## INDUSTRIAL

# Aluminum CNC Spiral 'O' Flute 




## Benefits of Mirror Finish:

- Razor sharp cutting edge
- Effortless chip removal
- Helps prevent chip re-welding
- Extends tool life
- Exceptional cut quality



## Excellent For Cutting:

- Aluminum
- Aluminum 6061
- Aluminum Alloys
- Aluminum Composite Material (ACM)
- Aluminum Composite Panel (ACP)
- ALPOLIC ${ }^{\circledR}$ Copper Composite Material (CCM)
- Alucobond ${ }^{\text {e }}$
- Alupanel ${ }^{\text {® }}$
- Brass
- Copper
- Dibond ${ }^{\circledR}$
- Durabond
- e-panel ${ }^{\text {TM }}$
- Etalbond ${ }^{\oplus}$
- Gold
- Silver
- Titanium Composite

Material (TCM)

- Wood

A Warning: Never attempt to cut ferrous metals with these bits. Inspect cut quality, adjust feed / speed accordingly. For optimal results and extended tool life use mist lubricant system or air cooling.

CNC feed and speed available online

## CNC ALUMINUM CUTTING SPIRAL '0' FLUTE

Solid Carbide • Single Flute •Up-Cut \& Down-Cut
Using the highest quality carbide, these bits have a special proprietary edge processing system featuring a super high polished cutting edge with a unique "mirror finish". The result is clean cuts, less chance for chip re-welding, a superior surface finish and longer tool life.


Single Flute

| ØD | B | $\emptyset d$ | L | ‘Up-Cut’ Tool No. | 'Down-Cut' Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1/16 | 1/4 | 1/8 | 1-1/2 | 51470 †** | 51770 New |
| 3/32 | 1/4 | 1/8 | 2 | 51472 †** | - |
| 1/8 | 1/4 | 1/8 | 1-1/2 | 51471 † | 51771 † New |
| 1/8 | 1/4 | 1/4 | 2 | 51474 | 51772 † New |
| 1/8 | 5/16 | 1/8 | 1-1/2 | 51406 † | 51506 † |
| 1/8 | 5/16 | 1/4 | 1-1/2 | 51373 | - |
| 1/8 | 1/2 | 1/8 | 2 | 51459 † | 51501 † |
| 1/8 | 1/2 | 1/4 | 2 | 51454 | 51503 |
| 1/8 | 5/8 | 1/4 | 2-1/2 | 51482 | - |
| 1/8 | 3/4 | 1/4 | 2-1/2 | 51486 | - |
| 5/32 | 5/16 | 3/16 | 2 | 51473 | - |
| 3/16 | 3/8 | 1/4 | 2 | 51475 | - |
| 3/16 | 3/8 | 1/4 | 2 | 51477 | 51773 New |
| 3/16 | 1/2 | 3/16 | 2 | 51374 | - |
| 3/16 | 1/2 | 1/4 | 2 | 51408 | 51508 |
| 3/16 | 5/8 | 3/16 | 2 | 51375 | - |
| 3/16 | 5/8 | 1/4 | 2 | 51478 | - |
| 3/16 | 7/8 | 1/4 | 2-1/2 | 51456 | - |
| 1/4 | 3/8 | 1/4 | 2 | 51479 | 51774 New |
| 1/4 | 5/8 | 1/4 | 2 | 51402 | 51502 |
| 1/4 | 5/8 | 1/4 | 2-1/2 | 51401 | - |
| 1/4 | 3/4 | 1/4 | 2 | 51377 | - |
| 1/4 | 3/4 | 1/4 | 2-1/2 | 51480 | 51775 New |
| 1/4 | 7/8 | 1/4 | 2-1/2 | 51458 | - |
| 1/4 | 1-1/4 | 1/4 | 3 | 51481 | 51776 New |
| 1/4 | 1-1/2 | 1/4 | 3 | 51476 | - |
| 9/32 | 5/8 | 1/4 | 2 | 51451 | - |
| 5/16 | 9/16 | 5/16 | 2-1/2 | 51642 | - |
| 5/16 | 3/4 | 1/2 | 3 | 51483 | - |
| 21/64 | 3/4 | 1/2 | 3 | 51455 | - |
| 11/32 | 9/16 | 3/8 | 2-1/2 | 51457 | - |
| 3/8 | 3/4 | 3/8 | 3 | 51484 | - |
| 3/8 | 1 | 3/8 | 3 | 51378 | - |
| 3/8 | 1-1/8 | 3/8 | 3 | 51485 | - |
| 3/8 | 1-3/8 | 3/8 | 3-1/2 | 51643 | - |
| 1/2 | 1-1/8 | 1/2 | 2-1/2 | 51379 | - |
| 1/2 | 1-1/8 | 1/2 | 3-1/2 | 51487 | - |
| 1/2 | 1-3/8 | 1/2 | 3-1/2 | 51644 | - |
| 1/2 | 1-5/8 | 1/2 | 3-1/2 | 51489 * | - |

† Router collet reducer RB-102 ( $1 / 4$ to $1 / 8$ ) available for $1 / 8$ shank bits.

* Special point for improved bottom finish. ** Not guaranteed due to size.
© Warning: Maximum RPM $=35,000$


## METRIC CNC ALUMINUM CUTTING New

 SPIRAL ‘ 0 ' FLUTESolid Carbide • Single Flute • Up-Cut


Produce super clean, smooth cuts in aluminum. Metric sized.

| $\boldsymbol{0} \boldsymbol{D}$ | $\mathbf{B}$ | $\boldsymbol{0 d}$ | $\mathbf{L}$ | 'Up-Cut' <br> Tool No. | 'Down-Cut' <br> Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1.5 mm | 4 mm | 3 mm | 30 mm | 51370 | - |
| 2 mm | 6 mm | 6 mm | 64 mm | 57300 | - |
| 2.5 mm | 6 mm | 6 mm | 64 mm | 57301 | - |
| 3 mm | 8 mm | 3 mm | 30 mm | 51371 | - |
| 3 mm | 8 mm | 6 mm | 63 mm | 51490 | - |
| 3 mm | 12 mm | 6 mm | 50 mm | - | 57307 |
| 3 mm | 12 mm | 6 mm | 64 mm | 57302 | - |
| 4 mm | 8 mm | 4 mm | 66 mm | 57303 | - |
| 4 mm | 20 mm | 6 mm | 63 mm | 51492 | - |
| 5 mm | 16 mm | 6 mm | 63 mm | 51494 | - |
| 6 mm | 8 mm | 6 mm | 64 mm | 57304 | - |
| 6 mm | 20 mm | 6 mm | 64 mm | 51496 | - |
| 6 mm | 32 mm | 6 mm | 76 mm | - | 57308 |
| 8 mm | 25 mm | 8 mm | 64 mm | 51498 | - |
| 8 mm | 38 mm | 8 mm | 76 mm | 57305 | - |
| 10 mm | 30 mm | 10 mm | 76 mm | 57306 | - |



A Warning: Maximum RPM $=35,000$
A Warning: Never attempt to cut ferrous metals with these bits. Inspect cut quality, adjust feed / speed accordingly. For optimal results and extended tool life use mist lubricant system or air cooling. PD CNC feed and speed available online

## 8-PC. CNC ALUMINUM CUTTING <br>  SPIRAL '0' FLUTE <br> 1/4" Shank • Solid Carbide Spiral Router Bit Collection



Excellent For Cutting:

| - Aluminum | - Brass/Bronze | - Durabond |
| :--- | :--- | :--- |
| - Aluminum Alloys | - CCM | - Silver/Gold |
| - ACM | - Copper | - TCM |
| - ACP | - Dibond | - Wood |
| - Alucobond |  |  |
| - Alupane ${ }^{\circledR}$ | - e-panel ${ }^{\text {™ }}$ |  |
|  | - Etalbond |  |

## 18-PC. CNC ADVANCED ALUMINUM CUTTING



1/4" Shank • Solid Carbide Router Bit Collection

Excellent For Cutting:



Set \#AMS-160 Includes:
51474, 51454, 51408, 51402, 51480, 51481, 51508 \& 51502
$\xrightarrow[A \text { elve }]{ }$ CNC feed and speed available online

ZrN COATED BITS

Benefits of ZrN Coating:

- Creates a harder and tougher cutting edge
- Allows for a prolonged cutting edge life
- Helps to prevent the build-up of material in the flutes while cutting



## RADIUS \& CHAMFER EDGE NON-FERROUS CUTTING END MILL

Solid Carbide • Single Flute •Up-Cut
By combining the up-cut design along with the common $3 / 32$ " convex radius or $45^{\circ}$ chamfer, you can maximize your efficiency by routing one single pass.

## ZrN COATED BITS

Excellent For Cutting:



CNC 4 FACET DRILLS
Solid Carbide • $118^{\circ}$ Drill Point


For drilling non-ferrous, iron and a variety of steels. See website for full material list. 2-flute design.

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1-1 / 4$ | $1 / 8$ | $2-1 / 4$ | SCFD-100 $\dagger$ |
| $5 / 32$ | $1-3 / 8$ | $5 / 32$ | $2-1 / 2$ | SCFD-102 |
| $3 / 16$ | $1-5 / 8$ | $3 / 16$ | $2-3 / 4$ | SCFD-104 |
| $7 / 32$ | $1-3 / 4$ | $7 / 32$ | 3 | SCFD-106 |
| $1 / 4$ | 2 | $1 / 4$ | $3-1 / 4$ | SCFD-108 |
| $5 / 16$ | $2-3 / 8$ | $5 / 16$ | 4 | SCFD-112 |
| $3 / 8$ | $2-3 / 4$ | $3 / 8$ | $4-1 / 4$ | SCFD-116 |
| $1 / 2$ | 3 | $1 / 2$ | $4-3 / 4$ | SCFD-124 |
| $9 / 16$ | 4 | $9 / 16$ | 6 | SCFD-126 |
| $3 / 4$ | 4 | $3 / 4$ | 6 | SCFD-128 |

$\dagger$ Router collet reducer RB-102 ( $1 / 4$ to $1 / 8$ ) available for $1 / 8$ shank drills.
More sizes and types (Letter, Number \& Metric) available upon request.

Single Flute: for routing materials where speed and easy chip removal are desired. Double Flute: provides a smoother finish than single flute when grooving, slotting.

Down-cut tools are recommended when chip removal is directed down to protect the finish of the top of the material that has been cut.

| ØD | $\mathbf{B}$ | Ød | Flute | $\mathbf{L}$ | 'Up-Cut' <br> Tool No. | 'Down-Cut' <br> Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $3 / 8$ | $1 / 4$ | 1 | $2-5 / 8$ | HSS1620 | - |
| $3 / 16$ | $5 / 8$ | $1 / 4$ | 1 | $2-7 / 8$ | HSS1621 | - |
| $1 / 4$ | $5 / 8$ | $1 / 4$ | 1 | $2-3 / 4$ | HSS1622 | - |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 1 | $2-3 / 4$ | - | HSS1628 |
| $1 / 4$ | $3 / 4$ | $1 / 2$ | 1 | $3-1 / 4$ | HSS1623 | - |
| $1 / 4$ | 1 | $1 / 4$ | 1 | 3 | - | HSS1629 |
| $1 / 8$ | $5 / 16$ | $1 / 4$ | 2 | $2-5 / 8$ | - | HSS1650 |
| $1 / 8$ | $3 / 8$ | $1 / 4$ | 2 | $2-5 / 8$ | HSS1630 | - |
| $1 / 4$ | $5 / 8$ | $1 / 4$ | 2 | $2-3 / 4$ | HSS1633 | - |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 2 | $2-3 / 4$ | HSS1634 | HSS1653 |
| $1 / 4$ | $3 / 4$ | $1 / 2$ | 2 | $3-1 / 4$ | HSS1635 | HSS1654 |
| $1 / 4$ | 1 | $1 / 4$ | 2 | 3 | HSS1636 | - |
| $1 / 4$ | 1 | $1 / 4$ | 2 | $3-1 / 4$ | - | HSS1656 |
| $5 / 16$ | $3 / 4$ | $1 / 2$ | 2 | $3-1 / 4$ | HSS1637 | - |
| $5 / 16$ | 1 | $1 / 2$ | 2 | $3-1 / 2$ | - | HSS1659 |
| $3 / 8$ | 1 | $3 / 8$ | 2 | 3 | HSS1641 | - |
| $1 / 2$ | $1-1 / 4$ | $1 / 2$ | 2 | $3-1 / 4$ | HSS1644 | HSS1661 |
| $1 / 2$ | $1-1 / 2$ | $1 / 2$ | 2 | $3-1 / 2$ | HSS1645 | - |

CNC feed and speed available online

## CNC NON-FERROUS FACE MILLING

Insert Carbide • 4 Flute
The replaceable tips end mill/router bit tool body made from alloy steel with 4 solid carbide cutting inserts for maximum feed and stability are specially made for CNC and milling machines. Each tip is made from micrograin carbide for maximum tool life and has 4 cutting rounded corners that can be rotated.

## Excellent For Cutting:

- Aluminum, Bronze \& Copper


## Applications:

- Milling / Surfacing / Facing
- Shouldering / Rabbeting
- Slotting / Grooving


| ØD | B | Ød | $\mathbf{L}$ | Max RPM | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2-31 / 64$ | 15 mm | $1 / 2$ | $2-53 / 64$ | 8,000 | RC-3400 |

Maximum recommended material depth in one pass $1 / 32^{\prime \prime}$ (1.0mm).
CNC feed and speed available online


## Excellent For Cutting:

1 Flute (Up-Cut)
Aluminum Plate Natural Wood Plate

1 Flute (Down-Cut) Aluminum Plate

2 Flute (Down-Cut)
Aluminum Extrusions Natural Wood Plate

2 Flute (Up-Cut)
Aluminum Plate
Aluminum Block
Natural Wood Plate


Milling / Surfacing / Facing


Shouldering / Rabbeting


Use "Ramp Down" Technique.


Slotting / Grooving


ALUMINUM CUTTING ROUTER BITS



* For rectangular grooves in thicker material like Alucore. ${ }^{\text {. }}$


## ACM DOUBLE EDGE FOLDING

Carbide Tipped • V-Groove
Designed for shaping Aluminum Composite (sandwich) Materials with $90^{\circ}, 108^{\circ}$ and $135^{\circ}$ angle $V$-grooves with flat bottom. Ideal for wall panel fabrication. Widely used for cladding many diverse exterior and interior applications. The long lasting durablility of the material makes it an excellent choice for buildings, signage, displays, etc.
Routing V-shaped grooves, whereby the aluminum cover and a part of the polyethylene core is removed, allows for folding the remaining material.

For Scoring Aluminum Composite Materials Including:
$\begin{array}{cc}\text { - Aluminum, Clay, Zinc \& } & \text { - Alucobond }{ }^{\circledR} \quad \text { - Plastic/Acrylic } \\ \text { Wood Composite Panels } & \text { - Alupanel }\end{array}$ Wood Composite Panels

- Aluminum Composite Material (ACM)
- Aluminum Composite Panel (ACP)
- ALPOLIC ${ }^{\text {® }}$ Copper Composite Material (CCM)
- Dibond ${ }^{\circledR}$
- Durabond
- e-panel ${ }^{\text {l"w }}$
- Etalbond ${ }^{\circledR}$
- Phenolics
- Titanium Composite Material (TCM)
- Wood

| $\mathbf{a}^{\circ}$ | $\mathbf{a 1}^{\circ}$ | $\boldsymbol{\emptyset D}$ | $\boldsymbol{0} 1$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\boldsymbol{0} \mathbf{d}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $90^{\circ}$ | $45^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $13 / 64$ | $1 / 4$ | 2 | 45792 |
| $90^{\circ}$ | $45^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $13 / 64$ | 6 mm | 2 | $45792-\mathrm{M}$ New |
| $90^{\circ}$ | $45^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $13 / 64$ | $1 / 2$ | 2 | 45794 |
| $90^{\circ}$ | $45^{\circ}$ | $3 / 4$ | $0.118(3.0 \mathrm{~mm})$ | $17 / 32$ | $5 / 16$ | $1 / 4$ | $2-1 / 8$ | 45793 |
| $108^{\circ}$ | $36^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $5 / 32$ | $1 / 4$ | 2 | 45795 |
| $108^{\circ}$ | $36^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $5 / 32$ | $1 / 2$ | $2-3 / 64$ | 45797 |
| $108^{\circ}$ | $36^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $5 / 32$ | $1 / 2$ | 3 | 45736 New |
| $135^{\circ}$ | $22.5^{\circ}$ | $3 / 4$ | $0.078(2.0 \mathrm{~mm})$ | $1 / 2$ | $9 / 64$ | $1 / 4$ | $2-1 / 4$ | 45798 |
| $135^{\circ}$ | $22.5^{\circ}$ | $3 / 4$ | $0.078(2.0 \mathrm{~mm})$ | $1 / 2$ | $1 / 8$ | $1 / 2$ | $2-1 / 2$ | 45791 |
| - | - | $5 / 8$ | - | $7 / 16$ | - | $1 / 4$ | 2 | 45799 * |

Packs
Includes V-Groove Router Bit \#'s 45792, 45795 \& 45798 AMS-140
Includes V-Groove Router Bit \#'s 45794, 45797 \& 45791
AMS-147

## ava

PCD Polycrystalline Diamond
Excellent cutting surfaces and extremely long life. Good for scoring above materials. Also optimal for panels with mineral core which may meet fire regulations.

| $\mathbf{a}^{\circ}$ | $\mathbf{a} 1^{\circ}$ | ØD | ØD1 | $\mathbf{B}$ | $\mathbf{B 1}$ | $\boldsymbol{0} \mathbf{d}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $90^{\circ}$ | $45^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $13 / 64$ | $1 / 4$ | 2 | DRB-450 |

## ACM DOUBLE EDGE FOLDING

Carbide (Brazed to Steel Shank) V-Groove
Special Amana-grade carbide provides much longer tool life especially compared to carbide tipped tooling.

For Scoring Aluminum Composite Materials Including:

- Aluminum, Clay, Zinc \& Wood Composite Panels
- Aluminum Composite Material (ACM)
- Aluminum Composite Panel (ACP)
- ALPOLIC ${ }^{\text {C }}$ Copper Composite Material (CCM)

| $\mathbf{a}^{\circ}$ | $\mathbf{a 1} \mathbf{1}^{\circ}$ | $\boldsymbol{\emptyset D}$ | $\boldsymbol{0} \mathbf{D} 1$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $90^{\circ}$ | $45^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $13 / 64$ | $1 / 4$ | $2-1 / 8$ | 45745 |
| $90^{\circ}$ | $45^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $13 / 64$ | $1 / 2$ | $2-3 / 8$ | 45747 |
| $108^{\circ}$ | $36^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $5 / 32$ | $1 / 4$ | $2-1 / 8$ | 45781 |
| $108^{\circ}$ | $36^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $5 / 32$ | $1 / 2$ | $2-3 / 8$ | 45785 |
| $135^{\circ}$ | $22.5^{\circ}$ | $3 / 4$ | $0.078(2.0 \mathrm{~mm})$ | $1 / 2$ | $1 / 8$ | $1 / 4$ | $2-1 / 4$ | 45741 |
| $135^{\circ}$ | $22.5^{\circ}$ | $3 / 4$ | $0.078(2.0 \mathrm{~mm})$ | $1 / 2$ | $1 / 8$ | $1 / 2$ | $2-1 / 2$ | 45743 |

Tools are manufactured with high balance, that allows them to run up to 60,000 RPM. Adjust your chip load and feed rate accordingly.
See previous page for cut illustrations.

## SCM DOUBLE EDGE FOLDING

Carbide (Brazed to Steel Shank) V-Groove
Special Amana-grade carbide provides much longer tool life especially compared to carbide tipped tooling.
For Scoring Steel and Titanium Composite Materials:

- Steel Composite Material (SCM)
- Titanium Composite Material (TCM)
- Alucobond ${ }^{\text {® }}$
- Plastic/Acrylic
- Alupanel ${ }^{\oplus}$
- Plexiglas ${ }^{\circledR}$
- Dibond ${ }^{\circledR}$
- Titanium Composite
- Durabond Material (TCM)
- e-panel ${ }^{\text {m" }}$
- Etalbond ${ }^{\text {® }}$
- Lexan ${ }^{\text {ma }}$
- Phenolics
- Wood

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elor

| $\mathbf{a}^{\circ}$ | $\mathbf{a 1}^{\circ}$ | $\boldsymbol{\emptyset D}$ | $\boldsymbol{0} \mathbf{D 1}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\boldsymbol{0} \mathbf{d}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $90^{\circ}$ | $45^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $13 / 64$ | $1 / 4$ | $2-1 / 8$ | 45762 |
| $90^{\circ}$ | $45^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $13 / 64$ | $1 / 2$ | $2-3 / 8$ | 45778 |
| $108^{\circ}$ | $36^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $5 / 32$ | $1 / 4$ | $2-1 / 8$ | 45749 |

See previous page for cut illustrations

## CNC ACM DOUBLE EDGE FOLDING

Insert Carbide • V-Groove for Shaping Composite Material Panels
Special Amana-grade insert carbide provides much longer tool life especially compared to carbide tipped tooling.
For Scoring Aluminum Composite Materials Including:


Optional knives for RC-1175: General Purpose \#RCK-119; MDF \#RCK-352.
Optional knives for RC-1177: General Purpose \#RCK-136; MDF \#RCK-353.
Visit www.amanatool.com for technical details and a complete list of replacement parts.
See previous page for cut illustrations.


## AITIN COATED BITS

Benefits of AITiN Coating:

- Extra wear resistance
- Allows for faster feed \& speed rates
- Cutting edge protected from wear
- Better chip evacuation
- Superior cut quality \& extended tool life


CNC feed and speed available online



## Solid Carbide • 2, 3 \& 4 Flute • Ball Nose • Tapered and Straight

Specially designed for 2D and 3D CNC profiling and carving with machines such as "i-Carver", CNC Shark ${ }^{\oplus}$, ShopBot ${ }^{\oplus}$, Datron, and Carvewright" ${ }^{\text {m }}$ CompuCarve woodworking systems. The high-shear ball nose tips cut smooth 2D and 3D contours with reduced stepping while the optimized flute geometry and low Total Indicated Runout (TIR) guarantees clean cuts, essentially eliminates sanding and reduces chatter. The high flute volume supports high feed rates and chip loads while the high aspect ratio is excellent for single pass, deep-reach cutting. Manufactured with high balance which allows tools to be run up to 60,000 RPMs. Adjust your chip load and feed rate accordingly.

## Applications:

- A perfect bit for 3D carving
- Precision 2D and 3D large scale carving
- Dimensional signage \& 3D millwork
- 2D/3D contouring, profiling, modeling \& pattern making
- Cabinetry, furniture making
- Jewelry mold making

| 0D | B | $\mathrm{a}^{\circ}$ | R | Flute | 0d | L | Uncoated Tool No. | ZrN Coated Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1/32 | 0.445 | $6.2^{\circ}$ | 1/64 | 3 | 1/8 | 3 | - | 46291 † |
| 1/32 | 1 | $6.2^{\circ}$ | 1/64 | 3 | 1/4 | 2-1/4 | - | 46280-S New |
| 1/32 | 1 | $6.2^{\circ}$ | 1/64 | 3 | 1/4 | 3 | 46280-U | 46280 |
| 1/32 | 1-1/2 | $6.2^{\circ}$ | 1/64 | 3 | 3/8 | 3-1/2 | - | 46580 |
| 1 mm | 1-7/64 | $5.4{ }^{\circ}$ | 0.5 mm | 2 | 1/4 | 2-23/64 | - | 46256 ** |
| 1/16 | 0.362 | $5.4{ }^{\circ}$ | 1/32 | 4 | 1/8 | 3 | - | 46293 † |
| 1/16 | 1 | $5.5^{\circ}$ | 1/32 | 2 | 1/4 | 2-1/4 | - | 46252-S ** New |
| 1/16 | 1 | $5.5{ }^{\circ}$ | 1/32 | 2 | 1/4 | 2-23/64 | - | 46252 ** |
| 1/16 | 1 | $5.4{ }^{\circ}$ | 1/32 | 4 | 1/4 | 3 | 46282-U | 46282 |
| 1/16 | 1-1/2 | $3.6{ }^{\circ}$ | 1/32 | 3 | 1/4 | 3 | - | 46281 |
| 1/16 | 1-1/2 | $5.4{ }^{\circ}$ | 1/32 | 4 | 3/8 | 3-1/2 | - | 46582 |
| 1/8 | 1/2 | $7^{\circ}$ | 1/16 | 3 | 1/4 | 3 | - | 46288 |
| 1/8 | 3/4 | $5^{\circ}$ | 1/16 | 3 | 1/4 | 3 | - | 46287 |
| 1/8 | 1 | $3.6{ }^{\circ}$ | 1/16 | 3 | 1/4 | 3 | - | 46286-S New |
| 1/8 | 1 | $3.6{ }^{\circ}$ | 1/16 | 3 | 1/4 | 2-1/4 | 46286-U | 46286 |
| 1/8 | 1 | $3.6{ }^{\circ}$ | 1/16 | 4 | 1/4 | 3 | - | 46583 New |
| 1/8 | 1-1/2 | $0.10^{\circ}$ | 1/16 | 3 | 1/8 | 3 | - | 46295 † |
| 1/8 | 1-1/2 | $1^{\circ}$ | 1/16 | 3 | 1/4 | 3 | 46284-U | 46284 |
| 3/16 | 1 | $1{ }^{\circ}$ | 3/32 | 3 | 1/4 | 3 | - | 46298 |
| 1/4 | 1 | $0.10^{\circ}$ | 1/8 | 2 | 1/4 | 2-1/4 | - | 46294-S New |
| 1/4 | 1 | $0.10^{\circ}$ | 1/8 | 4 | 1/4 | 3 | - | 46584 New |
| 1/4 | 1 | $7^{\circ}$ | 1/8 | 2 | 1/2 | 4 | - | 46289 |
| 1/4 | 1-1/2 | $0.10^{\circ}$ | 1/8 | 2 | 1/4 | 3 | 46294-U | 46294 |
| 1/4 | 1-3/8 | $5^{\circ}$ | 1/8 | 2 | 1/2 | 4 | - | 46285 |
| 1/4 | 2 | $3^{\circ}$ | 1/8 | 2 | 1/2 | 4 | - | 46283 |
| 3/8 | 2-1/4 | $0.10^{\circ}$ | 3/16 | 3 | 3/8 | 4 | - | 46494 |
| 1/2 | 2-1/4 | $0.10^{\circ}$ | 1/4 | 3 | 1/2 | 4 | - | 46495 |



## ZrN COATED BITS

## Benefits of ZrN Coating:

- Creates a harder and sharper cutting edge
- Allows for a prolonged cutting edge life
- Helps to prevent the build-up of material in the flutes while cutting
- High resistance to wear for faster speeds
- Less friction and heat buildup

Excellent for Cutting:

- Acrylonitrile Butadiene - Foam Board

Styrene (ABS)

- Acrylic
- Aluminum
- Brass
- Bronze
- Copper
- Gold
- Silver
- Titanium
- Composite
- Dibond ${ }^{\circledR}$
- Ethafoam
- Expanded Polypropylene (EPP)
- Fiberglass
- Expanded Polystyrene Foam (EPS)
- Extruded Polystyrene Foam (XPS)
- Graphite
- 20Ibs High Density Urethane
- HDPE
- HDU
- Lexan ${ }^{\text {TM }}$
- MDF/HDF
- Phenolics
- Phenolic Composites
- Polyethylene Foam
- Polylam
- Polyurethane Foam
- PVC
- PVC Foam Board
- Sign Board
- Sign Foam
- Tooling Board
- Wood
- XPE (Cross Linked

Polyethylene) Foam

CNC feed and speed available online

[^0]** Tools for IntelliCarve.

Packs

| Includes | Tool No. |
| :---: | :---: |
| 46282, 46284 \& 46294 | AMS-142 |
| 46280, 46282 \& 46286 | AMS-144 |
| 46282, 46286 \& 46294 | AMS-146 |
| 46256, 46252 \& 46254 | AMS-110** |
| 46290, 46292 \& 46294 | AMS-145 |
| 46280, 46282, 46286 \& 46294 | AMS-148 |
| 46290, 46292, 46284 \& 46288 | AMS-141 |

5-Packs

| Includes | Tool No. |
| :---: | :---: |
| 46280 (5 Pcs. each) | $46280-5$ |
| 46282 (5 Pcs. each) | $46282-5$ |
| 46284 (5 Pcs. each) | $46284-5$ |
| 46286 (5 Pcs. each) | $46286-5$ |
| 46294 (5 Pcs. each) | $46294-5$ |



## CNC METRIC 2D/3D CARVING TAPERED AND STRAIGHT

## ZrN coated bits



Solid Carbide • Metric Ball Nose (Conical Ball)

| ØD | $\mathbf{B}$ | $\mathbf{a}^{\circ}$ | $\mathbf{R}$ | Flute | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.8 mm | 25 mm | $6.2^{\circ}$ | 0.40 mm | 3 | 6 mm | 75 mm | 46470 |
| 1 mm | 3 mm | $0.10^{\circ}$ | .019 | 3 | $1 / 8$ | $1-1 / 2$ | 46471 |
| 1.5 mm | 25 mm | $5.4^{\circ}$ | 0.75 mm | 4 | 6 mm | 75 mm | 46472 |
| 3.2 mm | 38 mm | $1^{\circ}$ | 1.6 mm | 3 | 6 mm | 75 mm | 46474 |
| 6.0 mm | 38 mm | $0.10^{\circ}$ | 3.0 mm | 2 | 6 mm | 75 mm | 46479 |

Solid Carbide • Metric Flat Bottom (Square End)

| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{B}$ | $\mathbf{a}^{\circ}$ | Flute | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 mm | 3 mm | $0.10^{\circ}$ | 3 | $1 / 8$ | $1-1 / 2$ | $46581 \dagger$ |
| 6 mm | 38 mm | $0.10^{\circ}$ | 2 | 6 mm | 75 mm | 46585 |

$\dagger$ Router collet reducer RB-102 ( $1 / 4$ to $1 / 8$ ) available for $1 / 8$ shank bits.


10
$\qquad$
CNC EXTRA-LONG REACH 2D/3D CARVING FLAT BOTTOM AND BALL NOSE
Solid Carbide with Reduced Shank • 3 Flute
Made with an extra-long reduced shank section for deeper reach and better chip clearance.
ZrN COATED BITS
Ball Nose (Conical Ball)


| ØD | $\mathbf{B}$ | $\mathbf{a}^{\circ}$ | $\mathbf{R}$ | $\boldsymbol{\emptyset d}$ | $\boldsymbol{0} \mathbf{d} \mathbf{~}$ | $\mathbf{L}$ | $\mathbf{L 1}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $1 / 2$ | $0.10^{\circ}$ | $1 / 8$ | $1 / 4$ | $15 / 64(.235)$ | 4 | $1-1 / 4$ | 46490 |
| $3 / 8$ | $3 / 4$ | $0.10^{\circ}$ | $3 / 16$ | $3 / 8$ | $23 / 64(.352)$ | 4 | $1-1 / 4$ | 46491 |
| $1 / 2$ | 1 | $0.10^{\circ}$ | $1 / 4$ | $1 / 2$ | $15 / 32(.470)$ | 6 | $1-1 / 2$ | 46493 |
| $1 / 2$ | $1-1 / 4$ | $0.10^{\circ}$ | $1 / 4$ | $1 / 2$ | $15 / 32(.470)$ | 7 | 2 | 46496 |

Flat Bottom (End Mill)

| ØD | $\mathbf{B}$ | $\mathbf{a}^{\circ}$ | Ød | Ød1 | $\mathbf{L}$ | $\mathbf{L 1}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $1 / 2$ | $0.10^{\circ}$ | $1 / 4$ | $15 / 64(.235)$ | 4 | $1-1 / 4$ | 46590 |
| $1 / 2$ | 1 | $0.10^{\circ}$ | $1 / 2$ | $15 / 32(.470)$ | 6 | $1-1 / 2$ | 46593 |
| $1 / 2$ | $1-1 / 4$ | $0.10^{\circ}$ | $1 / 2$ | $15 / 32(.470)$ | 7 | 2 | 46596 |

Tools are manufactured with high balance, that allows them to run up to 60,000 RPM. Adjust your chip load and feed rate accordingly.

## CNC 2D/3D CARVING TAPERED AND

 STRAIGHT FLAT BOTTOMSolid Carbide • 2, 3 \& 4 Flute • Flat Bottom (End Mill)

## ZrN COATED BITS

| 0D | B | $\mathrm{a}^{\circ}$ | Flute | Ød | L | Uncoated Tool No. | ZrN Coated Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1/32 | 0.445 | $6.2^{\circ}$ | 3 | 1/8 | 3 | - | 46571 † |
| 1/32 | 1 | $6.2^{\circ}$ | 3 | 1/4 | 3 | - | 46570 |
| 1/16 | 5/16 | $0.10^{\circ}$ | 3 | 1/4 | 2 | 46290-U | 46290 |
| 1/16 | 1 | $5.4{ }^{\circ}$ | 4 | 1/4 | 3 | - | 46572 |
| 1/8 | 15/32 | $0.10^{\circ}$ | 2 | 1/4 | 2-23/64 | - | 46254 ** |
| 1/8 | 1/2 | $7^{\circ}$ | 3 | 1/4 | 3 | - | 46576 |
| 1/8 | 1 | $3.6{ }^{\circ}$ | 3 | 1/4 | 3 | - | 46573 |
| 1/8 | 1-3/32 | $0.10^{\circ}$ | 4 | 1/4 | 2-1/2 | 46292-U | 46292 |
| 1/8 | 1-1/2 | $0.10^{\circ}$ | 3 | 1/8 | 3 | - | 46299 |
| 1/8 | 1-1/2 | $1^{\circ}$ | 3 | 1/4 | 3 | - | 46574 |
| 3/16 | 1 | $1^{\circ}$ | 3 | 1/4 | 3 | - | 46575 |
| 1/4 | 1-1/2 | $0.10^{\circ}$ | 2 | 1/4 | 3 | - | 46577 |
| 1/2 | 2-1/4 | $0.10^{\circ}$ | 3 | 1/2 | 4 | - | 46579 |

** Tools for IntelliCarve. $\dagger$ Router collet reducer RB-102 ( $1 / 4$ to $1 / 8$ ) available for $1 / 8$ shank bits.

