 Piece Cutter Sets)

MINI-PRO cutters

- 3 wing 2-15/16" diameter
- 3/4" bore Runs with a 1-11/16" diameter rub bearing (AM-90-027)

PRO-LINE cutters

M C 51-500

P C 11-500

P T 11-500

- 3 wing 4" diameter
- 1-1/4" bore Runs with a 2-3/4" diameter rub bearing (AP-90-044)

Standard sets cut 1/4" x 5/8" or 1/2" x 5/8" deep tongue and groove. Mini-Pro is not to be used on 1/2" spindle.

These 8 piece cutter sets are built to cut both 1-3/8" passage doors and 1-3/4" entry doors simply by changing the center cutters.

Any of the below groover sets may be exchanged at no charge at the time of purchase.



M C 51-090

PT 11-090

Ρ

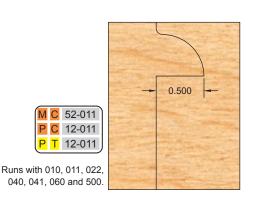
C 11-090

5/8" Deep Center Groover Chart					
	MINI PRO SET	PRO-LINE SET			
	MC-51-904	PC-11-904			
1/4" GROOVERS ONLY		PT-11-904			
3/8" GROOVERS ONLY	MC-51-903	PC-11-903			
3/8 GROOVERS UNLT		PT-11-903			
1/2" GROOVERS ONLY	MC-51-905	PC-11-905			
1/2 GROOVERS UNLY		PT-11-905			

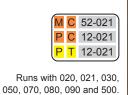
1/2" Deep Center Groover Chart					
	MINI PRO SET PRO-LINE S				
1/4" x 1/2"	MC-51-906	PC-11-906			
1/4 x 1/2		PT-11-906			
3/8" x 1/2"	MC-51-907	PC-11-907			
5/6 X 1/2		PT-11-907			
1/2" x 1/2"	MC-51-908	PC-11-908			
1/2 X 1/2		PT-11-908			

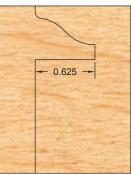
DOUBLE SIDED COPE & PATTERN GLASS PANEL OPTIONS (2 Piece Groover Sets)

These Glass Panel sets consist of 2" groovers to allow a total material height of 2-1/2" when run with the profile cutters from your Cope and Pattern set. Any of the Double Sided Cope and Pattern profiles can be made into dedicated Glass Panel sets and are shown on pages 20 and 21.



Profile shapes are for example only. Set consists of 2 groovers only.





GLASS PANEL (4 Piece Sets)

MINI-PRO cutters

• 3 wing • 2-15/16" diameter

• 3/4" bore • Runs with a 1-11/16"

diameter rub bearing (AM-90-027)

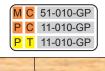
PRO-LINE cutters

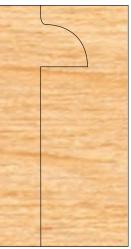
• 3 wing • 4" diameter

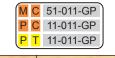
• 1-1/4" bore • Runs with a 2-3/4" diameter rub bearing (AP-90-044)

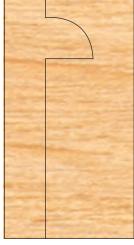
Freeborn Tool company now offers 4 piece Glass Panel Sets. Each set comes with 2 profile cutters and 2 glass panel goovers matched to the depth of the profile, either 1/2" or 5/8". In addition, for profiles 065-086 which have a different profile depth, you can choose between either the 1/2" or 5/8 deep glass panel cut.

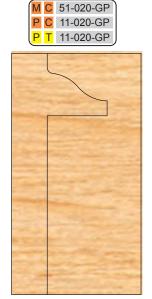
Glass Panel sets are designed to cut up to 2-1/2" material, utilizing a 2" groover, and the profile cutter

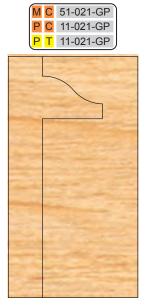


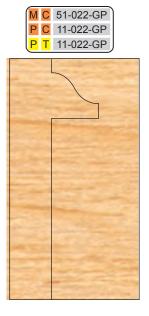


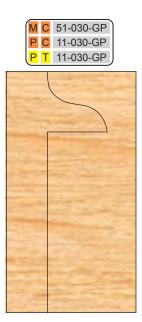


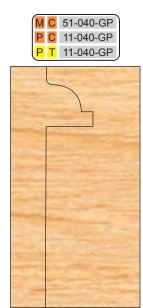


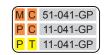


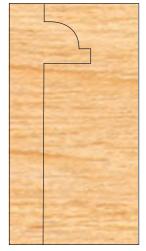








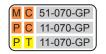


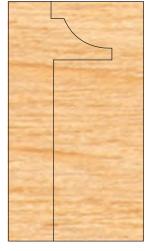


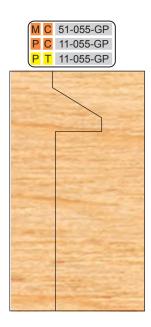
GLASS PANEL (4 Piece Sets)

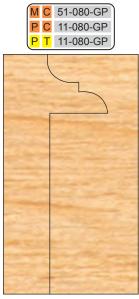
Glass Panel sets are designed to cut up to 2-1/2" material, utilizing a 2" groover, and the profile cutter

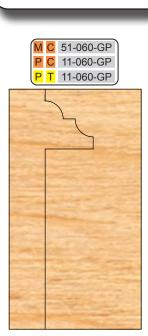
M C 51-050-GP P C 11-050-GP P T 11-050-GP











MINI-PRO cutters

• 3 wing • 2-15/16" diameter

• 3/4" bore • Runs with a 1-11/16"

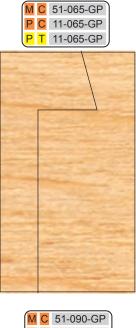
diameter rub bearing (AM-90-027)

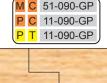


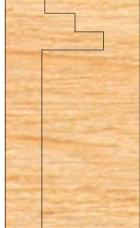


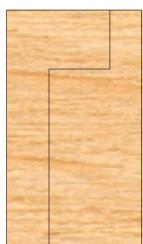
PRO-LINE cutters

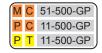
- 3 wing 4" diameter
- 1-1/4" bore Runs with a 2-3/4"
- diameter rub bearing (AP-90-044)











For profile 065 and 086 let us know at the time of order what depth you would like the glass panel cut to be: either 1/2" or 5/8" deep.

RAISED PANEL SHAPER CUTTERS (3/4" MATERIAL)

Our raised panel cutters are manufactured with 15° SHEAR to produce optimum cuts both with and across the grain.

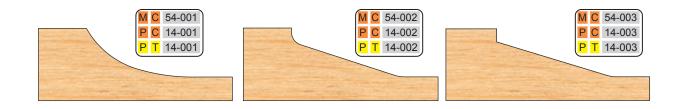
Counterclockwise rotation with wood fed face up.

