

Freeborn
TOOL COMPANY, INC.

2008 Catalog

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.

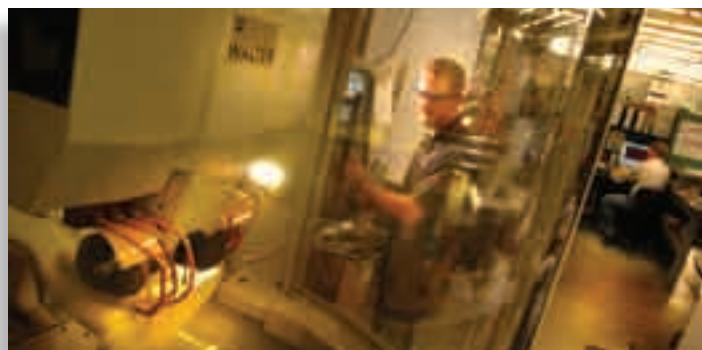
Since the 1970's, Freeborn Tool Co. has been a leading manufacturer of shaper cutters in the United States. Throughout the years, Freeborn has become known for the quality of their cutters as well as their ability to make custom tooling to fit the woodworker's requirements, quickly.

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.



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*.

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 inside back cover for details).

** The orange and yellow painted cutters are trademarks of Freeborn Tool Company, Inc.*

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 exempted from the 15% restocking fee.

CANCELLATIONS

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

Call Toll Free for the Freeborn Dealer nearest you.

PRODUCT ORDER CODE

M	C	00-000	P	C	00-000
M	T	00-000	P	T	00-000

M - MINI-PRO	(3/4" Bore)
P - PRO-LINE	(1-1/4" Bore)
C - Carbide Tip	(Orange)
T - T-Alloy Tip	(Yellow)

Cope & Pattern (6 Cutter Sets)

Versatile and easy-to-use. These 6 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).

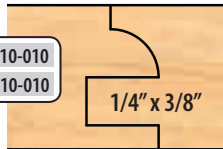
Counterclockwise rotation with wood fed face down.

For optional tongue and groove cutters and eased edge option, see page 6 and 7.

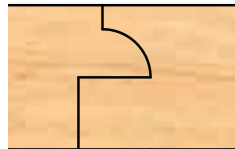


Cope & Pattern
3/4" to 1-1/8" material

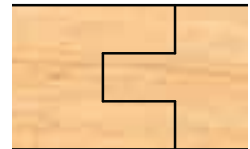
M C 50-010 P C 10-010
M T 50-010 P T 10-010



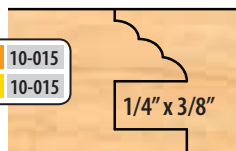
Glass Panel
3/4" to 1" material



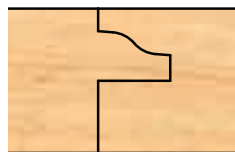
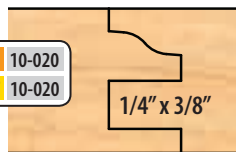
Tongue & Groove
3/4" material



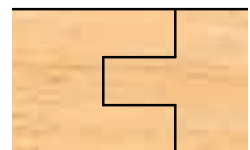
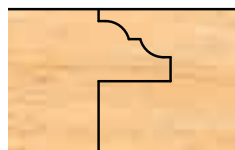
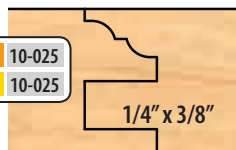
M C 50-015 P C 10-015
M T 50-015 P T 10-015



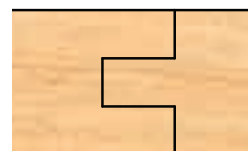
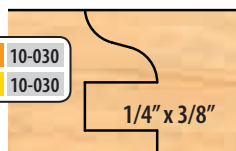
M C 50-020 P C 10-020
M T 50-020 P T 10-020



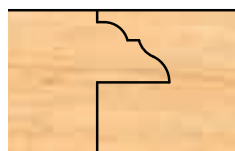
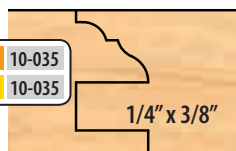
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M T 50-025 P T 10-025



M C 50-030 P C 10-030
M T 50-030 P T 10-030



M C 50-035 P C 10-035
M T 50-035 P T 10-035



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

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

Wood samples shown actual size.

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

MINI-PRO cutters

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

PRO-LINE cutters

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

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

PRODUCT ORDER CODE

M C	00-000	P C	00-000	M - MINI-PRO	(3/4" Bore)
M T	00-000	P T	00-000	P - PRO-LINE	(1-1/4" Bore)
				C - Carbide Tip	(Orange)
				T - T-Alloy Tip	(Yellow)

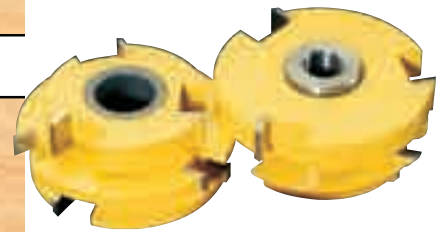
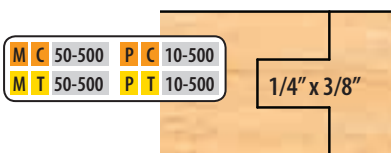
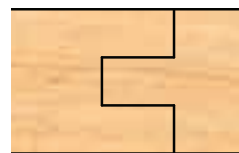
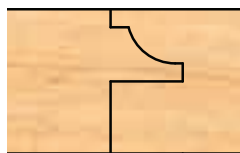
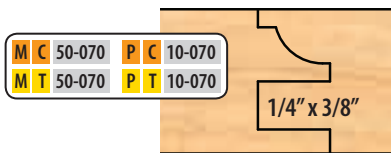
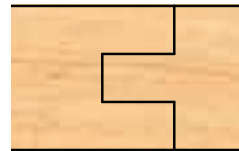
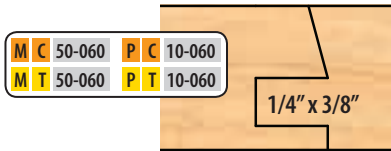
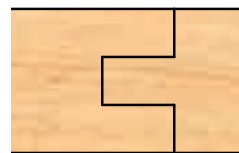
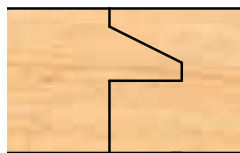
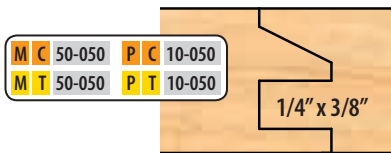
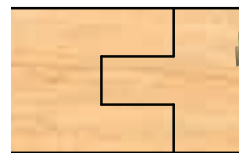
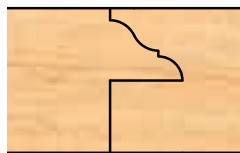
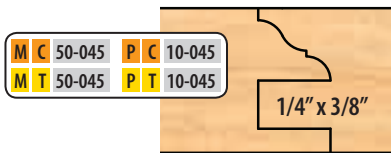
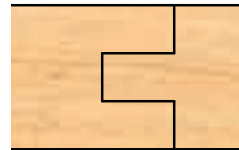
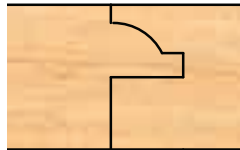
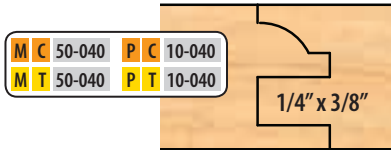
Cope & Pattern (6 Cutter Sets)

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

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

Glass Panel
3/4" to 1" material

Tongue & Groove
3/4" material



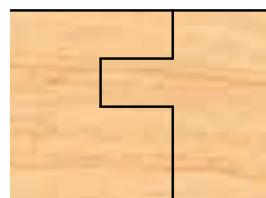
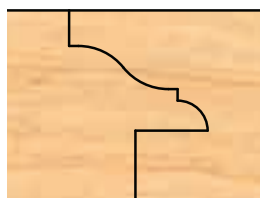
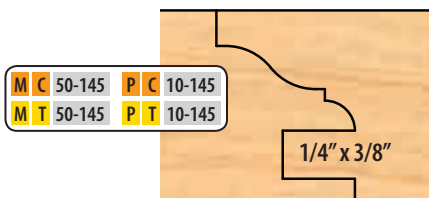
For opposite rotation, add 20% to the suggested list price.
See **custom cutter** ordering information on inside back cover. Same day quoting.
Wood samples shown actual size.
For eased edges add 20% to the suggested list price.

1" to 1-3/8" material

Cope & Pattern

Glass Panel

Tongue & Groove



Double Sided Cope & Pattern (6 Cutter Sets)

Standard sets cut 1/4" wide x 3/8" deep tongue and groove.

For optional tongue and groove cutters and eased edge option, see page 6 and 7.



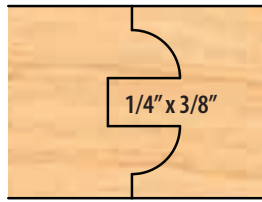
MINI-PRO cutters

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

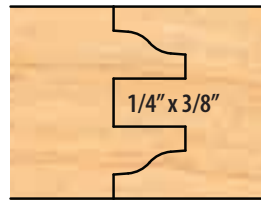
PRO-LINE cutters

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

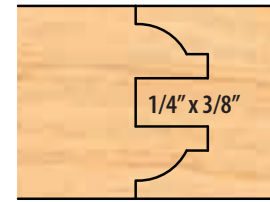
1" to 1-1/4" material



M C 50-310 P C 10-310
M T 50-310 P T 10-310



M C 50-320 P C 10-320
M T 50-320 P T 10-320



M C 50-340 P C 10-340
M T 50-340 P T 10-340

Center Groover Sets (2 Piece 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, you will be unable to do the tongue & groove option

Available on all M-50 and P-10 series cope & patterns. Diameters will no longer be the same, requiring fence adjustments between cuts.



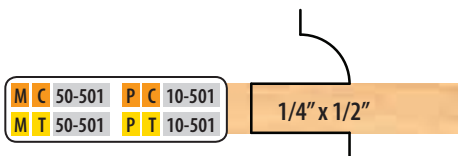
See **custom cutter** ordering information on inside back cover. Same day quoting.