## 8-PC CNC 2D/3D CARVING TAPERED



1/4" Shank • Solid Carbide Spiral Ball Nose and Flat Bottom Router Bit Collection
Designed specifically for precision 2D and 3D applications


## 18-PC. CNC 2D/3D CARVING \& LETTERING

1/8" \& 1/4" Shank • Solid Carbide Router Bit Collection
Designed specifically for precision 2D and 3D applications.

## ZrN COATED BITS

AMS-136 and AMS-143 Excellent For Cutting:

- Acrylonitrile Butadiene Styrene (ABS)
- Acrylic
- Aluminum
- Aluminum Alloys
- ACM
- Alucobond ${ }^{\circledR}$
- Alupanel ${ }^{\circledR}$
- Brass/Bronze
- Carbon Fiber
- CCM
- Composites
- Copper
- Dibond ${ }^{\circledR}$
- Expanded Polystyrene Foam
(EPS)
- Extruded Polystyrene Foam (XPS)
- Fiberglass
- Fiberglass PCB Board
- Graphite
- HDF/MDF
- HDPE
- HDU
- Lexan™
- Phenolics
- Phenolic

Composites

- Plastic/Acrylic
- Plywood
- PVC
- Silver/Gold
- Sign Foam
- TCM
- Titanium
- Tooling Board
- Wood
- 20lbs High

Density Urethane

- XPE




Set \#AMS-143 Includes:
46280, 46282, 46284, 46286, 46288, 46294, 46290, 46292, 46291, 46295, 46287, 46570, 46572, 46574, 46490, 46590, 46094, 46090 \& RB-102

## Excellent For Cutting:

- Acrylonitrile-Butadiene-Styrene (ABS)
- Ethafoam
- Ethylene-Vinyl Acetate Foam (EVA)
- Expanded Polypropylene (EPP)
- Expanded Polystyrene Foam (EPS)
- Extruded Polystyrene Foam (XPS)
- Flexible Polyurethane Foam (FPF)
- LexanTM
- PALFOAM ${ }^{\text {TM }}$
- Polyethylene Foam
- Polylam
- Polyurethane Foam
- XPE (Cross Linked Polyethylene) Foam


## CNC FOAM CUTTING SPIRAL

Solid Carbide • 2 Flute •Up-Cut \& Down-Cut
Specifically designed for milling Polyurethane Foam and Expanded Polystyrene (EPS)
Specifically designed for milling Polyurethane Foam and Expanded Polystyrene (EPS)
to ensure your foam projects are milled with unparalleled accuracy, detail and clarity. Achieve both precision and depth for foam carving and milling applications. Provides Achieve both precision and depth for foam carving and milling applications. Pron
deeper cuts and larger slices with fewer passes in thick materials, resulting in improved productivity and less assembly.
The up-cut spiral ejects chips away from the work-piece.

Ball End

| ØD | $\mathbf{B}$ | $\mathbf{R}$ | Ød | $\mathbf{L}$ | 'Up-Cut' <br> Tool No. | 'Down-Cut' <br> Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1-1 / 8$ | $1 / 16$ | $1 / 4$ | $2-1 / 2$ | 46030 | - |
| $1 / 4$ | $2-1 / 4$ | $1 / 8$ | $1 / 4$ | 4 | 46032 | - |


| Square End <br> $\boldsymbol{\sigma}$ | $\mathbf{B}$ | $\boldsymbol{0}$ | $\mathbf{L}$ | 'Up-Cut' <br> Tool No. | 'Down-Cut' <br> Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1-1 / 16$ | $1 / 8$ | 3 | $46269 \dagger$ | 46562 New |
| $1 / 8$ | $1-1 / 8$ | $1 / 4$ | $2-1 / 2$ | 46270 | 46564 |$\quad$ New

$\dagger$ Router collet reducer RB-102 ( $1 / 4$ to $1 / 8$ ) available for $1 / 8$ shank bits.

CNC feed and speed available online


High Speed Steel (HSS) • 4 Flute •Up-Cut
Titanium Nitride (TiN) coating increases strength and durability. TiN coated bits harden and protect the cutting edges, and helps smooth the flutes for improved chip ejection.

TiN coated CNC foam tools let you achieve depth and precision for thick foam carving applications. Ensure your foam projects are milled with accuracy and high detail, deep cuts in thick materials in fewer passes.

## Excellent For Cutting:

- Acrylonitrile-Butadiene-Styrene (ABS)
- Aluminum Alloys
- Ethafoam
- Ethylene-Vinyl Acetate Foam (EVA)
- Expanded Polypropylene (EPP)
- Expanded Polystyrene Foam (EPS)
- Extruded Polystyrene Foam (XPS)
- Flexible Polyurethane Foam (FPF)
- LexanTM
- PALFOAM ${ }^{\text {TM }}$
- Plastic
- Polyethylene Foam
- Polylam
- Polyurethane Foam
- Wood
- XPE (Cross Linked Polyethylene) Foam

Ball End


| ØD | $\mathbf{B}$ | $\mathbf{R}$ | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :--- |
| $1 / 4$ | 4 | $1 / 8$ | $1 / 4$ | 6 | HSS1202 |
| $1 / 4$ | 4 | $1 / 8$ | $3 / 8$ | 6 | HSS1200 | New

Square End

| ØD | B | Ød | L | Tool No. |  |
| :---: | :---: | :---: | :---: | :---: | :--- |
| $1 / 4$ | 4 | $1 / 4$ | 6 | HSS1212 |  |
| $1 / 4$ | 4 | $3 / 8$ | 6 | HSS1210 | New |
| $1 / 2$ | 6 | $1 / 2$ | 8 | HSS1214 |  |
| $1 / 2$ | 6 | $1 / 2$ | 10 | HSS1215 | New |
| 3 | 10 | $3 / 4$ | $12-1 / 2$ | HSS1216 |  |

## FOAM CUTTING HIGH SPEED STEEL (HSS) New STRAIGHT V-FLUTE

High Speed Steel (HSS) • 2 Flute
V-flutes are selected when a balanced tool is critical for smooth finish. Excellent for hand-fed operations.

## Excellent For Cutting:

- Ethafoam
- Expanded Polypropylene (EPP)
- Flexible Polyurethane Foam (FPF)
- Foam
- Natural Woods
- Polyethylene Foam
- Polylam
- XPE (Cross Linked Polyethylene) Foam

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :--- |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 8$ | HSS1610 |
| $1 / 4$ | 1 | $1 / 4$ | $3-1 / 4$ | HSS1611* |
| $1 / 4$ | 1 | $1 / 2$ | $2-1 / 2$ | HSS1612 |
| $3 / 8$ | 1 | $3 / 8$ | $2-1 / 2$ | HSS1613 |
| $1 / 2$ | $1-1 / 4$ | $1 / 2$ | $2-3 / 4$ | HSS1614 |

* May be used in Air Routers.



## INDUSTRIAL

## Steel



## ATTN COATED BITS

## Benefits of AITiN Coating:

- Extra wear resistance
- Allows for faster feed \& speed rates
- Cutting edge protected from wear
- Better chip evacuation
- Superior cutting quality \& extended tool life
- Less heat build-up


Set \#AMS-152 Includes:
51461, 51460, 51602, 51465, 51464, 51604, 51462, 51467, RB-102 \& RB-122
$\square$ CNC feed and speed available online

## CNC STEEL, STAINLESS STEEL \& COMPOSITE CUTTING

Solid Carbide Spiral •2, 3 \& 4 Flute •Up-Cut Router Bits/End Mills

Manufactured from our exclusive ultra-fine micrograin carbide, these bits feature a 30 degree Center Cutting Mill End with a $45^{\circ}$ corner chamfer (for extra strength) and Aluminum Titanium Nitride (AITiN) coating for superior cut quality.
Perfect for the signmaking industry. Our special carbide grade combined with the AITiN coating results in amazing performance.
 The unique corner chamfer gives the bits additional strength.

## Excellent For Cutting:

- Stainless Stee
- Steel
- Plastics
- Cast Iron
- Composites
- Low Carbon Steel
- Magnesium
- Super Alloys
- Titanium (up to 40HRC hardness)


| ØD | B | Ød | L | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3 m m$ | 10 mm | 3 mm | 40 mm | 3 | 51610 |
| $1 / 8$ | $1 / 4$ | $1 / 8$ | 2 | 2 | $51461 \dagger$ |
| $1 / 8$ | $3 / 8$ | $1 / 4$ | $1-1 / 2$ | 3 | 51460 |
| $1 / 8$ | $3 / 8$ | $1 / 4$ | $1-1 / 2$ | 4 | 51602 |
| 4 mm | 10 mm | 4 mm | 48 mm | 3 | 51612 |
| $3 / 16$ | $3 / 8$ | $3 / 16$ | $2-1 / 2$ | 2 | 51463 |
| $3 / 16$ | $7 / 16$ | $1 / 4$ | $1-7 / 8$ | 3 | 51462 |
| $6 m$ | 16 mm | 6 mm | 60 mm | 3 | 51614 |
| $1 / 4$ | $3 / 8$ | $1 / 4$ | $2-1 / 2$ | 2 | 51465 |
| $1 / 4$ | $1 / 2$ | $1 / 4$ | $2-1 / 2$ | 2 | 51466 |
| $1 / 4$ | $5 / 8$ | $1 / 4$ | $2-3 / 8$ | 3 | 51464 |
| $1 / 4$ | $5 / 8$ | $1 / 4$ | $2-3 / 8$ | 4 | 51604 |
| $3 / 8$ | $1 / 2$ | $3 / 8$ | 3 | 2 | 51467 |
| $1 / 2$ | $3 / 4$ | $1 / 2$ | 3 | 2 | 51468 |
| New |  |  |  |  |  |

† Router collet reducer RB-102 (1/4 to 1/8) available for $1 / 8$ shank bits.
A Warning: Maximum RPM=28,000
Visit www.amanatool.com for technical details. $\square$ CNC feed and speed available online

3-Pc and 4-Pc Packs

| Description | Tool No. |
| :--- | :---: |
| 4-Pc AITiN Coated Pack Includes \#'s $\mathbf{5 1 4 6 1}$ (1/8 dia), $\mathbf{5 1 4 6 3}$ (3/16 dia), | AMS-154 |
| $\mathbf{5 1 4 6 5}$ (1/4 dia.), $\mathbf{5 1 4 6 7}$ (3/8 dia.) |  |
| $3-P c$ Pack Includes \#'s $\mathbf{5 1 4 6 0}$ (1/8 dia), $\mathbf{5 1 4 6 2}$ (3/16 dia) 51464 (1/4 dia.) | AMS-156 |

## 8-PC. CNC STEEL, STAINLESS STEEL \& COMPOSITE CUTTING



1/8", 1/4" \& 3/8" Shank • Solid Carbide Spiral Router Bit Collection

## Excellent For Cutting:

- Stainless Steel
- Plastics
- Steel
- Super Alloys
- Cast Iron
- Composites
- Low Carbon Steel
- Magnesium
- Titanium (up to 40HRC hardness)


Note: Inspect cut quality and adjust feed/speed accordingly. Care should be taken to observe proper feeds/speeds according to the work-piece material to avoid damage. For optimal results and extended tool life use mist lubricant system or air cooling.

## MINIATURE CNC STEEL, STAINLESS STEEL New \& COMPOSITE CUTTING

Solid Carbide Spiral • 2 \& 4 Flute •Up-Cut Router End Mills
High performance. Choose 2 flute for effecient vertical plunging, pocketing and slotting operations and 4 flute for improved surface finish, longer life and increased feed rates with peripheral milling applications.

## AITIN COATED BITS

| $\boldsymbol{0} \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Type | 2-Flute <br> Tool No. | 4-Flute <br> Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0.010 | 0.0050 | 0.030 | $1 / 8$ | $1-1 / 2$ | Ball End | 51739 | 51750 |
| 0.015 | 0.0075 | 0.045 | $1 / 8$ | $1-1 / 2$ | Ball End | 51740 | 51751 |
| 0.020 | 0.0100 | 0.060 | $1 / 8$ | $1-1 / 2$ | Ball End | 51741 | 51752 |
| 0.025 | 0.0125 | 0.075 | $1 / 8$ | $1-1 / 2$ | Ball End | 51742 | 51753 |
| 0.030 | 0.0150 | 0.090 | $1 / 8$ | $1-1 / 2$ | Ball End | 51743 | 51754 |
| 0.035 | 0.0175 | 0.105 | $1 / 8$ | $1-1 / 2$ | Ball End | 51744 | 51755 |
| 0.040 | 0.0200 | 0.125 | $1 / 8$ | $1-1 / 2$ | Ball End | 51745 | 51756 |
| 0.045 | 0.0225 | 0.135 | $1 / 8$ | $1-1 / 2$ | Ball End | 51746 | 51757 |
| 0.050 | 0.0250 | 0.174 | $1 / 8$ | $1-1 / 2$ | Ball End | 51747 | 51758 |
| 0.055 | 0.0275 | 0.267 | $1 / 8$ | $1-1 / 2$ | Ball End | 51748 | 51759 |
| 0.060 | 0.0300 | 0.360 | $1 / 8$ | $1-1 / 2$ | Ball End | 51749 | 51760 |
| 0.010 | - | 0.030 | $1 / 8$ | $1-1 / 2$ | Square End | 51660 | 51719 |
| 0.015 | - | 0.045 | $1 / 8$ | $1-1 / 2$ | Square End | 51661 | 51720 |
| 0.020 | - | 0.060 | $1 / 8$ | $1-1 / 2$ | Square End | 51662 | 51721 |
| 0.025 | - | 0.075 | $1 / 8$ | $1-1 / 2$ | Square End | 51663 | 51722 |
| 0.030 | - | 0.090 | $1 / 8$ | $1-1 / 2$ | Square End | 51664 | 51723 |
| 0.035 | - | 0.105 | $1 / 8$ | $1-1 / 2$ | Square End | 51665 | 51724 |
| 0.040 | - | 0.120 | $1 / 8$ | $1-1 / 2$ | Square End | 51666 | 51725 |
| 0.045 | - | 0.135 | $1 / 8$ | $1-1 / 2$ | Square End | 51667 | 51726 |
| 0.050 | - | 0.174 | $1 / 8$ | $1-1 / 2$ | Square End | 51668 | 51727 |
| 0.055 | - | 0.267 | $1 / 8$ | $1-1 / 2$ | Square End | 51669 | 51728 |
| 0.060 | - | 0.360 | $1 / 8$ | $1-1 / 2$ | Square End | 51679 | 51729 |

A Warning: Due to the extremely small diameters involved, please exercise caution to the accurate calculations of all feed and speed rates.


CNC feed and speed available online

## CNC MULTI-HELIX SPIRAL

Solid Carbide End Mills • 4 Flute •Up-Cut
These multi-helix tools are the superstars of carbide end mills for professionals and hobbyists alike. The multiple helix eliminates harmonic chatter, so critical when surface finishes, part dimension tolerances and tool life are of the utmost importance. They are outstanding tools for peripheral milling, and can take aggressive cuts along the full length of the overall flute length with no issues. For use with manual and automatic milling machines, as well as the most sophisticated CNC machines.

## AITHN COATED BITS

Excellent For Cutting:

- Stainless Steel
- Titanium
- Cast Iron
- Steel
- Cermet*


| $\boldsymbol{0} \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\boldsymbol{\emptyset d}$ | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | - | $5 / 8$ | $1 / 4$ | $2-1 / 2$ | Square Bottom | 51593 |
| $3 / 8$ | - | $7 / 8$ | $3 / 8$ | $2-1 / 2$ | Square Bottom | 51595 |
| $1 / 2$ | - | 1 | $1 / 2$ | 3 | Square Bottom | 51597 |
| $3 / 4$ | - | 1 | $3 / 4$ | 3 | Square Bottom | 51608 |
| $1 / 4$ | 0.015 | $5 / 8$ | $1 / 4$ | $2-1 / 2$ | Corner Radius Bottom | 51605 |
| $3 / 8$ | 0.020 | $7 / 8$ | $3 / 8$ | $2-1 / 2$ | Corner Radius Bottom | 51607 |
| $1 / 2$ | 0.030 | 1 | $1 / 2$ | 3 | Corner Radius Bottom | 51609 |

*Composites in which ceramic materials and metals are joined together.


## Multi-Function Tools



Set \#AMS-135 Includes:
46280, 46282, 51464, 51460, 51404, 51411, 51408 \& 51402
CNC feed and speed available online


Set \#AMS-172 Includes:
51461, 51470, 51471, 51410, 51415, 45199, 46180, 46240
Includes two router collet reducers $1 / 4$ " $-1 / 8$ " shank.
$\square$ CNC feed and speed available online

## CNC HIGH PERFORMANCE

 $90^{\circ}$ 'V' SPIRAL DRILLSSolid Carbide Spiral • 2 \& 4 Flute •Up-Cut
A true multi-function tool, combination drill/mills allow plunging, slotting and/or top chamfering all in one tool saving you indexing time. AlTiN coating provides quantum increases in productivity, either in terms of speed or longevity, with or without coolant.

## AITHN COATED BITS

## Excellent For Cutting:

- Stainless Steel
- Steel
- Soft Plastics
- Cast Iro
- Titanium

- Cermet

| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{B}$ | $\boldsymbol{0} \mathbf{d}$ | $\mathbf{B 1}$ | $\mathbf{L}$ | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 2$ | $1 / 8$ | $1 / 16$ | $1-1 / 2$ | 2 | 51650 |
| $3 / 16$ | $5 / 8$ | $3 / 16$ | $3 / 32$ | 2 | 2 | 51651 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $1 / 8$ | $2-1 / 2$ | 2 | 51652 |
| $5 / 16$ | $7 / 8$ | $5 / 16$ | $5 / 32$ | $2-1 / 2$ | 2 | 51653 |
| $3 / 8$ | $7 / 8$ | $3 / 8$ | $3 / 16$ | $2-1 / 2$ | 2 | 51654 |
| $7 / 16$ | 1 | $7 / 16$ | $7 / 32$ | $2-1 / 2$ | 2 | 51655 |
| $1 / 2$ | 1 | $1 / 2$ | $1 / 4$ | 3 | 2 | 51656 |
| $5 / 8$ | $1-1 / 4$ | $5 / 8$ | $5 / 16$ | $3-1 / 2$ | 2 | 51657 |
| $3 / 4$ | $1-1 / 2$ | $3 / 4$ | $3 / 8$ | 4 | 2 | 51658 |
| $1 / 8$ | $1 / 2$ | $1 / 8$ | $1 / 16$ | $1-1 / 2$ | 4 | 51690 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $1 / 8$ | $2-1 / 2$ | 4 | 51692 |
| $3 / 8$ | $7 / 8$ | $3 / 8$ | $3 / 16$ | $2-1 / 2$ | 4 | 51694 |
| $1 / 2$ | 1 | $1 / 2$ | $1 / 4$ | 3 | 4 | 51696 |

Warning: These tools are not designed for drilling steel, stainless steel, titanium and cermets.

## 8-PC. CNC SPECIALTY ALUMINUM, <br>  PLASTICS \& STAINLESS STEEL CUTTING

1/4" Shank • Solid Carbide Spiral Router Bit Collection

Excellent For Cutting:


## 8-PC. CNC

ALUMINUM, PLASTIC,
 \& STAINLESS STEEL CUTTING
1/8" Shank • Solid Carbide Specialty Router Bit Collection

## Excellent For Cutting:



$\dagger$ Part of the shank is flat to fit in NORFIELD machine.
A Warning: Not to be used on a handheld router, table router or CNC machine.

## CNC $118^{\circ}$ POINT SPADE DRILL New

Solid Carbide • 2 Flute
Used to drill very short, shallow holes in hard (or hardened) steel. Can be used in either CNC or drill presses. Note: Make sure your drill press runs fast and has a tight spindle.

Excellent For Cutting:

- Stainless Steel
- Titanium
- Steel
- Non-Ferrous
- Cast Iron
- Cermet *
* Cermets are composites in which ceramic materials and metals join together.

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $7 / 16$ | $1 / 8$ | $1-1 / 2$ | 51682 |
| $3 / 16$ | $9 / 16$ | $3 / 16$ | 2 | 51684 |
| $1 / 4$ | $11 / 16$ | $1 / 4$ | 2 | 51686 |
| $5 / 16$ | $7 / 8$ | $5 / 16$ | $2-1 / 2$ | 51686 |
| $3 / 8$ | 1 | $3 / 8$ | $2-1 / 2$ | 51689 |

CNC feed and speed available online

## CNC $118^{\circ}$ POINT CENTER DRILL, HIGH PERFORMANCE $60^{\circ}$ COUNTERSINK

Solid Carbide • 2 Flute
$60^{\circ}$ inclusive countersinks drill downwards a small amount in order to make a quality starting hole and a profile. Follow up with a secondary drill for the full depth of cut of the work-piece. They do not route along a slot. Combination drill/countersinks provides exceptional starting positioning for secondary drills, plus provide qualified countersink dimensions for screw heads, etc. Premium AITiN coating provides quantum increase in productivity, either in terms of speed or longevity, with or without coolant.
Use on manual or CNC driven lathes and manual or CNC driven milling machines.
Not for use in handheld drills or handheld routers.

## Excellent For Cutting:

- Stainless Steel
- Soft Plastic
- Steel
- Titanium
- Cast Iron
- Cermet
- Corian
- Poly (methyl methacrylate) (PMMA)
- Acrylic Stone
- Coroplast ${ }^{\circledR}$ *
* A soft plastic cardboard made with super soft \& flexible PVC


| ØD | ØD1 | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 16$ | $5 / 64$ | $5 / 64$ | $3 / 16$ | 2 | 51670 |
| $5 / 16$ | $1 / 8$ | $1 / 8$ | $5 / 16$ | $2-1 / 8$ | 51672 |



HSS1705TIN


Top View

Excellent For Cutting

- Metal Clad Doors
- Steel Doors
- Fiberglass Doors



Drill Point $118^{\circ}$

CNC feed and speed available online

## INDUSTRIAL

## Carbide Burr Bits For Die-Grinders



Double Cut (DC) burrs utilize a cross flute of exactly half the number of standard flutes in an opposing helix. Benefits include rapid removal of a broad range of materials combined with excellent operator control. It does this by incorporating a cutting rake angle that gives great "bite" into the material, and yet is not so aggressive that the operator fatigues quickly after using it in a hand piece. A DC flute geometry gives better performance in low RPM applications, but still performs well at high RPMs.
Non Ferrous (NF) burrs are specially designed for cutting all non-ferrous and non-metallic workpieces such as aluminum, zinc, plastic, wood, etc. The uniquely aggressive cutting action provides little to no chance of plugging the flutes.
Applications: To be used with air or electrically-driven hand die-grinder with a typical collet mechanism or knee mill with an air-driven spindle speeder such as an Air Turbine product. An air speeder can bump spindle.
(Carbide brazed to steel shank)
A Warning: Not to be used in conventional routers.


Cylindrical Shape


Oval Shape


- Stainless Steel
- Steel Weldments
- Titanium

Pointed Tree Shape


Excellent For Cutting:

- Aluminum
- Copper \& Chrome
- Steel: 55-60rc
- Steel: Carbon
- Steel: Nickel
- Bronze
- Steel: 40-55rc
d Cut
SA Burrs • Cylindrical Shape No End Cut


|  |  |  | Double Cut |  | Non-Ferrous/ZrN Coated |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ØD | B | Ød | L | DC Ref \# | DC Tool No. | NF Ref \# | NF Tool No. |  |
| $1 / 8$ | $9 / 16$ | $1 / 8$ | $1-1 / 2$ | SA-43DC | BURS-098 * | - | - |  |
| $1 / 4$ | $5 / 8$ | $1 / 4$ | 2 | SA-1DC | BURS-100 * | SA-1FM | BURS-100NF * New |  |
| $3 / 8$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | SA-3DC | BURS-102 | SA-3FM | BURS-102NF | New |
| $3 / 8$ | $3 / 4$ | $1 / 4$ | $6-3 / 4$ | SA-3LDC | BURS-103 | - | - |  |
| $1 / 2$ | 1 | $1 / 4$ | $2-3 / 4$ | SA-5DC | BURS-104 | SA-5FM | BURS-104NF | New |
| $1 / 2$ | 1 | $1 / 4$ | 7 | SA-5L6DC | BURS-105 | - | - |  |



* Solid carbide.


## SB Burrs • Cylindrical Shape with End Cut



* Solid carbide.




## SD Burrs • Ball Shape



| ØD |  |  |  | Double Cut |  | Non-Ferrous/ZrN Coated NF Ref \# NF Tool No. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | B | 0d | L | DC Ref \# | DC Tool No. |  |  |  |
| 1/8 | 1/8 | 1/8 | 1-1/2 | SD-42DC | BURS-150 * | - | - |  |
| 1/4 | 7/32 | 1/4 | 2 | SD-1DC | BURS-152 * | - | - |  |
| 3/8 | 5/16 | 1/4 | 2-1/8 | SD-3DC | BURS-154 | SD-3FM | BURS-154NF | New |
| 3/8 | 5/16 | 1/4 | 6-3/4 | SD-3L6DC | BURS-156 | - | - |  |
| 1/2 | 7/16 | 1/4 | 2-1/4 | SD-5DC | BURS-158 | SD-5FM | BURS-158NF | New |
| 1/2 | 7/16 | 1/4 | 6-1/2 | SD-5L6DC | BURS-160 | - | - |  |



SE Burrs • Oval Shape



SF Burrs • Radius Tree Shape


Double Cut
Non-Ferrous

| 0 D | B | 0 d | L |  | DC Tout No. | Non-Ferrous |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1/8 | $1 / 2$ | 1/8 | 1-1/2 | SF-42DC | BURS-138 * | - | - |  |
| 1/4 | 5/8 | 1/4 | 2 | SF-1DC | BURS-140 * | - | - |  |
| 3/8 | 3/4 | 1/4 | 2-1/2 | SF-3DC | BURS-142 | SF-3FM | BURS-142NF | New |
| 3/8 | 3/4 | 1/4 | 6-3/4 | SF-3L6DC | BURS-143 | - | - |  |
| 1/2 | 1 | 1/4 | 2-3/4 | SF-5DC | BURS-144 | SF-5FM | BURS-144NF | New |
| 1/2 | 1 | 1/4 | 7 | SF-5L6DC | BURS-146 | - | - |  |



BURS-192

| ØD | B | Ød | L | DC Ref \# | DC Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $3 / 8$ | $1 / 8$ | $1-1 / 2$ | SG-43DC | BURS-190 * |
| $1 / 4$ | $5 / 8$ | $1 / 4$ | 2 | SG-1DC | BURS-192 * |
| $3 / 8$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | SG-3DC | BURS-194 |
| $3 / 8$ | $3 / 4$ | $1 / 4$ | $6-3 / 4$ | SG-3L6DC | BURS-196 |
| $1 / 2$ | 1 | $1 / 4$ | $2-3 / 4$ | SG-5DC | BURS-198 |
| $1 / 2$ | 1 | $1 / 4$ | $6-3 / 4$ | SG-5L6DC | BURS-199 |
| * Solid carbide. |  |  |  |  |  |



SH Burrs • Flame Shape


BURS-200



SL Burrs • Radius Cone Shape


|  |  | Double Cut |  |  |  | Non-Ferrous/ZrN Coated NF Ref \# NF Tool No. |  | $\downarrow$ | $\longrightarrow \downarrow$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ØD | B | Ød | L | DC Ref \# | DC Tool ${ }^{\text {No. }}$ |  |  |  |  |  |
| 1/8 | 3/8 | 1/8 | 1-1/2 | SL-41DC | BURS-210 * | - | - |  |  |  |
| 1/4 | 5/8 | 1/4 | 2 | SL-1DC | BURS-212 * | - | - |  | (2)aman foed ${ }^{\text {a }}$ | D |
| 3/8 | 1-1/16 | 1/4 | 2-13/16 | SL-3DC | BURS-214 | SL-3FM | BURS-214NF | New |  |  |
| 3/8 | 1-1/16 | 1/4 | 7-1/16 | SL-3L6DC | BURS-216 | - | - |  |  | 岸 |
| 1/2 | 1-1/8 | 1/4 | 2-7/8 | SL-4DC | BURS-218 | SL-4FM | BURS-218NF | New |  |  |
| 1/2 | 1-1/8 | 1/4 | 7-1/8 | SL-4L6DC | BURS-219 | - | - |  |  |  |
| Solid | arbide. |  |  |  |  |  |  |  |  |  |

SM Burrs • Pointed Cone Shape

```
Manmerym
```



BURS-222

| $\boldsymbol{\sigma}$ | $\mathbf{B}$ | $\boldsymbol{0}$ | $\mathbf{L}$ | $\mathbf{a}^{\circ}$ | DC Ref \# | DC Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $11 / 32$ | $1 / 8$ | $1-1 / 2$ | $12^{\circ}$ | SM-41DC | BURS-220 |
| $1 / 4$ | $1 / 2$ | $1 / 4$ | 2 | $22^{\circ}$ | SM-1DC | BURS-222* |
| $3 / 8$ | $5 / 8$ | $1 / 4$ | $2-1 / 2$ | $14^{\circ}$ | SM-4DC | BURS-224 |
| $1 / 2$ | $7 / 8$ | $1 / 4$ | $2-5 / 8$ | $14^{\circ}$ | SM-5DC | BURS-226 |
| $1 / 2$ | $7 / 8$ | $1 / 4$ | $6-7 / 8$ | $14^{\circ}$ | SM-5L6DC | BURS-228 |



Burr speed recommendations available online


## Excellent for Cutting:

- Plastic, Acrylic \& PVC
- Acetal and Nylon
- Acrylic Stone
- Acrylonitrile Butadiene Styrene (ABS)
- Alupanel ${ }^{\text {® }}$
- Corian
- Coroplast ${ }^{\oplus}$
- Correx Boards
- Corrugated Polypropylene
- Delrin
- Foam Board
- Gatorfoam ${ }^{\circledR}$
- High Density Polyethylene (HDPE)
- High Impact Polystyrene (HIPS)
- HIPS with Digital Printing


## Benefits of Mirror Finish

- Razor sharp cutting edge
- Effortless chip removal
- Exceptional cut quality
Made according to strict tolerances from an exclusive carbide grade polished to a mirror finish using Amana's unique process. Designed to eject chips either up or down. Ideal for industrial applications.

CNC PLASTIC CUTTING SPIRAL ‘0’ FLUTE
Solid Carbide • Single Flute •Up-Cut \& Down-Cut Produce super clean, smooth cuts in plastics.


| ØD | $\mathbf{B}$ | $\boldsymbol{0 d}$ | $\mathbf{L}$ | 'Up-Cut' Tool No. | 'Down-Cut' Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 16$ | $1 / 4$ | $1 / 8$ | 2 | $51415 \dagger$ | $51515 \dagger$ |
| $1 / 16$ | $1 / 4$ | $1 / 4$ | 2 | 51441 | - |
| $1 / 8$ | $1 / 4$ | $1 / 8$ | 2 | $51443 \dagger$ | - |
| $1 / 8$ | $3 / 4$ | $1 / 8$ | 2 | $51437+$ New | - |
| $1 / 8$ | $1 / 4$ | $1 / 4$ | 2 | 51416 | - |
| $1 / 8$ | $5 / 16$ | $1 / 4$ | $1-1 / 2$ | - | 51523 New |
| $1 / 8$ | $5 / 16$ | $1 / 8$ | 2 | $51453+$ | - |
| $1 / 8$ | $1 / 2$ | $1 / 8$ | 2 | $51410 \dagger$ | $51510 \dagger$ |
| $1 / 8$ | $1 / 2$ | $1 / 4$ | 2 | 51411 | 51511 |
| $1 / 8$ | $5 / 8$ | $1 / 4$ | $2-1 / 2$ | 51445 | - |
| $1 / 8$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 51446 | - |
| $5 / 32$ | $9 / 16$ | $1 / 4$ | 2 | 51447 | 51516 |
| $3 / 16$ | $3 / 8$ | $3 / 16$ | 2 | 51448 | 51518 |
| $3 / 16$ | $3 / 8$ | $1 / 4$ | 2 | 51449 | - |
| $3 / 16$ | $5 / 8$ | $3 / 16$ | 2 | 51412 | 51512 |
| $3 / 16$ | $5 / 8$ | $1 / 4$ | 2 | 51417 | 51517 |
| $3 / 16$ | $5 / 8$ | $1 / 4$ | $2-1 / 2$ | 51423 | New |
| $3 / 16$ | $7 / 8$ | $1 / 4$ | $2-1 / 2$ | 51442 | - |
| $3 / 16$ | $1-1 / 4$ | $1 / 4$ | 3 | 51418 | - |
| $7 / 32$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 51424 | - |
| $1 / 4$ | $3 / 8$ | $1 / 4$ | 2 | 51425 | - |
| $1 / 4$ | $5 / 8$ | $1 / 4$ | 2 | 51419 | 51519 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 2 | 51404 | - |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 51421 | 51504 |
| $1 / 4$ | $7 / 8$ | $1 / 4$ | $2-1 / 2$ | 51444 | 51524 |
| $1 / 4$ | 1 | $1 / 4$ | $2-1 / 2$ | 51405 | - |
| $1 / 4$ | $1-1 / 16$ | $1 / 4$ | 3 | 51409 | 51505 |
| $1 / 4$ | $1-1 / 4$ | $1 / 4$ | 3 | 51407 | - |
| $1 / 4$ | $1-3 / 8$ | $1 / 4$ | 3 | 51403 | 51507 |
| $1 / 4$ | $1-1 / 2$ | $1 / 4$ | 3 | 51413 | - |
| $1 / 4$ | $2-1 / 4$ | $1 / 4$ | $3-3 / 4$ | 51646 | New |
| $3 / 8$ | $3 / 8$ | $3 / 8$ | 3 | 51641 | New |
| $3 / 8$ | $5 / 8$ | $3 / 8$ | $2-1 / 2$ | 51429 | 51528 |
| $3 / 8$ | $3 / 4$ | $3 / 8$ | 3 | 51426 | - |
| $3 / 8$ | $1-1 / 8$ | $3 / 8$ | 3 | 51414 | 51509 |
| $3 / 8$ | $1-5 / 8$ | $3 / 8$ | $3-1 / 2$ | 51427 | 51514 |
| $1 / 2$ | $1-1 / 4$ | $1 / 2$ | 3 | 51645 | New |
| $1 / 2$ | $1-3 / 8$ | $1 / 2$ | $3-1 / 2$ | 51644 | 51529 |
| $1 / 2$ | $1-5 / 8$ | $1 / 2$ | $3-1 / 2$ | 51428 | - |
| $1 / 2$ | 2 | $1 / 2$ | 4 | 51648 | New |
|  |  |  |  |  | - |

## - SPPEKTRA New CNC PLASTIC CUTTING SPIRAL ' 0 ' FLUTE

Solid Carbide • Single Flute • Up-Cut
The Spektra ${ }^{\top}{ }^{\top}{ }^{n A C O}{ }^{\circledR}$ nanocomposite micro-thin coating provides longevity and cutting results of the highest quality.