MINI-PRO cutters

- 3 wing 4-1/2" diameter
- 3/4" bore Runs with a 1-5/8"
- diameter rub bearing (AM-90-026)

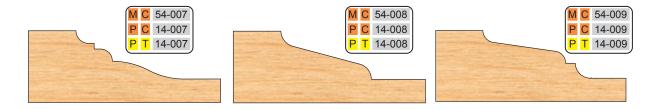
PRO-LINE cutters

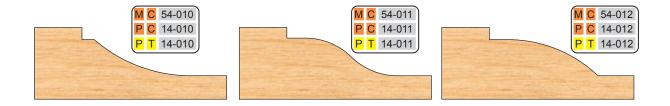
- 3 wing 6" diameter
- 1-1/4" bore Runs with a 3"
- diameter rub bearing (AP-90-048)

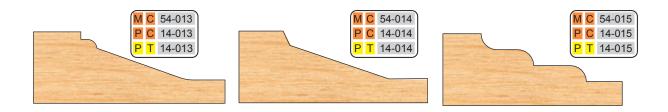


e d list

For **opposite rotation**, add 20% to the suggested list price.







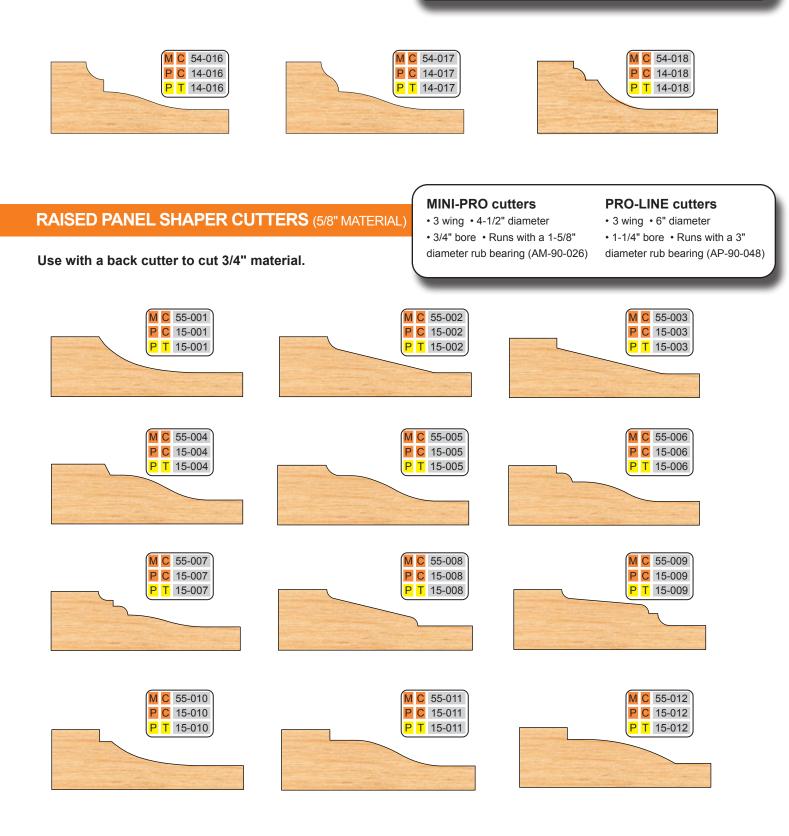
RAISED PANEL SHAPER CUTTERS (3/4" MATERIAL)

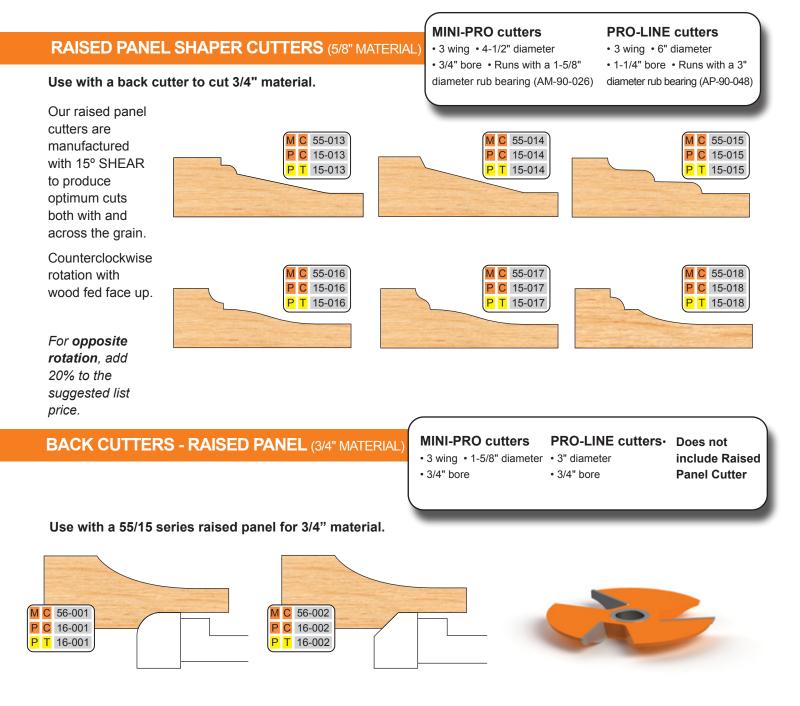
MINI-PRO cutters

- 3 wing 4-/12" diameter
- 3/4" bore Runs with a 1-5/8"
- diameter rub bearing (AM-90-026)

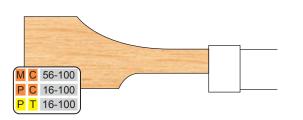
PRO-LINE cutters

- 3 wing 6" diameter
- 1-1/4" bore Runs with a 3"
- diameter rub bearing (AP-90-048)





RAISED PANEL TONGUE TRIMMER



MINI-PRO cuttersPRO-LINE cutters-• 3 wing • 3-3/8" diameter• 3-3/8" diameter• 3/4" bore• 3/4" bore

Does not include Raised Panel Cutter

RAISED PANEL SHAPER CUTTERS (1/2" MATERIAL)

PRO-LINE cutters

• 3 wing • 1-1/4" bore

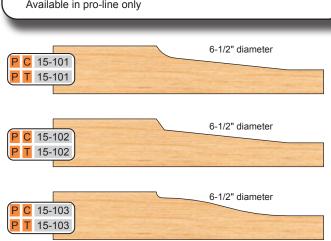
• designed to run with a 3" diameter rub bearing (AP-90-048) Available in pro-line only

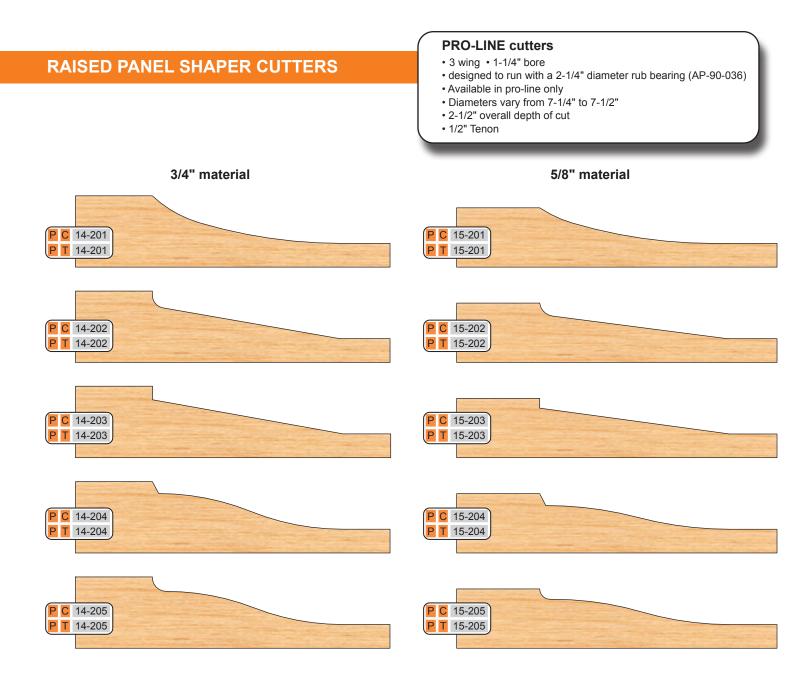
Manufactured with 15° SHEAR to produce optimum cuts both with and across the grain.