Wood samples shown actual size.

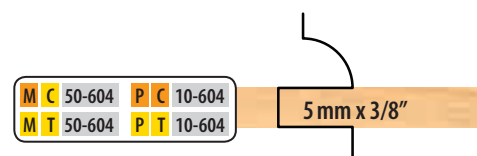
PRODUCT ORDER CODE

- | | | | | | |
|-----|--------|-----|--------|-----------------|---------------|
| M C | 00-000 | P C | 00-000 | M - MINI-PRO | (3/4" Bore) |
| M T | 00-000 | P T | 00-000 | P - PRO-LINE | (1-1/4" Bore) |
| | | | | C - Carbide Tip | (Orange) |
| | | | | T - T-Alloy Tip | (Yellow) |

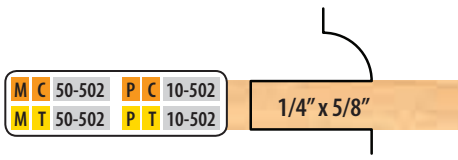
Center Groovers Only - Profile cutters not included



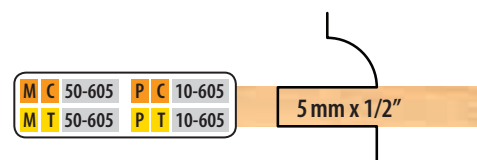
M C 50-501 P C 10-501
M T 50-501 P T 10-501



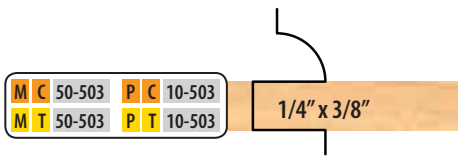
M C 50-604 P C 10-604
M T 50-604 P T 10-604



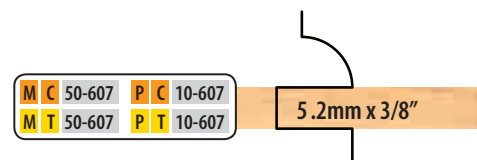
M C 50-502 P C 10-502
M T 50-502 P T 10-502



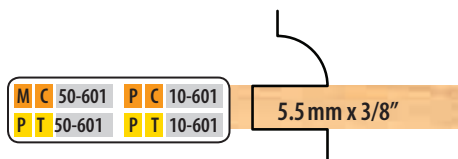
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M T 50-605 P T 10-605



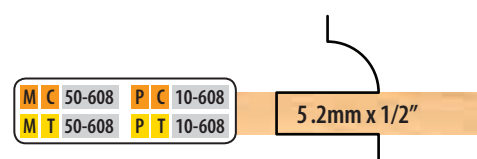
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M T 50-503 P T 10-503



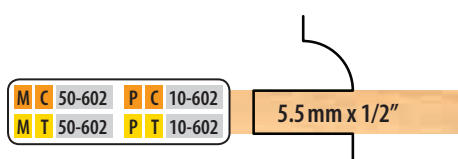
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M T 50-607 P T 10-607



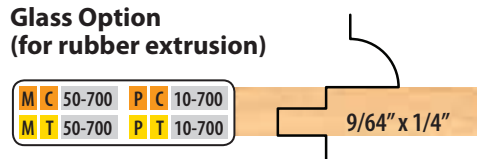
M C 50-601 P C 10-601
P T 50-601 P T 10-601



M C 50-608 P C 10-608
M T 50-608 P T 10-608



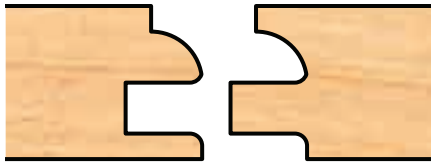
M C 50-602 P C 10-602
M T 50-602 P T 10-602



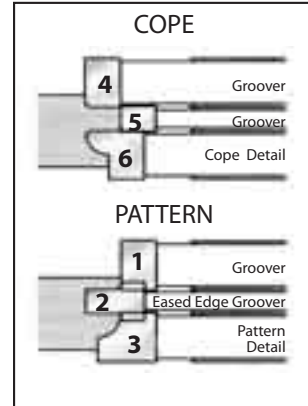
M C 50-700 P C 10-700
M T 50-700 P T 10-700

Glass Option (for rubber extrusion)

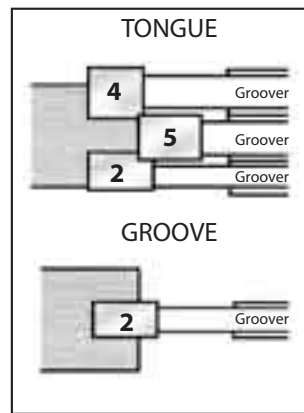
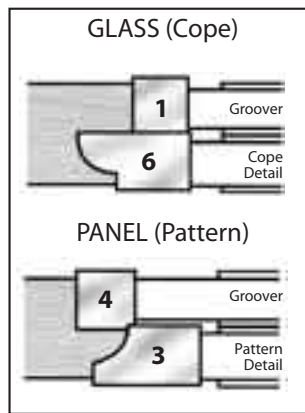
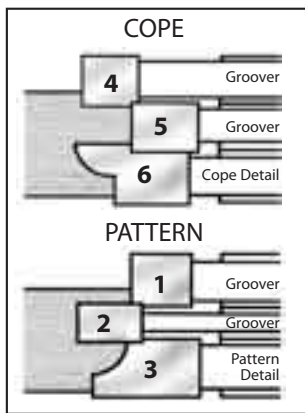
Optional Eased Edge Sets



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



COPE & PATTERN STACKING INSTRUCTIONS

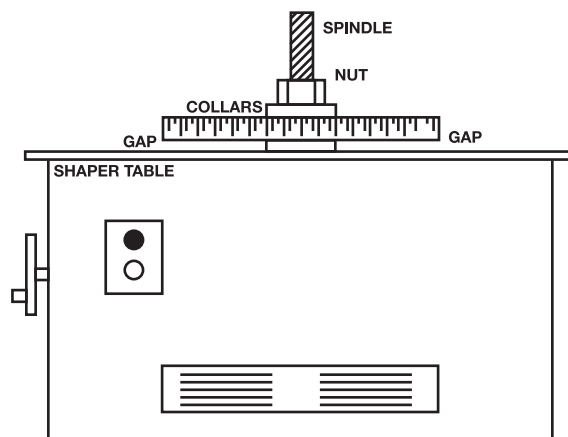


Each function of the 6 piece cope & pattern set requires a different cutter configuration. For desired results, use the following guide to set up each operation.

REMEMBER: Always stagger cutters when stacking. Never stack wing to wing.

CHECK THE ALIGNMENT OF YOUR SPINDLE

1. Unplug your machine. Remove the fence and cutter.
2. Raise the spindle to its highest position and clamp a 12" - 18" steel straight edge between the collars of the spindle.
3. Lower the spindle until the straight edge almost touches the table top.
4. Rotate the spindle by hand, observing the gap between the table top and the straight edge. If this gap is not uniform, indicating shaft misalignment, shim the spindle cartridge, or table, as needed to correct.



Spindle Alignment

REMEMBER: For a proper fit, your shaper must be aligned. Before using any shaper cutter, always check your spindle to ensure it is square with the shaper table. Misalignment here causes off pattern and fitting problems.

Double Sided Cope & Pattern (8 Cutter Sets)

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 facing page).



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

Wood samples shown actual size.

A 3/8" x 5/8" tongue option is available as a no charge exchange.

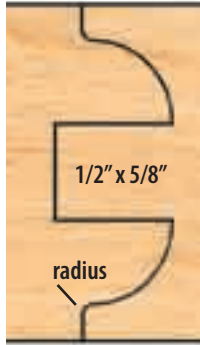
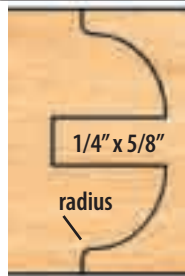
MINI-PRO cutters

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

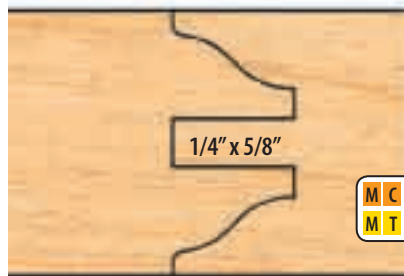
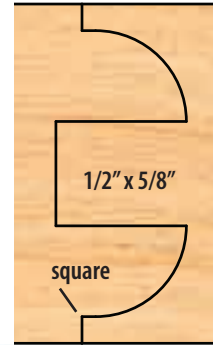
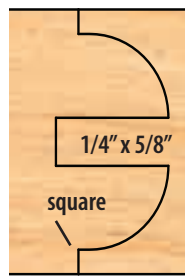
PRO-LINE cutters

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

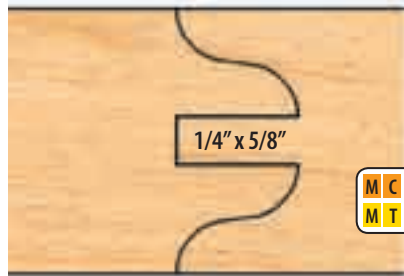
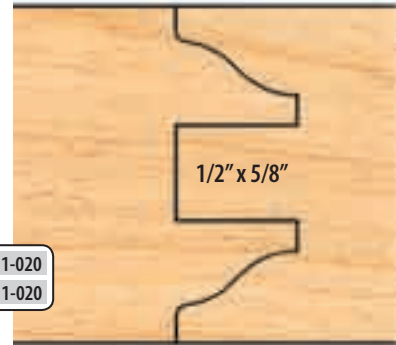
M C 51-010 P C 11-010
M T 51-010 P T 11-010



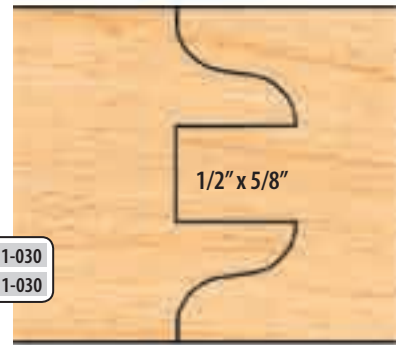
M C 51-011 P C 11-011
M T 51-011 P T 11-011