For complete details on Spektra ${ }^{\text {™ }}$ visit www.amanatool.com/spektra

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | 'Up-Cut' Tool No. | 'Down-Cut' Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 16$ | $1 / 4$ | $1 / 8$ | 2 | $51415-\mathrm{K} \dagger$ | - |
| $1 / 16$ | $1 / 4$ | $1 / 4$ | 2 | $51441-\mathrm{K}$ | - |
| $1 / 8$ | $1 / 2$ | $1 / 8$ | 2 | $51410-\mathrm{K} \dagger$ | $51510-\mathrm{K} \dagger$ |
| $1 / 8$ | $1 / 2$ | $1 / 4$ | 2 | $51411-\mathrm{K}$ | $51511-\mathrm{K}$ |
| $1 / 8$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | $51446-\mathrm{K}$ | - |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 2 | $51404-\mathrm{K}$ | $51504-\mathrm{K}$ |
| $1 / 4$ | 1 | $1 / 4$ | $2-1 / 2$ | $51405-K$ | - |
| $3 / 16$ | $5 / 8$ | $1 / 4$ | 2 | $51417-K$ | - |

5-Pc Spektra Set (includes 51441-K, 51410-K, 51446-K, 51417-K \& 51404-K) AMS-166-K
† Router collet reducer RB-102 (1/4 to 1/8) available for $1 / 8$ shank bits.

CNC feed and speed available online

‘Up-Cut’ ‘Down-Cut’

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 mm | 6 mm | 3 mm | 50 mm | 51634 | - |
| 2 mm | 8 mm | 2 mm | 50 mm | 57310 | - |
| 2 mm | 8 mm | 6 mm | 64 mm | 57311 | - |
| 2.5 mm | 8 mm | 2.5 mm | 50 mm | 57312 | - |
| 2.5 mm | 8 mm | 6 mm | 64 mm | 57313 | - |
| 3 mm | 8 mm | 3 mm | 50 mm | 57314 | - |
| 3 mm | 8 mm | 6 mm | 64 mm | 57315 | - |
| 3 mm | 12 mm | 3 mm | 64 mm | 51491 | - |
| 3 mm | 12 mm | 6 mm | 50 mm | - | 51526 |
| 3 mm | 12 mm | 6 mm | 64 mm | 57316 | 57330 |
| 4 mm | 8 mm | 4 mm | 64 mm | 57317 | - |
| 4 mm | 12 mm | 4 mm | 64 mm | 51636 | - |
| 4 mm | 20 mm | 4 mm | 64 mm | 57318 | - |
| 4 mm | 20 mm | 6 mm | 64 mm | 57319 | 57331 |
| 4 mm | 30 mm | 4 mm | 64 mm | 57320 | - |
| 5 mm | 16 mm | 5 mm | 64 mm | 51493 | - |

'Up-Cut’'Down-Cut’

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 mm | 16 mm | 6 mm | 64 mm | 57321 | 57332 |
| 5 mm | 30 mm | 5 mm | 64 mm | 57322 | - |
| 6 mm | 8 mm | 6 mm | 64 mm | 57323 | - |
| 6 mm | 12 mm | 6 mm | 64 mm | 57324 | - |
| 6 mm | 16 mm | 6 mm | 63 mm | 51638 | - |
| 6 mm | 20 mm | 6 mm | 64 mm | 51495 | - |
| 6 mm | 30 mm | 6 mm | 75 mm | 51497 | - |
| 6 mm | 30 mm | 6 mm | 76 mm | - | 57333 |
| 6 mm | 32 mm | 6 mm | 75 mm | - | 51527 |
| 6 mm | 38 mm | 6 mm | 75 mm | 51499 | - |
| 6 mm | 38 mm | 6 mm | 76 mm | - | 57334 |
| 8 mm | 25 mm | 8 mm | 64 mm | 57325 | 57335 |
| 8 mm | 38 mm | 8 mm | 76 mm | 57326 | 57336 |
| 10 mm | 30 mm | 10 mm | 76 mm | 57327 | - |
| 10 mm | 35 mm | 10 mm | 76 mm | 57328 | - |
| 12 mm | 38 mm | 12 mm | 76 mm | 57329 | - |



## CNC PLASTIC CUTTING SPIRAL DOUBLE '0’ FLUTE New <br> Solid Carbide • Double Flute •Up-Cut <br> 

materials (Plexiglas ${ }^{\circledR}$ Lucite ${ }^{\ominus}$ ) other plastics and wood. Bits are made according to strict tolerances from an exclusive carbide grade. Designed to eject chips up.

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 2$ | $1 / 4$ | 2 | 51762 |
| $3 / 16$ | $5 / 8$ | $1 / 4$ | $2-1 / 2$ | 51763 |
| $1 / 4$ | $7 / 8$ | $1 / 4$ | 3 | 51765 |
| $1 / 4$ | $1-1 / 4$ | $1 / 4$ | 3 | 51767 |



2 Flute

## 8-PC. CNC <br> PLASTIC CUTTING SPIRAL '0' FLUTE



1/4" Shank • Solid Carbide Spiral Router Bit Collection

Set \#AMS-165 Includes:
51411, 51417, 51404, 51405, 51511, 51517, 51504, 46308

## 18-PC. CNC ADVANCED PLASTIC CUTTING



1/4" Shank • Solid Carbide Router Bit Collection


## Set \#AMS-167 Includes:

51441, 51411, 51446, 51417, 51442, 51419, 51404, 51405, 51511,
51504, 46280, 46282, 43608, 46411, 46112, 46426, 46424 \& RC-1075



Spiral


Straight


43508

43604


New


HSS1504

HSS1604

Excellent For Cutting:

- Soft \& Hard Plastics
- Acetal Styrene (ABS)
- Polycarbonate
- Polyethylene (PE)
- Polystyrene
- PVC
- Poly (methyl methacrylate) (PMMA)
- Polypropylene Extruded Acrylic
- High Density Polyethylene (HDPE)
- Ultra High Molecular Weight Polyethylene (UHMW)
- Coroplast ${ }^{\oplus}$


## PLASTIC EDGE ROUNDING

Solid Carbide • Single '0' Flute
Designed for rounding the edge of sheets or parts.

## Excellent For Cutting:

- Plastic - Corian
- Acrylic - Coroplast ${ }^{\text {® }}$
- Acrylic Stone • Poly (methyl methacrylate) (PMMA)


| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{B}$ | $\boldsymbol{\emptyset d}$ | $\mathbf{R}$ | B1 | Type Thickness | L | Tool No. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $3 / 8$ | $1 / 4$ | $3 / 16$ | $7 / 32$ | Straight | $3 / 16$ | $2-1 / 2$ | 46452 |
| $1 / 4$ | $3 / 8$ | $1 / 4$ | $1 / 4$ | $9 / 32$ | Spiral | $1 / 4$ | $2-1 / 2$ | 46466 |

## PLASTIC CUTTING ‘0’ FLUTE

Solid Carbide • Single '0' Flute
Unique circular ' 0 ' flute designed to eject chips more easily. Single flute for fast cutting in soft plastics such as PVC, styrene, ABS, Poly (methyl methacrylate) (PMMA), etc. Visit www.amanatool.com for full material cut list.

| $\boldsymbol{\emptyset} \boldsymbol{D}$ | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 2$ | $1 / 4$ | 2 | 43500 |
| $3 / 16$ | $5 / 8$ | $1 / 4$ | 2 | 43504 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 2 | 43508 |
| $1 / 4$ | 1 | $1 / 4$ | $2-1 / 2$ | 43512 |
| $1 / 4$ | 1 | $1 / 4$ | $3-1 / 4$ | 43514 |

## PLASTIC CUTTING

Solid Carbide • 2 Flute • Straight Grind
Used for routing harder and more rigid plastics in the following materials: Acrylic, Acetal, Nylon, PVC, ABS, Phenolic, Corian, Poly (methyl methacrylate) (PMMA), Acrylic Stone, Coroplast, etc.


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 2$ | $1 / 4$ | 2 | 43600 |
| $3 / 16$ | $5 / 8$ | $1 / 4$ | 2 | 43604 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 2 | 43607 New |
| $1 / 4$ | 1 | $1 / 4$ | $2-1 / 2$ | 43608 |
| $1 / 2$ | 1 | $1 / 2$ | 3 | 43616 |

## PLASTIC CUTTING STRAIGHT ‘0’ FLUTE HIGH SPEED STEEL (HSS)

High Speed Steel (HSS) • Single \& 2 Flute
Provides smooth finish in plastics. Excellent for hand fed operations. May be used in air routers with guide bushing.


| ØD | $\mathbf{B}$ | Flute | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 2$ | 1 | $1 / 4$ | 2 | HSS1500 |
| $1 / 8$ | $5 / 8$ | 1 | $1 / 4$ | $3-1 / 4$ | HSS1501 |
| $3 / 16$ | $5 / 8$ | 1 | $1 / 4$ | $3-1 / 4$ | HSS1502 |
| $3 / 16$ | $3 / 4$ | 1 | $1 / 4$ | $3-1 / 4$ | HSS1503 |
| $1 / 4$ | $3 / 4$ | 1 | $1 / 4$ | $2-1 / 8$ | HSS1504 |
| $1 / 4$ | $3 / 4$ | 1 | $1 / 4$ | $3-1 / 4$ | HSS1505 |
| $1 / 4$ | 1 | 1 | $1 / 4$ | $2-3 / 8$ | HSS1506 |
| $3 / 8$ | 1 | 1 | $3 / 8$ | $2-1 / 2$ | HSS1507 |
| $3 / 16$ | $5 / 8$ | 2 | $1 / 4$ | 2 | HSS1600 |
| $1 / 4$ | $3 / 4$ | 2 | $1 / 4$ | $2-1 / 8$ | HSS1601 |
| $1 / 4$ | $3 / 4$ | 2 | $1 / 4$ | $3-1 / 4$ | HSS1602 |
| $1 / 4$ | $3 / 4$ | 2 | $1 / 4$ | $3-3 / 4$ | HSS1603 |
| $1 / 4$ | 1 | 2 | $1 / 4$ | $2-3 / 8$ | HSS1604 |
| $1 / 4$ | 2 | 2 | $1 / 4$ | $3-1 / 4$ | HSS1605 |
| $3 / 8$ | 1 | 2 | $3 / 8$ | $2-1 / 2$ | HSS1606 |
| $3 / 8$ | 1 | 2 | $3 / 8$ | $3-1 / 2$ | HSS1607 |

## PLASTIC CUTTING SPIRAL BALL NOSE

Solid Carbide • 2 \& 4 Flute •Up-Cut
Designed to eliminate tool marks that commonly appear when used with plastic and solid surface materials. Due to the highly polished finish and unique tool geometry, the spiral ball nose router bit delivers superior surface finish of at least 28 Ra (roughness average) in various materials. The up-cut router bits also eject chips up, to help prevent chip-out on the bottom of the material.
Constructed of special grade solid carbide, the Amana Tool ${ }^{\oplus}$ spiral ball nose router bits last longer than traditional router bits and deliver superior cutting performance with plastics. The bits are ideal for use in a variety of applications spanning the mechanical, medical and woodworking industries.

## Excellent For Cutting:



[^1]

| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\boldsymbol{0 d}$ | $\mathbf{L}$ | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 16$ | $1 / 2$ | $1 / 4$ | 3 | 2 | 46385 |
| $3 / 16$ | $3 / 32$ | $1 / 2$ | $1 / 4$ | $2-1 / 2$ | 2 | 46424 |
| $3 / 16$ | $3 / 32$ | $3 / 4$ | $1 / 4$ | 2 | 2 | 46425 |
| $3 / 16$ | $3 / 32$ | $3 / 4$ | $1 / 4$ | 3 | 2 | 46389 |
| $1 / 4$ | $1 / 8$ | $1 / 2$ | $1 / 4$ | $2-1 / 2$ | 2 | 46426 |
| $1 / 4$ | $1 / 8$ | $7 / 8$ | $1 / 4$ | $2-1 / 2$ | 2 | 46379 |
| $1 / 4$ | $1 / 8$ | 1 | $1 / 4$ | 4 | 2 | $46451 \mathbf{A}$ |
| $1 / 4$ | $1 / 8$ | $1-1 / 8$ | $1 / 4$ | 3 | 2 | 46428 |
| $1 / 4$ | $1 / 8$ | $1 / 2$ | $1 / 4$ | 3 | 4 | 46440 |
| $5 / 16$ | $5 / 32$ | $1 / 2$ | $5 / 16$ | 3 | 4 | 46442 |
| $3 / 8$ | $3 / 16$ | $5 / 8$ | $3 / 8$ | 3 | 4 | 46444 |
| $3 / 8$ | $3 / 16$ | $1-1 / 8$ | $3 / 8$ | 3 | 2 | 46381 |
| $1 / 2$ | $1 / 4$ | $3 / 4$ | $1 / 2$ | 3 | 4 | 46446 |
| $1 / 2$ | $1 / 4$ | $1-1 / 8$ | $1 / 2$ | 3 | 2 | 46383 |
| $1 / 2$ | $1 / 4$ | $1-1 / 2$ | $1 / 2$ | 5 | 2 | $46459 \mathbf{A}$ |

© Warning: CNC use only.
Metric Sizes

| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\boldsymbol{\text { Ød }}$ | $\mathbf{L}$ | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 mm | 1.5 mm | 12 mm | 6 mm | 50 mm | 2 | 46453 |
| 4 mm | 2 mm | 12 mm | 4 mm | 50 mm | 2 | 46454 |
| 5 mm | 2.5 mm | 12 mm | 5 mm | 50 mm | 2 | 46455 |
| 6 mm | 3 mm | 22 mm | 6 mm | 63 mm | 2 | 46456 |
| 10 mm | 5 mm | 29 mm | 10 mm | 75 mm | 2 | 46457 |
| 12 mm | 6 mm | 29 mm | 12 mm | 75 mm | 2 | 46458 |


$\underset{\text { muthe }}{\text { Acer }}$ CNC feed and speed available online

## SPIRAL FINISHER

Solid Carbide • 3 Flute •Low Helix Up-Cut \& Down-Cut
Leaves an Extra High Surface Finish! Those seeking to move up to our 3 flute, Low Helix Finisher will have improved surface finishes in either plastics or hardwoods. The unbeatable combination of three keen edges and a gentle $10^{\circ}$ helix, equates to a stiffer tool that minimizes both part movement and edge burring, leaving a smooth finish.

## Excellent for Cutting

- Plastic - Hard Wood
- Acrylic Stone - Solid Surface
- Composite Plastic • Soft Wood
- Corian
- Poly (methyl methacrylate) (PMMA)
- Coroplast $^{\bullet}$
- Precision Board

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | 'Up-Cut' <br> Tool No. | 'Down-Cut' <br> Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $3 / 8$ | $1 / 4$ | 3 | 51630 | 51730 |
| $1 / 4$ | $7 / 8$ | $1 / 4$ | 3 | 51631 | 51731 |
| $3 / 8$ | $5 / 8$ | $3 / 8$ | 3 | 51632 | 51732 |
| $1 / 2$ | $1-1 / 8$ | $1 / 2$ | $3-1 / 2$ | 51637 | 51737 |

CNC feed and speed available online


## ACRYLIC CUTTING SLOW SPIRAL 'O' FLUTE FINISHER

Solid Carbide • Up-Cut \& Down-Cut • Single \& 2 Flute
Provides smooth finish in acrylic materials, and both soft and hard plastics.


| $\boldsymbol{\emptyset}$ | $\mathbf{B}$ | $\boldsymbol{0}$ | $\mathbf{L}$ | Flute | 'Up-Cut' <br> Tool No. | 'Down-Cut' <br> Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 1 | 46327 | 46427 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 2 | 46313 | 46413 |
| $1 / 4$ | 1 | $1 / 4$ | $2-1 / 2$ | 2 | 46311 | 46411 |
| $1 / 2$ | $1-1 / 4$ | $1 / 2$ | 3 | 2 | 46391 New | 46492 New |



## PLASTIC CUTTING SLOW SPIRAL FINISHER

Solid Carbide • 3 Flute •Up-Cut \& Down-Cut
Specially designed to provide an excellent finish in hardwoods, solid surface and hard plastics. Choose 'Up-Cut' if an excellent finish on the bottom of surface is required, or 'Down-Cut' for an excellent finish on the top of surface.


| ØD | B | Ød | $\mathbf{L}$ | 'Up-Cut' <br> Tool No. | 'Down-Cut' <br> Tool No. |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $3 / 8$ | 1 | $3 / 8$ | $2-1 / 2$ | - | 46430 |
| $3 / 8$ | 1 | $3 / 8$ | 3 | 46330 | 46431 |
| $1 / 2$ | 1 | $1 / 2$ | 3 | 46332 | 46432 |
| $1 / 2$ | $1-1 / 2$ | $1 / 2$ | $3-1 / 2$ | 46334 | 46434 |
| $\mathbf{A}$ Warning: Recommended $\mathrm{RPM}=20,000-21,000$ |  |  |  |  |  |

## CNC PLASTIC TRIM SAW BLADE AND ARBOR SYSTEM

Carbide Tipped • Right Hand Rotation Cutting
Designed for trimming and grooving hard and soft plastics. 100\% flash mounting.


Replacement Parts:

| ØD | Teeth | Hook | Kerf | Plate | Grind | Bore | Ød | L | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 20 | $0^{\circ}$ | $3 / 32$ | $1 / 16$ | TCG | $5 / 8$ | - | - | Saw Blade LB4201 |  |
| $1-1 / 4$ | - | - | - | - | - | - | $1 / 2$ | $3-1 / 4$ | CNC Arbor 47650 |  |

Replacement screw (4) - \#67149 (3/8"x1/2"); Replacement key \#5020 (M5x12).
$\xrightarrow{\text { Pod }}$ CNC feed and speed available online

## PLASTIC CUTTING FLUSH TRIM

Solid Carbide • 2 Flute with Double Ball Bearing
Spiral designed for trimming sheets of stack plastics and laminates in hand-fed applications. Double bearing provides smoother action around contour of the template.

## Excellent for Cutting

- Plastic - Acrylic Stone
- Acrylic
- Corian

Coroplast ${ }^{\oplus}$

- Poly (methyl methacrylate) (PMMA)


| ØD | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 3 | 51436 |
| $1 / 2$ | $1-1 / 8$ | $1 / 2$ | 4 | 51438 |

A Warning: Maximum RPM=35,000

Replacement parts \#51436 \#47779 Locking Ring \#47723 Ball Bearing (2)

Replacement parts \#51438 \#47752 Locking Ring \#47701 Ball Bearing (2)

## PLASTIC CUTTING

Carbide Tipped • Single \& Double '0' Flute
For fast cutting in harder more abrasive plastics such as phenolic resin, acrylic, Corian, Poly (methyl methacrylate) (PMMA), Acrylic Stone, Coroplast, etc.

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | 1 | $1 / 4$ | $2-1 / 4$ | 2 | 43304 |
| $3 / 8$ | 1 | $3 / 8$ | $2-1 / 2$ | 1 | 43108 |

## $3^{\circ} 5^{\circ}$ AND $7^{\circ}$ PATTERNMAKERS

## Carbide Tipped • 2 Flute

This slightly tapered bit is specifically designed for wood patternmaking, especially wood vacuum-forming molds where draft ( $3^{\circ} 5^{\circ}$ and $7^{\circ}$ taper) is required for releasing the styrene or other plastic from the mold. It can be used to bevel the leading edge on a door.

| ØD | ØD1 | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $3 / 8$ | $3^{\circ}$ | $1-1 / 4$ | $1 / 2$ | $3-1 / 8$ | 42420 |
| $19 / 32$ | $3 / 8$ | $5^{\circ}$ | $1-1 / 4$ | $1 / 2$ | $3-5 / 32$ | 42422 |
| $13 / 16$ | $3 / 8$ | $7^{\circ}$ | $1-1 / 4$ | $1 / 2$ | $3-5 / 32$ | 42424 |
| $3 / 4$ | $1 / 2$ | $3^{\circ}$ | $2-1 / 8$ | $1 / 2$ | $4-5 / 8$ | 47144 |

A Warning: Not for use in CNC machines.
Replacement bearing for \#47144 use \#47706.

## CNC PLASTIC CUTTING INSERT CARBIDE SYSTEM

The most innovative time-saving system for cutting and chamfering in plastics.

## 1 Flute

Thirteen unique insert knife profiles produce smooth, chip-free cuts and last at least twice as long as comparable solid carbide bits.
These industrial quality knives allow the user to both cut \& chamfer the top and bottoms of Plexiglas ${ }^{\circledR}$ or styrene sheets
 in one action. The knives fit the In-Groove ${ }^{\text {tw }}$ tool bodies which are expertly balanced to provide superior cutting results.
For more information visit www.amanatool.com/inplastic


Vacuum-forming mold (wooden)

# Composite cutting solutions! 



## CNC COMPRESSION HONEYCOMB CUTTING

Solid Carbide • 6 Flute
Compression router bits provide a burr-free top and bottom finish, providing that the workpiece is thicker than 0.250 ". For optimal cutting results use mist lubricant system or air cooling.

## ZrN COATED BITS

## Excellent for cutting:

- BioBoard ${ }^{\text {m }}$
- Falconboard ${ }^{\bullet}$
- Aluminum Honeycomb Panel (AHP)
- Carbon Fiber
- Honeycomb Cardboard


| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $5 / 8$ | $1 / 8$ | $1 / 8$ | $2-1 / 2$ | 40301 New |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $1 / 4$ | $2-1 / 2$ | 46302 |
| $3 / 8$ | $1-1 / 8$ | $3 / 8$ | $3 / 8$ | 3 | 46303 |
| $3 / 8$ | $1-1 / 4$ | $1 / 4$ | $3 / 8$ | 3 | 46308 |
| $1 / 2$ | $1-1 / 8$ | $1 / 2$ | $1 / 2$ | 3 | 46307 |

A Warning: Maximum RPM $=28,000$
$\int_{\text {nabe }}$ CNC feed and speed available online

## CNC HONEYCOMB CUTTING HOGGER

Solid Carbide • 6 \& 8 Flute
Designed to cut a large variety of honeycomb materials, hogger geometry is excellent for shredding and chip evacuation while maintaining a smooth surface. Amana Tool's "hogger" style routers for honeycomb composites incorporate a precision-ground "knuckle" profile, allowing a freer-cutting action that reduces power requirements and less sidewall pressure in low output spindles while giving impressive gains in feed-rates. ZrN coating greatly enhances durability in highly abrasive composites.

## ZrN COATED BITS

Excellent for cutting:

- Honeycomb
- Composite Materials


6 Flute


8 Flute

| ØD | $\mathbf{B}$ | Ød | Flute | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $13 / 16$ | $1 / 8$ | 6 | $2-1 / 2$ | 40304 New |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 6 | 4 | 40305 New |
| $1 / 4$ | $1-1 / 4$ | $1 / 4$ | 6 | 4 | 46306 |
| $3 / 8$ | 2 | $3 / 8$ | 8 | 4 | 46305 |
| $1 / 2$ | 3 | $1 / 2$ | 8 | 6 | 46309 |

A Warning: Maximum RPM=25,000

CNC feed and speed available online


6 Flute




## END MILL POINT DIAMOND PATTERN, COMPOSITE CUTTING

Solid Carbide - 2 Flute
This bit is designed especially for cutting fiberglass, fiberglass PCB Board, composites, phenolic and other highly abrasive materials. Works well on epoxies made with carbon, glass and composite materials. The up-cut/down-cut diamond pattern cutting edges effectively grinds through the material evenly in all directions.

## Excellent for Cutting:

- Composites
- Glass Reinforced Plastic (GRP)
- Fiberglass
- Fiberglass PCB Board
- Fiber Reinforced Plastic (FRP)
- G10 / FR-4 and G11 / FR-5 Glass Epoxy Composite Laminate Material
- Glass Fiber Reinforced Polymer Plastic Materials (GFR)
- Phenolic
- Phenolic "Garolite" G-7


A Warning: Maximum RPM=28,000

## END MILL POINT ROUGHING SPIRAL, COMPOSITE MATERIAL

Solid Carbide • Multi Flute • Down-Cut
Special grade solid carbide bits feature unique grinding and multi spiral flute design. Suitable for 'roughing' cuts in hard and abrasive composite materials such as: carbon fiber, fiberglass, fiber reinforced plastic (FRP), glass fiber reinforced polymer (GFR), Trespa, etc. Special grade carbide for maximum durability.
Down-Cut for better clamping when machining small work pieces and improved finish on the top of the board.
For use on routers and CNC machines.


Top View


## SPIRAL COMPOSITE, FIBERGLASS AND PHENOLIC CUTTING

Solid Carbide • 2 \& 3 Flute

Amana's Modern Finishing Geometry (MFG) incorporates high shear, multi-flute and a ZrN coating designed for the ultimate combination of finish and tool longetivity in aerospace materials. Modern-day materials present challenges to the fabricator. Using these special multi-flute edge tools featuring ZrN ceramic coating addresses these challenges with a winning geometry combination.

## ZrN COATED BITS

Up-Cut


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1.2 mm | 5 mm | $1 / 8$ | 35 mm | 3 | $46093 \dagger$ |
| $1 / 8$ | $1 / 2$ | $1 / 8$ | 2 | 3 | $46091 \dagger$ |
| $1 / 8$ | $1 / 2$ | $1 / 4$ | 2 | 2 | 46040 |
| $1 / 8$ | $1 / 2$ | $1 / 4$ | 2 | 3 | 46090 |
| $3 / 16$ | $5 / 8$ | $1 / 4$ | 2 | 2 | 46042 |
| $3 / 16$ | $5 / 8$ | $1 / 4$ | 2 | 3 | 46092 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 2 | 46043 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 3 | 46094 |
| $3 / 8$ | $7 / 8$ | $3 / 8$ | $2-1 / 2$ | 2 | 46045 |
| $1 / 2$ | $3 / 4$ | $1 / 2$ | 3 | 2 | 46047 New |

† Router collet reducer RB-102 (1/4 to $1 / 8$ ) available for $1 / 8$ shank bits.
Down-Cut

| ØD | B | Ød | L | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 3 | 46097 |

## GLASS REINFORCED PLASTIC CUTTING SPIRAL

Solid Carbide • 3 \& 4 Flute

Fiberglass-impregnated materials are well known for their abrasiveness along with a tendency to fray or shred during machining along with heat created by the router bit. The response from Amana Tool ${ }^{\circledR}$ to these challenges is an extremely free-cutting, multi-edge Glass Reinforced Plastic (GRP) multi-flute tool that shears the material without shredding or imparting unnecessary heat.

## ZrN COATED BITS

## Excellent For Cutting:

- Carbon Fiber Reinforced - Fiberglass PCB Board

Polymer (CFRP) • Lexan ${ }^{\text {TM }}$

- Composite - Poly (methyl methacrylate) (PMMA)
- Coroplast ${ }^{\text {® }}$
- Fiberglass


Up-Cut

| ØD | B | Ød | L | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 2$ | $1 / 4$ | $2-1 / 2$ | 3 | 51521 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 4$ | 4 | 51525 |

Down-Cut

| ØD | B | Ød | $\mathbf{L}$ | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 2$ | $1 / 4$ | $2-1 / 2$ | 3 | 51531 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 4$ | 4 | 51535 |

[^2]

Tools are manufactured with high balance, that allows them to run up to 60,000 RPM. Adjust your chip load and feed rate accordingly.



## Excellent for Cutting:

- Carbon Fiber Panels
- CFRP
- Carbon Graphite
- Fiberglass
- Fiberglass PCB Board
- FRP
- GFR
- Plastic, PVC \& Acrylic


## CNC CARBON GRAPHITE \& CARBON FIBER PANEL CUTTING SPIRAL

## Solid Carbide • Down-Cut

These carbon graphite and carbon fiber cutting solid carbide router bits are designed to produce a minimum failure in composite materials such as layers separating and a significant loss of mechanical toughness.
The rapidly growing use of use of Carbon Fiber Reinforced Polymers (CFRP) necessitates tooling designed to effectively meet the challenges of such composites. Experts have recognized the need for a tool geometry combining a highly abrasion resistant carbide substrate generous fluting and an impact zone that not only "shatters" the hard carbon fibers but also keeps heat down.
These industrial router bits combat abrasion heat and the breakdown of composites for clean, accurate cuts.

| $\boldsymbol{\emptyset D}$ | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 2$ | $1 / 8$ | 2 | $46260 \dagger$ |
| $1 / 8$ | $1 / 2$ | $1 / 8$ | 2 | $46260-\mathrm{K}$ N New |
| $3 / 16$ | $5 / 8$ | $3 / 16$ | 2 | 46262 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 3 | 46264 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 3 | $46264-\mathrm{K}$ N New |
| $1 / 4$ | $1-1 / 2$ | $1 / 4$ | 3 | 46265 |
| $3 / 8$ | $1-1 / 8$ | $3 / 8$ | $3-1 / 2$ | 46266 |
| $1 / 2$ | $1-1 / 8$ | $1 / 2$ | $3-1 / 2$ | 46267 |
| $1 / 2$ | $2-1 / 8$ | $1 / 2$ | 4 | 46268 |

† Router collet reducer RB-102 ( $1 / 4$ to $1 / 8$ ) available for $1 / 8$ shank bits.
2. For complete details on Spektra ${ }^{T M}$ visit www.amanatool.com/spektra

CNC feed and speed available online


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$\rightarrow$ D $\mid \leftarrow$


Top View

## CNC $90^{\circ}$ COUNTERSINK COMPOSITE MATERIALS

Solid Carbide (Brazed to Steel Shank) • 5 Flute
Designed for making countersinks in composite materials. Offers long-lasting durability.

## Excellent for:

- Glass Fiber Reinforced Polymer - Plastic Materials (GFR)
- Carbon Fiber Reinforced Polymer - Plastic Materials (CFRP)
- Fiber-Reinforced Plastic (FRP)
- Metal Matrix Composite (MMC)
- Honeycomb


Top View

| ØD | ØD1 | B | $\mathbf{a}^{\circ}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $3 m m$ | 5 mm | $90^{\circ}$ | $1 / 4$ | $1-9 / 16$ | 46468 |

CNC feed and speed available online

## FIBERGLASS AND COMPOSITE

Solid Carbide • Medium Burr with End Mill Point
FiberGlass Router (FGR) burrs incorporate reciprocating diamond-fluted geometry, strong negative rake angles and generous fluting to provide the best cutting action in a wide variety of woven resin bond fiberglass and composite materials.

## Excellent for Cutting:

- Edging and Slotting All Carbon Fiber Reinforced Polymer (CFRP)
- Composites
- Fiberglass
- Fiberglass PCB Board
- G10 / FR-4 and G11 / FR-5 Glass Epoxy Composite Laminate Material

| $\boldsymbol{\emptyset}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | 1 | $1 / 8$ | 2 | $48010 \dagger$ |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 48011 |
| $1 / 4$ | $1-1 / 8$ | $1 / 4$ | 3 | 48012 |
| $1 / 4$ | $1-1 / 2$ | $1 / 4$ | 3 | 48014 |
| $3 / 8$ | $7 / 8$ | $3 / 8$ | $2-1 / 2$ | 48016 |

$\dagger$ Router collet reducer RB-102 ( $1 / 4$ to $1 / 8$ ) available for $1 / 8$ shank bits.

## FIBERGLASS AND COMPOSITE

Solid Carbide • Medium Burr with $135^{\circ}$ Drill Point
Combining the proven performance of a diamond-cut geometry with the capacity to plunge while leaving a minimum of top-side burr. $135^{\circ}$ drillpoint minimizes part deflection on thin or otherwise unsupported work-pieces.

## Excellent for Cutting:

- Edging and Slotting All Carbon Fiber Reinforced Polymer (CFRP)
- Composites
- Fiberglass
- Fiberglass PCB Board
- G10 / FR-4 and G11 / FR-5

Glass Epoxy Composite Laminate Material

| ØD | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 2 | 46098 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 48001 |
| $3 / 8$ | $7 / 8$ | $3 / 8$ | $2-1 / 2$ | 48002 |
| $1 / 2$ | 1 | $1 / 2$ | 3 | 48003 |

## HIGH PERFORMANCE

## FIBERGLASS AND COMPOSITE

Solid Carbide - Burr End
Offering an array of unique extended life Aluminum Titanium Nitride (AITiN) coated CNC router bits for all your fiberglass application needs. AITiN coating provides double the hardness of cutting edges resulting in quantum increases in productivity, either in terms of speed or longevity, with or without coolant. Coating helps to prevent edge failures due to vibration and shock during CNC and manual feed applications. Multi-fluted end face for finesse in the grinding process.