Counterclockwise rotation with wood fed face up.

These raised panel cutters cut a 1-3/8" reveal plus a 3/8" long tongue. Reduce production time by adding an opposite rotation cutter, and produce double sided raised panels in a single pass.

Opposite rotation cutters are made to order.





DOOR EDGE DETAIL SHAPER CUTTERS

MINI-PRO cutters

• 3 wing • 2-15/16" diameter • 3/4" bore • 1" wide tips

PRO-LINE cutters

- 3 wing 4" diameter
- 1-1/4" bore 1" wide tips

All of these wood samples are full scale as shown. Whether it is a 30° back bevel. fingerpull, 3/8" offset, or flush overlay door, we offer a wide selection to choose from.

Counterclockwise rotation with wood fed face up.

To order custom profiles, see our Custom Made Tooling page in the back of the catalog.



add 20% to the suggested list price.

actual size.

Wood samples shown

MC 57-001 M C 57-002 M C 57-003 PC 17-001 PC 17-002 PC 17-003 P T 17-001 P T 17-002 P T 17-003 MC 57-004 MC 57-005 MC 57-006 PC 17-006 PC 17-004 PC 17-005 P T 17-006 P T 17-004 P T 17-005 MC 57-009 MC 57-007 M C 57-008 PC 17-007 PC 17-008 PC 17-009 P T 17-009 P T 17-007 P T 17-008 MC 57-010 MC 57-011 M C 57-012 PC 17-010 PC 17-011 P C 17-012 P T 17-010 P T 17-011 P T 17-012 MC 57-014 MC 57-015 MC 57-013 P C 17-015 PC 17-013 PC 17-014 P T 17-013 P T 17-014 P T 17-015 MC 57-016 MC 57-017 MC 57-018 PC 17-018 PC 17-016 PC 17-017 P T 17-018 P T 17-016 P T 17-017 For opposite rotation, MC 57-019 M C 57-020 M C 57-021 P C 17-021 PC 17-019 PC 17-020 P T 17-020 P T 17-021 P T 17-019 MC 57-022 M C 57-023 PC 17-022 PC 17-023 P T 17-023 P T 17-022 57-029 has 4" diameter M C 57-032 MC 57-024 17-029 has 4-1/2" diameter PC 17-024 PC 17-032 P T 17-024 P T 17-032 For this finger pull detail, the

> Similar to 002 profile but .100 backout

wood is cut at a 30° incline.

M	С	57-029
Ρ	С	17-029
P	Т	17-029

DOOR EDGE DETAIL BEVEL CUTTERS

MINI-PRO cutters

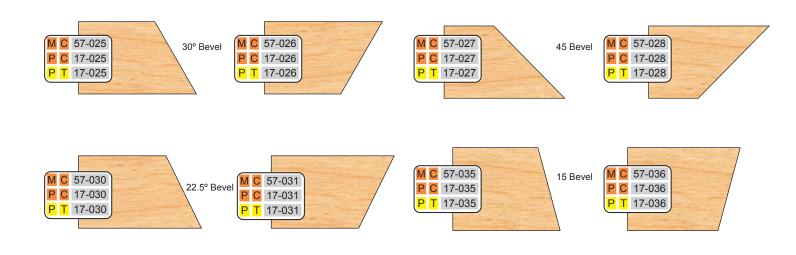
• 3 wing

• 3/4" bore • 1" wide tips

PRO-LINE cutters

- 3 wing
- 1-1/4" bore 1" wide tips

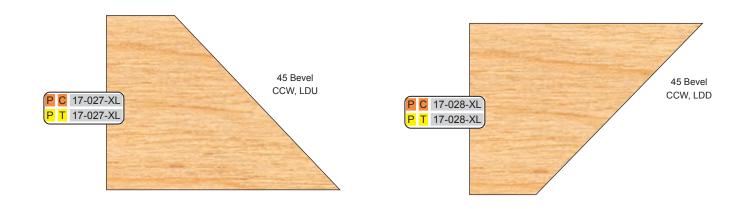
For a different angle or a wider bevel cutter than those shown, ask our custom cutter department for a quote (See inside back cover).



DOOR EDGE DETAIL XL BEVEL CUTTERS

PRO-LINE cutters

- 3 wing
- 1-1/4" bore 1-3/4" wide tips



DOOR EDGE DETAILS (32MM HINGE SYSTEM)

MC 57-101

PC 17-101

P T 17-101

MC 57-104

PC 17-104

P T 17-104

MC 57-107

PC 17-107

P T 17-107

P T 17-114

MINI-PRO cutters

M C 57-102

PC 17-102

P T 17-102

MC 57-105

PC 17-105

P T 17-105

MC 57-108

PC 17-108

P T 17-108

Top Cutter Profiles 3/4" to 7/8" material

• 3 wing • 2-1/16" minor diameter • 3/4" bore

PRO-LINE cutters

- 3 wing 3-1/16" minor diameter
- 1-1/4" bore

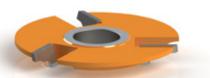
Major diameter varies with depth of cut

Part number is for top cutter only.

Manufactured with 15° SHEAR to produce optimum cuts both with and across grain.

Counterclockwise rotation with wood fed face up.

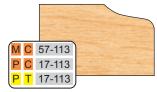
Any top cutter is designed to nest and run with any bottom cutter.

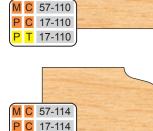


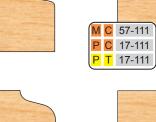
For **opposite rotation**, add 20% to the suggested list price.

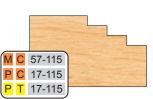
To order custom profiles, see our Custom Made Tooling page in the back of the catalog. Same day quoting.

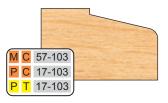
Wood samples shown actual size.

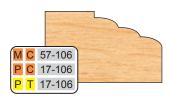


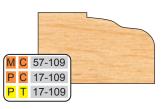


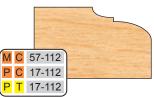


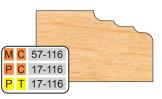










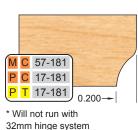


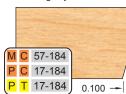
Bottom cutters for 32mm Hinge Systems are designed to nest and run with any top cutter listed.

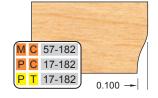
Selection of bottom cutter should depend upon the distance of the bored hole for the hinge from the edge of the door.

Manufactured to the same specifications as all top cutters.