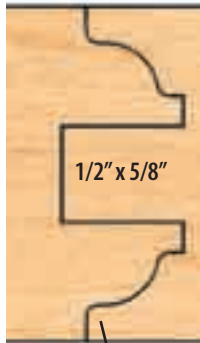
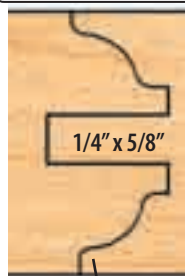
M C 51-020 P C 11-020
M T 51-020 P T 11-020



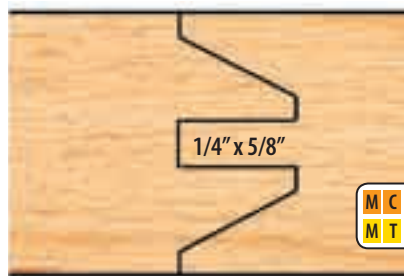
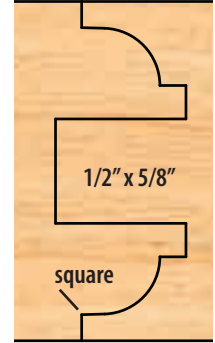
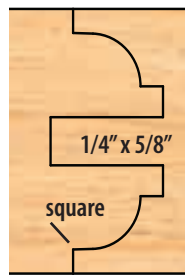
M C 51-030 P C 11-030
M T 51-030 P T 11-030



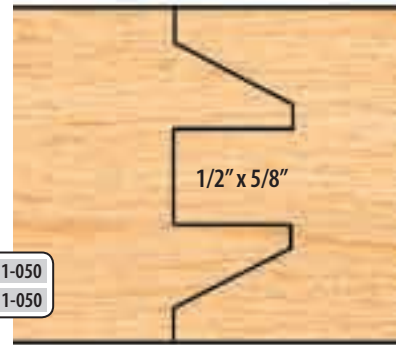
M C 51-040 P C 11-040
M T 51-040 P T 11-040



M C 51-041 P C 11-041
M T 51-041 P T 11-041



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



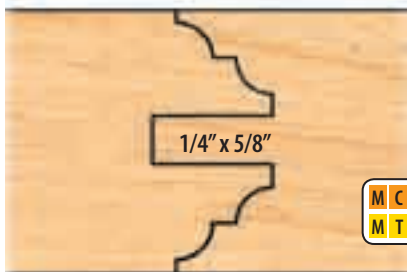
PRODUCT ORDER CODE			
M C	00-000	P C	00-000
M T	00-000	P T	00-000

M - MINI-PRO	(3/4" Bore)
P - PRO-LINE	(1-1/4" Bore)
C - Carbide Tip	(Orange)
T - T-Alloy Tip	(Yellow)

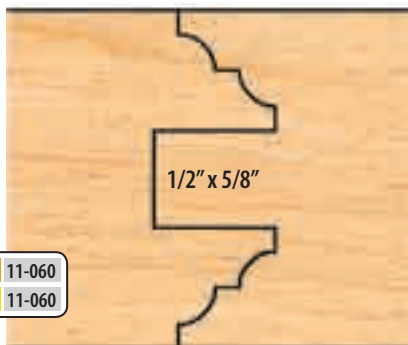
Double Sided Cope & Pattern (8 Cutter Sets)

1-3/4" material

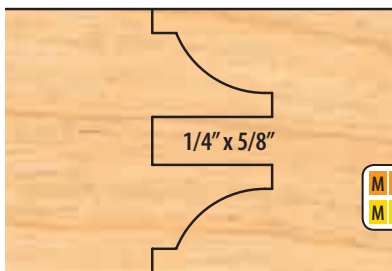
1-3/8" material



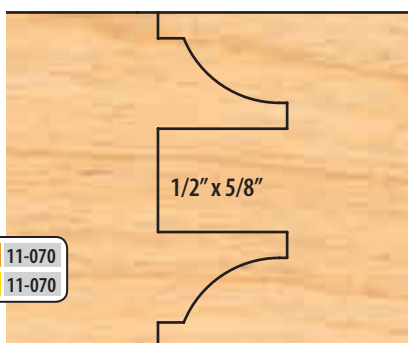
M C	51-060	P C	11-060
M T	51-060	P T	11-060



Eased edges are available for an additional 20%.

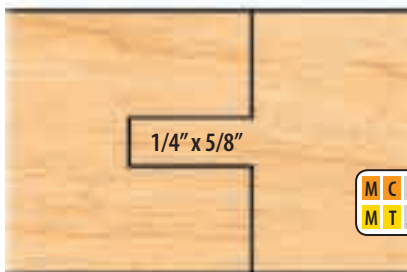


M C	51-070	P C	11-070
M T	51-070	P T	11-070

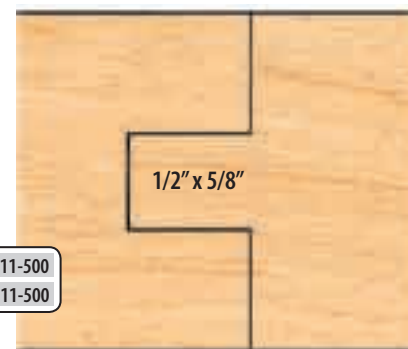


See **custom cutter** ordering information on inside back cover. Same day quoting. Wood samples shown actual size.

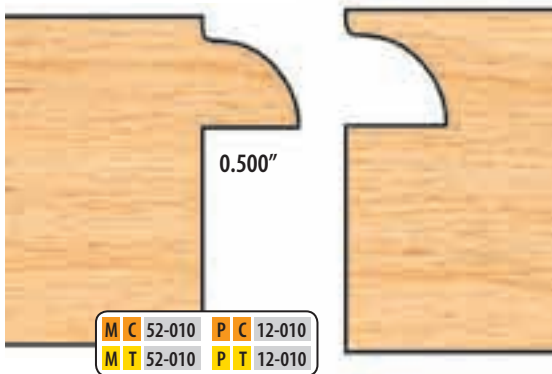
A 3/8" x 5/8" tongue option is available as a no charge exchange.



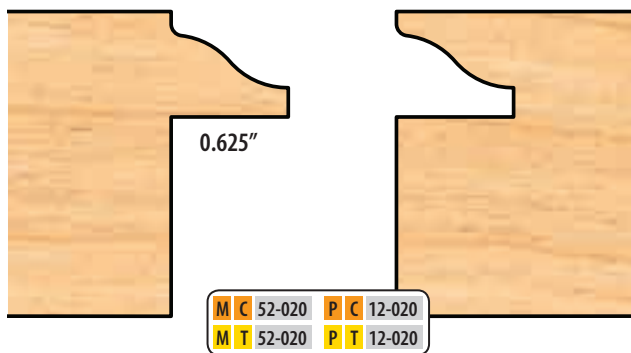
M C	51-500	P C	11-500
M T	51-500	P T	11-500



Optional Glass Panel Groovers (2 Cutter Sets)



Runs with 010, 011, 040, 041 and 060.



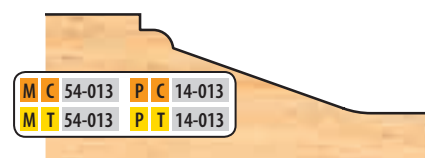
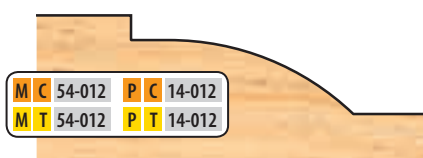
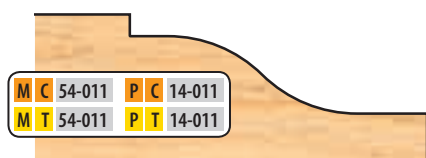
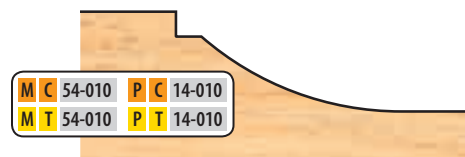
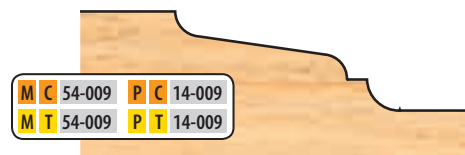
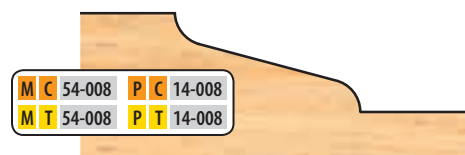
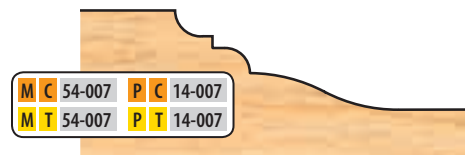
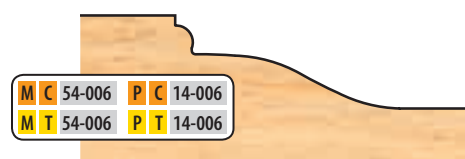
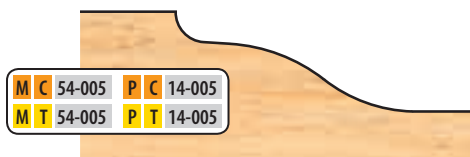
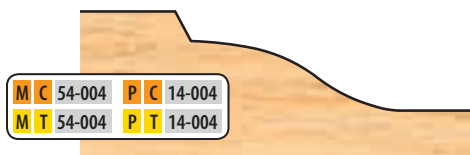
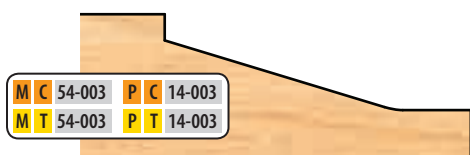
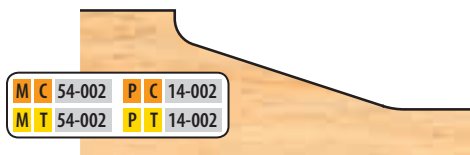
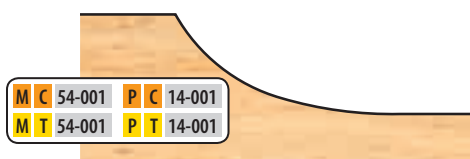
Runs with 020, 030, 050, 070 and 500.

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.



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



MINI-PRO cutters

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

PRO-LINE cutters

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

Raised Panel Shaper Cutters (1/2" Material)

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

Counterclockwise rotation with wood fed face up.