## Excellent for Cutting:

- Edging and Slotting All Carbon Fiber Reinforced Polymer (CFRP)
- Composites
- Fiberglass
- Fiberglass PCB Board
- G10 / FR-4 and G11 / FR-5 Glass Epoxy Composite Laminate Material
- Fiber Reinforced Plastic (FRP)
- Glass Reinforced Plastic (GRP)
- Phenolic
- Fiber Reinforced Plastic (FRP)
- Glass Reinforced Plastic (GRP)
- Phenolic


| ØD | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :--- |
| $1 / 8$ | $1 / 2$ | $1 / 8$ | $1-1 / 2$ | $48050-B \dagger$ |
| $1 / 4$ | $2-1 / 8$ | $1 / 4$ | 4 | $48054-B$ |
| $3 / 8$ | 1 | $3 / 8$ | 3 | $48055-B$ |
| $1 / 2$ | $1-1 / 8$ | $1 / 2$ | 3 | $48058-B$ |

$\dagger$ Router collet reducer RB-102 ( $1 / 4$ to $1 / 8$ ) available for $1 / 8$ shank bits.


Top View

$135^{\circ}$ Drill Point

Benefits of AITiN Coating:

- Extra wear resistance
- Allows for faster feed \& speed rates
- Cutting edge protected from wear
- Better chip evacuation
- Superior cutting quality \& extended tool life
- Less heat build-up



Top View


Top View


Top View

## HIGH PERFORMANCE FIBERGLASS AND COMPOSITE

Solid Carbide • $135^{\circ}$ Drill Point
Combination drill/diamond-cut for clean vertical feed for minimum work-piece deflection.

## ATHN COATED BITS

## Excellent for Cutting:

- Edging and Slotting All Carbon Fiber Reinforced Polymer (CFRP)
- Composites
- Fiberglass
- Fiberglass PCB Board
- G10 / FR-4 and G11 / FR-5 Glass Epoxy Composite Laminate Material
- Fiber Reinforced Plastic (FRP)
- Glass Reinforced Plastic (GRP)
- Phenolic

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 2$ | $1 / 8$ | $1-1 / 2$ | $48050-D \dagger$ |
| $1 / 4$ | $2-1 / 8$ | $1 / 4$ | 4 | $48054-D$ |
| $3 / 8$ | 1 | $3 / 8$ | 3 | $48055-D$ |
| $1 / 2$ | $1-1 / 8$ | $1 / 2$ | 3 | $48058-D$ |

† Router collet reducer RB-102 ( $1 / 4$ to $1 / 8$ ) available for $1 / 8$ shank bits.

## HIGH PERFORMANCE <br> FIBERGLASS AND COMPOSITE

Solid Carbide - End Mill
A combination 2 flute end mill/diamond-cut router bit for improved facing finishes on fiberglass and composites.

## AITHN COATED BITS

## Excellent for Cutting:

- Edging and Slotting All Carbon Fiber Reinforced Polymer (CFRP)
- Composites
- Fiber Reinforced Plastic (FRP)
- Glass Reinforced Plastic (GRP)
- Phenolic
- Fiberglass
- Fiberglass PCB Board
- G10 / FR-4 and G11 / FR-5

Glass Epoxy Composite Laminate Material


| ØD | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 2$ | $1 / 8$ | $1-1 / 2$ | $48050-\mathrm{E} \dagger$ |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 3 | $46486-$ CVD |
| $1 / 4$ | 1 | $1 / 4$ | 3 | $48052-E$ |
| $1 / 4$ | $2-1 / 8$ | $1 / 4$ | 4 | $48054-E$ |
| $3 / 8$ | 1 | $3 / 8$ | 3 | $48055-E$ |
| $1 / 2$ | $1-1 / 8$ | $1 / 2$ | 3 | $48058-E$ |

* Chemical Vapor Deposition (CVD) coating for longer tool life. See full details on next page.
† Router collet reducer RB-102 ( $1 / 4$ to $1 / 8$ ) available for $1 / 8$ shank bits.


## HIGH PERFORMANCE <br> FIBERGLASS AND COMPOSITE

Solid Carbide • Plain End
The end of this tool has a flat surface to preserve finishes on the perpendicular face.

## AITIN COATED BITS

## Excellent for Cutting:

- Edging and Slotting All Carbon Fiber Reinforced Polymer (CFRP)
- Composites
- Fiber Reinforced Plastic (FRP)
- Glass Reinforced Plastic (GRP)
- Fiberglass
- Fiberglass PCB Board
- G10 / FR-4 and G11 / FR-5 Glass Epoxy Composite Laminate Material

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :--- |
| $1 / 8$ | $1 / 2$ | $1 / 8$ | $1-1 / 2$ | $48050-\mathrm{N} \dagger$ |
| $1 / 4$ | $2-1 / 8$ | $1 / 4$ | 4 | $48054-\mathrm{N}$ |
| $3 / 8$ | 1 | $3 / 8$ | 3 | $48055-\mathrm{N}$ |
| $1 / 2$ | $1-1 / 8$ | $1 / 2$ | 3 | $48058-\mathrm{N}$ |

† Router collet reducer RB-102 ( $1 / 4$ to $1 / 8$ ) available for $1 / 8$ shank bits.

## HIGH PERFORMANCE CVD DIAMOND COATED FIBERGLASS AND COMPOSITE New

Solid Carbide • 10 Flute •Long Lasting Router Bit/End Mill
Chemical Vapor Deposition (CVD) tools are significantly longer lasting when used on abrasive materials and therefore are perfect for long production applications.
Lower setup costs. Faster throughput times. Higher feed rates. Long tool life.
Chemical Vapor Deposition (CVD) tools are significantly longer lasting when used on abrasive materials and thus more efficient in distances processed per tool.

## Excellent for Cutting:

- Edging and Slotting All Carbon Fiber Reinforced Polymer (CFRP)
- Composites
- Fiberglass
- Fiberglass PCB Board
- G10 / FR-4 Glass Epoxy Composite Laminate Material
G11 / FR-5 Glass Epoxy Composite Laminate Material - Kevlar
- Glass Reinforced Plastic (GRP)
- Phenolic

| ØD | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 3 | $46486-C V D$ * |



Top View

## DIAMOND GRIT SPIRAL WITH ELECTRO-PLATED DIAMONDS

3 Flute • Down-Cut • Alloy Steel End Mill

These tools offer outstanding finishes in the most abrasive of glass fiber or Carbon-Fiber-Reinforced Polymer (CFRP) applications. Combining a down-cut spiral with ultra-abrasion resistant embedded diamonds. Excellent for superb top finishes and outstanding performance. For use on routers and machining centers with or without CNC systems. Must secure work-piece.

## Excellent For Cutting:

- Carbon Fiber
- Metal Matrix Composite (MMC)
- Composites
- Carbon Fiber Reinforced Polymer (CFRP)
- Fiberglass
- Fiberglass PCB Board


| $\emptyset \mathbf{D}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $1-1 / 8$ | $1 / 4$ | 3 | 44110 |
| $1 / 4$ | $1-3 / 8$ | $1 / 4$ | 3 | 44112 |
| $3 / 8$ | $1-3 / 8$ | $3 / 8$ | 3 | 44114 |



## DIAMOND COATED FIBERGLASS, CARBON FIBER AND COMPOSITE

Flush Trim Grit with Ball Bearing • Extended Tool Life
This tool has a special diamond coating which results in longer tool life than the electro-plated brazing method. Diamond grit size is D427 ( $\mu \mathrm{m}$ ) / 40\# (Mesh). Used in the mobile/motor home, caravan, star wagon, trailer, coach, boat and RV industries to trim laminated fiberglass boards. Cuts fast and clean.

Excellent for Cutting:

- Carbon Fiber
- Composite
- Fiberglass
- Fiberglass PCB Board
- Metal Matrix Composite (MMC)
- Carbon Fiber Reinforced Polymer (CFRP)


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Repl. Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-9 / 16$ | $47723(1)$ | 44101 |
| $1 / 4$ | 1 | $1 / 4$ | $2-9 / 16$ | $47723(1)$ | 44102 |
| $3 / 8$ | 1 | $1 / 4$ | $2-5 / 8$ | $47702(1)$ | 44103 |
| $1 / 2$ | 1 | $1 / 2$ | $3-1 / 4$ | $47706(1)$ | 44105 |
| $1 / 2$ | $1-3 / 4$ | $1 / 2$ | $4-1 / 4$ | $47706(2)$ | 44100 |
| $1 / 2$ | 2 | $1 / 2$ | $4-3 / 8$ | $47706(2)$ | 44106 |
| Replacement | Nut \#67086. | Note: $\# 44100$ | \& $\# 44106$ | feature double ball bearings |  |

# Panel Pilot Router Bits 

- Perfect for the RV \& mobile home industry
- Perfect for construction of standard and custom designed wall panels, floor and roof trusses



## PANEL PILOT

Carbide Tipped • Single Flute • Heat Treated
These panel pilot bits have a pointed tip for plunge cuts, a special grind for speed and an integral solid pilot. It is designed for fast cut-out work and is used extensively in the mobile/motor home, caravan, star wagon, trailer, coache and RV industries.
This single-flute version cuts fast and produces an excellent finish.


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 45506 |
| $3 / 8$ | 1 | $1 / 4$ | $2-7 / 8$ | 45507 |
| $3 / 8$ | 1 | $3 / 8$ | 3 | 45508 |
| $1 / 2$ | $1-3 / 16$ | $1 / 2$ | $3-1 / 2$ | 45510 |
| $1 / 2$ | 2 | $1 / 2$ | $4-3 / 4$ | 45511 |



## STAGGER TOOTH PLUNGE PANEL

Carbide Tipped with Center Pilot - Heat Treated
This version of the panel pilot bit has a stagger-tooth configuration for fast, clean cuts, coupled with a solid pilot between the cutting edges. Designed specifically for the caravan, star wagon, trailer, coach, mobile/motor home and RV-manufacturing industries to cut openings in ceilings and sidewalls. It can be used in any setup that has a template between the materials to be cut.


| $\boldsymbol{\emptyset}$ | $\mathbf{B}$ | $\mathbf{E}$ | $\mathbf{F}$ | $\mathbf{B 1}$ | $\mathbf{B 2}$ | $\boldsymbol{\text { Od }}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $2-13 / 16$ | $3 / 8$ | $1 / 2$ | $1-1 / 8$ | $1-3 / 16$ | $1 / 2$ | $4-1 / 4$ | 51314 |
| $1 / 2$ | $2-13 / 16$ | $3 / 8$ | $1 / 2$ | $1-1 / 8$ | $1-3 / 16$ | $1 / 2$ | 5 | 51319 |
| $1 / 2$ | $2-1 / 2$ | $9 / 32$ | $3 / 8$ | $1-1 / 8$ | 1 | $1 / 2$ | 4 | 51321 |

## PANEL PILOT

High Speed Steel (HSS) • Single Flute
The ultimate boring/pilot bit! These HSS panel pilot bits are long lasting and perfect for mobile/motor homes, modular homes, caravans, star wagons, trailers, coaches, RV industries and shed manufacturers.
Perfect for wood panels, vinyl coated panels and aluminum layered material.

Straight


| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $5 / 8$ | $1 / 4$ | $2-3 / 4$ | HSS11004 |
| $3 / 8$ | $7 / 8$ | $3 / 8$ | $3-1 / 8$ | HSS11002 |
| $1 / 2$ | 1 | $1 / 2$ | $3-5 / 8$ | HSS11006 |

Spiral
The 'Down-Cut' design ejects the chips away from the operator. Perfect for drywall, wallboard, vinyl coated panels, aluminum and plywood sandwich panels.

| ØD | $\mathbf{B}$ | $\boldsymbol{0}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $5 / 8$ | $1 / 4$ | $2-3 / 4$ | HSS11003 |
| $3 / 8$ | $3 / 4$ | $3 / 8$ | $3-1 / 8$ | HSS11001 |
| $1 / 2$ | 1 | $1 / 2$ | $3-1 / 2$ | HSS11005 |

## STAGGER TOOTH PANEL PILOT

Carbide Tipped with Plunge Point
Stagger tooth version of our standard two-flute panel pilot which gives greater speed and stock removal than our single-flute with the strength of a two-flute bit.


| ØD | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $5 / 8$ | $2-1 / 4$ | $1 / 2$ | $4-3 / 4$ | 45520 |

## STAGGER TOOTH PLUNGE CUTTING

Carbide Tipped
Two cutting edges spaced 180 degrees apart, each half the length of its flute. One extends from the tip to the middle of the flute, the other from the middle to end. The configuration combines the cutting speed and chip clearance of a single-flute bit with the finish of a double-flute bit. Excellent bit for cutting dense or abrasive man-made materials and panel goods.
2 Blade Stagger

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | 1 | $1 / 4$ | $2-1 / 4$ | 51300 |
| $3 / 8$ | $1-3 / 8$ | $3 / 8$ | 3 | 51302 |
| $3 / 8$ | $1-1 / 2$ | $1 / 2$ | $3-1 / 8$ | 51304 |
| $1 / 2$ | $1-1 / 2$ | $1 / 2$ | $3-1 / 8$ | 51306 |
| $1 / 2$ | 2 | $1 / 2$ | $4-1 / 4$ | 51308 |
| $1 / 2$ | $2-1 / 8$ | $1 / 2$ | $4-1 / 4$ | 51309 |
| $1 / 2$ | $2-1 / 4$ | $1 / 2$ | $4-1 / 2$ | 51310 |
| $1 / 2$ | $2-1 / 2$ | $1 / 2$ | $4-1 / 2$ | 51311 |
| $1 / 2$ | $2-5 / 8$ | $1 / 2$ | $4-3 / 4$ | 51313 |
| $1 / 2$ | $2-5 / 8$ | $1 / 2$ | $5-1 / 2$ | 51323 |
| $5 / 8$ | 2 | $1 / 2$ | 4 | 51315 |

Extra Long 3 Blade Stagger

| ØD | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $3-1 / 2$ | $1 / 2$ | $6-1 / 4$ | 51325 |






## INDUSTRIAL

Polycrystalline Diamond (PCD)

- Harder cut edge provides high wear resistance
- Cut thousands of feet more than carbide without changing the tool which saves setup time
- Optimized machine tool efficiency
- Quality of finish is often significantly improved

If you're looking for the ultimate in tooling, you've found it! Our Polycrystalline Diamond (PCD) tipped router bits will cut a wide variety of tough, abrasive materials including composites, particleboard, MDF (both raw or with melamine), veneer, hardwoods, plastic and solid surface. The cutting edge lasts much longer than carbide for extremely long life.


## CNC PCD COMPRESSION UP/DOWN SHEAR

Diamond Tipped with Plunge Point • Right Hand Rotation
Diamond is the hardest material on the earth. PCD tooling is manufactured in a high-temperature and high-pressure laboratory that fuses diamond particles onto a carbide substrate, which allows the diamond to be brazed onto a tool body.
Compression with carbide plunge point. For grooving, jointing \& rabbeting in composite materials (particleboard, MDF both raw or with melamine, veneer, hardwood, etc). Up/Down-shear for double sided material.

Excellent for Cutting:

- Aluminum
- Aluminum Composites
- Aluminum Composite

Material (ACM)

- Composites
- Composite Panels
- Custom Composite Materials (CCM)
- Fiberglass
- Fiberglass PCB Board

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L 1}$ | $\mathbf{L}$ | Max RPM | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | 1 | $1 / 2$ | $1-3 / 8$ | $2-3 / 4$ | 30,000 | DRB-200 |
| $1 / 2$ | $1-3 / 8$ | $1 / 2$ | $1-3 / 4$ | $3-3 / 4$ | 30,000 | DRB-208 |
| $5 / 8$ | 1 | $1 / 2$ | $1-3 / 8$ | $2-7 / 8$ | 27,000 | DRB-212 |
| $5 / 8$ | $1-5 / 8$ | $5 / 8$ | $1-3 / 4$ | 4 | 27,000 | DRB-216 |
| $3 / 4$ | $1-3 / 8$ | $3 / 4$ | 2 | $3-3 / 4$ | 24,000 | DRB-224 |

[^3]

## 44. PCD CNC ENGRAVING, V-GROOVING AND CHAMFERING <br> Diamond Tipped

Excellent for V-Grooving and Chamfering:

- Aluminum Composite Material (ACM)
- Carbon Fiber
- Composites
- Hardwood
- Laminate Chipboard and MDF


## Excellent for Engraving:

- ACM
- Aluminum, Brass \& Copper
- Aluminum Composites
- Carbon Fiber
- Composites
- Hardwood
- HDPE
- King Starboard ${ }^{\circledR}$ /

Marine Building Material

- Laminate Chipboard and MDF
- Softwood
- Solid Surface
- Synthetic and Homogenous Marble
- Plywood Veneer
- Metal Alloys that don't contain Iron
- PCB Board
- Phenolic
- Plastics
- Plywood Veneer
- Softwood
- Solid Surface
- Synthetic and Homogenous Marble
- Titanium



Top View


Top View


1:1 DRB-418

| $\mathbf{a}^{\circ}$ | $\emptyset \mathbf{D}$ | $\mathbf{D 1}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | Flute | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $60^{\circ}$ | $1 / 4$ | 0.005 | $1 / 8$ | - | $1 / 4$ | 2 | $2-3 / 8$ | DRB-416 |
| $90^{\circ}$ | $1 / 2$ | 0.10 | $3 / 8$ | $1 / 4$ | $1 / 4$ | 1 | $2-1 / 4$ | DRB-418 New |



DRB-416

## PCD DOUBLE FLUTE STRAIGHT PLUNGE

## Diamond Tipped • 2 Flute

Excellent for cutting composite panels and fiberglass. The diamond-tipped cutting edges lasts much longer than carbide-tipped tooling. In the long-run, PCD is the most economical choice.

## Excellent for Cutting:

- Aluminum
- Aluminum Composites
- Aluminum Composite Material (ACM)
- Composites
- Composite Panel
- Laminate
- Lightweight Composites
- MDF
- Particleboard
- Plywood Veneer
- Fiberglass
- Fiberglass Reinforced Composites
- Fiber-Reinforced Structural Foam Floors


| ØD | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 3 | DRB-420 |
| $1 / 2$ | $3 / 4$ | $1 / 2$ | 4 | DRB-424 |

A Warning: Maximum RPM $=12,000$


CNC feed and speed available online

PCD ACM DOUBLE EDGE FOLDING
V-Groove for Shaping Aluminum Composite Material Panels 2 Flute • Diamond Tipped
Designed for shaping Aluminum Composite (sandwich) Materials with $90^{\circ}$ angle V -grooves with flat bottom. Widely used for cladding many diverse exterior and interior applications. The long lasting durablility of the material makes it an excellent choice for buildings, signage, displays, etc. Routing V-shaped grooves, whereby the aluminum cover and a part of the polyethylene core is removed, allows for folding the remaining material. Ideal for wall panel fabrication.
PCD provides excellent cutting surfaces and extremely long life. Also optimal for panels with mineral core which may meet fire regulations.

Excellent for Cutting and Scoring:

- Acetate
- Aluminum, Clay, Brass, Bronze, Zinc \& Wood Composite Panels
- ACM
- Aluminum Composite Panel (ACP)
- ALPOLIC® Copper Composite Material (CCM)
- Alucobond ${ }^{\circledR}$
- Alupanel ${ }^{\circledR}$
- Bakelite
- Dibond ${ }^{\circledR}$
- Durabond
- e-panel ${ }^{\text {TM }}$
- Etalbond ${ }^{\circledR}$
- Nylon
- Phenolics
- Plastic/Acrylic
- Plexiglas ${ }^{\circledR}$
- PVC
- Titanium Composite Material (TCM)
- Wood


| $\mathbf{a}^{\circ}$ | $\mathbf{a} 1^{\circ}$ | ØD | ØD1 | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $90^{\circ}$ | $45^{\circ}$ | $1 / 2$ | $0.090(2.3 \mathrm{~mm})$ | $3 / 8$ | $13 / 64$ | $1 / 4$ | 2 | DRB-450 |

CNC feed and speed available online

CNC PCD BALL NOSE New
Diamond Tipped • 2 Flute
If you're looking for the ultimate in tooling you've found it! Our PCD ball nose router bits are designed to eliminate tool marks that commonly appear when used with plastic and solid surface materials. The cutting edge lasts much longer than carbide for extremely long life.
Diamond is the hardest material on the earth. PCD tooling is manufactured in a high-temperature and high-pressure laboratory that fuses diamond particles onto a carbide substrate which allows the diamond to be brazed onto a tool body.


| $\mathbf{R}$ | ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 4$ | $3 / 8$ | $1 / 4$ | $2-1 / 2$ | DRB-432 |
| $3 / 16$ | $3 / 8$ | $1 / 2$ | $3 / 8$ | 3 | DRB-433 |

A Warning: Maximum RPM=18,000
$\underset{\text { atab }}{\text { ater }}$ CNC feed and speed available online

Diamond Tipped • 2 Flute
Diamond is the hardest material on the earth. PCD tooling is manufactured in a high-temperature and high-pressure laboratory that fuses diamond particles onto a carbide substrate which allows the diamond to be brazed onto a tool body. If you're looking for the ultimate in tooling you've found it! Our PCD tipped compression CNC router bits will groove joint rabbet and surface plane a wide variety of tough abrasive materials including composites, particleboard, MDF (both raw or with melamine) veneer and hardwoods. The cutting edge lasts much longer than carbide for extremely long life.

## Excellent for Cutting:

- Aluminum, Bronze \& Copper
- Aluminum Composites
- ACM
- MDF
- Particleboard
- Composites
- Wood


| ØD | B | A | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 2$ | $1 / 2$ | $3 / 8$ | $1 / 2$ | $2-1 / 2$ | DRB-440 |

Cow
CNC feed and speed available online

## SH CNC PCD T-SLOT <br> Diamond Tipped • 2 Flute

T-Slot diamond tipped router (standard T-Slot). Re-sharpen one to two times. Right hand rotation. The diamond-tipped cutting edges lasts much longer than carbide-tipped tooling. In the long-run, PCD is the most economical choice. If you're looking for the ultimate in tooling you've found it! Our PCD tipped T-slot CNC router bits will groove a wide variety of tough abrasive materials including composites, particleboard, MDF (both raw or with melamine) veneer and hardwoods.

## Excellent for Cutting:

- Aluminum
- Hardwood
- Aluminum Composites
- Aluminum Composite Material (ACM)
- Composites
- MDF
- Melamine
- Particle Board


## Benefits of PCD Technology

- Harder cutting edge provides higher resistance to wear
- Cut thousands of feet more than carbide without changing tool, saving setup time
- Optimized machine tool efficiency
- Quality of finish is often significantly improved

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OD | $\mathbf{B}$ | $\mathbf{D} 1$ | \# of blades | $\mathbf{B} 1$ | Ød | $\mathbf{L}$ | Max RPM | Tool No. |
| $1-3 / 8$ | $1 / 4$ | $3 / 8$ | $2+1$ | $1 / 16$ | $1 / 2$ | $2-3 / 8$ | 30,000 | DRB-300-RH |

CNC feed and speed available online

Milling / Surfacing / Facing

Shouldering / Rabbeting



## Benefits of PCD Technology

- Harder cutting edge provides higher resistance to wear
- Cut thousands of feet more than carbide without changing tool, saving setup time
- Optimized machine tool efficiency
- Quality of finish is often significantly improved

PCD FLUSH TRIM FOR
MDF/LAMINATE, ACM \& ALUMINUM
Diamond Tipped • 2 Flute with Ball Bearing Guide
Diamond is the hardest material on the earth. PCD tooling is manufactured in a high-temperature and high-pressure laboratory that fuses diamond particles onto a carbide substrate, which allows the diamond to be brazed onto a tool body. If you're looking for the ultimate in tooling, you've found it! Amana's PCD tipped flush trim CNC router bits will trim a wide variety of tough, abrasive materials including composites, particleboard, MDF (both raw or with melamine), veneer and hardwoods. The cutting edge lasts much longer than carbide for extremely long life. The ultimate flush trim bit for ACM and aluminum. The diamond-tipped cutting edges last much longer than carbide-tipped flush trims, saving you time and money.

## Excellent for Flush Trimming:

- ACM
- Dibond ${ }^{\circledR}$
- ACP
- Aluminum, Clay, Zinc \& Wood

Composite Panels

- Aluminum
- ALPOLIC® CCM
- Alucobond ${ }^{\text {® }}$
- Alupanel ${ }^{\text {® }}$
- Composites
- Composite Materials
- Durabond**
- e-panel ${ }^{\text {TM }}$
- Etalbond ${ }^{\text {® }}$
- Fiber-Reinforced Urethane
- Fiber-Reinforced Structural Foam Floors
- Fiberglass Reinforced Composites
- Lightweight Composites
- MDF Laminates
- TCM


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $7 / 16$ | $1 / 4$ | $2-19 / 64$ | DRB-400 |
| $1 / 2$ | 1 | $1 / 4$ | $2-53 / 64$ | DRB-404 |

Replacement parts: Bearing \#47706; Screw \#67018; Washer \#67082.


## PCD CORNER ROUND ROUTER BITS

Diamond Tipped • 2 Flute with 1/2" Diameter Ball Bearing
If you are looking for the ultimate in tooling, you have found it. Our diamond router bits will cut a wide variety of tough, abrasive materials. The cutting edge lasts much longer than carbide-tipped tooling. In the long-run, PCD is the most economical choice.

## Excellent for Corner Rounding:

- Aluminum
- Aluminum Composites
- ACM
- Chipboard
- Composites
- Custom Composite Materials
- Fiberglass Reinforced Composites
- Fiber-Reinforced Structural Foam Floors
- Fiber-Reinforced Urethane
- Lightweight Composites
- Laminates
- MDF
- Wood


Replacement parts: Bearing \#47706; Screw \#67096; Washer \#67082.


## CNC V-GROOVE, MITER FOLD, SIGNMAKING \& LETTERING -1/4" \& 1/2" SHANK

Insert Carbide • Single Flute \& 2 Flute • $40^{\circ}$ to $160^{\circ}$
Designed for V-Grooving, signmaking, lettering, miter folding and chamfering your material to a perfect joint! Excellent solution for etching. General purpose knives included.



| $\mathrm{a}^{\circ}$ | $\mathrm{a}^{\circ} 1$ | $\emptyset \mathrm{D}$ | B | B1 | Flute | Cutting Edges | Ød | L1 | L | Gen. Purpose Repl. Knife | Optional MDF Repl. Knife | Torx Screw | Max <br> RPM | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $40^{\circ}$ | $20^{\circ}$ | 47/64 | 1 | 1-1/16 | 1 | 1 | 1/2 | 1-1/2 | 2-9/16 | RCK-57 | RCK-367 | 67117 | 28,000 | RC-1040 |
| $45^{\circ}$ | $22.5{ }^{\circ}$ | 13/16 | 63/64 | 1-1/16 | 1 | 1 | 1/4 | 1-3/8 | 2-5/16 | RCK-56 | RCK-350 | 67117 | 35,000 | RC-1145 |
| $45^{\circ}$ | $22.5{ }^{\circ}$ | 13/16 | 1 | 1-1/16 | 1 | 1 | 1/2 | 1-3/8 | 2-3/8 | RCK-56 | RCK-350 | 67117 | 24,000 | RC-1045 |
| $45^{\circ}$ | $22.5{ }^{\circ}$ | 13/16 | 1 | 1-1/16 | 1 | 1 | 1/2 | 2-1/2 | 3-21/32 | RCK-56 | RCK-350 | 67117 | 18,000 | RC-1049 |
| $46^{\circ}$ | $23^{\circ}$ | 27/32 | 63/64 | 1-1/16 | 1 | 1 | 1/2 | 1-3/8 | 2-3/8 | RCK-56 | RCK-350 | 67117 | 24,000 | RC-1047 |
| $50^{\circ}$ | $25^{\circ}$ | 7/8 | 31/32 | 1-1/16 | 1 | 1 | 1/2 | 1-1/2 | 2-9/16 | RCK-56 | RCK-350 | 67117 | 22,000 | RC-1046 |
| $60^{\circ}$ | $30^{\circ}$ | 1-1/32 | 29/32 | 1-1/16 | 1 | 1 | 1/2 | 1-3/8 | 2-7/16 | RCK-56 | RCK-350 | 67117 | 24,000 | RC-1108 |
| $60^{\circ}$ | $30^{\circ}$ | 1-1/16 | 59/64 | 1-1/16 | 1 | 1 | 1/4 | 1-1/8 | 2-25/64 | RCK-56 | RCK-350 | 67117 | 24,000 | RC-1148 New |
| $70^{\circ}$ | $35^{\circ}$ | 1-7/32 | 7/8 | 1-1/16 | 1 | 1 | 1/2 | 1-1/2 | 2-9/16 | RCK-56 | RCK-350 | 67117 | 18,000 | RC-1048 |
| $72^{\circ}$ | $36^{\circ}$ | 1-1/4 | 7/8 | 1-1/16 | 1 | 1 | 1/2 | 1-1/2 | 2-19/32 | RCK-56 | RCK-350 | 67117 | 18,000 | RC-1072 |
| $90^{\circ}$ | $45^{\circ}$ | 1-1/2 | 3/4 | 1-1/16 | 1 | 2 | 1/4 | 1-3/8 | 2-5/8 | RCK-134 | RCK-351 | 67117 | 35,000 | RC-1142 New |
| $90^{\circ}$ | $45^{\circ}$ | 1-1/2 | 3/4 | 1-1/16 | 1 | 2 | 1/2 | 1-25/32 | 3 | RCK-134 | RCK-351 | 67117 | 18,000 | RC-1102 |
| $91^{\circ}$ | $45.5{ }^{\circ}$ | 1-1/2 | 3/4 | 1-3/64 | 1 | 2 | 1/4 | 1-3/8 | 2-19/32 | RCK-119 | RCK-352 | 67117 | 18,000 | RC-1140 New |
| $91^{\circ}$ | $45.5{ }^{\circ}$ | 1-1/2 | 3/4 | 1-1/16 | 1 | 2 | 1/2 | 1-25/32 | 3 | RCK-119 | RCK-352 | 67117 | 18,000 | RC-1100 |
| $100^{\circ}$ | $50^{\circ}$ | 1-5/8 | 11/16 | 1-1/16 | 1 | 2 | 1/2 | 1-25/32 | 3-3/16 | RCK-119 | RCK-352 | 67117 | 18,000 | RC-1103 |
| $110^{\circ}$ | $55^{\circ}$ | 1-3/4 | 5/8 | 1-1/16 | 1 | 2 | 1/2 | 2 | 3-3/16 | RCK-119 | RCK-352 | 67117 | 18,000 | RC-1105 |
| $120^{\circ}$ | $60^{\circ}$ | 2-1/32 | 9/16 | 1-5/32 | 2 | 1 | 1/2 | 2 | 3-1/16 | RCK-136 | RCK-353 | 67139 | 18,000 | RC-1104 † |
| $130^{\circ}$ | $65^{\circ}$ | 2-1/8 | 1/2 | 1-5/32 | 2 | 1 | 1/2 | 2 | 3 | RCK-137 | RCK-354 | 67115 | 22,000 | RC-1107 |
| $140^{\circ}$ | $70^{\circ}$ | 2-13/64 | 13/32 | 1-11/64 | 2 | 1 | 1/2 | 2 | 3-1/16 | RCK-59 | RCK-346 | 67117 | 18,000 | RC-1110 |
| $150^{\circ}$ | $75^{\circ}$ | 2-1/4 | 19/64 | 1-5/32 | 2 | 1 | 1/2 | 2 | 2-15/16 | RCK-137 | RCK-354 | 67115 | 22,000 | RC-1106 |
| $140^{\circ}$ | $70^{\circ}$ | 3-5/64 | 1/2 | 1-1/2 | 2 | 1 | 1/2 | 1-31/32 | 3-3/16 | RCK-347 | - | 67139 | 16,000 | RC-1111 New |
| $160^{\circ}$ | $80^{\circ}$ | 2-5/16 | 13/64 | 1-5/32 | 2 | 1 | 1/2 | 2 | 2-25/32 | RCK-137 | RCK-354 | 67115 | 22,000 | RC-1109 |

* This tool will make 5 sided box. $\dagger$ RC-1104 is suitable for cutting Cristal Plexiglas ${ }^{\oplus}$.

For the best finishing results, blow cold air on the cut area while cutting, with a low feed rate of $500-1,000 \mathrm{~mm} / \mathrm{min}$ at RPM 6,000-10,000.
Item \#'s RC-1100, RC-1102, RC-1103, RC-1105 \& RC-1142 allows you to get two uses out of each insert. Once insert knife show signs of wear you can rotate the insert for a brand new cutting edge.

For material cut list see next page.


## CNC V-GROOVE, MITER FOLD, SIGNMAKING

 \& LETTERING - 3/4" SHANK
## Insert Carbide • Single Flute \& 2 Flute $\bullet 45^{\circ}$ to $150^{\circ}$

Innovative CNC tool design uses the highest grade carbide insert knives. Designed for V-Grooving signmaking, lettering, miter folding and chamfering your material to a perfect joint! Excellent solution for etching. Complete with general purpose knives.


Create the Perfect $91^{\circ}$ Miter Fold with RC-1028 or RC-1100

RC-1034 $90^{\circ}$

| $\mathrm{a}^{\circ}$ | $\mathrm{a}^{\circ} 1$ | $\emptyset \mathrm{D}$ | B | B1 | Flute | Cutting Edges | Ød | L1 | L | Gen. Purpose Repl. Knife | Optional MDF Repl. Knife | Torx Screw | Max <br> RPM | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $45^{\circ}$ | $22.5{ }^{\circ}$ | 1-1/2 | 1-3/4 | 1-15/16 | 1 | 1 | 3/4 | 2-3/16 | 4-1/4 | RCK-58 | RCK-349 | 67117 | 18,000 | RC-1031 |
| $90^{\circ}$ | $45^{\circ}$ | 2-5/8 | 1-9/32 | 1-27/32 | 1 | 2 | 3/4 | 2-5/32 | 3-13/16 | RCK-133 | RCK-355 | 67110 | 18,000 | RC-1030 |
| $90^{\circ}$ | $45^{\circ}$ | 3 | 1-1/2 | 2-1/8 | 1 | 2 | 3/4 | 2-1/8 | 4-23/64 | RCK-138 | RCK-359 | 67115 | 18,000 | RC-1034 |
| $91^{\circ}$ | $45.5^{\circ}$ | 2-5/8 | 1-5/16 | 1-3/8 | 1 | 2 | 3/4 | 2-3/8 | 3-7/8 | RCK-117 | RCK-356 | 67110 | 18,000 | RC-1028 |
| $150^{\circ}$ | $75^{\circ}$ | 3-25/32 | 1/2 | 1-31/32 | 2 | 1 | 3/4 | 2-3/8 | 3-1/2 | RCK-112 | RCK-357 | 67115 | 13,000 | RC-1027 |

$\star$ Warning: These tools have an open flute design (not anti-kickback) and are intended for high feed-rate CNC machine use only. Do not use in portable routers. A Warning: For maximum RPM visit www.amanatool.com
Item \#'s RC-1028, RC-1030 \& RC-1034 allows you to get two uses out of each insert. Once knife show signs of wear you can rotate the insert for a new cutting edge. $\xrightarrow[\text { atrat }]{ }$ CNC feed and speed available online


Excellent For Cutting:

- Foam
- Melamine
- MDF/HDF
- Wood
- King ColorCore ${ }^{\circledR}$,
- Plastic
- Xanita ${ }^{\circledR}$ Board ${ }^{\star}$
- 20lbs High Density Urethane
- Sign Board
- Solid Surface
- Veneered Plywood

Engravable
Polymer Sheet.