Bottom Cutter Profiles







MC 57-185

PC 17-185

P T 17-185

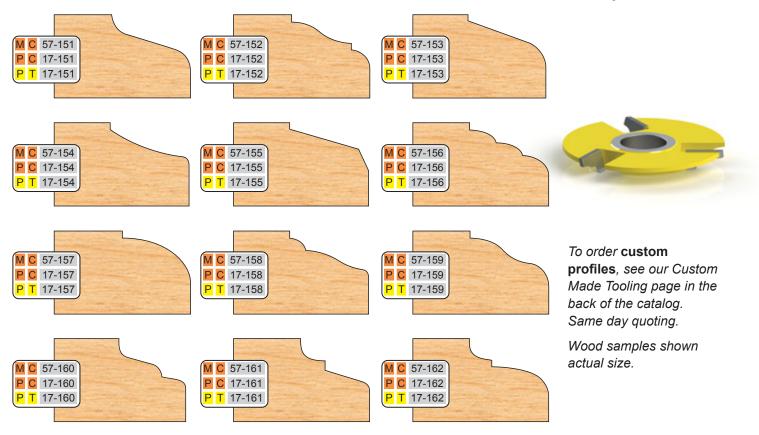


* Will not run with 32mm hinge system

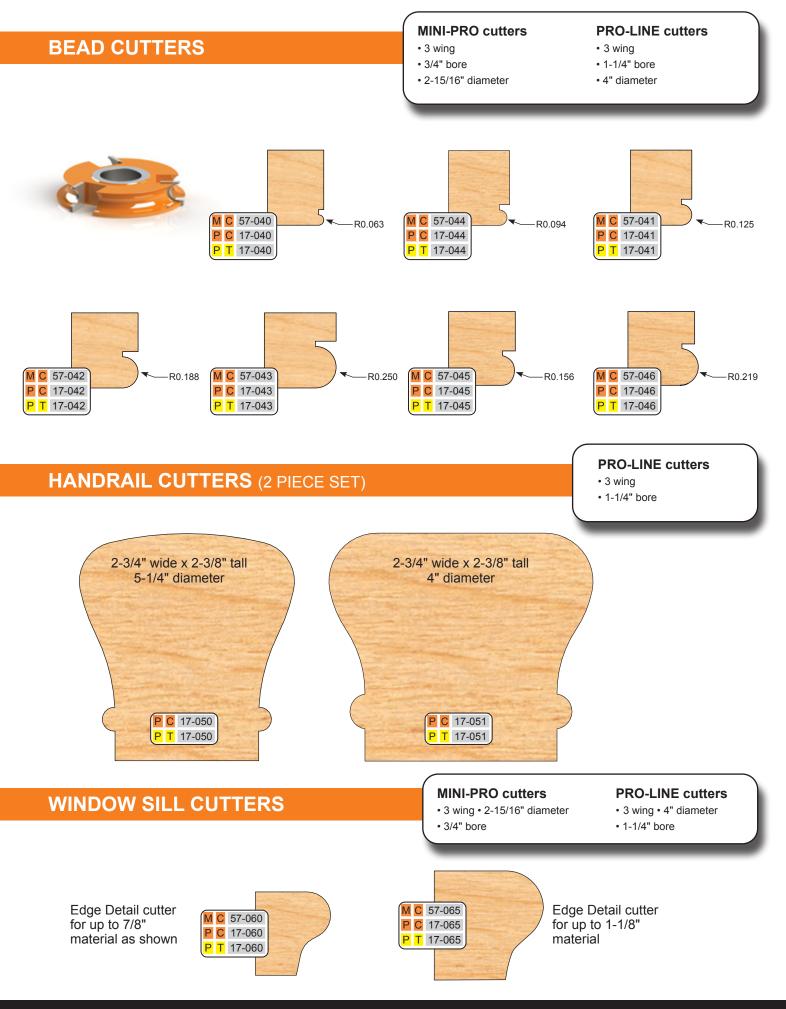
O (3/4" Bore)	M - MINI-PRO	ODUCT ORDER CODE	(P
IE (1-1/4" Bore)	P - PRO-LINE	M C 00-000	
Tip (Orange)	C - Carbide Tip		
p (Yellow)	T - T-Alloy Tip	P C 00-000	
,		P T 00-000	
			~
		P C 00-000 P T 00-000	L

Top Cutter Profiles 7/8" to 1" material

Part number is for top cutter only.







REVERSIBLE GLUE JOINT

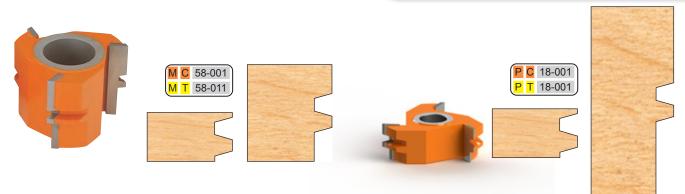
Creates an incredibly strong joint by interlocking the glue surfaces.

MINI-PRO cutters

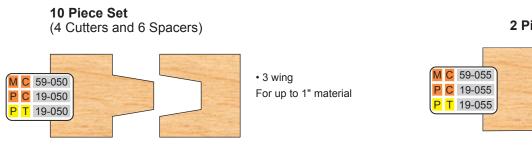
- 3 wing 2-15/16" diameter
- 3/4" bore 1" wide tips
- Cuts from 1/2" to 7/8" material

PRO-LINE cutters

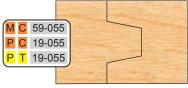
- 3 wing 2-15/16" diameter • 1-1/4" bore • 2" wide tips
- Cuts from 1/2" to 1-7/8" material



WEDGE TONGUE & GROOVE



2 Piece Set



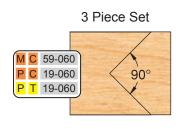
V – GROOVE DETAIL CUTTER

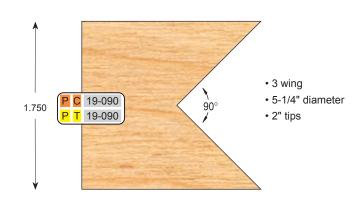
• 3 wing For up to 1" material

EDGE BANDING

3 Piece Set

- 1 piece solid cutters for female cut
- 2 pieces split for male cut





V-PANELING SHAPER CUTTER SET

MINI-PRO cutters • 3 wing • 2-15/16" diameter

2-3/16" diameter rub bearing

- **PRO-LINE** cutters
- 3 wing 4" diameter • 3/4" bore • designed to run with
 - 1-1/4" bore designed to run with
 - 3-1/4" diameter rub bearing

PRO-LINE cutters

• 3 wing • 4" diameter

• 1-1/4" bore

The V-Paneling set consists of 5 cutters and 1 spacer to perform these 4 functions.

Counterclockwise rotation with wood fed face down.

These sets do not share a common minor diameter.

To order custom profiles, see our Custom Made Tooling page in the back of the catalog. Same day quoting. Wood samples shown actual size.

See stacking instructions on page 42.

Optional Rub-Spacers & Groovers for Cope Side

3/4" to 1" material 3/4" to 1" material		NEW	MINI-PRO SET		PRO-LINE SET	
			RUB SPACER	GROOVER	RUB SPACER	GROOVER
		SINGLE-V	AM-50-809		AM-10-809	PC-19-011
Single V	Double V	SINGLE-V	AW-50-609		AWI-10-609	PT-19-011
		DOUBLE-V	AM-50-809		AM-10-809	PC-19-011
		DOOBLE-V	AM-50-005		Am-10-003	PT-19-011
↑		DOUBLE COPE & PATTERN	AM-50-801	MC-59-012	AM-10-801	PC-19-012
7/8"		DOUBLE COPE & PATTERN	AWI-50-601		AWI-10-601	PT-19-012
Single Cope & Pattern	Double Cope & Pattern	SINGLE COPE & PATTERN	AM-50-801	MC-59-012	AM-10-801	PC-19-012
↓ ↓			AM-50-001		AM-10-001	PT-19-012

7-PC. FLOORING SET

The flooring set consists of 6 cutters and 1 spacer to perform these 5 functions.