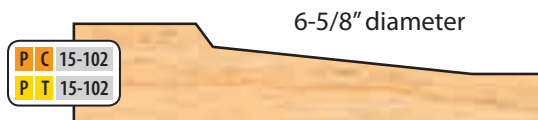
These raised panel cutters cut a 1-3/8" reveal plus a 3/8" long tongue.

Reduce production time by adding an opposite rotation cutter to those above, and produce double sided raised panels in a single pass.

Opposite rotation cutters are made to order. Please allow 7-10 days.

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



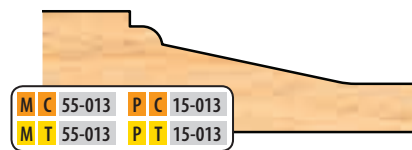
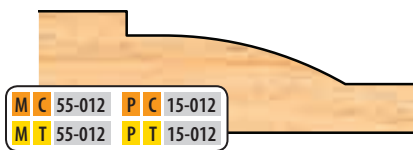
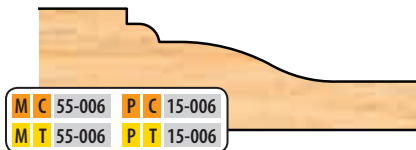
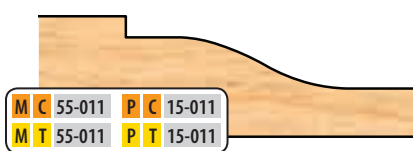
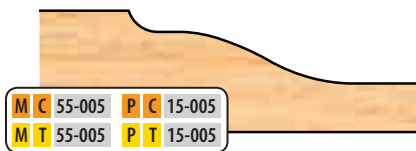
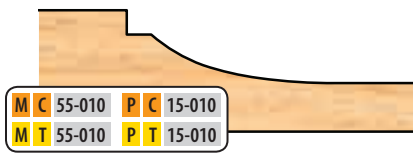
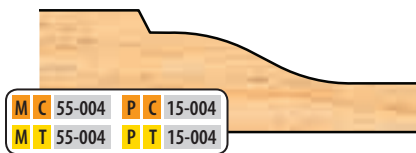
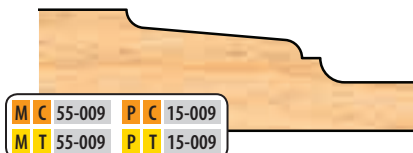
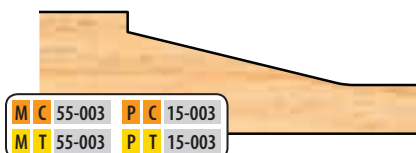
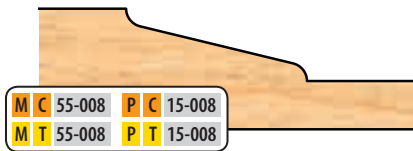
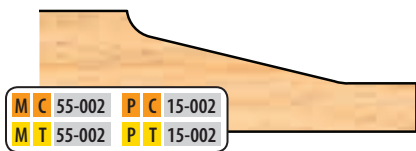
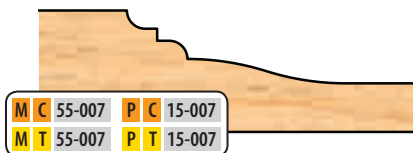
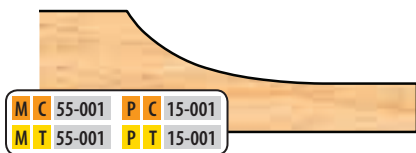
MINI-PRO cutters

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

PRO-LINE cutters

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

Raised Panel Shaper Cutters (5/8" Material)



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

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

Wood samples shown actual size.

Use with a back cutter to cut 3/4" material.

Back Cutters - Raised Panel (3/4" Material)

MINI-PRO cutters

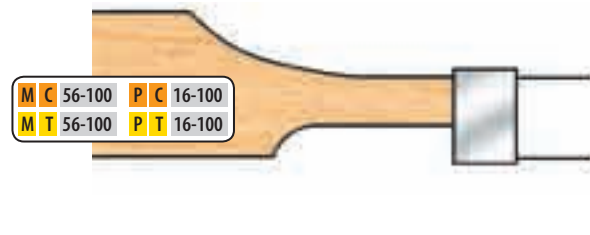
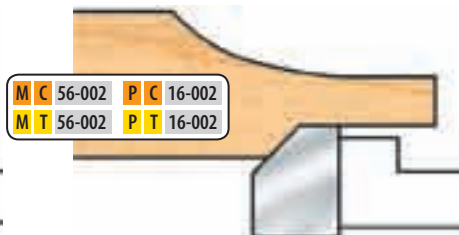
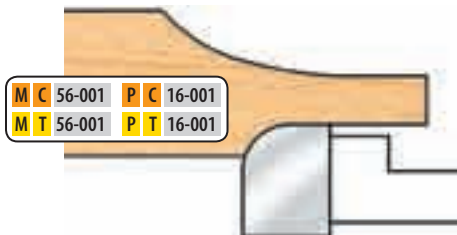
- 3 wing • 3-3/8" diameter
- 3/4" bore

Does not include Raised Panel Cutter

PRO-LINE cutters

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

Use with a 55/15 series raised panel for 3/4" material.



Raised Panel Tongue Trimmer

MINI-PRO cutters

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

Does not include Raised Panel Cutter

PRO-LINE cutters

- 3 wing • 3" diameter
- 1-1/4" bore

Door Edge Detail Shaper Cutters

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.

Many more profiles are shown on pages 14 and 15.

If you don't see what you need, check out our custom cutter page on the inside back cover.



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


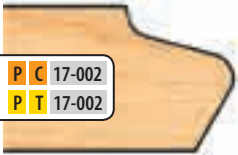
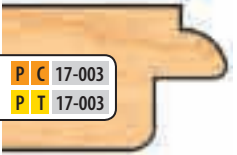
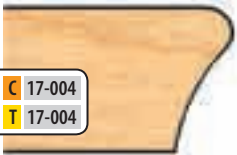
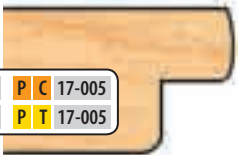
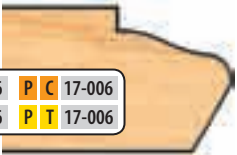
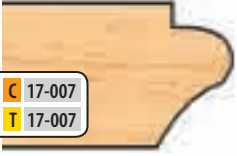
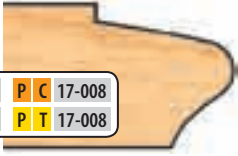
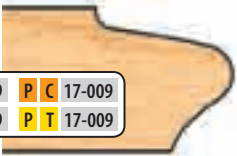
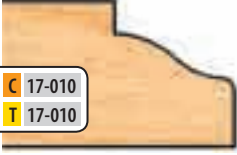
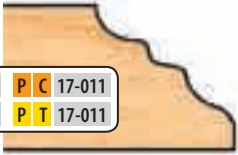
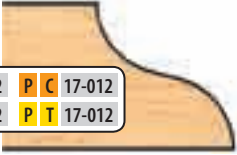

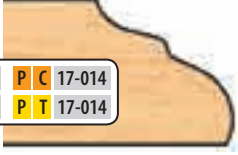

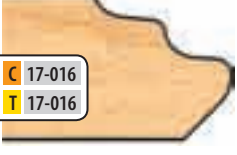
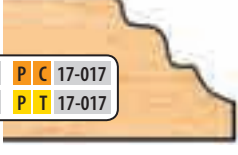
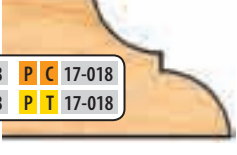

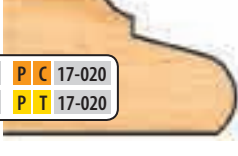

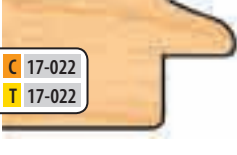



Wood samples shown actual size.

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

 M C 57-001 P C 17-001 M T 57-001 P T 17-001	 M C 57-002 P C 17-002 M T 57-002 P T 17-002	 M C 57-003 P C 17-003 M T 57-003 P T 17-003
 M C 57-004 P C 17-004 M T 57-004 P T 17-004	 M C 57-005 P C 17-005 M T 57-005 P T 17-005	 M C 57-006 P C 17-006 M T 57-006 P T 17-006
 M C 57-007 P C 17-007 M T 57-007 P T 17-007	 M C 57-008 P C 17-008 M T 57-008 P T 17-008	 M C 57-009 P C 17-009 M T 57-009 P T 17-009
 M C 57-010 P C 17-010 M T 57-010 P T 17-010	 M C 57-011 P C 17-011 M T 57-011 P T 17-011	 M C 57-012 P C 17-012 M T 57-012 P T 17-012
 M C 57-013 P C 17-013 M T 57-013 P T 17-013	 M C 57-014 P C 17-014 M T 57-014 P T 17-014	 M C 57-015 P C 17-015 M T 57-015 P T 17-015
 M C 57-016 P C 17-016 M T 57-016 P T 17-016	 M C 57-017 P C 17-017 M T 57-017 P T 17-017	 M C 57-018 P C 17-018 M T 57-018 P T 17-018
 M C 57-019 P C 17-019 M T 57-019 P T 17-019	 M C 57-020 P C 17-020 M T 57-020 P T 17-020	 M C 57-021 P C 17-021 M T 57-021 P T 17-021
 M C 57-022 P C 17-022 M T 57-022 P T 17-022	 M C 57-023 P C 17-023 M T 57-023 P T 17-023	 M C 57-029 P C 17-029 M T 57-029 P T 17-029
 M C 57-024 P C 17-024 M T 57-024 P T 17-024		

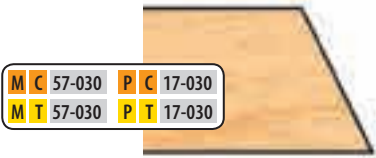
57-029 has 4" diameter
17-029 has 4-1/2" diameter
For this finger pull detail, the wood is cut at a 30° incline.

Door Edge Detail Bevel Cutters

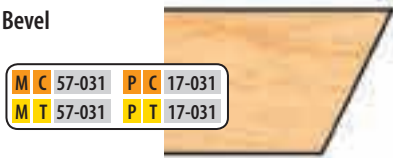
For a different angle or a wider bevel cutter than those shown, ask our custom cutter department for a quote (See inside back cover).