- Laminate

- Carbon Fiber
- Aluminum
- Copper
- Silver
- Brass
*When working with Xanita LightBoard panel (X-board ${ }^{\oplus}$, X-board ${ }^{\oplus}$ plus) we recommend using MDF knives for better results.


## 1 Flute • For Signmaking, Lettering \& Engraving

Industrial quality insert carbide knives produce crisp, clean cuts and last at least twice as long as comparable solid carbide bits.
This engraving system was engineered to quickly interchange inserts while tool body can remain mounted in CNC machine. This minimizes downtime and helps to maintain consistent cutting accuracy. CNC Tool bodies are expertly balanced for virtually no vibration to provide superior cutting results.


## Excellent For Cutting:

- Laminated Materials
- Phenolic
- Aluminum (V-Tip only)
- Veneers
- Solid Surface
- Brass (V-Tip only)
- MDF
- Carbon Fiber
- PCB Board
- Softwood
- HDPE
- Hardwood
- King Starboard ${ }^{\circledR}$



AMS-209

CNC INSERT CARBIDE ENGRAVING SYSTEM SETS
The 8-piece In-Groove collection contains industrial-quality insert carbide knives that can quickly and easily be interchanged while the tool body remains mounted in the CNC machine, minimizing downtime and helping maintain consistent cutting accuracy.


| Description | Shank | Overall Length | Tool No. |
| :--- | :---: | :---: | :---: |
| 8-Piece In-Groove Set | $1 / 4$ | $2-1 / 2$ | AMS-210 |
| 8-Piece In-Groove Set | $1 / 2$ | $2-1 / 2$ | AMS-209 |

Knives Included with Each Set

| QTY | Description |
| :---: | :--- |
| 1 | Corner Round/Bead Groove Insert Carbide Knife |
| 1 | Straight Insert Carbide Knife |
| 3 | $30^{\circ}$ V-Tip Insert Carbide Knives |
| 1 | $60^{\circ}$ V-Tip Insert Carbide Knife |
| 1 | $1 / 16^{\prime \prime}$ Radius Core Box Insert Carbide Knife |

RCK-360 $r$ rer $r$
RCK-361 $r$
RCK-362
RCK-380

[^4]CNC IN-GROOVE'" INSERT ENGRAVING TOOL BODY
Solid carbide insert carbide knives produce crisp, clean cuts and last at least twice as long as comparable solid carbide bits. This industrial engraving tool body was engineered to quickly interchange inserts while the tool body remains mounted in your CNC machine. This minimizes downtime and helps to maintain consistent cutting accuracy. Insert knives sold separately. CNC tool bodies are expertly balanced for virtually no vibration for superior cutting results.


| Tool Body Shank | Overall Length | Tool No. |
| :---: | :---: | :--- |
| $6 m m$ | $2-1 / 2$ | RC-1077 * |
| $1 / 4$ | $2-1 / 2$ | RC-1075 * |
| $12 m m$ | $2-1 / 2$ | RC-1078 * |
| $1 / 2$ | $2-1 / 2$ | RC-1076 * |

* Insert knives sold separately.

Replacement parts: Hex key \#5004; Screw \#67127.


RC-1075 RC-1077


RC-1076 RC-1078


## REPLACEMENT IN-GROOVE ${ }^{\text {TM }}$ INSERT CARBIDE KNIVES

| $30^{\circ} \mathrm{V}$-TIPS |  |  |
| :---: | :---: | :---: |
| Tip Width | B | Tool No. |
| 0.005 | $16 \mathrm{~mm}(5 / 8)$ | RCK-360 |
| 0.010 | $16 \mathrm{~mm}(5 / 8)$ | RCK-361 |
| 0.020 | $16 \mathrm{~mm}(5 / 8)$ | RCK-362 |
| 0.030 | $16 \mathrm{~mm}(5 / 8)$ | RCK-363 |
| 0.040 | $16 \mathrm{~mm}(5 / 8)$ | RCK-364 |
| 0.060 | $16 \mathrm{~mm}(5 / 8)$ | RCK-366 |
| 0.090 | $16 \mathrm{~mm}(5 / 8)$ | RCK-369 |

$60^{\circ}$ V-TIPS

| Tip Width $\quad$ B | Tool No. |
| :---: | :---: |
| $0.0057 .5 \mathrm{~mm}(9 / 32)$ | RCK- 380 |
| 0.010 | $7.5 \mathrm{~mm}(9 / 32)$ |
| RCK-381 |  |
| 0.020 | $7.5 \mathrm{~mm}(9 / 32)$ |
| 0.030 | RCK-382 |
| $0.5 \mathrm{~mm}(9 / 32)$ | RCK-383 |
| 0.040 | $7.5 \mathrm{~mm}(9 / 32)$ |
| $0.060-384$ |  |
| $7.5 \mathrm{~mm}(9 / 32)$ | RCK-385 |
| $0.0907 .5 \mathrm{~mm}(9 / 32)$ | RCK-386 |

## $90^{\circ} \mathrm{V}$-TIPS

| Tip Width | B | Tool No. |
| :---: | :---: | :---: |
| 0.005 | $4 \mathrm{~mm}(5 / 32)$ | RCK-390 |
| 0.010 | $4 \mathrm{~mm}(5 / 32)$ | RCK-391 |
| 0.020 | $4 \mathrm{~mm}(5 / 32)$ | RCK-392 |
| 0.040 | $4 \mathrm{~mm}(5 / 32)$ | RCK-393 |

## STRAIGHT PLUNGE

| Tip Width | B | Tool No. |
| :---: | :---: | :---: |
| $1 / 8$ | $5 \mathrm{~mm}(3 / 16)$ | RCK-400 |
| $3 / 16$ | $6 \mathrm{~mm}(15 / 64)$ | RCK-402 |
| $1 / 4$ | $7 \mathrm{~mm}(9 / 32)$ | RCK-404 |
| $5 / 16$ | $8 \mathrm{~mm}(5 / 16)$ | RCK-406 |



## CORNER ROUND

| Radius | B | Tool No. |
| :---: | :---: | :---: |
| $1 / 16$ | $8 \mathrm{~mm}(5 / 16)$ | RCK-410 |
| $3 / 32$ | $8 \mathrm{~mm}(5 / 16)$ | RCK-412 |
| $1 / 8$ | $8 \mathrm{~mm}(5 / 16)$ | RCK-414 |




## V-GROOVE SIGNMAKING \& LETTERING

Carbide Tipped • Single, 2 \& 3 Flute
Cut decorative V-Grooves and lettering on signs with these bits. Use with an edge guide to chamfer and bevel edges.


| $\mathrm{a}^{\circ}$ | ØD | B | B1 | 0 d | L | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $60^{\circ}$ | 1/4 | 1/8 | - | 1/4 | 2-3/8 | 2 | DRB-416 |
| $60^{\circ}$ | 1/4 | 31/64 | 7/32 | 1/4 | 2 | 3 | 45624* New |
| $60^{\circ}$ | 1/2 | 5/8 | 7/16 | 1/4 | 1-3/4 | 2 | $45705 \dagger$ New |
| $60^{\circ}$ | 1/2 | 5/8 | 27/64 | 1/2 | 2-1/4 | 2 | $45706 \dagger$ New |
| $90^{\circ}$ | 1/4 | 9/16 | 1/8 | 1/4 | 1-1/2 | 2 | 45625 * |
| $90^{\circ}$ | 3/8 | 7/16 | 3/16 | 1/4 | 1-5/8 | 2 | 45700 |
| $90^{\circ}$ | 3/8 | 7/16 | 3/16 | 1/2 | 2 | 2 | 45702 |
| $90^{\circ}$ | 1/2 | 3/8 | 1/4 | 1/4 | 2-1/4 | 1 | DRB-418 New |
| $90^{\circ}$ | 1/2 | 1/2 | 1/4 | 1/4 | 1-5/8 | 2 | 45704 |
| $90^{\circ}$ | 1/2 | 1/2 | 1/4 | 1/2 | 2-1/8 | 2 | 45708 |
| $90^{\circ}$ | 5/8 | 1/2 | 5/16 | 1/4 | 1-5/8 | 2 | 45710 |
| $90^{\circ}$ | 5/8 | 1/2 | 5/16 | 1/2 | 2 | 2 | 45712 |
| $90^{\circ}$ | 3/4 | 5/8 | 3/8 | 1/4 | 1-3/4 | 2 | 45714 |
| $90^{\circ}$ | 3/4 | 5/8 | 3/8 | 1/2 | 2-1/8 | 2 | 45716 |
| $90^{\circ}$ | 7/8 | 5/8 | 7/16 | 1/4 | 1-7/8 | 2 | 45718 |
| $90^{\circ}$ | 7/8 | 5/8 | 7/16 | 1/2 | 2-1/4 | 2 | 45720 |
| $90^{\circ}$ | 1 | 5/8 | 1/2 | 1/4 | 1-7/8 | 2 | 45722 |
| $90^{\circ}$ | 1 | 5/8 | 1/2 | 1/2 | 2-1/4 | 2 | 45724 |
| $90^{\circ}$ | 1-1/4 | 3/4 | 5/8 | 1/2 | 2-1/2 | 2 | 45726 |
| $90^{\circ}$ | 1-1/4 | 15/16 | 5/8 | 1/4 | 2-13/64 | 2 | 45751 |
| $90^{\circ}$ | 1-1/2 | 1 | 3/4 | 1/2 | 2-3/4 | 2 | 45728 * 10 $^{\text {a }}$ |
| $90^{\circ}$ | 2 | 1-3/4 | 1 | 1/2 | 3-1/4 | 2 | 45732 * 12 $^{\text {a }}$ |
| $100^{\circ}$ | 1-1/4 | 53/64 | 17/32 | 1/4 | 2-3/32 | 2 | 45752 |
| $110^{\circ}$ | 1-1/4 | 47/64 | 7/16 | 1/4 | 2 | 2 | 45754 |
| $110^{\circ}$ | 32 mm | 18.8 mm | 10 mm | 6 mm | 50.8 mm | 2 | 45740 New |
| $120^{\circ}$ | 1-1/4 | 21/32 | 23/64 | 1/4 | 1-59/64 | 2 | 45756 |
| $120^{\circ}$ | 32 mm | 16.7 mm | 11 mm | 6 mm | 48.8 mm | 2 | 45742 New |
| $130^{\circ}$ | 1-1/4 | 31/64 | 9/32 | 1/4 | 1-3/4 | 2 | 45758 |
| $130^{\circ}$ | 32 mm | 12.3 mm | 9.5 mm | 6 mm | 44.3 mm | 2 | 45744 New |
| $140^{\circ}$ | 32 mm | 12.1 mm | 7 mm | 6 mm | 44.1 mm | 2 | 45746 New |
| $150^{\circ}$ | 1-1/4 | 7/16 | 11/64 | 1/4 | 1-11/16 | 2 | 45770 |
| $150^{\circ}$ | 32 mm | 11 mm | 6 mm | 6 mm | 43 mm | 2 | 45748 New |

© Warning: Maximum RPM $\boldsymbol{\wedge}_{10}=10,000$; $\boldsymbol{\wedge}^{12}=12,000$

$\dagger 2$ flute $60^{\circ} \mathrm{V}$-Groove bit designed for lettering, signmaking and decorative work. * Solid Carbide
\&29. Polycrystalline Diamond (PCD) for extremely long life. Maximum recommended material depth in one
pass varies from 0.5 mm to 3.0 mm depends on the hardness. The harder the material, the less depth.

- Use in a table-mounted router. Not for use in a handheld router!
$60^{\circ}$ V-GROOVE SIGNMAKING AND LETTERING
Solid Carbide Cutting Head - Single \& 3 Flute
Originally developed in Europe specifically for professional signmakers, this bit features an extra-fine $60^{\circ}$ point that produces a clean, precise cut. For those intricate lines, this bit is superior to standard V-Groover. Makes crisp, clean cuts in solid woods, MDF and acrylics.

| $\mathbf{a}^{\circ}$ | ØD | $\mathbf{B}$ | B1 | Ød | $\mathbf{L}$ | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $60^{\circ}$ | $9 / 16$ | $1 / 2$ | $7 / 16$ | $1 / 4$ | $2-1 / 2$ | 1 | $45731^{*}$ |
| $60^{\circ}$ | $9 / 16$ | $1 / 2$ | $7 / 16$ | $1 / 4$ | $2-1 / 4$ | 3 | 45730 |
| $60^{\circ}$ | $9 / 16$ | $1 / 2$ | $7 / 16$ | $1 / 2$ | $2-1 / 4$ | 3 | 45733 |

* Specialty 1-flute bit designed for use with acrylics.


## $30^{\circ}, 45^{\circ}$ AND $60^{\circ}$ ENGRAVING <br> 1/4" Shank • Solid Carbide • Single Flute

For extra-fine carving and lettering details for signmaking in wood, plastic, aluminum and solid surface materials.

## $30^{\circ}$ Single Flute

| $\mathbf{t}=$ tip width | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| 0.005 | $1 / 4$ | $2-1 / 4$ | 45771 |  |
| 0.010 | $1 / 4$ | $2-1 / 4$ | 45772 |  |
| 0.0108 | $1 / 4$ | 2 | 45620 New |  |
| 0.020 | $1 / 4$ | 2 | 45773 |  |
| 0.030 | $1 / 4$ | $2-1 / 4$ | 45774 |  |
| 0.035 | $1 / 4$ | 2 | 45621 New |  |
| 0.040 | $1 / 4$ | 2 | 45775 |  |
| 0.060 | $1 / 4$ | $2-1 / 4$ | 45776 |  |
| 0.090 | $1 / 4$ | 2 | 45777 |  |
| 0.005 to 0.090 | $30^{\circ}$ Set (7 Pcs.) | 2 | 45779 |  |

$45^{\circ}$ Single Flute

| $\mathbf{t}=$ tip width | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: |
| 0.025 | 0.272 | 2 | 45622 New |
| 0.042 | 0.242 | 2 | 45623 New |

$60^{\circ}$ Single Flute

| $\mathbf{t}=$ tip width | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: |
| 0.005 | $1 / 4$ | 2 | 45760 |
| 0.010 | $1 / 4$ | 2 | 45761 |
| 0.020 | $1 / 4$ | 2 | 45763 |
| 0.030 | $1 / 4$ | 2 | 45765 |
| 0.040 | $1 / 4$ | 2 | 45766 |
| 0.060 | $1 / 4$ | 2 | 45767 |
| 0.090 | $1 / 4$ | 2 | 45768 |
| 0.005 to 0.090 | $60^{\circ}$ Set (7 Pcs.) | 2 | 45769 |

## ONC feed and speed available online Warning: Maximum RPM=28,000

## "ZERO-POINT" $90^{\circ}$ V-GROOVE \& ENGRAVING

Solid Carbide - 2 Flute
Designed for beveling or V-Grooving $90^{\circ}$.
Excellent For Cutting:

- Wood
- Gold
- Soft Plastics
- Aluminum
- Silver
- Hard Plastics
- Brass
- MDF
- Solid Surfaces (Corian®, Formica, etc)
- Bronze
- Lexan™
- Laminated Chipboard/Plywood
- Copper
- Composite

| $\mathbf{a}^{\circ}$ | ØD | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $90^{\circ}$ | $1 / 8$ | $5 / 8$ | $1 / 16$ | $1 / 8$ | 2 | 45608 New |
| $90^{\circ}$ | $1 / 8$ | $5 / 8$ | $1 / 16$ | $1 / 4$ | $2-1 / 4$ | $45609 \quad$ New |
| $90^{\circ}$ | $3 / 16$ | $5 / 8$ | $3 / 32$ | $1 / 4$ | 2 | 45610 |
| $90^{\circ}$ | $1 / 4$ | $3 / 4$ | $1 / 8$ | $1 / 4$ | $2-1 / 4$ | 45612 |
| $90^{\circ}$ | $3 / 8$ | $3 / 4$ | $3 / 16$ | $3 / 8$ | $2-1 / 2$ | 45614 |

$\int_{\text {atith }}$ CNC feed and speed available online

## "ZERO-POINT" $60^{\circ}$ \& $90^{\circ}$ V-GROOVE New

Carbide Tipped • 2 Flute
Cut decorative V-Grooves and lettering on signs. Use with an edge guide to chamfer and bevel edges.

For material cut list visit www.amanatool.com.


| $\mathbf{a}^{\circ}$ | ØD | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $60^{\circ}$ | $1 / 2$ | $9 / 16$ | $13 / 32$ | $1 / 4$ | $2-1 / 4$ | 45707 |
| $90^{\circ}$ | $3 / 8$ | $1 / 2$ | $11 / 64$ | $1 / 4$ | $2-1 / 4$ | 45701 |
| $90^{\circ}$ | $1 / 2$ | $1 / 2$ | $15 / 64$ | $1 / 4$ | $2-1 / 4$ | 45703 |
| 3-Pc set includes tool \#'s $45771\left(30^{\circ}\right), 45707\left(60^{\circ}\right)$ and $45701\left(90^{\circ}\right)$ |  | AMS-129 |  |  |  |  |

CNC feed and speed available online


## CARVING/ENGRAVING

Solid Carbide • 2 Flute
For fine-line "engraving" in wood and composite materials, use either of these compact bits. Two-flute configuration and modest length (which minimizes vibration) combine to produce crisp, clean cuts.



CARVING LINER
Solid Carbide • Single Flute
For extra-fine carving and lettering details.
Excellent For Carving:

- Aluminum - Plywood
- Brass • Silver
- MDF/Laminate •Wood


| $\mathbf{a}^{\circ}$ | ØD | ØD1 | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| $15^{\circ}$ | $1 / 8$ | 0.07 | 0.400 | $1 / 8$ | $2-1 / 4$ | 40782 New |
| $18^{\circ}$ | $1 / 4$ | - | $5 / 8$ | $1 / 4$ | $2-1 / 2$ | 45783 |
| $22^{\circ}$ | $1 / 4$ | 0.017 | 0.648 | $1 / 4$ | $2-1 / 2$ | 40784 New. |

## LETTERING $60^{\circ}$ ANGLE

Carbide Tipped • 2 Flute • Designed For Signmaking
The $60^{\circ}$ cutting angle expels excess material quickly and eliminates chipping and splintering. For use in hardwood, softwood, plywood and composition material.


| ØD | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :--- | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $60^{\circ}$ | $3 / 4$ | $1 / 2$ | $2-3 / 4$ | 45788 |
| $1-1 / 8$ | $60^{\circ}$ | $3 / 4$ | $1 / 2$ | $2-3 / 4$ | 45789 * $\dagger$ |

† Not for use in CNC machines. * Replacement parts: Bearing \#47738; Collar \#47740.


Not shown 1:1

## CORE BOX AND V-GROOVE

Carbide Tipped • 2 Flute with Upper Ball Bearing
Designed for fluting and V -Grooving cuts guided by a template or pattern. The ball bearing pilot rides along the template edge, and the cutter duplicates the template contour in the work-piece. With a handheld router, the template must be on top of the work-piece. With a table-mounted router, the template must be on bottom of the work-piece.


| $\emptyset \mathbf{D}$ | $\mathbf{a}^{\circ}$ | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $90^{\circ}$ | - | $1 / 2$ | $1 / 4$ | 2 | V-Groove | 45750 * |
| $1 / 2$ | - | $1 / 4$ | $3 / 8$ | $1 / 4$ | 2 | Core Box | 45950 |

Replacement parts: Bearing \#47701; Collar \#47724.

* NOTE: $90^{\circ} \mathrm{V}$-Groove bit is for decorative purposes and is not intended for 'miter-folding', etc.



## 8-PC. STARTER SIGNMAKING \#III

1/4" \& 1/2" Shank •Carbide Tipped \& Solid Carbide Router Bit Collection Designed specifically for $2 \mathrm{D} / 3 \mathrm{D}$, signmaking, lettering and engraving applications.

## Expand Your Creativity

This signmaking collection is specially designed for creating signs and other CNC projects in a variety of materials. For the most demanding signmaking, lettering and engraving tasks.

## Excellent For Cutting:

- Aluminum, Brass, Bronze, Copper \& Titanium
- Dibond ${ }^{\circledR}$
- Fiberglass
- Fiberglass PCB Board
- Foam Board
- Graphite
- HDPE
- Laminate
- MDF/HDF
- Phenolic Composites
- Sign Foam, Sign Board \& HDU
- Wood
- 20lbs High Density Polyurethane


| Angle | Dia. | Radius | Cut Length | Shank | Length | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - | $1 / 2$ | $1 / 4$ | $3 / 8$ | $1 / 2$ | $2-1 / 8$ | Core Box | 45912 |
| - | $1-1 / 2$ | - | $5 / 8$ | $1 / 2$ | $2-3 / 4$ | Mortising | 45566 |
| $7.5^{\circ}$ | $3 / 16$ | - | $1 / 2$ | $1 / 4$ | $1-11 / 16$ | V-Groove | 45780 |
| $90^{\circ}$ | $5 / 8$ | - | $1 / 2$ | $1 / 2$ | 2 | V-Groove | 45712 |
| - | $1 / 8$ | - | $1 / 2$ | $1 / 4$ | 2 | Spiral Plunge | 46200 |
| - | $1 / 4$ | - | 1 | $1 / 4$ | $2-1 / 2$ | Spiral Plunge | 46415 |
| $5.4^{\circ}$ | $1 / 16$ | $1 / 32$ | 1 | $1 / 4$ | 3 | $2 D / 3 D$ Carve | 46282 |
| $0.10^{\circ}$ | $1 / 4$ | $1 / 8$ | $1-1 / 2$ | $1 / 4$ | 3 | $2 D / 3 D$ Carve | 46294 |
|  |  | Complete 8-Pc Set |  |  |  |  |  |
|  |  |  |  |  | AMS-133 |  |  |



AMS-133

## 8-PC. CNC GENERAL PURPOSE

## 1/4" Shank • Carbide Tipped \& Solid Carbide Router Bit Collection

This $1 / 4$ " shank collection was designed for CNC profiling, 2D and 3D profiling and carving in plastics, aluminum and wood. Each router bit is manufactured from Amana's exclusive grade carbide according to stringent quality standards.

## Excellent For Cutting:

- Aluminum, Brass, Bronze,
- Graphite

Copper \& Titanium

- ACM
- MDF/HDF
- Composite
- Phenolic Composites
- Durabond
- Plastic PVC \& Acrylic
- Fiberglass
- Plexiglas ${ }^{\oplus}$
- Fiberglass PCB Board
- Wood

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| Angle | Dia. | Radius | Cut Height | Shank | Length | Type | Tool No. |
| $90^{\circ}$ | $1 / 2$ | - | $1 / 2$ | $1 / 4$ | $1-5 / 8$ | V-Groove | 45704 |
| $60^{\circ}$ | $1 / 2$ | - | $5 / 8$ | $1 / 4$ | $1-3 / 4$ | V-Groove | 45705 |
| - | $1 / 4$ | $1 / 8$ | $1 / 2$ | $1 / 4$ | $2-1 / 2$ | Spiral Ball Nose | 46426 |
| - | $1 / 4$ | $3 / 32$ | $1 / 2$ | $1 / 4$ | $2-1 / 2$ | Spiral Ball Nose | 46424 |
| - | $1 / 4$ | - | 1 | $1 / 4$ | 2 | Spiral Plunge | 46248 |
| - | $1 / 8$ | - | $1 / 2$ | $1 / 4$ | 2 | Spiral Plunge | 46341 |
| - | $1 / 4$ | - | 1 | $1 / 4$ | $2-1 / 2$ | Spiral Plunge | 46348 |
| $5.44^{\circ}$ | $1 / 16$ | $1 / 32$ | 1 | $1 / 4$ | 3 | 2D/3D Carve | 46282 |



AMS-134


## 8-PC. CNC STARTER SIGNMAKING

 1/2un stank 414
回

1/4" \& 1/2" Shank •Carbide Tipped, Solid Carbide \& Insert Carbide Router Bit Collection
Designed specifically for 2D/3D, signmaking, lettering and engraving applications.

## Expand Your Creativity

The set is specially designed for creating signs and other CNC projects in a variety of materials. For the most demanding signmaking, lettering and engraving tasks.

## Excellent For Cutting:

- Aluminum, Brass,

Bronze, Copper

- Carbon Fiber
- Laminate
- MDF

| Angle | Dia. | Cut Height | Shank | Length | Type | Includes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $60^{\circ}$ | $1 / 2$ | $5 / 8$ | $1 / 4$ | $1-3 / 4$ | V-Groove | 45705 |  |  |
| $7.5^{\circ}$ | $3 / 16$ | $1 / 2$ | $1 / 4$ | $1-11 / 16$ | V-Groove | 45780 |  |  |
| - | $1 / 4$ | $5 / 8$ | $1 / 4$ | 2 | Aluminum '0' Flute | 51402 |  |  |
| - | $1 / 4$ | $3 / 4$ | $1 / 4$ | 2 | Aluminum 'O' Flute | 51404 |  |  |
| - | $1 / 4$ | $1 / 2$ | $1 / 4$ | $2-1 / 2$ | Spiral Ball Nose | 46426 |  |  |
| $45^{\circ}$ | $13 / 16$ | $7 / 8$ | $1 / 2$ | $2-3 / 8$ | Insert V-Groove | RC-1045 |  |  |
| $90^{\circ}$ | $1-1 / 2$ | $3 / 4$ | $1 / 2$ | 3 | Insert V-Groove | RC-1102 |  |  |
| - | - | - | In-Groove ${ }^{\text {TM }}$ with $30^{\circ}$ V-Tip Insert Knife | RC-1075 |  |  |  |  |
|  |  | Complete 8-PC Set |  |  |  |  |  | AMS-130 |



## New

8-PC. CNC STARTER
1/4" Shank • Carbide Tipped,


Solid Carbide \& Insert Carbide
Router Bit Collection
Designed for a wide variety of applications. Each router bit is manufactured from Amana's exclusive grade carbide according to stringent quality standards.

## Excellent For Cutting:

- Aluminum, Brass,

Bronze, Copper

- Melamine
- Carbon Fiber
- Plastic/Acrylic
- Laminate
- Wood
- MDF
- Wood
- Veneered Plywood


| Includes | Set No. |
| :---: | :---: |
| $43608,51402,51421,46438,51454,46170-K$, RC-2245 \& 45210 | AMS-164 |

## New 5-PC. CNC STARTER ENGRAVING



1/4" Shank • Carbide Tipped \& Solid Carbide Router Bit Collection
Designed for a wide variety of applications. Each router bit is manufactured from Amana's exclusive grade carbide according to stringent quality standards.

## Excellent For Engraving:

- ACM
- Aluminum, Brass,

Bronze, Copper

- Composite
- Fiberglass
- Foam
- Laminate
- MDF
- Plastic/Acrylic
- Wood
- Veneered Plywood


Set No. AMS-127

# 4-PC. CNC V-GROOVE 2D/3D SIGNMAKING, LETTERING AND ENGRAVING 

1/2" Shank • Insert Carbide Router Bit Collection


| Includes | Set No. |
| :---: | :---: |
| RC-1045 $\left(45^{\circ}\right), \mathrm{RC}-1108\left(60^{\circ}\right), \mathrm{RC}-1102\left(90^{\circ}\right) \& \mathrm{RC}-1104\left(120^{\circ}\right)$ | AMS-150 |



AMS-150


AMS-131


AMS-171


AMS-137


## 8-PC. CNC ARTIST SIGNMAKING



1/4" Shank • Carbide Tipped \& Solid Carbide Router Bit Collection
Excellent For Cutting:


## 8-PC. CNC <br> SPIRAL COMPRESSION, TAPERED \& STRAIGHT

1/4" Shank • Solid Carbide Router Bit Collection


For material cut list visit www.amanatool.com.
Set No.
46100, 46102, 46200, 46202, 46170, 46248, 43828 \& 46280
AMS-137


8-PC. CNC V-CARVING
1/4" Shank • Carbide Tipped \& Solid Carbide Router Bit Collection

## Excellent For Cutting:

- Aluminum, Brass, Bronze, Copper
- Carbon Fiber
- Laminate
- MDF
- Melamine
- Plastic/Acrylic
- Solid Surface
- Wood
- Veneered Plywood


Set No.

45783, 45780, 45771, 45700, 45705, 46280, 46282 \& RC-1075 (with RCK-360) AMS-128

## New 8-PC. V-GROOVE FOR ACM PANELS



1/4" Shank • Insert Carbide, Carbide Tipped
\& Solid Carbide Router Bit Collection
For Scoring Aluminum Composite Materials Including:

- Aluminum, Clay, Zinc \&
- Dibond ${ }^{\circledR}$

Wood Composite Panels

- Dura
- Aluminum Composite

Material (ACM)

- e-panel ${ }^{\text {m }}$
- Aluminum Composite Panel (ACP)
- ALPOLIC ${ }^{\text {® }}$ Copper

Composite Material (CCM)

- Alucobond ${ }^{\circledR}$
- Alupanel ${ }^{\text {® }}$
- Etalbond ${ }^{\circledR}$
- Phenolics
- Plastic/Acrylic
- Plexiglas®
- Titanium Composite Material (TCM)
- Wood


Includes

| Includes | Set No. |
| :---: | :---: |
| $45792,45795,45798,45745,45762$, RC-45716, 51402 \& 51502 | AMS-151 |

## 8-PC. CNC GENERAL PURPOSE



1/2" Shank • Carbide Tipped, Solid Carbide \& Insert Carbide Router Bit Collection

For material cut list visit www.amanatool.com.


Includes
Set No.
$\overline{45411, ~ R C-1102, ~ 46188, ~ 46380, ~ 46206, ~ 46106, ~ R C-2250 ~ \& ~ R C-1076 ~(w i t h ~ R C K-360) ~ A M S-170 ~}$

## 10-PC. CNC 3D, SIGNMAKING, LETTERING AND ENGRAVING

1/2" Shank • Carbide Tipped, Solid Carbide \& Insert Carbide Router Bit Collection


Excellent For Cutting:

- Aluminum, Brass,
- Plastic/Acrylic

Bronze, Copper

- Carbon Fiber
- Wood
- Wood
- Veneered Plywood

- MDF

Includes
Set No.

| Includes | Set No. |
| :---: | :---: |
| RC-2250, RC-1045, 45733, 45422, 46206, 46380, |  |
| 46190,46192, RC-1102 \& RC-1076 (with RCK-360) | AMS-138 |

## 18-PC. CNC ADVANCED SIGNMAKING

1/4" Shank • Carbide Tipped, Solid Carbide \& Insert Carbide Router Bit Collection

ⒽC


Includes
Set No.

$\overline{R C-45910, ~ 56125, ~ 45783, ~ R C-45711, ~ 45780, ~ 45705, ~ 45751, ~ 45756, ~ 46170, ~ 46102, ~ 46376, ~}$ RC-2248, 51454, 51411, 46282, 51404, 51402 \& RC-1075 (with RCK-360) AMS-132 For material cut list visit www.amanatool.com.

## 18-PC. CNC ADVANCED GENERAL PURPOSE <br> 1/2" Shank • Carbide Tipped, Solid Carbide \& Insert Carbide Router Bit Collection <br> 



Includes
$\qquad$
RC-2250, RC-1045, RC-1108, RC-1102, 45733, 45794, 45408, 45418, 45422, 45426, 46106, 46206, 46174, 46188, 46356, 45932,46380 \& RC-1076 (with RCK-360) AMS-139 For material cut list visit www.amanatool.com.

## 18-PC. CNC SPECIALTY MULTI-MATERIAL

1/8" Shank • Solid Carbide Router Bit Collection


Set No. 51470, RB-102(2), 51471, 51506, 51461, 46291, 46295, 51415, 51410(2), 51510, 46269, 46373,46260, 46180(2), 46127, 46227 \& 46240 AMS-173

AMS-173 For material cut list visit www.amanatool.com.

## 18-PC. CNC SPECIALTY MULTI-MATERIAL

1/4" Shank • Solid Carbide
\& Insert Carbide
Router Bit Collection


46094, 46376, 46102, 46100, 46202, 46200, 46170 \& RC-2249
For material cut list visit www.amanatool.com.

Set No.
AMS-176

## INDUSTRIAL

Master CNC Router Bit Collection

Set \#AMS-CNC-58

## INDUSTRIAL

$\triangle$ Amana Tool ${ }^{\circ}$
Wood, Laminates, Composiles, V-Groove, 3D, Signmaking, Engraving, Plastics, Foam, Aluminum \& Steel




Set \#AMS-CNC-58
58-PC. CNC MASTER
 ADVANCED MATERIAL
Carbide Tipped, Solid Carbide \& Insert Carbide Router Bit Collection
58 pieces of the most versatile CNC, industrial, high performance solid carbide, carbide-tipped and solid carbide insert router bits.
Stored in a freestanding or wall-mounted wood display with locking clear acrylic door that measures $27-1 / 2^{\prime \prime} \mathrm{H} \times 22-1 / 2^{\prime \prime} \mathrm{W} \times 6^{\prime \prime} \mathrm{D}$.