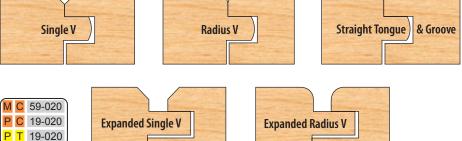
M C 59-010

Cut provides a loose fit (.030) for wood expansion. Set up instructions included.

Counterclockwise rotation with wood fed face down.

See stacking instructions on page 42.

3/4" to 1" material



MINI-PRO cutters

• 3/4" bore

• 3 wing • 2-15/16" diameter

5-PC. FLOORING SET WITH NAIL SLOT

MINI-PRO cutters • 3 wing • 2-15/16" diameter

• 3/4" bore

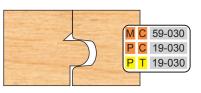
PRO-LINE cutters

• 3 wing • 4" diameter

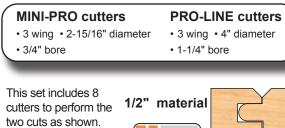
• 1-1/4" bore

This set includes 5 cutters to perform the cut as shown.

Counterclockwise rotation with wood fed face down. Up to 1" material.



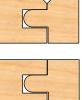
8-PC. FLOORING / V-PANEL SET



Runs CCW. face down. Cut provides a 0.010" loose fit to allow for

wood expansion.

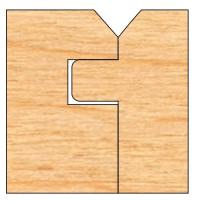
		nateriai
M	С	59-040
Ρ	С	19-040
P	Т	19-040
\sim		



V PANEL SET FOR 2" MATERIAL

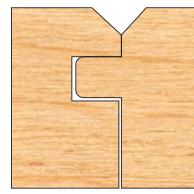
PROD	UCI	ORDER	CODE	M - MINI-PRO
N		00-000		P - PRO-LINE C - Carbide Tip
F	° C	00-000		T - T-Alloy Tip
F	<mark>Р Т</mark>	00-000		

(3/4" Bore) (1-1/4" Bore) (Orange) (Yellow)



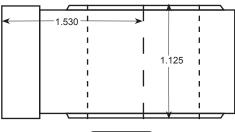


QUARTER COVE CONVEX CUTTERS



0.030 GAP for P-19-070 exchange for P-19-075 at time of purchase

The P-19-075 Groover may be exchanged at time of purchase for no charge





MINI-PRO cutters

- 3 wing 2-15/16" diameter
- 3/4" bore

PRO-LINE cutters

- 3 wing 4" diameter
- 1-1/4" bore

	PART #		RADIUS
MC-60-002	PC-20-002	PT-20-002	1/8"
MC-60-004	PC-20-004	PT-20-004	1/4"
MC-60-006	PC-20-006	PT-20-006	3/8"
MC-60-008	PC-20-008	PT-20-008	1/2"
MC-60-012	PC-20-012	PT-20-008	3/4"
	PC-20-016	PT-20-016	1"



REVERSIBLE PATTERN DETAIL

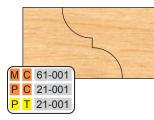
MINI-PRO cutters

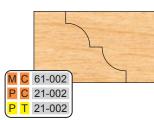
- 3 wing 2-15/16" diameter
- 3/4" bore 1" wide tips

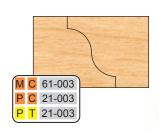
PRO-LINE cutters

- 3 wing 4" diameter
- 1-1/4" bore 1" wide tips

Counterclockwise rotation with wood fed face up.







After machining two pieces of wood, one piece may be inverted and plugged into its mate, forming a matched joint.



STRAIGHT TOP GROOVERS

MINI-PRO cutters

• 3 wing • 2-15/16" diameter • 3/4" bore • designed for use with 2-15/16" diameter rub bearing for flush trim application

PRO-LINE cutters

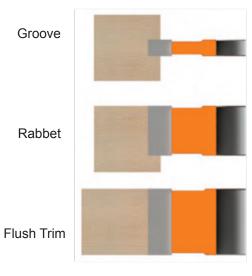
• 3 wing • 4" diameter

• 1-1/4" bore • designed for use with 4" diameter rub bearing for flush trim application

	PART #		WIDTH
MC-62-002	PC-22-002	PT-22-002	1/8"
MC-62-003	PC-22-003	PT-22-003	3/16"
MC-62-004	PC-22-004	PT-22-004	1/4"
MC-62-005	PC-22-005	PT-22-005	5/16"
MC-62-006	PC-22-006	PT-22-006	3/8"
MC-62-007	PC-22-007	PT-22-007	7/16"
MC-62-008	PC-22-008	PT-22-008	1/2"
MC-62-010	PC-22-010	PT-22-010	5/8"
MC-62-012	PC-22-012	PT-22-012	3/4"
MC-62-014	PC-22-014	PT-22-014	7/8"
MC-62-016	PC-22-016	PT-22-016	1"
MC-62-020	PC-22-020	PT-22-020	1-1/4"
MC-62-024	PC-22-024	PT-22-024	1-1/2"
MC-62-028	PC-22-028	PT-22-028	1-3/4"
MC-62-032	PC-22-032	PT-22-032	2"

STRAIGHT TOP GROOVERS

PART #	DIAMETER	WINGS	KERF
GC-0406250	4"	6	1/4"
GC-0406375	4"	6	3/8"
GC-0406500	4"	6	1/2"
GC-0406750	4"	6	3/4"
GC-0608250	6"	8	1/4"
GC-0608375	6"	8	3/8"
GC-0608.500	6"	8	1/2"
GC-0608750	6"	8	3/4"
GC-0812250	8"	12	1/4"
GC-0812375	8"	12	3/8"
GC-0812500	8"	12	1/2"
GC-0812750	8"	12	3/4"



Straight Top Groovers are ideal for cutting grooves, rabbets, and for flush trimming.



PRO-LINE cutters

• 6-12 wing

- 1-1/4" bore only
- 4-8" diameter per chart



HALF ROUND CONVEX SHAPER CUTTERS

PART # WIDTH RADIUS PC-23-002 PT-23-002 1/4" 1/8" MC-63-002 PT-23-003 MC-63-003 PC-23-003 3/8" 3/16" 1/4" PC-23-004 PT-23-004 MC-63-004 1/2" MC-63-006 PC-23-006 PT-23-006 3/4" 3/8" PC-23-008 PT-23-008 MC-63-008 1" 1/2"

HALF ROUND CONCAVE SHAPER CUTTERS

	PART #		WIDTH	RADIUS
MC-64-002	PC-24-002	PT-24-002	1/4"	1/8"
MC-64-003	PC-24-003	PT-24-003	3/8"	3/16"
MC-64-004	PC-24-004	PT-24-004	1/2"	1/4"
MC-64-006	PC-24-006	PT-24-006	3/4"	3/8"
MC-64-008	PC-24-008	PT-24-008	1"	1/2"
MC-64-009	PC-24-009	PT-24-009	1-1/8"	9/16"
MC-64-010	PC-24-010	PT-24-010	1-1/4"	5/8"
	PC-24-012	PT-24-012	1-1/2"	3/4"

MINI-PRO cutters

- 3 wing 2-15/16" diameter
- 3/4" bore

PRO-LINE cutters

- 3 wing 4" diameter
- 1-1/4" bore



MINI-PRO cutters

PRO-LINE cutters

• 3 wing • 2-15/16" diameter • 3/4" bore

• 3 wing • 4" diameter

• 1-1/4" bore



Bullnose



All Concave Cutters have .030" flare for easy bull nosing.