All bevel cutters are open body style.

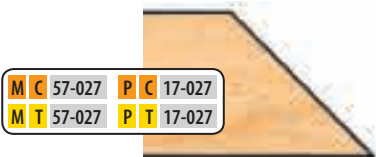
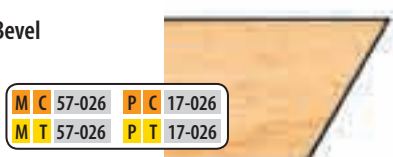
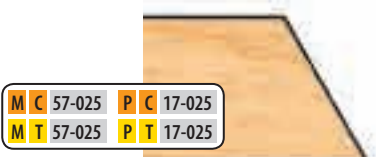
MINI-PRO cutters	PRO-LINE cutters
• 3 wing	• 3 wing
• 3/4" bore • 1" wide tips	• 1-1/4" bore • 1" wide tips



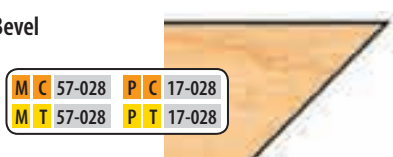
22.5° Bevel



30° Bevel



45° Bevel



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

Bead Cutters

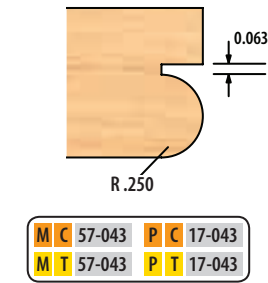
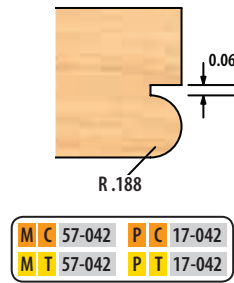
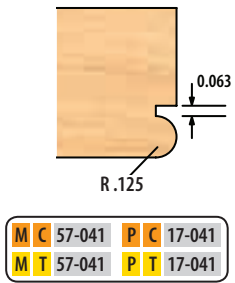
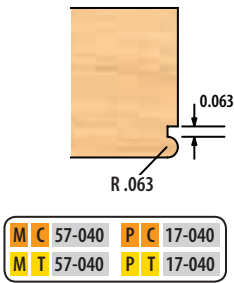
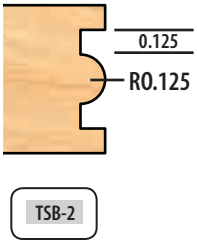
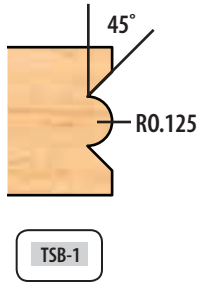


Table Saw Bead Cutters

- 6 wing
- 5/8" bore
- 8" diameter



Door Edge Details (32mm Hinge System)

MINI-PRO cutters

- 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

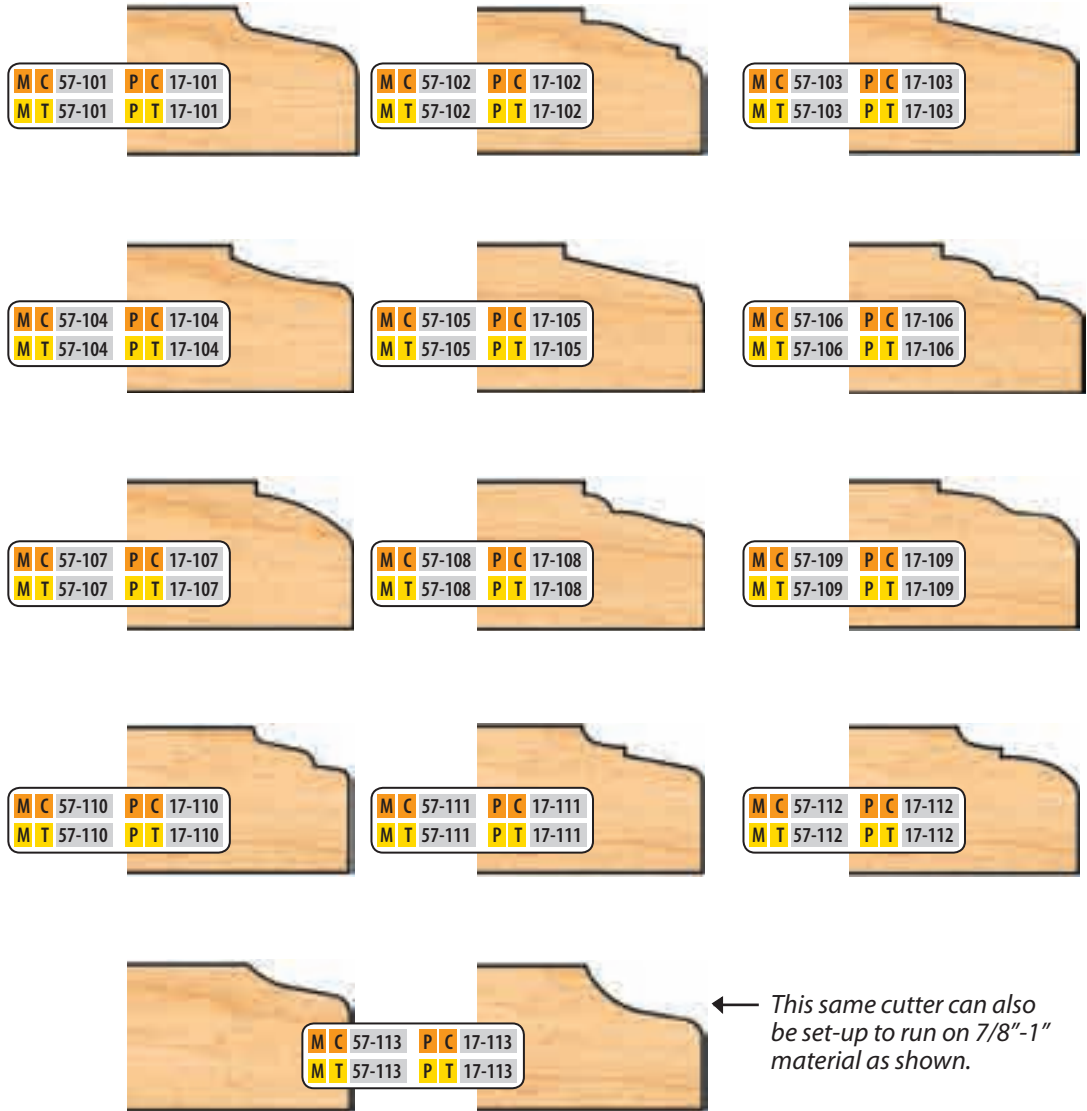
Part number is for top cutter only.

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.

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



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

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

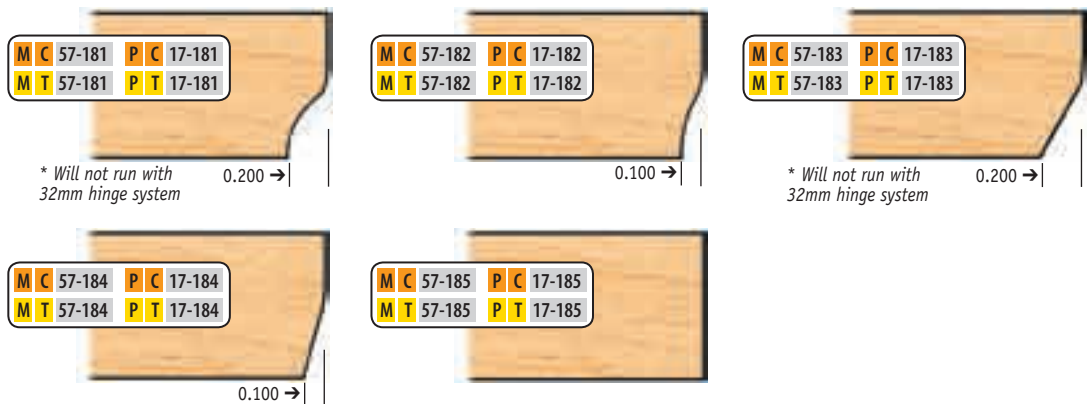
Wood samples shown actual size.

Bottom Cutter Profiles

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.

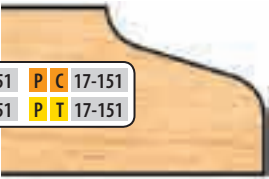
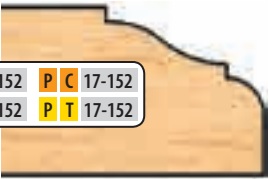
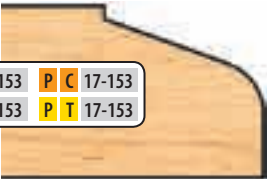
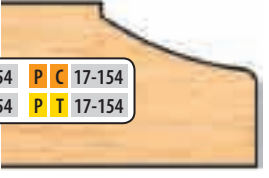

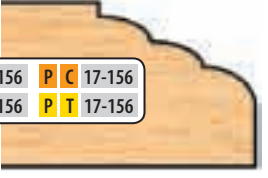
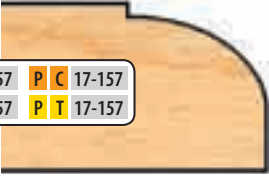
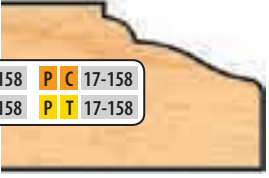
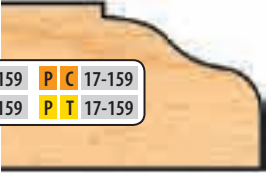
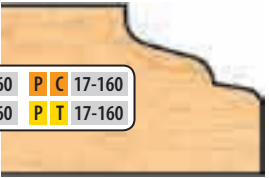
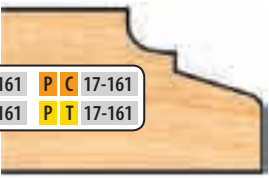
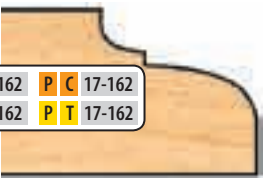


PRODUCT ORDER CODE			
M C	00-000	P C	00-000
M T	00-000	P T	00-000
M - MINI-PRO	(3/4" Bore)	P - PRO-LINE	(1-1/4" Bore)
		C - Carbide Tip	(Orange)
		T - T-Alloy Tip	(Yellow)

Door Edge Details (32mm Hinge System)

Part number is for top cutter only.