## Excellent For Cutting:

- Aluminum, Brass, • Fiberglass Bronze, Copper, - Fiberglass PCB
Gold, Silver \& Titanium
- ACM
- Aluminum

FoamCore

- Composite
- Corrugated Polypropylene
- Durabond ${ }^{\circledR}$

Board

- FoamCore
- Gator Board
- Graphite
- Melamine
- MDF/HDF
- Laminate
- Phenolic Composites
- Plastic, Acrylic \& Plexiglas ${ }^{\text {® }}$
- Sign Foam, Sign Board \& HDU
- Solid Surface
- Steel and Stainless Steel
- Veneered Plywood
- Wood
- Xanita ${ }^{\oplus}$ X-Board ${ }^{\text {TM }}$ \& Lightboard ${ }^{\text {TM }}$


## The Ultimate CNC Cutting Solution for Advanced Material Types!

2D/3D Carving ZrN Coated
46280 3D Carving Ball Nose $1 / 32^{\prime \prime}$ Dia $62^{\circ}$
46280 3D Carving Ball Nose 1/32" Dia., $6.2^{\circ}$
46282 3D Carving Ball Nose 1/16" Dia., $5.4^{\circ}$
46286 3D Carving Ball Nose $1 / 8^{\circ}$ Dia., $3.6^{\circ}$
46284 3D Carving Ball Nose $1 / 8^{\prime}$ Dia., $1.0^{\circ}$
46294 3D Carving Ball Nose 1/4' Dia., $0.10^{\circ}$
46490 3D Carving Extra-Long Ball Nose $1 / 4^{\prime \prime}$ Dia., $0.10^{\circ}$
RB-116 Reduction Bushing $1 / 2^{\prime \prime}$ to $1 / 4^{\prime \prime}$
462923 Carving Flat Bottom $1 / 8^{\prime \prime}$ Dia., $0.10^{\circ}$

## Ball Nose

46424 Spiral 3/16" Dia., 3/32" Radius
46426 Spiral $1 / 4^{"}$ Dia., $1 / 8^{\prime \prime}$ Radius
46376 Spiral 1/4" Dia., 1" Cut Length
46380 Spiral 1/2" Dia., 1-1/4" Cut Length
46384 Spiral 1/2" Dia., 2-1/8" Cut Length

## MDF/Laminate

46180 Compression Spiral $1 / 8^{\prime \prime}$ Dia., $13 / 16^{\text {" }}$ Cut Length
RB-102 Reduction Bushing $1 / 4^{\prime \prime}$ to $1 / 8^{\prime \prime}$
46170 Compression Spiral $1 / 4^{\prime \prime}$ Dia., $7 / 8^{\prime \prime}$ Cut Length
46172 Compression Spiral 3/8" Dia., 1-1/4" Cut Length
RB-122 Reduction Bushing $1 / 2^{\prime \prime}$ to $3 / 8^{\prime \prime}$
46188 Compression Spiral $1 / 2^{\prime \prime}$ Dia., 1-1/4" Cut Length

## Steel Cutting AITiN Coated

51460 Spiral End Mill $1 / 8^{*}$ Dia., $3 / 8^{*}$ Cut Length
51464 Spiral End Mill 1/4" Dia., 5/8" Cut Length
51467 Spiral End Mill $3 / 8^{\circ}$ Dia., $1 / 2^{*}$ Cut Length
RB-122 Reduction Bushing $1 / 2^{\prime \prime}$ to $3 / 8^{\prime \prime}$

| Plastic | '0' Flute |
| :---: | :---: |
| 51410 | Spiral 1/8* Dia., 1/2" Cut Length |
| RB-102 | Reduction Bushing 1/4" to 1/8* |
| 47640 | 1/4* Extension Adapter for CNC, 1/2" Shank |
| 51411 | Spiral 1/8" Dia., 1/2" Cut Length |
| 51417 | Spiral 3/16" Dia., 5/8* Cut Length |
| 51404 | Spiral 1/4" Dia., 3/4" Cut Length |
| 51405 | Spiral 1/4" Dia., $1^{\prime \prime}$ Cut Length |
| 51504 | Spiral 1/4" Dia., 3/4" Cut Length |
| 43500 | Straight 1/8" Dia., 1/2" Cut Length |
| Aluminum ' O ' Flute |  |
| 51406 | Spiral 1/8" Dia., 5/16" Cut Length |
| RB-102 | Reduction Bushing 1/4" to 1/8* |
| 51474 | Spiral 1/8" Dia., 1/4" Cut Length |
| 51454 | Spiral 1/8" Dia., 1/2" Cut Length |
| 51408 | Spiral 3/16" Dia., 1/2" Cut Length |
| 51502 | Spiral 1/4" Dia., 5/8" Cut Length |
| 51402 | Spiral 1/4" Dia., 5/8" Cut Length |

Aluminum Composite Material (ACM)
$45798135^{\circ}$ V' Groove, 23/32" Dia.
$4579290^{\circ} \mathrm{V}$ ' Groove, $1 / 2^{\prime \prime}$ Dia.
$45795108^{\circ} V^{\prime}$ Groove, $1 / 2^{\prime \prime}$ Dia.
Signmaking
$45783 \quad 9^{\circ}$ Carving Liner, $1 / 4^{\prime \prime}$ Dia. RC-1075* 1/4" Shank CNC Tool Body RCK-360* $30^{\circ}$ 'V' Groove Solid Carbide Insert Knife RC-1045* 45 Insert CNC V' Groove, 13/16" Dia. RC-1108* $60^{\circ}$ Insert CNC V' Groove, 1-1/32" Dia. RC-1102* $90^{\circ}$ Insert CNC V' Groove, 1-1/2" Dia.

Wood/MDF
RC-2250* Mini Insert Spoilboard 1-1/2" Dia.
46102 Spiral Flute Plunge $1 / 4^{\prime \prime}$ Dia., Up-Cut
46202 Spiral Flute Plunge 1/4" Dia., Down-Cut
Foam
46270 Spiral 1/8" Dia., 1-1/8" Cut Length
46272 Spiral 1/4" Dia., 2-1/4" Cut Length
Composites, Honeycomb \& ZrN Coated
46308 Honeycomb Spiral $3 / 8^{\prime \prime}$ Dia., 1-1/4" Cut Length
RB-122 Reduction Bushing $1 / 2^{\prime}$ to $3 / 8^{\prime \prime}$
46306 Honeycomb Hogger Spiral 1/4" Dia.
RB-116 Reduction Bushing $1 / 2^{\prime \prime}$ to $1 / 4^{\prime \prime}$
46094 Composites Spiral 1/4" Dia.
*Items from Amana Tools Industrial Division.

## AMS-CNC-58

We have the tool you need for every CNC application. Whether it's aluminum, cabinet making, signmaking, we have created a versatile mix of router bits to accomplish your project.

Keep your tools secure and clean with locking acrylic cabinet door. All bits are organized by material-type for easy tool selections.

## Set Includes

Top Selling 58 SKUS
Plywood Veneer Lockable Cabinet
Plastic Bushings Keep Bits Straight \& Rust-Free

## 52-PC. CNC MASTER ADVANCED MATERIAL



Carbide Tipped, Solid Carbide
\& Insert Carbide Router Bit Collection
52 pieces of the most versatile CNC, industrial, high performance solid carbide, carbide tipped and solid carbide insert router bits.
Stored in a freestanding or wall mounted wood display with locking clear acrylic door that measures $27-1 / 2^{\prime \prime} \mathrm{H} \times 22-1 / 2^{\prime \prime} \mathrm{W} \times 6^{\prime \prime} \mathrm{D}$.


## INDUSTRIAL

# StraightPlunge Router Bits 



- Extra strong carbide, lasts 200\% longer
- New generation of high wear outstanding carbide

- Superior geometric design provides super clean cuts
- Cost effective


In choosing a straight bit for any application, always select one with the shortest cutting edges and the shortest overall length that will reach the required cut depth. Excessive length intensifies deflection and vibration, which degrade cut quality and lead to tool breakage.

A single-flute bit should be used where cut speed is more important than cut finish. Making one cut per revolution is faster than making two or three. Improved chip clearance is possible with a single flute configuration. The result: fast cuts.


HIGH PRODUCTION STRAIGHT PLUNGE
Carbide Tipped • Single Flute
1/4" and 3/8" Shank


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $7 / 16$ | $1 / 4$ | 2 | 45100 |
| $3 / 16$ | $7 / 16$ | $1 / 4$ | 2 | 45102 |
| $1 / 4$ | $1 / 2$ | $1 / 4$ | 2 | 45104 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 2 | 45106 |
| $1 / 4$ | 1 | $1 / 4$ | $2-1 / 4$ | 45108 |
| $1 / 4$ | 1 | $1 / 4$ | $3-1 / 4$ | $45110^{*}$ |
| $3 / 8$ | 1 | $3 / 8$ | $2-1 / 2$ | 45300 |



* Specifically designed for air powered routers as used in the boat manufacturing industry.


HIGH PRODUCTION STRAIGHT PLUNGE
Carbide Tipped • Single Flute
1/2" Shank


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $3 / 4$ | $1 / 2$ | $2-1 / 2$ | 45304 |
| $3 / 8$ | 1 | $1 / 2$ | $2-3 / 4$ | 45302 |
| $5 / 16$ | $3 / 4$ | $1 / 2$ | $2-1 / 2$ | 45306 |
| $1 / 2$ | $3 / 4$ | $1 / 2$ | $2-3 / 8$ | 45307 |
| $1 / 2$ | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | 45308 |
| $1 / 2$ | $1-1 / 2$ | $1 / 2$ | $3-1 / 8$ | 45310 |
| $1 / 2$ | 2 | $1 / 2$ | $4-1 / 4$ | 45312 |
| $1 / 2$ | $2-1 / 2$ | $1 / 2$ | $4-3 / 8$ | 45313 |
| $9 / 16$ | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | 45314 |

## HIGH PRODUCTION STRAIGHT PLUNGE

Carbide Tipped • 2 Flute • 1/8" and 1/4" Shank
Use a two-flute bit where fine finish is paramount. Two flutes balance the bit, eliminating vibration that degrades the cut finish. Two cuts per revolution yield a smooth surface, but feed rate is slightly reduced.


| $\emptyset \mathrm{D}$ | B | 0 d | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| 1.3mm | 4.5mm | 1/4 | 1-7/8 | 45260 † |
| 1/16 | 3/16 | 1/8 | 1-1/2 | 46480 ++ |
| 1/16 | 3/16 | 1/4 | 1-5/8 | $45190 \sim \dagger$ |
| 5/64 | 3/16 | 1/4 | 1-3/4 | $45191 \sim \dagger$ |
| 3/32 | 1/4 | 1/8 | 1-1/2 | 46482 ++ |
| 3/32 | 1/4 | 1/4 | 1-3/4 | 45192 ~ |
| 1/8 | 7/16 | 1/8 | 1-1/2 | 45199 ++ |
| 1/8 | 7/16 | 1/4 | 2 | $45200 \sim \dagger$ |
| 5/32 | 7/16 | 1/4 | 2 | 45201 ~ |
| 3/16 | 7/16 | 1/8 | 1-1/2 | 45198 |
| 3/16 | 7/16 | 1/4 | 2 | 45202 ~ |
| 3/16 | 5/8 | 1/4 | 2-3/16 | 45239 |
| 13/64 | 3/4 | 1/4 | 2 | 45217 |
| 7/32 | 3/4 | 1/4 | 2 | 45206 |
| 15/64 | 3/4 | 1/4 | 2 | 45203 |
| 1/4 | 1/2 | 1/4 | 2 | 45204 |
| 1/4 | 3/4 | 1/4 | 2 | 45208 |
| 1/4 | 3/4 | 1/4 | 3 | DRB-420 |
| 1/4 | 1 | 1/4 | 2-1/4 | 45210 |
| 1/4 | 1 | 1/4 | 2-1/2 | 45210-01 New |
| 1/4 | 1 | 1/4 | 3 | 45210-3 New |
| 1/4 | 1 | 1/4 | 3-3/4 | 45210-3.75 New |
| 1/4 | 1 | 1/4 | 2-7/8 | 45211 * |
| 1/4 | 1 | 1/4 | 3-1/4 | 45205 * New |
| 9/32 | 1 | 1/4 | 2-1/4 | 45212 |
| 9/32 | 1 | 1/4 | 3 | 45212-01 New |
| 5/16 | 3/4 | 1/4 | 2 | 45242 |
| 5/16 | 1 | 1/4 | 2-1/4 | 45214 |
| 5/16 | 1 | 1/4 | 2-3/4 | 45214-01 New |
| 3/8 | 3/4 | 1/4 | 2 | 45216 |
| 3/8 | 1 | 1/4 | 2 | 45218S |
| 3/8 | 1 | 1/4 | 2-1/4 | 45218 |
| 3/8 | 1-1/4 | 1/4 | 2-1/2 | 45220 |
| 13/32 | 1 | 1/4 | 2-1/2 | 45193 New |
| 7/16 | 1 | 1/4 | 2-1/8 | 45222 |
| 15/32 | 3/4 | 1/4 | 2 | 45223 |
| 31/64 | 3/4 | 1/4 | 2-1/4 | 45194 New |
| 1/2 | 3/4 | 1/4 | 1-3/4 | 45224 |
| 1/2 | 3/4 | 1/4 | 2-1/4 | 45224-01 New |
| 1/2 | 1 | 1/4 | 2-1/8 | 45226 |
| 1/2 | 1 | 1/4 | 2-13/16 | 45244 |
| 1/2 | 1-3/16 | 1/4 | 2-5/8 | RC-45226 |
| 1/2 | 1-1/4 | 1/4 | 2-1/2 | 45245 |
| 9/16 | 3/4 | 1/4 | 2-1/8 | 45227 |
| 19/32 | 3/4 | 1/4 | 2-1/4 | 45238-01 New |
| 5/8 | 3/4 | 1/4 | 2 | 45228 |
| 5/8 | 1 | 1/4 | 2-1/4 | 45247 |
| 5/8 | 1-1/4 | 1/4 | 2-7/8 | 45249 |
| 11/16 | 3/4 | 1/4 | 2 | 45229 |
| 23/32 | 3/4 | 1/4 | 2 | 45231 |
| 3/4 | 3/4 | 1/4 | 2 | 45230 |
| 3/4 | 3/4 | 1/4 | 2 | RC-1024 |
| 3/4 | 1 | 1/4 | 2-1/4 | 45251 |
| 3/4 | 1 | 1/4 | 2-5/8 | 45251-01 New |
| 13/16 | 3/4 | 1/4 | 2 | 45232 |
| 7/8 | 3/4 | 1/4 | 2 | 45234 |
| 1 | 3/4 | 1/4 | 2 | 45236 |



Top View

## Excellent For Cutting:

- Wood
- MDF
- Plywood

$\dagger$ Not guaranteed due to extremely small diameter.
~ With solid carbide cutting edge.
* Not guaranteed due to extreme length.
++ Solid carbide.
2a. Polycrystalline Diamond (PCD) for extremely long life.
Replacement Knife \#AMA-30 (tool \#RC-45226 - single flute).



66

HIGH PRODUCTION STRAIGHT PLUNGE
Carbide Tipped • 2 Flute • 1/2" Shank
AMAX extended life carbide features a $200 \%$ longer tool life, a superior geometric design and super clean cuts in wood, MDF and plywood.

| ØD | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| 1/4 | 3/4 | 1/2 | 2-1/2 | 45408 ~ |
| 1/4 | 1 | 1/2 | 2-3/4 | 45486 |
| 9/32 | 3/4 | 1/2 | 2-3/4 | 45409 |
| 5/16 | 3/4 | 1/2 | 2-1/2 | 45410 |
| 5/16 | 1 | 1/2 | 2-3/4 | 45412 |
| 3/8 | 3/4 | 1/2 | 2-1/2 | 45413 |
| 3/8 | 1 | 1/2 | 2-3/4 | 45414 |
| 3/8 | 1-1/4 | 1/2 | 3 | 45415 * |
| 13/32 | 3/4 | 1/2 | 2-1/2 | 45401 |
| 7/16 | 1-1/4 | 1/2 | 3 | 45416 |
| 15/32 | 1-1/4 | 1/2 | 2-7/8 | 45425 |
| 31/64 | 1 | 1/2 | 2-5/8 | 45180 New |
| 1/2 | 3/4 | 1/2 | 2-1/4 | 45419 † |
| 1/2 | 3/4 | 1/2 | 4 | DRB-424 |
| 1/2 | 1 | 1/2 | 2-5/8 | 45418 |
| 1/2 | 1-1/4 | 1/2 | 2-7/8 | 45420 |
| 1/2 | 1-1/2 | 1/2 | 3-1/8 | 45422 |
| 1/2 | 1-1/2 | 1/2 | 4-1/4 | 45424 |
| 1/2 | 2 | 1/2 | 3-1/2 | 45426S New |
| 1/2 | 2 | 1/2 | 4-1/4 | 45426 |
| 1/2 | 2-1/2 | 1/2 | 4-1/2 | 45427 * |
| 1/2 | 2-1/2 | 1/2 | 5-1/2 | 45427-01* New |
| 1/2 | 3 | 1/2 | 5-1/4 | 45477 |
| 17/32 | 1-1/4 | 1/2 | 2-7/8 | 45429 |
| 9/16 | 1-1/4 | 1/2 | 2-7/8 | 45428 |
| 19/32 | 1-1/4 | 1/2 | 2-7/8 | 45437 |
| 5/8 | 1 | 1/2 | 2-5/8 | 45430 |
| 5/8 | 1-1/4 | 1/2 | 2-7/8 | 45432 |
| 5/8 | 1-1/2 | 1/2 | 3-1/8 | 45434 |
| 5/8 | 2 | 1/2 | 3-3/4 | 45433 |
| 21/32 | 1-1/4 | 1/2 | 2-7/8 | 45435 |
| 11/16 | 1-1/4 | 1/2 | 2-7/8 | 45436 |
| 23/32 | 1-1/4 | 1/2 | 2-7/8 | 45445 |
| 3/4 | 5/8 | 1/2 | 2-1/4 | 45181 New |
| 3/4 | 1 | 1/2 | 2-5/8 | 45438 |
| 3/4 | 1-1/4 | 1/2 | 2-7/8 | 45440 |
| 3/4 | 1-1/2 | 1/2 | 3-1/8 | 45442 |
| 3/4 | 2 | 1/2 | 3-5/8 | 45441 |
| 25/32 | 1-1/4 | 1/2 | 2-7/8 | 45443 |
| 13/16 | 1-1/4 | 1/2 | 2-7/8 | 45444 |
| 7/8 | 1-1/4 | 1/2 | 2-7/8 | 45446 |
| 15/16 | 1-1/4 | 1/2 | 3 | 45182 New |
| 1 | 1-1/4 | 1/2 | 2-7/8 | 45448 |
| 1 | 1-1/2 | 1/2 | 3-1/8 | 45403 |
| 1 | 2 | 1/2 | 3-5/8 | 45447 |
| 1-1/16 | 1-1/4 | 1/2 | 2-7/8 | 45459 |
| 1-1/8 | 1-1/4 | 1/2 | 2-7/8 | 45449 |
| 1-1/4 | 1-1/4 | 1/2 | 2-7/8 | 45450 - 27.5 |
| 1-1/2 | 1-1/4 | 1/2 | 2-7/8 | 45452 A 27.5 |
| 1-3/4 | 1-1/4 | 1/2 | 2-7/8 | 45453 ( ${ }_{24}$ |
| 2 | 1-1/4 | 1/2 | 2-7/8 | 45480 A $^{22}$ |

* Not guaranteed due to extreme length.
~ With solid carbide cutting edge.
$\dagger$ For post form countertop machines.
2 Polycrystalline Diamond (PCD) for extremely long life
© Warning: Maximum RPM $\boldsymbol{\Delta}_{22}=22,000 ; \boldsymbol{\Delta}_{24}=24,000 ; \boldsymbol{\Delta} 27.5=27,500$

Straight Plunge, see page 69

## HIGH PRODUCTION STRAIGHT PLUNGE

Carbide Tipped • 2 Flute • 3/8" Shank

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $3 / 8$ | 1 | $3 / 8$ | $2-1 / 2$ | 45402 |
| $3 / 8$ | $1-1 / 4$ | $3 / 8$ | $2-3 / 4$ | 45400 |
| $3 / 8$ | $1-1 / 4$ | $3 / 8$ | $3-3 / 8$ | 45404 |
| $1 / 2$ | 1 | $3 / 8$ | $2-1 / 2$ | 45406 |

## CNC HIGH PRODUCTION STRAIGHT PLUNGE OPEN FLUTE

Carbide Tipped • 2 Flute • $3 / 4^{\prime \prime}$ Shank
For high-volume production work with a CNC router, use one of these plunge-cutting straights. Long, $3 / 4^{"}$ shanks extend the bits reach, enhancing its versatility. Open-flute design promotes rapid chip clearance, necessary for high feed rates. Right-hand configuration for standard clockwise rotation. Left-hand configuration for counter-clockwise rotation "Topmaster" machines.


| ØD | B | Ød | L | Configuration | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | 2 | $3 / 4$ | 4 | Right-Hand | 45455 |
| $3 / 4$ | 2 | $3 / 4$ | 5 | Left-Hand | 45454 |
| $3 / 4$ | $2-1 / 2$ | $3 / 4$ | $4-1 / 2$ | Right-Hand | 45456 |
| $3 / 4$ | $2-1 / 2$ | $3 / 4$ | 5 | Left-Hand | 45457 |

Note: Chipbreaker option (special order): Designed to cut chipboard and MDF at high automatic feed rates found on CNC machines. Each flute is ground so that the chipbreakers are staggered to each other, giving a straight cut. To order, add ‘CB’ suffix (ie: \#45454-CB).
$\square$ $\bigwedge_{\text {tabe }}$ CNC feed and speed available online

## HIGH PRODUCTION STRAIGHT PLUNGE

Solid Carbide • Single \& 2 Flute
For high volume, high speed cutting in dense natural woods and abrasive wood composites, use solid carbide bits. Solid carbide dissipates heat more uniformly, composites, use solid carbide bits. Solid carbide dissipates heat more uniformly,
extending tool life. Single flute bits cut faster, with better chip clearance. Two-flute bits cut more slowly, leaving a smooth finish.




Top View

© Warning: Maximum RPM=28,000



Top View


## 3 FLUTE HIGH PRODUCTION SHEAR

Carbide Tipped $\bullet 3^{\circ}$ Up-Shear
Excellent for working composition board and melamine, this bit cuts with an upward shearing action to prevent chipping \& tearing of the bottom of veneer or coated material. Designed primarily for production applications where the router is below the work.

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| øD | B | 0 d | L | Tool No. |
| 3/8 | 1 | 1/2 | 2-3/4 | 45414-3US |
| 1/2 | 1-1/2 | 1/2 | 3-1/8 | 45422-3US |



Top View

## PRODUCTION SHEAR

Carbide Tipped • 2 Flute $\cdot 3^{\circ}$ Down-Shear
Excellent for working composition board and melamine, this bit cuts with a shearing action, slicing very slightly downward to prevent chipping \& tearing of the surface veneer or coating. It augers chips away from the router. Designed primarily for production applications where the router is above the work.


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $3 / 8$ | 1 | $1 / 2$ | $2-3 / 4$ | $45414-P S$ |
| $1 / 2$ | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | $45420-\mathrm{PS}$ |
| $1 / 2$ | $1-1 / 2$ | $1 / 2$ | $3-1 / 8$ | $45422-P S$ |
| $1 / 2$ | 2 | $1 / 2$ | $4-1 / 4$ | $45426-P S$ |



## OPPOSITE-SHEAR STAGGERED TOOTH

## Carbide Tipped • 2 Flute

A stagger-tooth bit has two cutting edges, each only half the flute length, located $180^{\circ}$ apart, one high, one low. The result is a tool that combines the speed and chip clearance of a one-flute bit with the strength and balance of a two-flute bit. This "opposite-shear" configuration features a down-shear edge and an up-shear edge. On a through-cut, it shears down on both surfaces at the same time. It is excellent for working double-sided melamine, plywood, laminates, and veneers, as well as solid-surface materials.

| ØD | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $1-1 / 2$ | $1 / 2$ | $3-1 / 8$ | 51320 |
| $1 / 2$ | 2 | $1 / 2$ | $4-1 / 8$ | 51324 |



## LEFT HAND PLUNGE

Carbide Tipped • 2 Flute • 1/2" Shank
These plunging straight bits are for reverse-rotation (counter-clockwise) routers.


| $\boldsymbol{\sigma}$ | $\mathbf{B}$ | $\boldsymbol{0}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $5 / 16$ | 1 | $1 / 2$ | $2-3 / 4$ | $45412-$ LH |
| $3 / 8$ | 1 | $1 / 2$ | $2-3 / 4$ | $45414-$ LH |
| $1 / 2$ | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | $45420-$ LH |
| $1 / 2$ | $1-1 / 2$ | $1 / 2$ | $3-1 / 8$ | $45422-$-LH |
| $1 / 2$ | 2 | $1 / 2$ | $4-1 / 4$ | $45426-$ LH |
| $3 / 4$ | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | $45440-$ LH |
| $3 / 4$ | 2 | $1 / 2$ | $3-5 / 8$ | $45441-$ LH |
| $7 / 8$ | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | 45446 -LH |
| $1-1 / 4$ | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | $45450-$ LH New |

## SUPER PLUNGE ${ }^{\text {™ }}$ WITH CENTER CARBIDE TIP

Carbide Tipped • 2 Flute • 1/2" Shank
This bit has a specially designed carbide center tip enhancing the speed of plunge cuts. At the same time, it extends the life of the cutting edges by reducing the stress of plunge cuts on their tips. Ideal for mortising and other plunging operations.


METRIC STRAIGHT PLUNGE FOR UNDERSIZED PLYWOOD DADO
Carbide Tipped • 2 Flute

|  | Actual <br> Plywood Thickness | $\mathbf{B}$ | Ød | L |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6 mm | - | 25 mm | 6 mm | 57 mm | 45213 New |
| 8 mm | - | 25 mm | 8 mm | 63 mm | 45215 New |
| 10 mm | - | 19 mm | $1 / 4$ | $2-1 / 8$ | 45219 |
| 10 mm | - | 38 mm | 10 mm | 79 mm | 45253 New |
| 10 mm | - | 19 mm | $1 / 2$ | $2-1 / 2$ | 45417 |
| 12 mm | 12 mm | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | 45488 |
| 14 mm | - | 25 mm | $1 / 2$ | $2-5 / 8$ | $45431^{*}$ |
| 18 mm | 18 mm | $3 / 4$ | $1 / 4$ | 2 | 45256 |
| 18 mm | 18 mm | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | 45498 |

* 14 mm bits for cutting plastic pilaster.

Note: Many standard metric plunge bits from 3 mm through 51 mm are available on special order. Please allow 2 to 3 weeks for delivery. See above for metric sized plywood bits.
Note: For 6 mm board, use \#45203 (15/64) shown in fractional section on page 70.


Top View




Top View

## UNDERSIZED PLYWOOD DADO

Carbide Tipped • 2 Flute
Straight Plunge Fractional Sizes.
Cut dado and groove dimensions perfectly for plywood, flakeboard and other sheet materials for which standard size bits are too large.


Actual

| ØD | Plywood Thickness | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $15 / 64$ | $1 / 4$ minus $1 / 64(6.0 \mathrm{~mm})$ | $3 / 4$ | $1 / 4$ | 2 | 45203 |
| $7 / 32$ | $1 / 4$ minus $1 / 32$ | $3 / 4$ | $1 / 4$ | 2 | 45206 |
| $15 / 32$ | $1 / 2$ minus $1 / 32$ | $3 / 4$ | $1 / 4$ | 2 | 45223 |
| $15 / 32$ | $1 / 2$ minus $1 / 32$ | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | 45425 |
| $19 / 32$ | $5 / 8$ minus $1 / 32$ | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | 45437 |
| $23 / 32$ | $3 / 4$ minus $1 / 32$ | $3 / 4$ | $1 / 4$ | 2 | 45231 |
| $23 / 32$ | $3 / 4$ minus $1 / 32$ | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | 45445 |

Note: For 6 mm board, use \#45203 (15/64) shown in fractional section above.


Single Flute


## INSERT CARBIDE STRAIGHT

Single \& 2 Flute


| $\boldsymbol{0} \mathbf{D}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Flute | Repl. <br> Knives | Repl. <br> Screws | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | 30 mm | $1 / 2$ | 3 | 1 | AMA-30 $\dagger$ | 67117 | RC-1154 |
| $1 / 2$ | 30 mm | $1 / 2$ | 3 | 1 | AMA-30 $\dagger$ | 67117 | RC-1154-LH** |
| $7 / 8$ | 50 mm | $1 / 2$ | $4-1 / 8$ | 1 | RCK-50 | 67117 | RC-1166 |
| $5 / 8$ | 30 mm | $1 / 2$ | $3-3 / 8$ | 2 | AMA-30 $\dagger$ | 67117 | RC-1080 |
| $5 / 8$ | 50 mm | $1 / 2$ | $4-1 / 8$ | 2 | AMA-30 $\dagger$ | 67117 | RC-1082 * |
| $3 / 4$ | 30 mm | $1 / 2$ | $3-3 / 8$ | 2 | RCK-30 | 67115 | RC-1084 |
| $3 / 4$ | 50 mm | $1 / 2$ | $4-1 / 8$ | 2 | RCK-30 | 67115 | RC-1086 * |
| $7 / 8$ | 30 mm | $1 / 2$ | $3-3 / 8$ | 2 | RCK-30 | 67115 | RC-1088 |
| $1-1 / 16$ | 30 mm | $1 / 2$ | $3-15 / 32$ | 2 | RCK-30 | 67115 | RC-1089 |

* 50 mm cutting edge is achieved using two 30 mm staggered knives.
** Left hand rotation.
$\dagger$ Optional knife with harder carbide for MDF applications: \#MDF-30.
\#5005 Torx ${ }^{\circledR}$ key included.
Note: All above plunge bits have four cutting edges per knife.
Metric sizes from 12 mm to 22 mm available on special order — please inquire.



## INSERT CARBIDE STRAIGHT

Single \& 2 Flute
These router bits yield cuts which are cleaner than typical insert bits, offering high speed cuts with super clean finish. They also are channel set, double edge knives. Each blade has a double-sided cutting edge for economy. The insert carbide is much harder than brazed carbide. There is minimum amount of downtime for blade changes.


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Flute | Knives | Screws | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 8$ | 20 mm | $1 / 2$ | $2-7 / 8$ | 1 | RCK-32 | 67015 | RC-3100 |
| $1 / 2$ | 30 mm | $1 / 2$ | $3-1 / 8$ | 1 | RCK-34 | 67016 | RC-3110 |
| $1 / 2$ | 30 mm | $1 / 2$ | $3-1 / 8$ | 2 | RCK-34 | 67016 | RC-3200 |

Replacement 1.5 mm special hex key \#5011.
Replacement spring washer: \#RC-3100 use \#67104; \#RC-3110 and \#RC-3200 use \#67105.

## CNC INSERT CARBIDE STRAIGHT

Single \& 2 Flute
These router bits are not designed to plunge. Using the "ramping technique" the router is eased in and routes. Available in three different grades of carbide for various applications.


A Warning: Recommended RPM=14,000-18,000
Note: All above two flute router bits have two cutting edges per knife.

* 50 mm cutting edge is achieved using two 30 mm staggered knives.
$\dagger$ Optional knife with harder carbide for MDF applications: \#MDF-30.


## CNC INSERT CARBIDE STRAIGHT

2 \& 3 Flute
Tested by many of the world's largest furniture manufacturers, these CNC router bits yield cuts which are cleaner than typical insert bits. This tool is specifically suited for peripheral work. Available with double and triple flutes.


A Warning: Maximum $R P M=18,000$

CNC feed and speed available online



CNC INSERT CARBIDE SUPER PLUNGE
This router bit is designed for fast and direct penetration into the material and quick removal of wood, MDF, melamine and man-made material.

| $\emptyset D$ | B | Teeth | Repl. Knife | Repl. Knife |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 0 d | L | Tool No. |
| $40 \mathrm{~mm}(1-1 / 2)$ | $29.5 \mathrm{~mm}(1-5 / 32)$ | 2+2 | RCK-30 | AMA-12 | 3/4 | 100 mm (4) | RC-2180 |

Replacement screw \#67115.
$\xrightarrow[\text { A A Lo }]{ }$
CNC feed and speed available online


## INSERT CARBIDE STRAIGHT

With Plunge Center Tip
This router bit is designed for fast and direct penetration into the material and quick removal of wood, MDF, melamine and man-made material.

|  |  | $0$ | $00$ |  |  | 岳 | (THC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\emptyset D$ | B | Repl. Knife | Repl. Knife | Max RPM | 0d | L | Tool No. |
| 18mm(23/32) | $50 \mathrm{~mm}(2)$ | RCK-162 | RCK-50 | 18,000 | 3/4 | 125 mm (5) | RC-2062 |

A Warning: These tools have an open flute design (not anti-kickback) and are intended for high feed-rate CNC machine use only. Do not use in portable routers.



Top View


$1 \leftarrow D \rightarrow 1$

## CNC INSERT CARBIDE UP \& DOWN SHEAR

Insert straight router bit complete with two up/down-shear flutes and center tip. Shear flutes squeeze the material into the middle to give an extra fine finish on both surfaces of laminated and veneered board. Replaceable inserts ensure a constant cutting diameter and finish quality. Center tip for improved boring. For use on routers with CNC control.

|  |  | $\frac{0 \quad 0}{\text { Repl. }}$ | Max |  |  | P- |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 D | B | Knife | RPM | 0 d | L | Tool No. |
| 20mm(25/32) | $30 \mathrm{~mm}(1-3 / 16)$ | RCK-16 | 18,000 | 3/4 | 110mm(4-11/32) | RC-2300 |
| $20 \mathrm{~mm}(25 / 32)$ | 50 mm (2) | RCK-28 | 18,000 | 3/4 | $130 \mathrm{~mm}(5-1 / 8)$ | RC-230 |


CNC feed and speed available online


## CNC INSERT CARBIDE STAGGER-TOOTH

Complete with two flutes and multiple cutting blades. Blades are sheared up and down to ensure a good finish on both top and bottom surfaces of laminated and veneered boards. For use on routers and machining centers with CNC control.

| $\emptyset \mathrm{D}$ | B | \# of <br> Knives | Repl. Knife | Max RPM | Ød |  | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22mm(7/8) | 42mm(1-11/16) | 4 | AMA-12 | 18,000 | 3/4 | 115mm(4-9/16) | RC-4200 |
| 22mm(7/8) | 62mm(2-7/16) | 6 | AMA-12 | 18,000 | $3 / 4$ | 135mm(5-5/16) | RC-4204 |

Replacement screw \#67110.
$\overbrace{\text { Sabe }}$
CNC feed and speed available online


Top View


## CNC INSERT CARBIDE ROUGH RABBETING \& SIZING

Insert straight router bit with multiple cutting flutes. Suitable for rough rabbeting and sizing in softwood, hardwood and man-made boards (with or without coating).
Multiple cutting flutes ensure fine chips are produced for improved waste extraction. Replaceable inserts ensure a constant cutting diameter. For use on routers and machining centers with CNC control.