MATCHED DROP LEAF

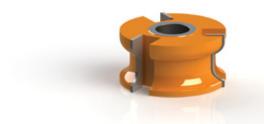
MINI-PRO cutters

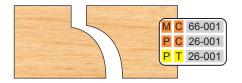
• 3 wing • 2-15/16" diameter • 3/4" bore

PRO-LINE cutters

- 3 wing 4" diameter
- 1-1/4" bore

Counterclockwise rotation with wood face down. When running counterclockwise, cove cut is made by lowering shaper spindle to cut with the top half of the cutter. Bead cut is made by raising shaper spindle to cut with the bottom half of the cutter.





WINDOW SASH CUTTER SET (4 PIECE CUTTER SET)

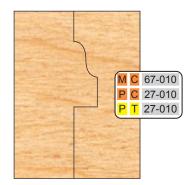
MINI-PRO cutters

• 3 wing

• 3/4" bore

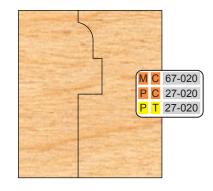
PRO-LINE cutters

- 3 wing 1-1/4" bore



These window sash profiles are common in many older homes. They are made to cut stock up to 1-3/4".

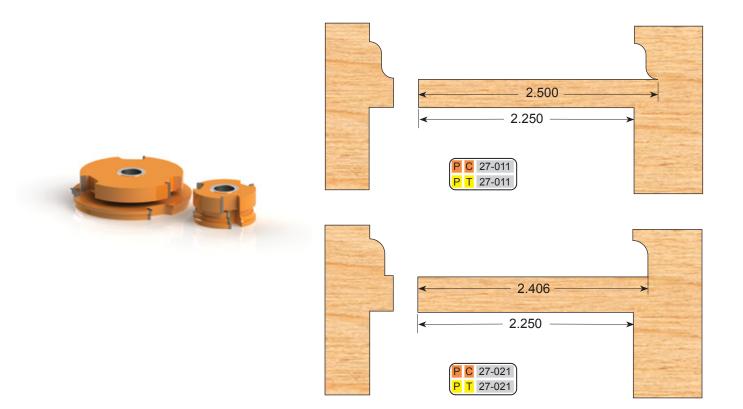
Counterclockwise rotation with wood fed face down.



WINDOW SASH CUTTER SET FOR MORTISE AND TENON (5 PIECE SET)

This Window set is designed to allow a variable tenon length of up to 2-1/2" (4 Cutters, 1 Spacer per set)

- PRO-LINE cutters
- 3 wing
- 1-1/4" bore only



ONE PIECE DOUBLE TONGUE & GROOVE LOCK MITRE CUTTER



B

MC 68-030

PC 28-030

P T 28-030

M C 68-001

P C 28-001 P T 28-001

1/2" material

90°

A

3/4" to 1" material

B

0.500

90°

A

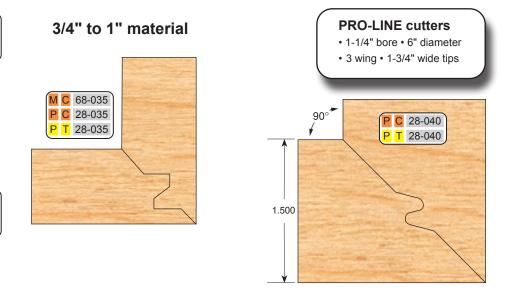


Counterclockwise rotation only. Mini-Pro is made to run only on 3/4" spindle.

Part B is run flat in horizontal position on shaper table.

Part A is run in a vertical position against the shaper fence (see diagram). See page 28.

3/4" to 1-1/2" material



TWO PIECE DOUBLE TONGUE & GROOVE LOCK MITRE SETS

3/4" - 1" material 2 Piece **MINI-PRO cutters** Set 22.5° • 3 wing • 3/4" bore P C 28-025 **9**0° • 2-15/16" diameter P T 28-025 **PRO-LINE cutters** • 1" wide tips 3 wing • 1-1/4" bore **PRO-LINE cutters** MC 68-015 • 5.19" diameter • 3 wing • 4" diameter PC 28-015 • 1-1/4" wide tips • 1-1/4" bore P T 28-015 • 1" wide tips

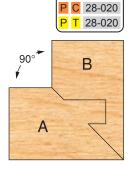
SINGLE TONGUE & GROOVE LOCK MITRE CUTTER (3 PIECE CUTTER SET)

M C 68-020

Counterclockwise rotation only. Mini-Pro is made to run only on 3/4" spindle.

Material to 1-1/8".

Part A and B are both run flat in horizontal position on shaper table. Part B is run again on table saw to cut groove (see diagram).



MINI-PRO cutters

• 3 wing • 4-5/16" diameter

• 3/4" bore • Use on 3/4" Spindles only

PRO-LINE cutters

3/4" material

- 3 wing 5-3/8" diameter
- 1-1/4" bore

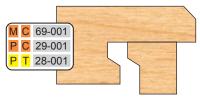




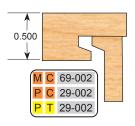
DRAWER LOCK CUTTER

Run drawer front face up in horizontal position over the top of the cutter. Drawer sides are run on end in a vertical position against the shaper fence.

Counterclockwise rotation only.



3/4" material



1/2" material

1-PIECE DOUBLE EASING CUTTERS

	NUMBER		WIDTH	RADIUS
MC-71-006	PC-31-006	PT-31-006	3/8"	1/8"
MC-71-008	PC-31-008	PT-31-008	1/2"	1/8"
MC-71-012	PC-31-012	PT-31-012	3/4"	1/8"
MC-71-016	PC-31-016	PT-31-016	1"	1/8"
MC-71-020	PC-31-020	PT-31-020	1-1/4"	1/8"
MC-71-024	PC-31-024	PT-31-024	1-1/2"	1/8"

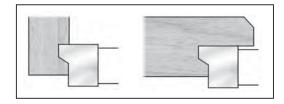
CORNER ROUNDING SHAPER CUTTERS

MINI-PRO cutters

- 3 wing 2-5/16" diameter
- 3/4" bore

PRO-LINE cutters

- 3 wing
 5" diameter
- 1-1/4" bore



MINI-PRO cutters

"diameter 2 wing a

- 3 wing 2-15/16" diameter • 3/4" bore
- **PRO-LINE** cutters
- 3 wing
 5" diameter
- 1-1/4" bore



Custom rub bearings available for these cutters.

MINI-PRO cutters

S PRO-LINE cutters

- 3 wing 2-5/16" diameter • 3/4" bore
- 3 wing 4" diameter or see below
- 1-1/4" bore

Larger PRO-LINE Cutters exceed the standard 4" diameter (see chart).

Counterclockwise rotation with wood fed face down.