Top Cutter Profiles 7/8" to 1" material

		
M C 57-151 P C 17-151 M T 57-151 P T 17-151	M C 57-152 P C 17-152 M T 57-152 P T 17-152	M C 57-153 P C 17-153 M T 57-153 P T 17-153
		
M C 57-154 P C 17-154 M T 57-154 P T 17-154	M C 57-155 P C 17-155 M T 57-155 P T 17-155	M C 57-156 P C 17-156 M T 57-156 P T 17-156
		
M C 57-157 P C 17-157 M T 57-157 P T 17-157	M C 57-158 P C 17-158 M T 57-158 P T 17-158	M C 57-159 P C 17-159 M T 57-159 P T 17-159
		
M C 57-160 P C 17-160 M T 57-160 P T 17-160	M C 57-161 P C 17-161 M T 57-161 P T 17-161	M C 57-162 P C 17-162 M T 57-162 P T 17-162



See custom cutter ordering information on inside back cover. Same day quoting.
Wood samples shown actual size.

MINI-PRO cutters

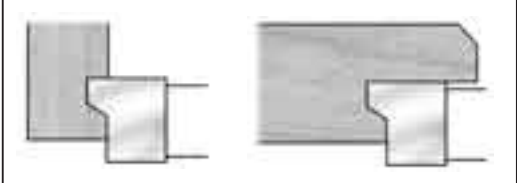
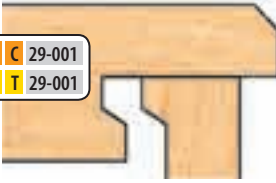
- 3 wing • 2-15/16" diameter
- 3/4" bore

PRO-LINE cutters

- 3 wing • 5" 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. Made to cut up to 3/4" drawer sides. Counterclockwise rotation only.

	
M C 69-001 P C 29-001 M T 69-001 P T 29-001	

MINI-PRO cutters



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

PRO-LINE cutters

- 3 wing • 4" diameter
- 1-1/4" bore

Matched Drop Leaf

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.

	
M C 66-001 P C 26-001 M T 66-001 P T 26-001	

MINI-PRO cutters

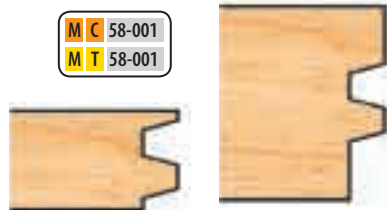
- 3 wing • 2-15/16" diameter
- 3/4" bore • 1" wide tips
- Cuts from 1/2" to 7/8" material

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

Reversible Glue Joint

Creates an incredibly strong joint by interlocking the glue surfaces.

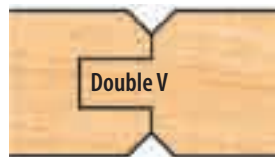


V-Paneling Shaper Cutter Set

The V-Paneling set consists of 5 cutters and 1 spacer to perform these 4 functions. Counterclockwise rotation with wood fed face down.

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

Wood samples shown actual size.



MINI-PRO cutters

- 3 wing • 2-15/16" diameter
- 3/4" bore • Designed to run with 2-3/16" diam. rub bearing

PRO-LINE cutters

- 3 wing • 4" diameter
- 1-1/4" bore • Designed to run with 3-1/4" diam. rub bearing

3/4" to 1" material



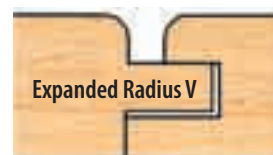
7-PC. Flooring Set

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

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

Counterclockwise rotation with wood fed face down.

3/4" to 1" material



MINI-PRO cutters

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

PRO-LINE cutters

- 3 wing • 4" diameter
- 1-1/4" bore

5-PC. Flooring Set with Nail Slot

MINI-PRO cutters

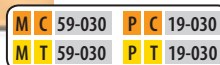
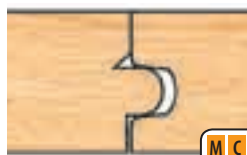
- 3 wing • 2-15/16" diameter
- 3/4" bore

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

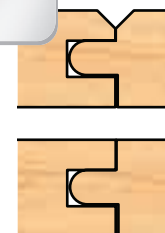
1/2" material

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

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

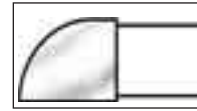
PRO-LINE cutters

- 3 wing • 4" diameter
- 1-1/4" bore

Number				Radius				
M C	60-002	M T	60-002	P C	20-002	P T	20-002	1/8"
M C	60-004	M T	60-004	P C	20-004	P T	20-004	1/4"
M C	60-006	M T	60-006	P C	20-006	P T	20-006	3/8"
M C	60-008	M T	60-008	P C	20-008	P T	20-008	1/2"
M C	60-012	M T	60-012	P C	20-012	P T	20-012	3/4"

Quarter Cove Convex Cutters

Counterclockwise rotation with wood fed face down.



MINI-PRO cutters

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

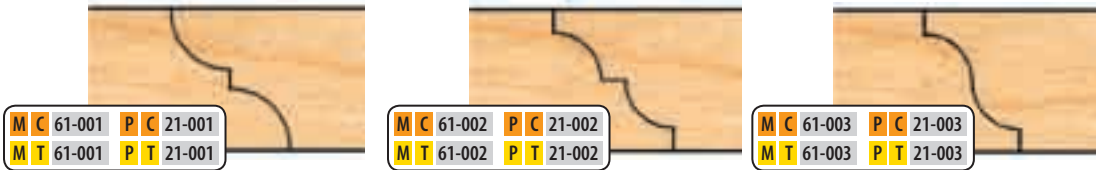
PRO-LINE cutters

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

Counterclockwise rotation with wood fed face up.

Reversible Pattern Detail

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



MINI-PRO cutters

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

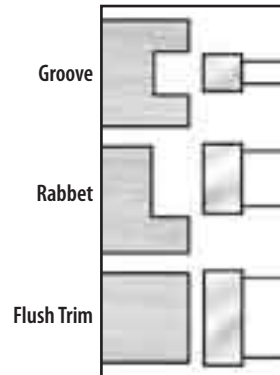
PRO-LINE cutters

- 3 wing • 4" diameter
- 1-1/4" bore • Designed for use with 4" diam. rub bearing for flush trim application

Straight Top Groovers

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

Number				Width				
M C	62-002	M T	62-002	P C	22-002	P T	22-002	1/8"
M C	62-004	M T	62-004	P C	22-004	P T	22-004	1/4"
M C	62-005	M T	62-005	P C	22-005	P T	22-005	5/16"
M C	62-006	M T	62-006	P C	22-006	P T	22-006	3/8"
M C	62-007	M T	62-007	P C	22-007	P T	22-007	7/16"
M C	62-008	M T	62-008	P C	22-008	P T	22-008	1/2"
M C	62-010	M T	62-010	P C	22-010	P T	22-010	5/8"
M C	62-012	M T	62-012	P C	22-012	P T	22-012	3/4"
M C	62-014	M T	62-014	P C	22-014	P T	22-014	7/8"
M C	62-016	M T	62-016	P C	22-016	P T	22-016	1"
M C	62-020	M T	62-020	P C	22-020	P T	22-020	1-1/4"
M C	62-024	M T	62-024	P C	22-024	P T	22-024	1-1/2"
M C	62-028	M T	62-028	P C	22-028	P T	22-028	1-3/4"
M C	62-032	M T	62-032	P C	22-032	P T	22-032	2"



MINI-PRO cutters

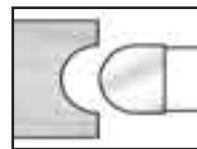
- 3 wing • 2-15/16" diameter
- 3/4" bore

PRO-LINE cutters

- 3 wing • 4" diameter
- 1-1/4" bore

Half Round Convex Shaper Cutters

Number				Width		Radius			
M C	63-002	M T	63-002	P C	23-002	P T	23-002	1/4"	1/8"
M C	63-003	M T	63-003	P C	23-003	P T	23-003	3/8"	3/16"
M C	63-004	M T	63-004	P C	23-004	P T	23-004	1/2"	1/4"
M C	63-006	M T	63-006	P C	23-006	P T	23-006	3/4"	3/8"
M C	63-008	M T	63-008	P C	23-008	P T	23-008	1"	1/2"



Flute



MINI-PRO cutters

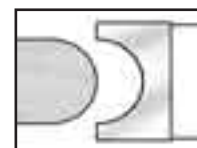
- 3 wing • 2-15/16" diameter
- 3/4" bore

PRO-LINE cutters

- 3 wing • 4" diameter
- 1-1/4" bore

Half Round Concave Shaper Cutters

Number				Opening Width		Radius			
M C	64-002	M T	64-002	P C	24-002	P T	24-002	1/4"	1/8"
M C	64-003	M T	64-003	P C	24-003	P T	24-003	3/8"	3/16"
M C	64-004	M T	64-004	P C	24-004	P T	24-004	1/2"	1/4"
M C	64-006	M T	64-006	P C	24-006	P T	24-006	3/4"	3/8"
M C	64-008	M T	64-008	P C	24-008	P T	24-008	1"	1/2"
M C	64-009	M T	64-009	P C	24-009	P T	24-009	1-1/8"	9/16"
M C	64-010	M T	64-010	P C	24-010	P T	24-010	1-1/4"	5/8"
M C	64-010	M T	64-010	P C	24-012	P T	24-012	1-1/2"	3/4"



Bullnose

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



Corner Rounding Shaper Cutters

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

Counterclockwise rotation with wood fed face down.