## SPIRAL FLUTE PLUNGE

## Solid Carbide • 2 Flute •Up-Cut \& Down-Cut

Spiral-flute bits combine a shearing action in cutting with an augering action in chip clearance. The shearing action yields an especially clean accurate cut while the augering action clears chips from the cut.

The 'Up-Cut' shears from the bottom up pulling chips from the bottom up thus allowing deeper penetration with less stress on the tool. An excellent choice for mortising.

Special unique carbide grade increased clearance geometry and razor-sharp cutting edges with polished flutes provide a superior finish and longer tool life especially in abrasive materials. Great for production settings and excellent for creating grooves and dado cuts in particleboard, plywood and laminate.

| ØD | B | $\emptyset \mathrm{d}$ | L |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 'Up-Cut' <br> Tool No. | 'Down-Cut' Tool No. |
| 1/32 | 1/8 | 1/8 | 2 | - | 46229 |
| 3/64 | 1/8 | 1/8 | 2 | - | 46231 |
| 1/16 | 3/16 | 1/8 | 2 | - | 46237 |
| 3/32 | 1/4 | 1/8 | 2 | - | 46239 |
| 1/8 | 1/2 | 1/8 | 2 | 46127 | 46227 |
| 1/8 | 1/2 | 1/4 | 2 | 46100 | 46200 |
| 1/8 | 1/2 | 1/4 | 2-1/4 | 46333 New | 46433 New |
| 1/8 | 13/16 | 1/4 | 2-1/2 | 46125 | 46225 |
| 5/32 | 5/8 | 1/4 | 2-1/2 | 46310 | 46410 |
| 3/16 | 3/4 | 1/4 | 2 | 46101 | 46201 |
| 3/16 | 3/4 | 1/4 | 2-1/2 | 46131 New | 46331 New |
| 7/32 | 1 | 1/4 | 2-1/2 | 46314 | 46414 |
| 1/4 | 3/8 | 1/4 | 2-1/2 | 46337 New | 46437 New |
| 1/4 | 5/8 | 1/4 | 2-1/2 | 46338 New | 46438 New |
| 1/4 | 3/4 | 1/4 | 2-1/2 | 46102 | 46202 |
| 1/4 | 3/4 | 1/4 | 2-1/4 | 46102-S | 46202-S |
| 1/4 | 1 | 1/4 | 2-1/2 | 46315 | 46415 |
| 1/4 | 1-1/8 | 1/4 | 3 | 46316 | 46416 |
| 1/4 | 1-1/4 | 1/4 | 3 | 46321 | 46421 |
| 9/32 | 1 | 5/16 | 2-1/2 | 46317 | 46417 |
| 9/32 | 1 | 1/2 | 3 | 46117 | 46217 |
| 5/16 | 1 | 5/16 | 2-1/2 | 46325 New | 46422 New |
| 5/16 | 1 | 1/2 | 3 | 46119 | 46219 |
| 5/16 | 1-1/8 | 1/2 | 3 | 46318 | - |
| 3/8 | 7/8 | 3/8 | 3 | 46339 New | 46439 New |
| 3/8 | 1 | 3/8 | 2-1/2 | 46103 | 46203 |
| 3/8 | 1-1/4 | 3/8 | 3 | 46320 | 46420 |
| 3/8 | 1-1/2 | 3/8 | 4 | 46323 | 46423 |
| 3/8 | 1-1/4 | 1/2 | 3 | 46104 | 46204 |
| 7/16 | 1 | 1/2 | 3 | 46335 New | 46435 New |
| 1/2 | 7/8 | 1/2 | 3 | 46210 New | 46447 New |
| 1/2 | 1-1/8 | 1/2 | 3 | 46336 New | 46436 New |
| 1/2 | 1-1/4 | 1/2 | 3 | 46106 | 46206 |
| 1/2 | 1-5/8 | 1/2 | 3-1/2 | 46107 | 46207 |
| 1/2 | 2 | 1/2 | 4 | 46329 | 46429 |
| 5/8 | 1-5/8 | 5/8 | 3-1/2 | 46108 | 46208 A |
| 5/8 | 2 | 5/8 | 4 | 46121 A | - |

A Warning: These tools have an open flute design (not anti-kickback) and are intended for high feed-rate CNC machine use only. Do not use in portable routers.

CNC feed and speed available online


Sets Available
See page 83



Top View

 SPIRAL FLUTE PLUNGE New
Solid Carbide • 2 Flute
The Spektra ${ }^{\text {TM }} \mathrm{nACo}^{\circledR}$ nanocomposite coating is a micro thin ceramic coating which enables the tool's cutting edge to retain crucial sharpness and lubricity. This provides longevity and produces cutting results of the highest quality.
For complete details on Spektra ${ }^{\text {TM }}$ visit www.amanatool.com/spektra
For material cut list visit www.amanatool.com.


Top View


## CNC COMPRESSION SPIRAL FLUTE

Solid Carbide • Single, 2 \& 3 Flute • For MDF/Laminate
Special carbide for longer lifetime in abrasive material. Designed for CNC applications requiring high feed rates and a clean finish. Particularly suitable for double-sided melamine or laminated material. 3-flute design provides an extra-smooth finish.
Excellent For Cutting:

- MDF/HDF - Veneered Plywood
- Laminate - Wood
- Melamine - Oriented Strand Board (OSB)


| ØD | B | B1 | 0 d | L | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1/8 | 3/8 | 5/32 | 1/8 | 2-1/2 | 1 | 46137 † |
| 1/8 | 3/8 | 5/32 | 1/4 | 2-1/2 | 1 | 46139 |
| 1/4 | 7/8 | 3/8 | 1/4 | 2-1/2 | 1 | 46140 |
| 1/2 | 1-1/4 | 7/16 | 1/2 | 3 | 1 | 46159 |
| 1/2 | 1-5/8 | 7/16 | 1/2 | 3-1/2 | 1 | 46160 |
| 1/8 | 13/16 | 7/32 | 1/8 | 2-1/2 | 2 | 46180 ** |
| 5/32 | 7/8 | 1/8 | 1/4 | 2-1/2 | 2 | 46183 New |
| 3/16 | 0.775 | 7/32 | 3/16 | 2-1/2 | 2 | 46181 |
| 1/4 | 7/8 | 7 mm | 1/4 | 2-1/2 | 2 | 46170 |
| 1/4 | 7/8 | 7 mm | 1/4 | 2-1/2 | 2 | 46170-LH * |
| 3/8 | 7/8 | . 188 | 3/8 | 3 | 2 | 46171 New |
| 3/8 | 1-1/8 | 9 mm | 3/8 | 3 | 2 | 46173 New |
| 3/8 | 1-1/4 | 9 mm | 3/8 | 3 | 2 | 46172 |
| 3/8 | 1 | 9 mm | 1/2 | 3 | 2 | 46174 |
| 3/8 | 1-1/8 | 9 mm | 1/2 | 3 | 2 | 46178 |
| 1/2 | 1 | 9 mm | 1/2 | 3 | 2 | 46182 |
| 1/2 | 1-1/8 | 10 mm | 1/2 | 3 | 2 | 46186 |
| 1/2 | 1-1/4 | 11 mm | 1/2 | 3 | 2 | 46188 |
| 1/2 | 1-1/4 | 11 mm | 1/2 | 3 | 2 | 46188-LH * |
| 1/2 | 1-1/2 | 12 mm | 1/2 | 3-1/2 | 2 | 46189 |
| 1/2 | 1-1/2 | 7/16 | 1/2 | 4-1/16 | 2 | 46191 |
| 1/2 | 1-5/8 | 13 mm | 1/2 | 3-1/2 | 2 | 46190 |
| 1/2 | 1-5/8 | 13 mm | 1/2 | 3-1/2 | 2 | 46190-LH * |
| 3/8 | 7/8 | . 200 | 3/8 | 3 | 3 | 46011 New |
| 3/8 | 1-1/8 | 9 mm | 3/8 | 3 | 3 | 46010 - $^{28}$ |
| 1/2 | 7/8 | . 200 | 1/2 | 3 | 3 | 46013 New |
| 1/2 | 1-1/4 | 9 mm | 1/2 | 3 | 3 | 46012 - $^{28}$ |
| 1/2 | 1-5/8 | 9 mm | 1/2 | 3-1/2 | 3 | 46014 A $^{28}$ |



A Warning: Recommended RPM=20,000-21,000
A 28 Maximum RPM $=28,000$
*Indicates left hand rotation. **Optional 1/4" dia. sleeve/adapter \#47632, see page 179.

## 2SPEKTRA <br> EXTREME TOOL LIFE COATING

## CNC COMPRESSION SPIRAL FLUTE New

Solid Carbide • 2 \& 3 Flute • For MDF/Laminate
The Spektra ${ }^{\top \mathrm{M}}{ }^{n} \mathrm{nACo}^{\oplus}$ nanocomposite coating is a micro thin ceramic coating which enables the tool's cutting edge to retain crucial sharpness and lubricity. This provides longevity and produces cutting results of the highest quality.

| ØD | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $13 / 16$ | $7 / 32$ | $1 / 8$ | $2-1 / 2$ | 2 | $46180-\mathrm{K}$ |
| $1 / 4$ | $7 / 8$ | 7 mm | $1 / 4$ | $2-1 / 2$ | 2 | $46170-\mathrm{K}$ |
| $3 / 8$ | $7 / 8$ | .200 | $3 / 8$ | 3 | 2 | $46171-\mathrm{K}$ |
| $3 / 8$ | 1 | 9 mm | $1 / 2$ | 3 | 2 | 46161 |
| $3 / 8$ | $1-1 / 4$ | 9 mm | $3 / 8$ | 3 | 2 | $46172-\mathrm{K}$ |
| $1 / 2$ | $1-1 / 4$ | 11 mm | $1 / 2$ | 3 | 2 | $46188-\mathrm{K}$ |
| $1 / 2$ | $1-5 / 8$ | 13 mm | $1 / 2$ | $3-1 / 2$ | 2 | $46190-\mathrm{K}$ |
| $3 / 8$ | $1-1 / 8$ | 9 mm | $3 / 8$ | 3 | 3 | $46010-\mathrm{K}$ |
| $1 / 2$ | $1-1 / 4$ | 9 mm | $1 / 2$ | 3 | 3 | $46012-\mathrm{K}$ |
| $1 / 2$ | $1-5 / 8$ | 9 mm | $1 / 2$ | $3-1 / 2$ | 3 | $46014-\mathrm{K}$ |



Excellent For Cutting:

- CFRP
- Double-Sided Melamine
- Laminate
- MDF/HDF
- Melamine Particleboard
- Oriented Strand Board (OSB)
- Veneered Plywood
- Wood

5-Pc Spektra Set (includes 46172-K, 46188-K, 46190-K, 46010-K \& 46170-K) AMS-182-K


## CNC COMPRESSION SPIRAL FLUTE FOR SOLID WOOD

## Solid Carbide • Single \& 2 Flute

Designed for working in hard solid wood. Slow helix, special grinding angle, improved body shape in order to support the high feed rate, quick direction changes and deep penetration.


| ØD | B | B1 | $\emptyset d$ | L | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1/4 | 7/8 | 9/32 | 1/4 | 2-1/2 | 1 | 46390 |
| 1/4 | 7/8 | 13/64 | 1/4 | 2-1/2 | 1 | 46322 |
| 3/8 | 7/8 | 13/64 | 3/8 | 3 | 1 | 46324 |
| 3/8 | 1-1/8 | 23/64 | 1/2 | 3 | 1 | 46392 |
| 1/2 | 7/8 | 13/64 | 1/2 | 3 | 1 | 46326 |
| 1/2 | 1-5/8 | 15/64 | 1/2 | 3-1/2 | 1 | 46328 |
| 1/2 | 7/8 | 13/64 | 1/2 | 3 | 2 | 46342 |
| 1/2 | 1-3/8 | 5/16 | 1/2 | 3-1/2 | 2 | 46344 |

## SPIRAL FLUTE PLUNGE New WITH CORNER RADIUS

Solid Carbide • 2 Flute •Up-Cut
For carving, lettering, decorative doors and sign manufacturing. Leaves an excellent finish and expels chips quickly.

## Excellent For Cutting:

- Aluminum
- MDF
- Soft/Hard Plastic
- Soft/Hard Wood


| $\emptyset \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $1 / 16$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 46460 |

CNC feed and speed available online

## CNC MORTISE COMPRESSION SPIRAL

Solid Carbide • Single, 2, 3 \& 4 Flute • For Mortising Work
These tools have a much shorter up-cut section than the standard compression tools. They are ideal for mortising, grooving and dado.

## Excellent For Cutting:

- MDF/HDF
- Laminate
- Melamine
- Wood \& Plywood


| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\boldsymbol{\emptyset d}$ | $\mathbf{L}$ | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | 1 | $1 / 8$ | $1 / 4$ | $2-1 / 2$ | 1 | 46393 |
| $1 / 2$ | $1-5 / 8$ | $1 / 4$ | $1 / 2$ | $3-1 / 2$ | 1 | 46397 |
| $1 / 4$ | 1 | $1 / 8$ | $1 / 4$ | $2-1 / 2$ | 2 | 46350 |
| $3 / 8$ | $7 / 8$ | $1 / 8$ | $3 / 8$ | 3 | 2 | 46367 |
| $3 / 8$ | $1-1 / 4$ | $3 / 16$ | $1 / 2$ | 3 | 2 | 46352 |
| $1 / 2$ | $1-1 / 4$ | $1 / 4$ | $1 / 2$ | 3 | 2 | 46354 |
| $1 / 2$ | $1-5 / 8$ | $1 / 4$ | $1 / 2$ | $3-1 / 2$ | 2 | 46356 |
| $1 / 2$ | $2-1 / 8$ | $1 / 4$ | $1 / 2$ | 4 | 2 | 46360 |



Single Flute


3 Flute

## * SPPEKTRA <br> EXTREME TOOL LIFE COATING

## CNC MORTISE COMPRESSION SPIRAL New

Solid Carbide • 2 \& 3 Flute • For Mortising Work
The Spektra ${ }^{\text {TM }}{ }^{n A C o}{ }^{\circledR}$ nanocomposite coating is a micro thin ceramic coating which enables the tools cutting edge to retain crucial sharpness and lubricity. This provides longevity and produces cutting results of the highest quality.

For complete details on Spektra ${ }^{\text {TM }}$ visit www.amanatool.com/spektra


| ØD | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | 1 | $1 / 8$ | $1 / 4$ | $2-1 / 2$ | 2 | $46350-\mathrm{K}$ |
| $3 / 8$ | $7 / 8$ | $1 / 8$ | $3 / 8$ | 3 | 2 | $46367-\mathrm{K}$ |
| $3 / 8$ | $1-1 / 4$ | $3 / 16$ | $1 / 2$ | 3 | 2 | $46352-\mathrm{K}$ |
| $3 / 8$ | 1 | $3 / 16$ | $3 / 8$ | 3 | 3 | $46020-\mathrm{K}$ |

[^5]Excellent For Cutting:

- MDF/HDF
- Double-Sided Melamine
- Laminate
- Wood \& Plywood


2 Flute


3 Flute


## CNC SPIRAL FLUTE FINISHING

Solid Carbide • 3 Flute with Chipbreaker
This series of bits contains small chip breakers that break up the chips and allow the bit to run cooler and faster. For cutting wood and wood composites.



Top View


Up-Cut
Down-Cut

## SPIRAL PATTERN/PLUNGE COMPRESSION <br> Solid Carbide (Brazed to Steel Shank) • 2 Flute with Upper Ball Bearing

Plunge-cutting straight with a shank-mounted ball-bearing pilot. Useful for template/ pattern routing or parts, joints, internal cuts and can be used in handheld and table-mounted routers. The template is attached to the work-piece and the pilot bearing rides along its edge as the cutting edges rout the work-piece, forming an exact duplicate of the template.


| $\emptyset D$ | $B$ | $\emptyset d$ | L | Replacement Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $7 / 8$ | $1-9 / 64$ | $1 / 2$ | $3-15 / 16$ | 47793 | 57176 |

Replacement parts: Screw \#67109; Washer \#67101.


## SPIRAL FLUSH TRIM COMPRESSION

Solid Carbide (Brazed to Steel Shank) • 2 Flute with Ball Bearing Guide
Used for trimming laminate work or for template and pattern work. For template application, the bearing follows the template, while the cutting edge trims the work-piece. With the router handheld, the template is on the bottom of the work. With table-mounted router, the template is on top.


| ØD | B | Ød | L | Replacement Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 22 mm | $1-9 / 64$ | $1 / 2$ | $3-15 / 16$ | 47798 | 57174 |

Replacement parts: Screw \#67109; Washer \#67101.



Set \#AMS-190-K Includes:

| Compression | Plastic '0' Flute | Spiral Plunge |
| :--- | :--- | :--- |
| $46170-\mathrm{K}$ | $51441-\mathrm{K}$ | $46100-\mathrm{K}$ |
| $46171-\mathrm{K}$ | $51410-\mathrm{K}$ | $46102-\mathrm{K}$ |
| 46161 | RB-102 | $46315-\mathrm{K}$ |
| $46010-\mathrm{K}$ | $51411-\mathrm{K}$ |  |
| 46162 | $51446-\mathrm{K}$ |  |
| 46163 | $51417-\mathrm{K}$ |  |
| $46012-\mathrm{K}$ | $51404-\mathrm{K}$ |  |
| 46165 | $51405-\mathrm{K}$ |  |

18-PC. SPIRAL MASTER COLLECTION New
Solid Carbide Carbide Compression Spiral, Plastic Cutting Spiral '0' Flute \& Spiral Plunge
侖 R


For material cut list visit www.amanatool.com.

## 8-PC. BALL NOSE SPIRAL New <br> Solid Carbide Spiral Router Bit Collection

Excellent For Cutting:

- Aluminum/Non-Ferrous
- Soft/Hard Plastic
- MDF/HDF
- Sign Foam
- Soft/Hardwood


## Includes:

46373, 46369, 46376, 46378, 46380, 46424, 46426 \& 46446

## 3-PC SPIRAL BALL NOSE PACK New <br> Solid Carbide • 2 Flute <br> Designed for a wide variety of applications. <br> 

Includes:
46288,46389 \& 46376


## 5-PC. DOWN-CUT SPIRAL <br> Solid Carbide Spiral Router Bit Collection

Excellent For Cutting:

- MDF/HDF
- Laminate
- Veneered Plywood - Composite

Includes:
46200, 46201, 46202, 46420, 46206 \& RB-122


Set \#AMS-122


Set \#AMS-123


Set \#AMS-125


## IUDUSTHIAII INSERT SPOILBOARD <br> SURFACING ROUTER BITS

## Insert Knife Technology Provides the Highest Quality of Cut!

The insert spoilboard industrial router bits with scorers features a unique $2+2$ knife design that contains two cutting flutes and two up-shear scorers, which provide a smoother finish at the bottom of the cut than traditional two-knife style router bits. Engineered with an Amana-exclusive carbide grade for the highest quality of cut, maximum cutting efficiency and faster material removal process. These industrial router bits feature insert knives with four cutting edges that allow users to rotate the knife when one side becomes dull. Great for surface planing.

## SPOILBOARD SURFACING, RABBETING FLYCUTTER, LEVELER \& SURFACE PLANER

Insert Carbide with Scorer and 2+2 Insert Knife Design
Insert router bit complete with two cutting flutes and two up-shear scorers for fast removal of materials over large surface area. The scorer leaves an improved finish at the bottom of the cut. Utilizes 4 -sided carbide inserts. Max cutting depth is $1 / 4^{\prime \prime}$. Also perfect for surfacing and finishing using timber slab machines.

Designed for planing \& rabbeting the following materials:

- MDF
- Plywood/Chipboard*
- Fiberboard
- Balsa Core
- Hardwood/Softwood*
- Plastic*
*For optimal results and maximum insert life, replace inserts with optional general purpose knives (sold separately).


| ØD | $\mathbf{B}$ | $\boldsymbol{0} \mathbf{d}$ | $\mathbf{L}$ | Repl. MDF Knives | Max RPM | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-1 / 2$ | $15 / 32$ | $1 / 2$ | $2-1 / 2$ | HMA-12, HCK-70 | 19,000 | RC-2251 |
| $80 \mathrm{~mm}(3-5 / 32)$ | $15 / 32$ | $3 / 4$ | $90 \mathrm{~mm}(3-1 / 2)$ | HMA-12, HCK-70 | 18,000 | RC-2252 |

- CNC use only.

Optional General Purpose knives: \#AMA-12 \& \#RCK-70.
Replacement screws: bottom: (2) \#67155; sides: (2) \#67110.
Torx ${ }^{\oplus}$ key: bottom: \#5015; sides: (2) \#5005


A Warning: Proper torques rating to tighten down screws is $2-3 \mathrm{Nm}$ Torques.

$\xrightarrow[A \text { Pdice }]{C}$
CNC feed and speed available online



Tool holder sold separately.


## MINI SPOILBOARD SURFACING, RABBETING, FLYCUTTER, LEVELER \& SURFÁCE PLANER

Insert Carbide with Scorer and 2+2 Knife Design
Mini insert spoilboard surfacing \& rabbeting with scorer, great for cutting tight corners. Features unique $2+2$ insert knife design that contains two cutting flutes and two up-shear scorers, which provide a smoother finish at the bottom of the cut than traditional two-knife style router bits. Max cutting depth is $1 / 4^{\prime \prime}$.
Also perfect for surfacing and finishing using timber slab machines.
Designed for planing \& rabbeting the following materials:


- MDF
- Chipboard*
- Fiberboard
- Balsa Core*
- HDF/LDF
- Hardwood/Softwood*
- Plastic*
*For optimal results and maximum insert life, replace inserts with optional general purpose knives (sold separately).
- 2+2 Mini design for tighter corners
- Utilizes 4-sided carbide inserts
- Exclusive carbide grade for highest quality of cut
- Maximum cutting efficiency
- Faster material removal process

| OD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Repl. MDF Knives | Max RPM | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| $1-1 / 4$ | $27 / 64$ | $1 / 2$ | $2-17 / 64$ | RCK-450, RCK-452 | 24,000 | RC-2247 |
| $1-1 / 2$ | $1 / 2$ | $1 / 4$ | $1-13 / 16$ | HMA-12, HCK-70 $\dagger$ | 24,000 | RC-2249 |
| $1-1 / 2$ | $1 / 2$ | $12 m m$ | $2-5 / 16$ | HMA-12, HCK-70 $\dagger$ | 24,000 | RC-2253 |
| $1-1 / 2$ | $1 / 2$ | $1 / 2$ | $2-5 / 16$ | HMA-12, HCK-70 $\dagger$ | 24,000 | RC-2250 |

$\dagger$ Optional General Purpose knives \#AMA-12 \& \#RCK-70.

- CNC use only.
\#RC-2247 replacement screws: bottom: (2) \#67123, key \#5090; sides: (2) \#67115, key \#5005. \#RC-2249, \#RC-2250 \& \#RC-2253 repl. screws: bottom: (2) \#67155, key \#5015; sides: (2) \#67115, key \#5005.

Note: This tool is not designed to plunge! You must ramp down to a depth of $1 / 4^{\prime \prime}$ deep over a 20 " run. Use the max RPM allowed $(24,000)$ and start the feed rate at about 320 inches per minute, and go up until you get waves, then back down to a smooth cut/finish.

A Warning: Proper torques rating to tighten down screws is $2-3 \mathrm{Nm}$ Torques.


Torx ${ }^{\circledR}$ key included.

Create Your Own
MDF SIMULATED SHAKER DOORS


To produce MDF Shaker cabinet doors use \#RC-2250 or \#RC-2252 and square corners with \#45200 straight plunge router bit.



## CNC HEAVY DUTY SPOILBOARD SURFACING, New PLANING, FLYCUTTER \& LEVELER

Insert Carbide • 3 Wing and 5 Wing
Featuring solid carbide insert knives with four cutting edges that allow users to rotate the knife when one side becomes dull providing the highest-quality finish available. Also perfect for surfacing and finishing using timber slab machines.

- Capable of removing thin layers of material, less than $\mathbf{0 . 0 0 1 "}$ per pass
- Tool can plunge down up to $1 / 4^{\prime \prime}$, then start resurfacing
- The unique chamfer corner insert design creates a flawless surface
- The 3 wing and 5 wing design results in a more balanced tool while running

Designed for the following materials:

- MDF
- Fiberboard
- HDF/LDF
- Plywood/Chipboard*
- Balsa Core*
- Hardwood/Softwood*
- Plastic*
*For optimal results and maximum insert life, replace inserts with optional general purpose knives (sold separately).
- Utilizes 4-sided carbide inserts
- Exclusive carbide grade for highest quality of cut
- Maximum cutting efficiency
- Faster material removal process


| ØD | $\mathbf{B}$ | $\boldsymbol{0} \mathbf{d}$ | $\mathbf{L}$ | Repl. MDF Knives | B1 | D1 | D2 | Flute | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | $53 / 64$ | $1 / 2$ | $2-19 / 32$ | RCK-459 $\dagger$ | $1 / 4$ | $5 / 64$ | $2-1 / 2$ | 3 | RC-2255 |
| $3-11 / 32$ | $1-7 / 32$ | $3 / 4$ | $3-25 / 64$ | RCK-459 $\dagger$ | $1 / 4$ | $5 / 64$ | $3-27 / 32$ | 5 | RC-2259 |

$\dagger$ Optional General Purpose knives \#RCK-457.
Repl. screws: (5) \#67110, key \#5005
A. Warning: Proper torques rating to tighten down screws is $2-3 \mathrm{Nm}$ Torques.

[^6]

3-Wing


5-Wing


## SPOILBOARD SURFACING, RABBETING, FLYCUTTER, LEVELER \& SURFACE PLANER <br> Insert Carbide • 2-Wing

These industrial router bits feature solid carbide insert knives with four cutting edges that allow users to rotate the knife when one side becomes dull, providing the highest-quality finish available on woodworking tools. Used in resurfacing of particleboard, MDF and balsa core material. Optional general purpose knives for chipboard, balsa core, hardwood/softwood and plastic.
Also perfect for surfacing and finishing using timber slab machines.


- Utilizes 4-sided carbide inserts
- Exclusive carbide grade for highest quality of cut
- Maximum cutting efficiency
- Faster material removal process

Designed for planing \& rabbeting the following materials:

- MDF
- Chipboard*
- Fiberboard
- Balsa Core*
- HDF/LDF
- Hardwood/Softwood*
- Plastic*

*For optimal results and maximum insert life, replace inserts with optional general purpose knives (sold separately).

+ Mini Design.
$\dagger$ Optional general purpose knives \#AMA-12.
** Best recommended for planing/flattening in surfaces of large solid wood slabs with a handheld router in router sleds. Features a $1 / 8$ radius $5^{\circ}$ bevel, making this tool unique compared to other spoilboard bits. Not to be used for slot cutting.

450. Polycrystalline Diamond (PCD) for extremely long life.

A Warning: Proper torques rating to tighten down screws is $2-3 \mathrm{Nm}$ Torques.

- CNC use only.




## INDUSTRIAL Mortising



Mortising is one of the most common woodworking operations. Mortise-and-tenon joints, hinges and locks, grooves and dadoes, all require the precise removal of material.
Whether you need a deep mortise for a strong, interlocking joint on a chair or a shallow mortise for hardware installation, Amana Tool® has a bit for the task. Some bits even have an upper guide bearing for use with a template. All of our mortising bits have Amana's renowned quality; your assurance of efficient, precise cuts and long tool life.

## MORTISING

Carbide Tipped • 2 Flute
Cutting mortises for hinges and locks can be challenging; the mortise depth must be accurate for smooth operation and the edges must be sharp for a clean, professional installation. These mortise bits make hardware installation a snap. The large gullet between the two flutes clears chips away quickly and the cutter geometry creates a crisp outline for a perfect fit.

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| OD | $\mathbf{B}$ | Od | $\mathbf{L}$ |
| $1 / 2$ | $3 / 4$ | $1 / 4$ | 2 |
| $5 / 8$ | $3 / 4$ | $1 / 4$ | 2 |
| $3 / 4$ | $3 / 4$ | $1 / 4$ | 2 |
| $3 / 4$ | $5 / 8$ | $1 / 2$ | $2-1 / 4$ |
| $1 / 4$ | $3 / 4$ | $1 / 2$ | $2-1 / 8$ |
| Tool No. |  |  |  |
| Without large gullet. |  |  | 455002 |




## MORTISING WITH UPPER BALL BEARING <br> Carbide Tipped • 2 Flute •Down-Shear Design

There is no faster method for producing multiple mortises than with a template. The accuracy achieved with a template is unparallel. These mortise bits are specially designed for use with templates, both linear and curved.
If you've ever used a bushing with template work then you'll appreciate these bearing-guided bits; there's no need to calculate offset - ever. Instead, the mortise is sized exactly to the template. And, unlike a bushing on the router sub-base, the guide bearing is always concentric to the cutting circle of the bit. This ensures precise cuts each and every time.


|  |  | Replacement |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ØD | B | Ød | L | Bearing | Collar | Tool No. |
| $1 / 2$ | $3 / 4$ | $1 / 4$ | $2-3 / 8$ | 47701 | 47724 | 45582 |
| $5 / 8$ | $3 / 4$ | $1 / 4$ | $2-3 / 8$ | 47712 | 47724 | 45584 |
| $3 / 4$ | $3 / 4$ | $1 / 4$ | $2-7 / 16$ | 47714 | 47724 | 45586 |
| $1-1 / 4$ | $1 / 2$ | $1 / 2$ | $2-5 / 8$ | 47756 | 47740 | 45590 |

## MORTISING

Carbide Tipped • 2 Flute • Down-Shear Design
Intended for hinge mortising, this bit is an excellent choice for cutting laps and tenons as well. The sides and bottom of the cut are exceptionally smooth. The down-shear design reduces chipping along the top edge of the cut, especially in laminates, veneered plywood and MDF. The large gullet between the cutting edges provides excellent chip clearance.


| $\boldsymbol{\emptyset D}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $5 / 16$ | $1 / 4$ | $1-7 / 16$ | 45570 |
| $3 / 4$ | $3 / 4$ | $1 / 2$ | $2-1 / 4$ | 45576 |
| $1-1 / 4$ | $15 / 64$ | $1 / 2$ | $1-3 / 4$ | 45578 |
| $1-1 / 4$ | $1 / 2$ | $1 / 2$ | 2 | 45580 |

## MORTISING FOR BOTTOM CLEANING WITH UPPER BALL BEARING

Carbide Tipped • 2 Flute •Up-Shear Design
Shank-mounted ball-bearing for pattern and template routing.


Replacement

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Bearing | Collar | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $7 / 16$ | $1 / 4$ | $2-1 / 4$ | 47714 | 47724 | 45561 |
| $3 / 4$ | $7 / 16$ | $1 / 2$ | $2-1 / 2$ | 47721 | 47739 | 45563 |
| 1 | $7 / 16$ | $1 / 2$ | $2-1 / 2$ | 47754 | 47740 | 45565 |
| $1-1 / 2$ | $5 / 8$ | $1 / 2$ | $2-3 / 4$ | 47758 | 47740 | 45567 |

## MORTISING FOR BOTTOM CLEANING

Carbide Tipped • 2 Flute •Up-Shear Design
This bit is intended for broad, very shallow cuts, where an exceptional finish is desired. Use it to clean up previously cut dadoes and grooves, or for surfacing cuts. The up-shear configuration improves chip removal, while the cutting-edge orientation produces a smooth surface.


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $7 / 16$ | $1 / 4$ | $2-1 / 4$ | 45560 |
| $3 / 4$ | $7 / 16$ | $1 / 2$ | $2-1 / 2$ | 45562 |
| 1 | $7 / 16$ | $1 / 2$ | $2-1 / 2$ | 45564 |
| $1-1 / 2$ | $5 / 8$ | $1 / 2$ | $2-3 / 4$ | 45566 |

## UP-SHEAR BIT SLOT MORTISER

Carbide Tipped • 2 Flute
These bits are designed to do deep slot and holes for tenon, especially in doors, chairs, tables, etc. Special carbide with a 1" long up-shear and chipbreaker for fast cuts and chip clearance. For use in lock mortising and door machines.

|  |  |  |  | For Slot Mortiser Only |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| ØD | B | B1 | 0 d | L | Tool No. |
| 1/2 | 1 | 2-3/4 | 1/2 | 6 | 45540 - |
| 5/8 | 1 | 4-3/4 | 1/2 | 6-5/8 | 45542 - |
| 3/4 | 1 | 4-3/4 | 1/2 | 6-5/8 | 45544 - |

A Warning: DO NOT USE THESE BITS ON A DRILL PRESS MACHINE UNDER ANY CIRCUMSTANCES!


HINGE AND LOCK FACE MORTISING/DADO SCREW TYPE CUTTER
Replaces Her-Saf ${ }^{\oplus}$ Style •Carbide Tipped • 2 Flute
Mortise doors to fit hinges, locks, lock face plates and for general stock removal. All cutters fit threaded arbors (see threaded arbor table below).


Fits Porter-Cable \& other standard model mortising jigs. Also used in door machines.