R = CCW, wood face up



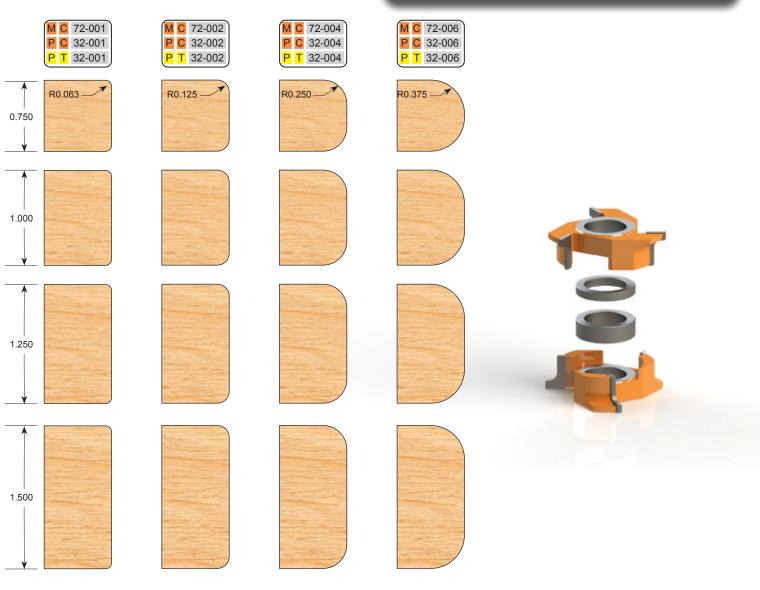
NUMBER	(R=Opposite	Rotation)	RADIUS	3/4" Bore DIAMETER	1-1/4" Bore DIAMETER
MC-65-002	PC-25-002	PT-25-002	1/8"	2-15/16"	4"
MC-65-002R	PC-25-002R	PT-25-002R	1/8"	2-15/16"	4"
MC-65-003	PC-25-003	PT-25-003	3/16"	2-15/16"	4"
MC-65-004	PC-25-004	PT-25-004	1/4"	2-15/16"	4"
MC-65-004R	PC-25-004R	PT-25-004R	1/4"	2-15/16"	4"
MC-65-005	PC-25-005	PT-25-005	5/16"	2-15/16"	4"
MC-65-006	PC-25-006	PT-25-006	3/8"	2-15/16"	4"
MC-65-006R	PC-25-006R	PT-25-006R	3/8"	2-15/16"	4"
MC-65-008	PC-25-008	PT-25-008	1/2"	2-15/16"	4"
MC-65-008R	PC-25-008R	PT-25-008R	1/2"	2-15/16"	4"
MC-65-010	PC-25-010	PT-25-010	5/8"	2-15/16"	4"
MC-65-012	PC-25-012	PT-25-012	3/4"	2-15/16"	4"
	PC-25-014	PT-25-014	7/8"	n/a	4-1/2"
	PC-25-016	PT-25-016	1"	n/a	4-1/2"
	PC-25-020	PT-25-020	1-1/4"	n/a	5"
	PC-25-024	PT-25-024	1-1/2"	n/a	5-1/2"
	PC-25-028	PT-25-028	1-3/4"	n/a	6-1/2"
	PC-25-032	PT-25-032	2"	n/a	6-1/2"

4-PIECE EXPANDABLE DOUBLE EASING SET

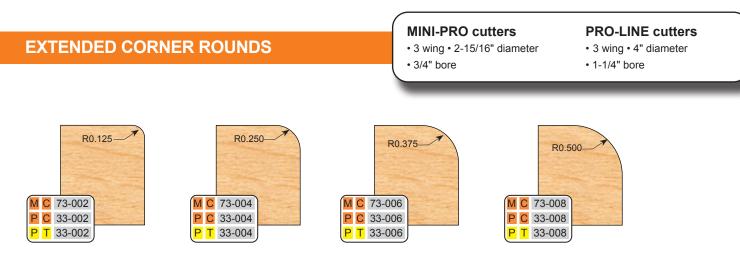
MINI-PRO cutters

• 3/4" bore

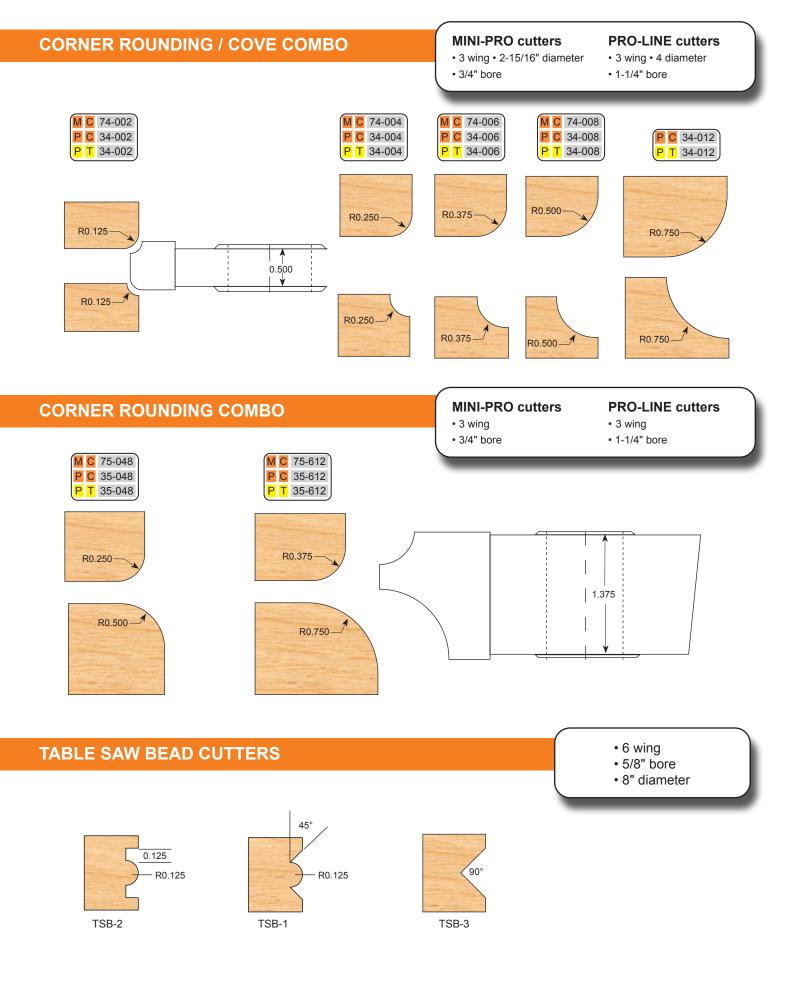
- 3 wing 2-3/16" minor diameter
- **PRO-LINE cutters**
- 3 wing 3" minor diameter
- 1-1/4" bore



Each set includes 2 cutters and 2 spacers to cut 3/4", 1", 1-1/4" and 1-1/2" material.



Counterclockwise rotation with face down. For up to 1-1/4" material.



BALL BEARING RUB COLLARS

NUMBER	BORE	DIAM.
AM-90-026	3/4"	1-5/8"
AM-90-027	3/4"	1-11/16"
AM-90-028	3/4"	1-3/4"
AM-90-032	3/4"	2"
AM-90-033	3/4"	2-1/16"
AM-90-035	3/4"	2-3/16"
AM-90-036	3/4"	2-1/4"
AM-90-039	3/4"	2-7/16"
AM-90-040	3/4"	2-1/2"
AM-90-047	3/4"	2-15/16"
AM-90-048	3/4"	3"

NUMBER	BORE	DIAM.
AP-90-036	1-1/4"	2-1/4"
AP-90-040	1-1/4"	2-1/2"
AP-90-044	1-1/4"	2-3/4"
AP-90-048	1-1/4"	3"
AP-90-049	1-1/4"	3-1/16"
AP-90-052	1-1/4"	3-1/4"
AP-90-056	1-1/4"	3-1/2"
AP-90-060	1-1/4"	3-3/4"
AP-90-064	1-1/4"	4"
AP-90-066	1-1/4"	4-1/8"
AP-90-068	1-1/4"	4-1/4"
AP-90-072	1-1/4"	4-1/2"



RUB SPACERS FOR COPE & PATTERN



A M 50-801 A P 10-801 1/4" x 1/2" tongue

A M 50-806 A P 10-806 5.5 x 3/8" tongue tongue



Optional rub spacer available for M-50 and P-10 series cope & pattern sets. Replaces center cutter on cope side.