MINI-PRO cutters

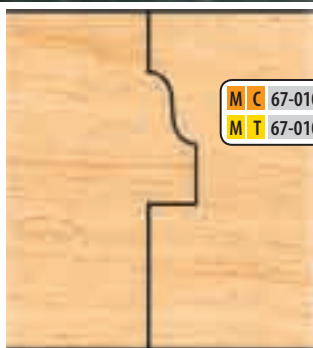
- 3 wing • 2-15/16" diameter
- 3/4" bore

PRO-LINE cutters

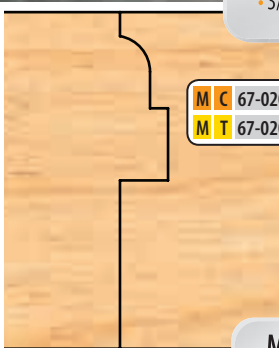
- 3 wing • 4" diameter (unless specified)
- 1-1/4" bore

Number		(R = Opposite Rotation)		Radius		Diameter							
M	C	65-002	M	T	65-002	P	C	25-002	P	T	25-002	1/8"	4"
M	C	65-002R	M	T	65-002R	P	C	25-002R	P	T	25-002R	1/8"	4"
M	C	65-003	M	T	65-003	P	C	25-003	P	T	25-003	3/16"	4"
M	C	65-004	M	T	65-004	P	C	25-004	P	T	25-004	1/4"	4"
M	C	65-004R	M	T	65-004R	P	C	25-004R	P	T	25-004R	1/4"	4"
M	C	65-005	M	T	65-005	P	C	25-005	P	T	25-005	5/16"	4"
M	C	65-006	M	T	65-006	P	C	25-006	P	T	25-006	3/8"	4"
M	C	65-006R	M	T	65-006R	P	C	25-006R	P	T	25-006R	3/8"	4"
M	C	65-008	M	T	65-008	P	C	25-008	P	T	25-008	1/2"	4"
M	C	65-010	M	T	65-010	P	C	25-010	P	T	25-010	5/8"	4"
M	C	65-012	M	T	65-012	P	C	25-012	P	T	25-012	3/4"	4"
						P	C	25-014	P	T	25-014	7/8"	4-1/2"
						P	C	25-016	P	T	25-016	1"	4-1/2"
						P	C	25-020	P	T	25-020	1-1/4"	5"
						P	C	25-024	P	T	25-024	1-1/2"	5-1/2"
						P	C	25-028	P	T	25-028	1-3/4"	6-1/2"
						P	C	25-032	P	T	25-032	2"	6-1/2"

Window Sash Cutter Set (4 Cutter Set)



M C 67-010 P C 27-010
M T 67-010 P T 27-010



M C 67-020 P C 27-020
M T 67-020 P T 27-020

MINI-PRO cutters

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

PRO-LINE cutters

- 3 wing • 4" diameter
- 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".

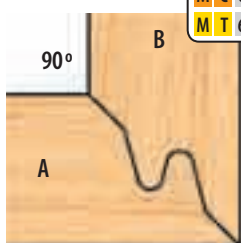
Counterclockwise rotation with wood fed face down.

Double Tongue & Groove Lock Mitre Cutter

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).



M C 68-001 P C 28-001
M T 68-001 P T 28-001



MINI-PRO cutters

- 3 wing • 4.05 diameter
- 3/4" bore • 1-1/8" wide tips
- Use on 3/4" spindles only

PRO-LINE cutters

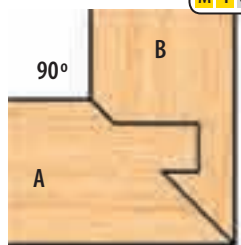
- 3 wing • 5.05 diameter
- 1-1/4" bore • 1-1/8" wide tips

Single Tongue & Groove Lock Mitre Cutter (3 Cutter Set)

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).



M C 68-020 P C 28-020
M T 68-020 P T 28-020



GCS-0806-1/4" TABLE SAW GROOVER Available in Carbide only as a stock item.

Use this solid head saw groover on your table saw to cut part "B" as shown. 8" diameter. 6 wing. Alternate shear face. 1/4" cut. 5/8" Bore.

MINI-PRO cutters

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

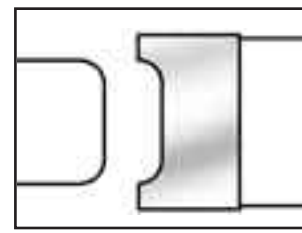
PRO-LINE cutters

- 3 wing • 4" diameter
- 1-1/4" bore

1-Piece Double Easing Cutters

Custom rub bearings available for these cutters.

Number				Width	Radius
M C	71-006	M T	71-006	3/8"	1/8"
M C	71-008	M T	71-008	1/2"	1/8"
M C	71-012	M T	71-012	3/4"	1/8"
M C	71-016	M T	71-016	1"	1/8"
M C	71-020	M T	71-020	1-1/4"	1/8"
M C	71-024	M T	71-024	1-1/2"	1/8"
P C	31-006	P T	31-006		
P C	31-008	P T	31-008		
P C	31-012	P T	31-012		
P C	31-016	P T	31-016		
P C	31-020	P T	31-020		
P C	31-024	P T	31-024		



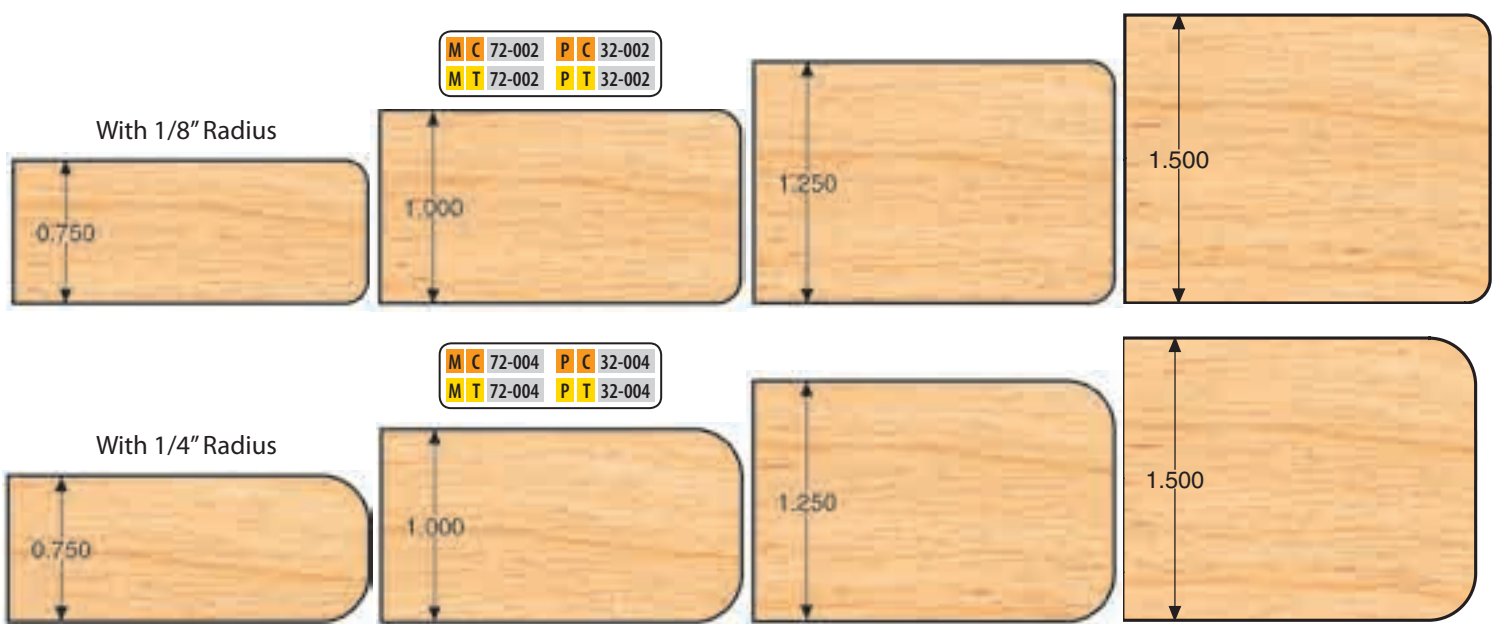
MINI-PRO cutters

- 3 wing • 2-3/16" minor
- 3/4" bore

PRO-LINE cutters

- 3 wing • 3" minor
- 1-1/4" bore

4-Piece Expandable Double Easing Set



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

MINI-PRO cutters

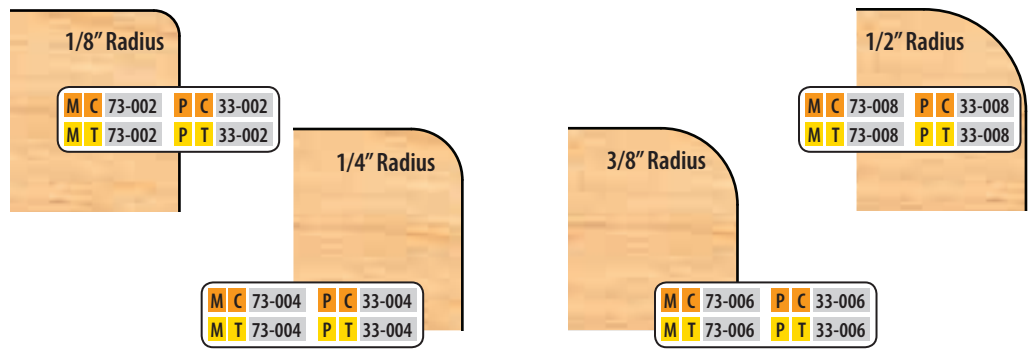
- 3 wing • 2-15/16" diameter
- 3/4" bore

PRO-LINE cutters

- 3 wing • 4" diameter
- 1-1/4" bore

Extended Corner Rounds

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



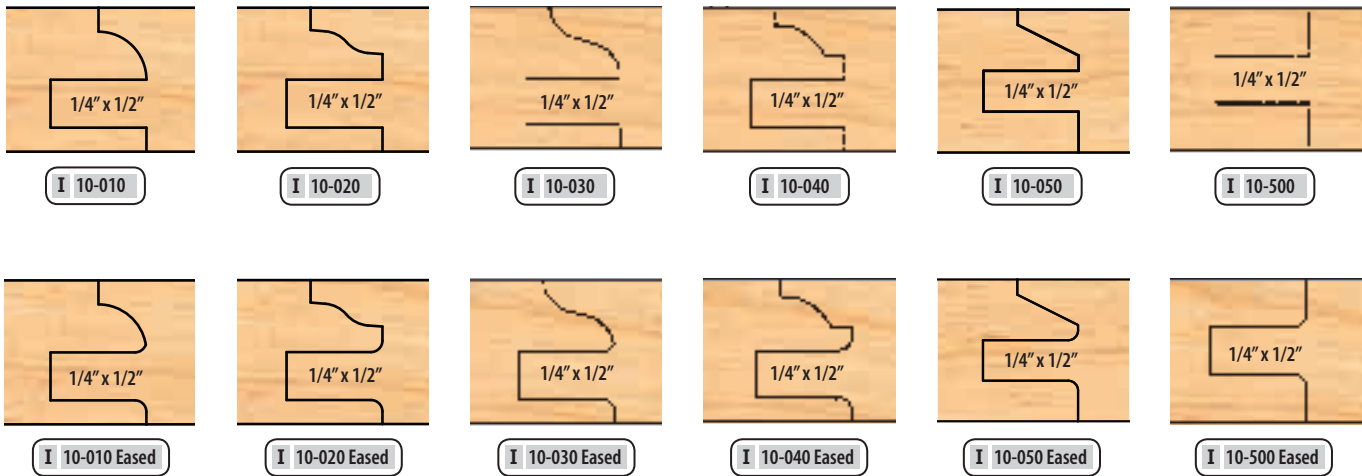
INSERT TOOLING

Insert tooling with Freeborn quality, designed for accuracy and ease of use. Our insert tooling features the following benefits:

- **Common minor diameters and verticle profile centering.**
With these two features you do not need to adjust the spindle height or fence position when switching from cope to pattern cuts.
- **Easy indexing when replacing tips.**
Using a locating button on all sets, and a locking gib system for the cope and pattern sets and detail sets, changing tips is a quick and accurate process.
- **Cope and Pattern bodies will accept both square and eased edge tips**
- **Dedicated bodies for each profile ensure maximum safety and accuracy.**
- **Cope and Pattern:** Outside diameter 4-1/2"
4" OD available by special order
Minor Diameter 3-1/2"
1-1/4" Bore
- **Raised Panel:** Outside diameter 6"
Minor Diameter 3"
1-1/4" Bore

Additional Freeborn profiles will be added on an ongoing basis. Please call us for updates.

Cope & Pattern Insert Cutters (3/4" to 7/8" material)



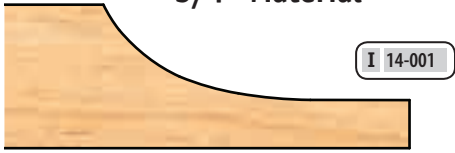
Straight Cutter Inserts

Part #	Description
IC 22-016	30mm tips. 4" outside diameter.
IC 22-016-S	30mm tips with 14mm x 14mm spurs. 4" outside diameter.
IC 22-032	60mm tips. 4" outside diameter.
IC 22-032-S	60mm tips with 14mm x 14mm spurs. 4" outside diameter.
F 25591	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.
IR 0030	30mm replacement inserts. Set of 10
IR 0060	60mm replacement inserts. Set of 10
IR 1414	14mm replacement inserts. Set of 10

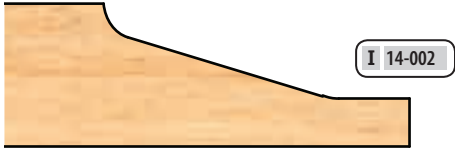
Using standard 30mm or 60mm carbide inserts, this is an easy and inexpensive way to perform trim or rabbet cuts. Please note: spurs are required for all cuts except trimming.

Raised Panel Insert Cutters

3/4" Material



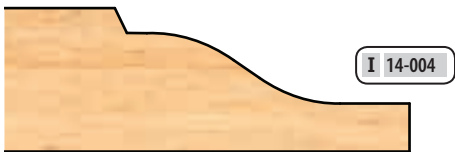
I 14-001



I 14-002



I 14-003



I 14-004



I 14-005

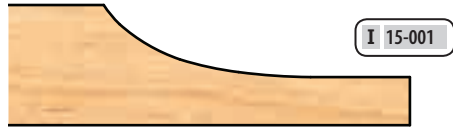


I 14-006

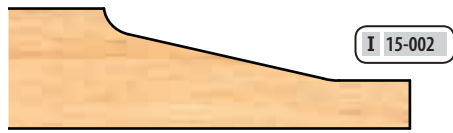


I 14-007

5/8" Material



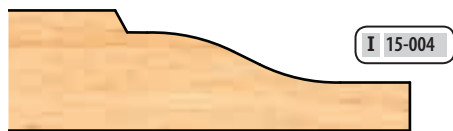
I 15-001



I 15-002



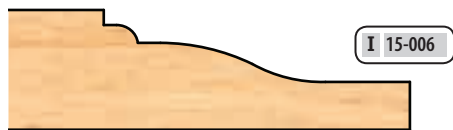
I 15-003



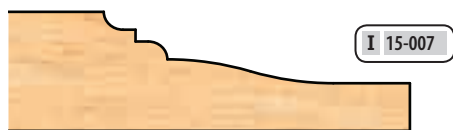
I 15-004



I 15-005

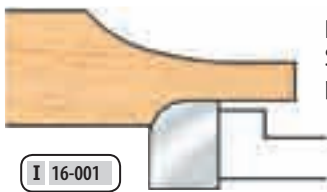


I 15-006



I 15-007

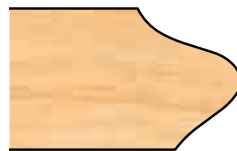
Back Cutter – Raised Panel



I 16-001

Runs with "15" Series raised panel cutters

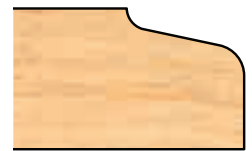
Door Edge Detail Insert Cutters



I 17-001



I 17-002



I 17-101

Ball Bearing Rub Collars

Number	Bore	Diam.
AM 90-026	3/4"	1-5/8"
AM 90-027	3/4"	1-11/16"
AM 90-033	3/4"	2-1/16"
AM 90-035	3/4"	2-3/16"
AM 90-039	3/4"	2-7/16"
AM 90-047	3/4"	2-15/16"

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"



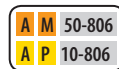
Rub Spacers for Cope & Pattern



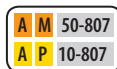
1/4" x 3/8"
tongue



1/4" x 1/2"
tongue



5.5 x 3/8"
tongue



5.5 x 1/2"
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.

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

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

Long Style

Number	Bore	Width
AM 91-008	1/2"	3/4"
AX 91-012	3/4"	1"
AP 91-012	3/4"	1-1/4"
AP 91-016	1"	1-1/4"
AP 91-016 XL*	1"	1-1/4"
AP 91-017	30mm	1-1/4"
AP 91-018	1-1/8"	1-1/4"

* for use with double sided Cope and Pattern sets

Short Style

Number	Bore	Width
AM 92-008	1/2"	3/4"
AX 92-012	3/4"	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	1-1/8"	1-1/4"

Double Sided

Number	Bore	Width
AM 93-008	1/2"	3/4"
AP 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"

Spacers and Shims

Spacers - Used in a wide range of woodworking applications.

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

Spacers

Number	Bore	Width
AM 94-002	3/4"	1/8"
AM 94-004	3/4"	1/4"
AM 94-006	3/4"	3/8"
AM 94-008	3/4"	1/2"
AM 94-010	3/4"	5/8"
AM 94-012	3/4"	3/4"
AM 94-016	3/4"	1"
AP 94-002	1-1/4"	1/8"
AP 94-004	1-1/4"	1/4"
AP 94-006	1-1/4"	3/8"
AP 94-008	1-1/4"	1/2"
AP 94-010	1-1/4"	5/8"
AP 94-012	1-1/4"	3/4"
AP 94-016	1-1/4"	1"

Shims

Number	Bore	Qty.	Color	Thickness	Qty.	Color	Thickness
AM 95-008	1/2"	6	Green	.003"	6	Black	.0125"
AM 95-012	3/4"	6	Blue	.005"	6	Pink	.015"
AP 95-016	1"	6	Matte	.0075"	6	Yellow	.020"
AP 95-018	1-1/8"	6	Brown	.010"	6	Coral	.030"
AP 95-020	1-1/4"						

The Shaper Book by Lonnie Bird

More than just a primer on shaper techniques, this book gives shop-proven examples of how the shaper can be put to use. With an emphasis on safety, this book is a step-by-step guide that will teach you all about the shaper: from basic setups to creating curved molding profiles to designing shaper jigs that will expand your woodworking potential.



Lonnie Bird is a professional woodworker and teaches seminars nationwide on shaper use. He presents a wealth of information and tips on how shapers can increase the quality and efficiency of your work. This easy-to-read book is a must for the serious woodworker's library and shop.

Custom Information Page

Technical Assistance

Many cutting applications require more than a stock answer. T-Alloy or Carbide, multiple wings, shear face, climb cutting, or the use of outboard fences and power feeds. The specialized sales and engineering staff at Freeborn 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.



Tool Company has designed, engineered, and manufactured its own profiling equipment, facing machines, and dual side grinders for in-plant use. Coupled with high powered comparators, this equipment has proven to consistently meet our own strict tolerances in manufacturing.

Fast Delivery

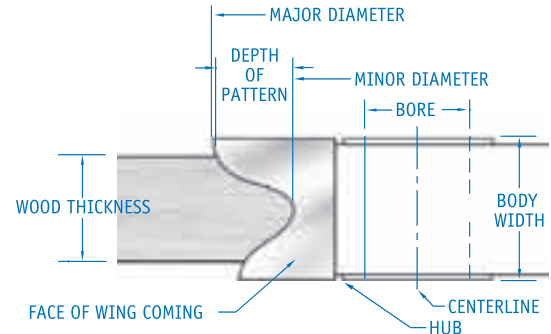
Quick turnaround and delivery

are essential. Fax your dimensional drawings to us and we will immediately process your order. Same day quotes are the rule.

Ease of Reordering

Every custom-made Freeborn 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.



Ordering Your Custom Cutter

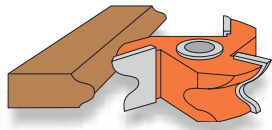
Please provide the following information:

1. Number of wings
2. Cutter diameter
3. Bore size
4. Cutter rotation
5. Material running face up or face down
6. Type of wood you are cutting
7. Cutting with or across the grain
8. Sketch of cutter pattern (dimensional side views are preferred) or wood sample
9. Specify T-Alloy or Carbide

Unsurpassed Quality

Our cutters are geometrically precise to the highest standards. For years Freeborn





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