T-BUSHINGS

Choose from

• Long Style - for 3 to 6 Cutter Sets. Consists of 1 long and 1 short T-Bushing.

• Medium Style - for 2 Piece Sets

• **Short Style** - for Single Cutters. Consists of 2 short T-Bushings.

• **Double Sided** - to run between Cutter and Bearing.

AM-91-008 1/2" 3/4" AX-91-012 1/2" 1" AP-91-012 3/4" 1-1/4" AP-91-016 1" 1-1/4" AP-91-016 XL* 1" 1-1/4" 30mm 1-1/4" AP-91-017 AP-91-018 1-1/8" 1-1/4" AP-91-024 1-1/4" 1-1/2" 1-1/4" 40mm AP-91-025 AP-91-029 1-1/4" 1-13/16"

I.D.

O.D.

Long Style

NUMBER

 NUMBER
 I.D.
 O.D.

 AM-91-008-M
 1/2"
 3/4"

 AP-91-012-M
 3/4"
 1-1/4"

 AP-91-016-M
 1"
 1-1/4"

Short S	tyle		E
NUMBER	I.D.	O.D.	
AM-92-008	1/2"	3/4"	
AX-92-012	1/4"	1"	
AP-92-008	1/2"	1-1/4"	
AP-92-012	3/4"	1-1/4"	
AP-92-016	1"	1-1/4"	
AP-92-017	30mm	1-1/4"	
AP-92-018	1-1/4"	1-1/4"	
AP-92-024	1-1/4"	1-1/2"	
AP-92-025	1-1/4"	40mm	
AP-92-029	1-1/4"	1-13/16"	

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Double Sided

NUMBER	I.D.	O.D.
AM-93-008	1/2"	3/4"
AX-93-008	1/2"	1-1/4"
AP-93-012	3/4"	1-1/4"
AP-93-016	1"	1-1/4"
AP-93-018	1-1/8"	1-1/4"
AP-93-024	1-1/4"	1-1/2"
AP-93-025	1-1/4"	40mm
AP-93-029	1-1/4"	1-13/16"

SPACERS AND SHIMS

Spacers

Spacers - Used in a wide range of woodworking applications.

NUMBER	BORE	WIDTH
AM-94-001	3/4"	1/16"
AM-94-002	3/4"	1/8"
AM-94-003	3/4"	3/16"
AM-94-004	3/4"	1/4"
AM-94-005	3/4"	5/16"
AM-94-006	3/4"	3/8"
AM-94-007	3/4"	7/16"
AM-94-008	3/4"	1/2"
AM-94-009	3/4"	9/16"
AM-94-010	3/4"	5/8"
AM-94-012	3/4"	3/4"
AM-94-016	3/4"	1"
AP-94-001	1 1/4"	1/16"
71 -0 1 -001	1-1/4"	1/10
AP-94-002	1-1/4	1/18"
AP-94-002	1-1/4"	1/8"
AP-94-002 AP-94-003	1-1/4" 1-1/4"	1/8" 3/16"
AP-94-002 AP-94-003 AP-94-004	1-1/4" 1-1/4" 1-1/4"	1/8" 3/16" 1/4"
AP-94-002 AP-94-003 AP-94-004 AP-94-005	1-1/4" 1-1/4" 1-1/4" 1-1/4"	1/8" 3/16" 1/4" 5/16"
AP-94-002 AP-94-003 AP-94-004 AP-94-005 AP-94-006	1-1/4" 1-1/4" 1-1/4" 1-1/4" 1-1/4"	1/8" 3/16" 1/4" 5/16" 3/8"
AP-94-002 AP-94-003 AP-94-004 AP-94-005 AP-94-006 AP-94-007	1-1/4" 1-1/4" 1-1/4" 1-1/4" 1-1/4" 1-1/4"	1/8" 3/16" 1/4" 5/16" 3/8" 7/16"
AP-94-002 AP-94-003 AP-94-004 AP-94-005 AP-94-006 AP-94-007 AP-94-008	1-1/4" 1-1/4" 1-1/4" 1-1/4" 1-1/4" 1-1/4" 1-1/4"	1/8" 3/16" 1/4" 5/16" 3/8" 7/16" 1/2"
AP-94-002 AP-94-003 AP-94-004 AP-94-005 AP-94-006 AP-94-007 AP-94-008 AP-94-009	1-1/4" 1-1/4" 1-1/4" 1-1/4" 1-1/4" 1-1/4" 1-1/4" 1-1/4"	1/8" 3/16" 1/4" 5/16" 3/8" 7/16" 1/2" 9/16"

Shims - Sets of 48 colorcoded plastic shims for various spacing needs.

Shims

NUMBER	BORE	QTY.	COLOR	THICKNESS	QTY.	COLOR	THICKNESS
AM-95-008	1/2"	6	Green	.003"	6	Black	.0125
AP-94-016	1"	6	Matte	.0075"	6	Yellow	.020
AP-94-018	1-1/8"	6	Brown	.010"	6	Coral	.030

Shims - Sets of 20 metal shims in five thicknesses.

Metal Shims

NUMBER	BORE	QTY.	THICKNESS				
AM-95-012-M	3/4"	4	.003"				
AP-95-020-M	1-1/4"	4	.005"				
		4	.010"				
		4	.015"				
		4	.020"				

Many of our sets may be run in multiple configurations, or require very careful set-ups. Scan the QR code to get additional information. As always, feel free to call us with any questions.

Setting up a Lock Mitre Set

Cope and Pattern Stacking Instructions

V Panel Stacking Instructions

Flooring Set Stacking Instructions

Shaper Spindle Alignment

All use the same QR Code

Cope and Pattern Trouble Shooting



CUSTOM MADE TOOLING SHEET

CUSTOMER INFORMATION	4									
Contact:										
Company:										
Phone:										
Fax:										
Email:										
	MATERIAL INFORMATION	MATERIAL INFORMATION								
Tool Type:	Туре:	Туре:								
Bore/Shank:	Thickness:	Collet/Spindle Size:								
Diameter:	Direction:: Face Up Face Down	Keyway:								
Rotation: CCW CW	Additional Info:	RPM:								
Tipping: Carbide T-Alloy		Feed Rate:								
# Of Wings:		Min./Max. Circle:								
1/4" Squai	es Please Daw with Dimentions as need	led								

Technical Assistance: Many cutting applications require more than a stock answer. Brazed-T-alloy / Brazed-Carbide / Insert / PCD, multiple wings, shear face, climb cutting, or the use of outboard fences and power feeds. We will assist you in meeting your profiling challenges. An infinite number of shapes and sizes will provide a solution to virtually any job. We invite your inquiries and stand ready to help you with your stock and custom cutter requirements.

Unsurpassed Quality: Our cutters are geometrically precise to the highest standards. We use the latest in 5 axis CNC equipment Coupled with high powered comparators, this equipment has proven to consistently meet our own strict tolerances in manufacturing.

Fast Delivery: Quick turnaround and delivery are essential. Fax or email your dimensional drawings to us and we will immediately process your order.

Ease of Reordering: Every custom-made cutter is given careful attention. Each is assigned its own drawing number which is filed for easy reordering reference. The assigned drawing number allows us to quickly duplicate the exact profile to your original specifications.

Since 1975, Freeborn Tool Co., Inc. has maintained a focus on making tools that perfectly fit the needs of its customers in the woodworking and manufacturing industries.







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