## Down Shear

| ØD | B | Thread | Tool No. |
| :---: | :---: | :---: | :---: |
| 1/2-0.015 | 7/8 | 1/4"-28 | 55283 |
| 1/2 | 7/8 | 1/4"-28 | 55251 |
| 1/2 | 0.885 | 1/4"-28 | 55253 |
| $1 / 2+0.015$ | 9/16 | 1/4"-28 | 55277 |
| 9/16 | 9/16 | 1/4" - 28 | 55279 |
| 9/16 + 0.015 | 9/16 | 1/4"-28 | 55278 |
| 19/32 | 9/16 | 1/4"-28 | 55281 |
| 5/8 | 9/16 | 1/4"-28 | 55259 |
| $5 / 8+0.015$ | 9/16 | 1/4"-28 | 56250 |
| 11/16 | 9/16 | 1/4"-28 | 56251 |
| 23/32 | 9/16 | 1/4"-28 | 56252 |
| 3/4-0.015 | 9/16 | 1/4"-28 | 55285 |
| 3/4 | 9/16 | 1/4"-28 | 55250 |
| $3 / 4+0.015$ | 9/16 | 1/4"-28 | 55248 |
| 25/32 | 9/16 | 1/4"-28 | 56253 |
| 13/16 | 9/16 | 1/4"-28 | 55249 |
| 7/8 | 9/16 | 1/4"-28 | 55252 |
| 15/16 | 9/16 | 1/4"-28 | 55149 |
| 1 | 9/16 | 1/4"-28 | 55254 |
| $1+0.015$ | 9/16 | 1/4" - 28 | 56255 |
| 1-1/8 | 9/16 | 1/4"-28 | 55256 |
| 1-1/4 | 9/16 | 1/4"-28 | 55257 |
| 1-1/4 | 11/16 | 1/4" - 28 | 56254 |
| 1-1/4 | 5/8 | 1/4"-28 | 55258 |
| 1-1/4 | 5/8 | 5/16"-24 | 55255 * |

Arbors: 1/4" Shank use \#47611. 1/2" Shank use \#47614. * Use arbor \#47616.
Straight Style - No Shear

| ØD | $\mathbf{B}$ | Thread | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 8+0.015$ | $3 / 8$ | $1 / 4^{\prime \prime}-28$ | $1-7 / 16$ | 56268 |
| $3 / 16+0.039$ | $1 / 2$ | $1 / 4^{\prime \prime}-28$ | $1-19 / 32$ | 56269 |
| $1 / 4$ | $1 / 2$ | $1 / 4^{\prime \prime}-28$ | 1.360 | 56270 |
| $1 / 4+.015$ | $1 / 2$ | $1 / 4^{\prime \prime}-28$ | 1.360 | 56272 |
| $9 / 32$ | $1 / 2$ | $1 / 4^{\prime \prime}-28$ | 1.360 | 56273 |
| $5 / 16+.015$ | $1 / 2$ | $1 / 4^{\prime \prime}-28$ | 1.360 | 56275 |
| $3 / 8$ | $9 / 16$ | $1 / 4^{\prime \prime}-28$ | 1.360 | 56274 |
| $3 / 8+.015$ | $9 / 16$ | $1 / 4-28$ | 1.360 | 56276 |

## DOVETAIL SCREW TYPE CUTTERS New



Used with half-blind dovetail jigs, as well as with 0 mnijig ${ }^{\oplus}$, Incra ${ }^{\oplus}$ and Leigh ${ }^{\circledast}$ jigs. All cutters fit threaded arbors.


| ØD | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Thread | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $14^{\circ}$ | $1 / 2$ | $1 / 4^{\prime \prime}-28$ | $1-1 / 4$ | 56280 |
| $3 / 8$ | $9^{\circ}$ | $3 / 8$ | $1 / 4^{\prime \prime}-28$ | $1-1 / 8$ | 56281 |
| $7 / 16$ | $10^{\circ}$ | $3 / 8$ | $1 / 4^{\prime \prime}-28$ | $1-1 / 8$ | 56282 |
| $5 / 8$ | $14^{\circ}$ | $9 / 16$ | $1 / 4^{\prime \prime}-28$ | $1-1 / 4$ | 56283 |
| $3 / 4$ | $14^{\circ}$ | $3 / 4$ | $1 / 4^{\prime \prime}-28$ | $1-1 / 2$ | 56284 |

## THREADED ARBOR

For Screw Type Mortising Cutters (above tables)


| For Use With Cutter(s): | ØD | Ød | A | B | $\mathbf{L}$ | Tool No. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| \#55250 through \#55258 | 1/4-28NF | $1 / 4$ | $1-7 / 16$ | $1 / 4$ | $1-13 / 16$ | 47611 |
| \#55251 | $1 / 4-28 N F$ | $1 / 4$ | $1-1 / 4$ | $15 / 32$ | $1-13 / 16$ | 47615 |
| \#55255 | $5 / 16-24 N F$ | $1 / 4$ | $1-7 / 16$ | $1 / 4$ | $1-13 / 16$ | 47616 |
| \#55250 through \#55258 | 1/4-28NF | $1 / 2$ | $1-1 / 2$ | $1 / 4$ | $1-1 / 2$ | 47614 |

Due to application, these arbors are not furnished with hex nut or washers.


This bit is essentially a plunge-cutting straight with a shank-mounted ball-bearing pilot. Versatile, useful for template/pattern routing of parts, joints, internal cuts and can be used in handheld and table-mounted routers.


| 0 D | B | 0 d | L | Flute | Repl. Bearing | Repl. Collar | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3/16 | 1/4 | 1/4 | 1-3/4 | 2 | 47775 | - | 47222-S + |
| 3/16 | 1/2 | 1/8 | 2 | 2 | 47775 | - | $47220+$ |
| 3/16 | 1/2 | 1/4 | 2 | 2 | 47775 | - | $47222+$ |
| 1/4 | 1/4 | 1/8 | 1-15/16 | 2 | 47723 | - | 47223-S+ |
| 1/4 | 1/4 | 1/4 | 2-1/2 | 2 | 47723 | - | 47224-S+ |
| 1/4 | 3/4 | 1/4 | 2-7/16 | 2 | 47723 | - | $47224+$ |
| 3/8 | 1/2 | 1/4 | 2 | 2 | 47751(2) | 47764 | 45475 ** |
| 3/8 | 1 | 1/2 | 3-1/4 | 2 | 47751 | - | 47226 |
| 1/2 | 3/8 | 1/4 | 2-1/4 | 2 | 47701 | 47724 | 45481 |
| 1/2 | 1/2 | 1/4 | 2 | 2 | 47701 | 47724 | 45487 |
| 1/2 | 3/4 | 1/4 | 2-1/4 | 2 | 47701 | 47724 | 45491 |
| 1/2 | 1 | 1/4 | 2-1/2 | 2 | 47701 | 47724 | 45460 |
| 1/2 | 1-1/4 | 1/4 | 2-3/4 | 2 | 47701 | 47724 | 45461 |
| 1/2 | 1-1/4 | 1/2 | 3-1/2 | 2 | 47701 | - | 47228 |
| 9/16 | 3/4 | 1/4 | 2-5/16 | 2 | 47753 | 47724 | 45361 New |
| 5/8 | 1/2 | 1/4 | 2-1/4 | 2 | 47712 | 47724 | 45482 |
| 5/8 | 3/4 | 1/4 | 2-1/2 | 2 | 47712 | 47724 | 45483 |
| 5/8 | 3/4 | 1/4 | 2-5/8 | 2 | 47712 | 47724 | 45470 |
| 5/8 | 1 | 1/4 | 2-3/4 | 2 | 47712 | 47724 | 45462 |
| 3/4 | 3/4 | 1/4 | 2-3/8 | 2 | 47714 | 47724 | 45485 |
| 3/4 | 1 | 1/4 | 2-1/2 | 2 | 47714 | 47724 | 45464 |
| 3/4 | 1 | 1/2 | 3 | 2 | 47721 | 47739 | 45463 |
| 3/4 | 1-3/4 | 1/2 | 3-3/4 | 2 | 47721 | 47739 | 45465 |
| 7/8 | 1 | 1/2 | 2-13/16 | 2 | 47830 | 47740 | 45363 New |
| 7/8 | 1-9/64 | 1/2 | 3-15/16 | 2 | 47793 | - | 57176 |
| 1 | 1 | 3/8 | 2-7/8 | 2 | 47722 | 47730 | 45466 |
| 1 | 1 | 1/2 | 2-3/4 | 2 | 47745 | 47740 | 45365 New |
| 1 | 1-3/4 | 1/2 | 3-3/4 | 2 | 47754 | 47739 | 45467 |
| 1-1/8 | 1 | 1/2 | 3 | 2 | 47738 | 47740 | 45550 |
| 1-1/8 | 1-1/2 | 1/2 | 3-1/2 | 2 | 47738 | 47740 | 45468 |
| 1-1/8 | 2 | 1/2 | 4 | 2 | 47738 | 47740 | 45551 |
| 1-1/4 | 1-1/2 | 1/2 | 3-3/8 | 2 | 47747 | 47740 | 45367 New |
| 1-1/2 | 1-3/4 | 1/2 | 3-3/4 | 2 | 47749 | 47740 | 45368 New |
| 3/8 | 1/2 | 1/4 | 2 | 3 | 47751 | 47764 | 45475-3TS |
| 1/2 | 1 | 1/4 | 2-1/2 | 3 | 47701 | 47724 | 45460-3TS |
| 3/4 | 1 | 1/2 | 3 | 3 | 47721(2) | 47739 | 45463-3TS** |

## Down-Shear

| ØD | B | Ød | L | Flute | Repl. Bearing | Repl. Collar | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3/4 | 1-1/4 | 1/2 | 3-1/4 | 2 | 47721(2) | 47739 | 45360 ** |
| 3/4 | 1-1/2 | 1/2 | 3-1/2 | 2 | 47721(2) | 47739 | 45362 ** |
| 3/4 | 2 | 1/2 | 4 | 2 | 47721(2) | 47739 | 45364 ** |
| 3/8 | 1/2 | 1/4 | 2 | 3 | 47751 | 47764 | 45475-3DS* |
| 1/2 | 1 | 1/4 | 2-1/2 | 3 | 47701 | 47724 | 45460-3DS* |
| 3/4 | 1 | 1/2 | 3 | 3 | 47721(2) | 47739 | 45463-3DS** |

[^7]

Down-shear angle cuts faster, cleaner and lasts longer than straight angle because of the chip removal speed.
We recommend using the down-shear angle in most instances especially where large diameters are used.

Down-Shear 3 Flute


MINI FLUSH TRIM PLUNGE TEMPLATE
Carbide Tipped with Mini Upper Ball Bearing Guide
These exclusive miniature bits feature either a $3 / 16^{\prime \prime}$ or $1 / 4$ " diameter ball bearing guide that is much smaller than other ball bearing router bits, making them ideal for delicate projects such as sign-making, building musical instruments, routing letter edges, flush trimming and plunging tight corners and confined areas and high production.
The bits can fit into tight spaces and sharp corners where a larger diameter bearing cannot, making it easier for users to work on finely detailed work pieces that have intricate contours, tight confines and narrow openings.
The series' innovative design also delivers a consistent edge that eliminates hand sanding or filing, thus saving users time and labor.
Can be used on wood and plastics.


| ØD | B | d | L | Repl. Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 16$ | $1 / 2$ | $1 / 8$ | 2 | $47775(3 / 16)$ | 47220 |
| $3 / 16$ | $1 / 2$ | $1 / 4$ | 2 | $47775(3 / 16)$ | 47222 |
| $3 / 16$ | $1 / 4$ | $1 / 4$ | $1-3 / 4$ | $47775(3 / 16)$ | $47222-S$ |
| $1 / 4$ | $1 / 4$ | $1 / 8$ | $1-15 / 16$ | $47723(1 / 4)$ | $47223-$ S |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-7 / 16$ | $47723(1 / 4)$ | 47224 |
| $1 / 4$ | $1 / 4$ | $1 / 4$ | $2-1 / 2$ | $47723(1 / 4)$ | $47224-S$ |

Attention: Reduce RPM \& Feed Rates (IPM) by 30-50\% to prevent tool breakage due to extremely small diameter (D). Bits are not guaranteed due to extremely small diameter.


## DADO CLEAN-OUT

Carbide Tipped • 2 Flute • 1/4" Shank
Bits are designed with a $1 / 4^{\prime \prime}$ cutting edge for dado clean-out.
Also used in hardwood and flooring medallions.


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Repl. Bearing | Repl. Collar | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| $3 / 8$ | $1 / 4$ | $1 / 4$ | $1-3 / 4$ | $47751(2)$ | 47764 | $45475-$ S $\dagger$ |
| $1 / 2$ | $1 / 8$ | $1 / 4$ | $1-3 / 4$ | 47701 | 47724 | $45489-S$ |
| $1 / 2$ | $1 / 4$ | $1 / 4$ | $1-5 / 8$ | 47701 | 47724 | $45460-S$ |
| $9 / 16$ | $3 / 8$ | $1 / 4$ | $1-27 / 32$ | 47753 | 47724 | $45474-$ S $^{*}$ |
| $5 / 8$ | $1 / 4$ | $1 / 4$ | $1-3 / 4$ | 47712 | 47724 | $45462-S$ |
| $3 / 4$ | $1 / 4$ | $1 / 4$ | $1-3 / 4$ | 47714 | 47724 | $45464-S$ |

$\dagger$ Double bearing.

* Tambour groove/slot bit.



## 8-PC. FLUSH TRIM PLUNGE TEMPLATE

1/8", 1/4" \& 1/2" Shank • Carbide Tipped Router Bit Collection
Extremely small cut diameter trim bits for tight turns. The exclusive miniature bit features either a $3 / 16$ " or a $1 / 4$ " diameter ball bearing guide that is much smaller than other ball bearing router bits on the market.

## Set \#AMS-600

Includes the following Amana Tool ${ }^{\circledR}$ router bits:


## FLUSH TRIM TEMPLATE

Insert Carbide • 2 Flute with Upper Ball Bearing
Insert carbide is the economical way to go. Each knife has two edges; saves down time. We have three different grades of carbide for various applications, such as: hard/softwood, MDF, solid surface, chipboard and plywood.


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Replacement Knives | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :--- |
| $3 / 4$ | 30 mm | $1 / 2$ | $3-1 / 4$ | RCK-30 | RC-1230 |
| $3 / 4$ | 50 mm | $1 / 2$ | $3-15 / 16$ | RCK-151 | RC-2400** |

** This tool is meant for difficult work. The knives are held with 3 screws.
Replacement parts: Bearing \#47721; Collar \#47739; Knife screws \#67115.

## FLUSH TRIM

Carbide Tipped • With Ball Bearing Guide
Use any of the flush trimming bits below for laminate work or for template and pattern work. For template application, the bearing follows the template, while the cutting edges trim the workpiece. With the router handheld, the template is on the bottom of the work. With a table-mounted router, the template is on top. A two-flute bit is a good general-purpose choice, providing fast cuts and good finishes. Excellent for template work.

## 2 Flute



| ØD | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| 3/16 | 7/16 | 1/8 | 1-23/32 | MR0105 *** |
| 3/16 | 7/16 | 1/4 | 2 | MR0102 *** |
| 3/16 | 3/4 | 1/4 | 2-7/16 | MR0103 *** |
| 1/4 | 1/2 | 1/4 | 2-1/4 | 47090 * |
| 1/4 | 1 | 1/4 | 2-1/2 | 47092 * |
| 3/8 | 1/2 | 1/4 | 2-1/8 | 47102 |
| 3/8 | 1 | 1/4 | 2-5/8 | 47100 |
| 3/8 | 1 | 3/8 | 2-7/8 | 47103 † |
| 3/8 | 1 | 1/2 | 3-1/8 | 47101 |
| 3/8 | 1-1/4 | 1/4 | 2-3/8 | 47093 |
| 1/2 | $8 \mathrm{~mm}(5 / 16)$ | 1/4 | 2-1/4 | RC-2000 |
| 1/2 | 7/16 | 1/4 | 2-19/64 | DRB-400 ${ }^{\text {ch }}$ |
| 1/2 | 1/2 | 1/4 | 2-1/4 | 47106 |
| 1/2 | 1/2 | 1/2 | 2-3/4 | 47110 |
| 1/2 | 13/16 | 1/4 | 2-5/16 | RC-47104 ${ }^{\text {易 }}$ |
| 1/2 | 1 | 1/4 | 2-5/8 | 47104 |
| 1/2 | 1 | 1/4 | 2-53/64 | DRB-404 ${ }^{\text {g }}$ |
| 1/2 | 1 | 3/8 | 2-7/8 | 47112 |
| 1/2 | 1 | 1/2 | 3-1/4 | 47108 |
| 1/2 | 1-1/4 | 1/4 | 2-3/4 | 47117 |
| 1/2 | 1-1/2 | 1/2 | 3-7/8 | 47124 |
| 1/2 | 2 | 1/2 | 4-1/4 | 47126 |
| 3/4 | 1 | 1/2 | 3-1/4 | 47140 |
| 3/4 | 1-1/4 | 1/2 | 3-1/2 | 47141 |
| 7/8 | 1-9/64 | 1/2 | 3-15/16 | 57174 ** |

Replacement Bearings: $1 / 4^{\prime \prime}$ dia. use \#47723, $3 / 8^{\prime \prime}$ dia. use \#47702, $1 / 2^{\prime \prime}$ dia. use \#47706, $3 / 4$ " dia. use \#47714. Undersized bearing (.492" dia.), use \#47715-for use after re-sharpening (1/2" dia. only)

* $1 / 4$ " diameter for closer inside corner cutting only; bearings not guaranteed due to size.

6. Replacement knife \#RCK-262 (2 required). Replacement knife \#RCK-8 (2 required).

2 Polycrystalline Diamond (PCD) for extremely long life. Also good to cut composites and trim ACM materials and Aluminum. † Single Flute, for the RV industry.
** Replacement bearing \#47798. *** Miniature with $3 / 16^{\text {" }}$ ball bearing guide \#47775.

## 3 Flute

For an extremely smooth finish, choose the three-flute configuration. It is especially good to use on laminates that tend to chip easily.

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $1 / 2$ | $1 / 4$ | 2 | 47116 |
| $1 / 2$ | $1 / 2$ | $1 / 2$ | $2-5 / 8$ | 47120 |
| $1 / 2$ | 1 | $1 / 4$ | $2-5 / 8$ | 47114 |
| $1 / 2$ | 1 | $1 / 2$ | $3-1 / 4$ | 47118 |
| $1 / 2$ | 1 | $1 / 2$ | $3-5 / 8$ | $47118-2 \bullet \bullet$ |

Standard replacement bearing (.500" dia.), use \#47706.
Undersized bearing (.492" dia.), use \#47715-for use after re-sharpening.

- Double ball bearing for added stability.


## 4 Flute

For a super-smooth cut finish, use a four-flute bit. Feed rate is reduced, and chipping is virtually eliminated.

| ØD | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | 1 | $1 / 2$ | 3 | 57184 |
| $3 / 4$ | $1-1 / 2$ | $1 / 2$ | 4 | 57185 |
| $3 / 4$ | 2 | $1 / 2$ | $4-1 / 2$ | 57186 |
| $3 / 4$ | 2 | $1 / 2$ | $4-3 / 4$ | $57187^{* * *}$ |

Standard replacement bearing (steel) use \#47714.
Optional Delrin ${ }^{\oplus}$ replacement bearing use \#47709, for solid surface application.
*** Replacement bearings \#47714 (bottom), \#47721 (2 top). Retaining collar \#47740.


AMA-12 ICK-30 RCK-15


## FLUSH TRIM PLUNGE TEMPLATE



Carbide Tipped • 2 Flute with Oversized Upper Ball Bearing For template use with specified jigs.


Repl.

| Jigs | ØD | B | 0d | L | A | Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Porter-Cable ${ }^{\circledR}$ Morten, ${ }^{\text {™ }}$ Morten \& Tenon, Omnijig ${ }^{\text {® }}$ | 5/16 | 3/4 | 1/4 | 2-3/4 | 3/32 | 47701 | 45495 |
| Porter-Cable ${ }^{\oplus}$ Morten, ${ }^{\text {Tw }}$ Morten \& Tenon, Omnijig ${ }^{\text {® }}$ | 5/16 | 1 | 1/4 | 2-23-32 | 3/32 | 47701 | 45371 Ne |
| Hinge-Mate" ${ }^{\text {" }}$ \|| Template | 1/2 | 1/4 | 1/4 | 1-7/8 | 1/8 | 47714 | 45496 |
| Replacement for | 1/2 | 3/8 | 1/4 | 2-1/2 | 1/16 | 47712 | 45484 |

"Porter-Cable"" bit \#43671 one piece. For Mortising of doors to accept hinge butts with Porter-Cable ${ }^{\circledR}$ Kit model \#59370 for 3 ," $3-1 / 2^{\prime \prime}$ and 4 " hinges

## ECONOMY FLUSH TRIM

## Insert Carbide • 2 Flute with Ball Bearing Guide

Get the practicality and productivity of an insert bit for the cost of a standard brazed-tip bit. The small two-sided carbide insert knives usually can be changed without altering the bit setup in the router. Because the knives aren't heated for brazing, it can be made of a harder grade of carbide and it will hold its edge longer. Ideal for both standard routers and laminate trimmers.


| ØD | B | Ød | L | Repl. <br> Knives | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $8 \mathrm{~mm}(5 / 16)$ | $1 / 4$ | $2-1 / 4$ | RCK-8 | RC-2000 |

Replacement parts: Bearing \#47706; Knife hex key \#5011;
Knife screws \#67016; Bearing screw \#67018;
Allen key for bearing \#5007.

## FLUSH TRIM

Insert Carbide • 2 Flute with Ball Bearing Guide
In a production environment, insert tooling reduces downtime to a minimum.
Each throw-away insert knife in this flush trimming bit has multiple edges. Rotate the knife to expose a fresh cutting edge. Tips can be replaced at any time, even mid-job, without changing the router setup.


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Repl. <br> Knives | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | 12 mm | $1 / 4$ | $2-1 / 8$ | AMA-12 | RC-1000 |
| $3 / 4$ | 30 mm | $1 / 2$ | $3-1 / 4$ | ICK-30 | RC-1004 |
| $3 / 4$ | 50 mm | $1 / 2$ | $4-5 / 16$ | RCK-151 | RC-1006* |
| $3 / 4$ | 50 mm | $1 / 2$ | $4-1 / 4$ | RCK-151 | RC-1007** |

* This tool is meant for difficult work. The knives are held with 3 screws.
** Replacement parts: Bearings \#47711 (bottom), \#47721 (2 top); Retaining collar \#47739; Dust shield \#67116.

NOTE: \#RC-1000, \#RC-1006 \& \#RC-1007 have four cutting edges per knife. \#RC-1004 has two cutting edges per knife.
Torx ${ }^{\circledR}$ key included - \#5005.
Replacement parts:
Bearing \#47711.
Knife screws \#67115.
Bearing screws \#67137.

## NO-FILE ${ }^{\text {TM }}$ FLUSH TRIM

Carbide Tipped • 2 Flute with Ball Bearing Guide
Eliminate the time-consuming hand-filing that normally follows each trimming cut on a laminate job. The No-File ${ }^{T M}$ bit "breaks" the sharp edge as it trims the laminate flush. When used properly, the resulting edge is smooth and has a slight radius.

| ØD | $\mathbf{B}$ | $\mathbf{R}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $3 / 8$ | $.015(0.4 \mathrm{~mm})$ | $1 / 4$ | $1-7 / 8$ | 47154 |
| $1 / 2$ | $3 / 8$ | $.059(1.5 \mathrm{~mm})$ | $1 / 4$ | $1-7 / 8$ | 47150 |
| $1 / 2$ | $3 / 8$ | $.059(1.5 \mathrm{~mm})$ | $1 / 2$ | $2-1 / 8$ | 47152 |

Note: \#47154 is for laminates $.025^{\prime \prime}-.038^{\prime \prime}$ thick (.4mm radius),
\#'s $47150-47152$ are for laminates $.042^{\prime \prime}-.052$ " thick ( 1.5 mm radius).
Replacement bearing \#47704 (3/8" dia.).

## FLUSH TRIM (EXTRA LONG)

Carbide Tipped • With Ball Bearing Guide
Use this bit for template or pattern work where the workpiece is unusually thick.
The two-flute configuration cuts fast and produces a smooth finish.
For a superior finish, use the three-flute version.
Twin bearings on selected tools provide better contact with reference edge and more stability in the cut.


2 Flute

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $1-1 / 2$ | $1 / 2$ | $3-7 / 8$ | 47124 |
| $1 / 2$ | $1-1 / 2$ | $1 / 2$ | $4-1 / 16$ | $47124-2 \bullet \bullet$ |
| $1 / 2$ | 2 | $1 / 2$ | $4-1 / 4$ | 47126 |
| $1 / 2$ | 2 | $1 / 2$ | $4-3 / 8$ | $47126-2 \bullet \bullet$ |

3 Flute

| $1 / 2$ | $1-1 / 2$ | $1 / 2$ | $3-7 / 8$ | 47128 |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $1-1 / 2$ | $1 / 2$ | $4-1 / 16$ | $47128-2 \bullet \bullet$ |
| $1 / 2$ | 2 | $1 / 2$ | $4-5 / 8$ | 47131 |

-• Double ball bearing for added stability.
Standard replacement bearing (.500" dia.), use \#47706.
Undersized bearing (.492" dia.), use \#47715 - for use after re-sharpening

## DYNABIT ${ }^{\text {TM }}$ LAMINATE TRIM

Carbide Tipped • 2 Flute with Ball Bearing Guide

The Dynabit ${ }^{\text {tm }}$ line features a modest down-shear for an excellent finish. The helix bits have a spiral-like twist to the cutting edges, making them especially good on difficult materials such as melamine. An adhesive-trapping gap between cutting edges and pilot bearing is featured on tools \#47111 \& \#47113.


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Type | Repl. <br> Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 8$ | $1 / 2$ | $1 / 4$ | $2-1 / 8$ | Down-shear | 47702 | 47115 |
| $1 / 2$ | 1 | $1 / 4$ | $2-5 / 8$ | Down-shear | 47706 | 47105 |
| $1 / 2$ | 1 | $1 / 2$ | 3 | Down-shear | 47706 | 47109 |
| $1 / 2$ | 1 | $1 / 4$ | $2-7 / 8$ | Down-shear | 47706 | 47111 |
| $1 / 2$ | 1 | $1 / 2$ | $3-1 / 4$ | Down-shear | 47706 | 47113 |
| $1 / 2$ | 2 | $1 / 2$ | 4 | Down-shear | 47706 | 47129 |
| $5 / 8$ | $5 / 8$ | $1 / 4$ | 2 | Flush Helix | 47712 | 47180 |
| $3 / 4$ | $5 / 8$ | $1 / 4$ | $2-1 / 4$ | Flush Helix | 47714 | 47182 |
| $3 / 4$ | $3 / 8$ | $1 / 4$ | 2 | $15^{\circ}$ Bevel | 47714 | 47184 |


$\leftarrow D \rightarrow \mid$ Up-Shear

## SUPERTRIM ${ }^{\text {T" }} 3^{\circ}$ SHEAR

Carbide Tipped • 2 Flute with Ball Bearing Guide
For exceptional cutting speed, coupled with a super-fine finish, use these large-diameter flush trim bits on a standard router. Available in either up-shear or down-shear. Especially suitable for solid surface material when used with optional \#47709 Delrin ${ }^{\circledR}$ bearing. Furnished with steel bearing \#47714.


| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | $\boldsymbol{0 d}$ | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $3^{\circ}$ | $1-1 / 2$ | $1 / 2$ | $3-7 / 8$ | Up-shear | 47130 |
| $3 / 4$ | $3^{\circ}$ | 2 | $1 / 2$ | $4-1 / 4$ | Up-shear | 47134 |
| $3 / 4$ | $3^{\circ}$ | 1 | $1 / 2$ | 3 | Down-shear | 47135 |
| $3 / 4$ | $3^{\circ}$ | $1-1 / 2$ | $1 / 2$ | $3-7 / 8$ | Down-shear | 47136 |
| $3 / 4$ | $3^{\circ}$ | 2 | $1 / 2$ | $4-1 / 4$ | Down-shear | 47138 |

Note: Down-shear bits are not intended for router table use.
Steel replacement bearing \#47714; Optional Delrin® bearing \#47709.


## DOWN-SHEAR MULTI TRIMMER

Carbide Tipped • 2 Flute
This adaptable double bearing guided cutter has down-shear design, which ensures a clean cut even in difficult materials. The two-bearing design allows the cutter to be used with the template mounted on either side of the work and, consequently, it is possible to cut from either direction using only one template and without moving the template to the other side of the work piece.
This is especially useful when cutting curves which run both with and against the grain.


| ØD | B | Ød | $\mathbf{L}$ | Replacement Bearing |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Upper | Lower | Tool No. |  |  |  |  |
| $1 / 2$ | $5 / 8$ | $1 / 4$ | $2-3 / 32$ | 47701 | 47706 | 47094 |
| $3 / 4$ | $1-1 / 4$ | $1 / 2$ | $3-3 / 4$ | $47721(2)$ | 47714 | 47096 |
| $3 / 4$ | 2 | $1 / 2$ | $4-5 / 16$ | $47721(2)$ | 47714 | 47097 |



## IWDUSTRIAL

# Scratch-Free Laminate Trim Bits with Euro ${ }^{\text {TM }}$ Square Bearing 

- Non-stick Teflon ${ }^{\text {® }}$ square bearing will not mark your edge
- Will not scratch or mark any laminates with matte or high gloss finish
- Carbide tipped


## LAMINATE TRIMMER WITH EURO ${ }^{\text {TM }}$ SQUARE BEARING

Carbide Tipped • 2 Flute
The bits are designed according to specifications with a slight taper allowing for adjustment up or down on the work edge to finish off the edge with a smooth and burr-free cut. The square bearing is manufactured with a strong non-stick Teflon ${ }^{\oplus}$ which won't mark your edge so it can be wiped clean easily.


- Leaves no marks on high-gloss, finished edges
- Glue won't stick to bearing
- Beveled cutter means little or no hand filing
- Will not scratch or mark any laminates with matte or high gloss finish
- Beveled cutter can be resharpened
- Use 1/2" diameter bit with laminate trimmers


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Replacement Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $19 / 64$ | $1 / 4$ | $1-3 / 4$ | SQB100 | 47147 |
| $3 / 4$ | $5 / 8$ | $1 / 4$ | $2-3 / 8$ | SQB102 | 47148 |
| $3 / 4$ | $5 / 8$ | $1 / 2$ | $2-5 / 8$ | SQB102 | 47149 |



## EUROTM ${ }^{\text {TM }}$ SQUARE BEARING

Will Not Scratch or Mark Laminates with Matte or High Gloss Finish
Manufactured with non-stick Teflon.

- SQB100 Can be mounted to any $1 / 2^{\prime \prime}$ diameter Amana Tool flush trimmer.
- SQB102 Can be mounted to any $3 / 4^{\prime \prime}$ diameter Amana Tool flush trimmer.

$\leftarrow D \rightarrow$

| Ø I.D. $\times$ Ø O.D. | 'B' Bearing Thickness | R | For Tool | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $3 / 16 \times 1 / 2$ | .223 | $3 / 32$ | 47147 | SQB100 |
| $3 / 16 \times 3 / 4$ | .273 | $3 / 32$ | $47148 \& 47149$ | SQB102 |

Note: Solvents should not be used to clean ball bearings, as this will deteriorate the special

grease. 'Frozen' bearings (ones that do not rotate freely), should be replaced immediately.



## ULTRATRIM"' SPIRAL TRIM

Solid Carbide • 2 Flute with Double Ball Bearing Guides
For the ultimate, chip-free finish in laminate, melamine, solid surface, fragile veneers and for template work of all kinds. The twin ball-bearing pilot enhances the stability of the tool. Available in 'Up-Cut' and 'Down-Cut' spirals.


Replacement bearing: use \#47701 (2).
Lock ring: use \#47752.
Washer: use \#67053.

* Old style bit with nut use bearing \#47706 (2), Nut \#67086



## ULTRATRIM ${ }^{\top T}$ SPIRAL TRIM

Solid Carbide • 2 Flute •Up-Cut Or Down-Cut Spiral
Spiral flush trim bit, \#46196 is used for acrylic, wood and MDF up to a $1 / 4^{\prime \prime}$ thick, for getting into tight corners with a small radius and great for cleaning out your edges. \#46197 is mainly used for acrylic and wood up to a $1 / 2^{\prime \prime}$ thickness.


* Note: Due to extremely small cutting diameter this bit is not guaranteed
+ Brass pilot guide
- Double ball bearing pressed

Replacement bearings for \#46197 and \#46297: Two \#47723. Philips retaining screws for \#46197 and \#46297: \#67134.


46297


46196

## COMPRESSION SPIRAL

Solid Carbide • 2 Flute with Double Ball Bearing Guides
Spiral bits produce razor-sharp cutting edges in flush trimming. The twin ball-bearing pilot enhances the stability of the tool. This bit offers an 'Up-Cut' and 'Down-Cut' combination.


| ØD | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $1-1 / 4$ | $1 / 2$ | $3-3 / 4$ | 46192 |

Replacement bearing \#47706.
Replacement nut use \#67086.

## ‘OVERHANG’ TRIM

Carbide Tipped • 2 Flute with Ball Bearing Guide
Stage flush trimming cuts, whether in laminate work or template work, with this bit. Trimming the material in two passes reduces chipping in laminates and tearout in solid wood. A preliminary cut with the overhang bit leaves a small overhang in laminate or template work, leaves an edge slightly protruding the template. Complete the operation with a final pass using a standard trim bit.


| $\emptyset \boldsymbol{D}$ | $\mathbf{B}$ | A | Ød | $\mathbf{L}$ | Repl. Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $1 / 2$ | $1 / 16$ | $1 / 4$ | $2-1 / 4$ | 47704 | 47185 |
| $1 / 4$ | $1 / 2$ | $1 / 8$ | $1 / 4$ | $2-1 / 4$ | 47700 | 47186 |
| $1 / 4$ | 1 | $1 / 16$ | $1 / 4$ | $2-1 / 2$ | 47704 | 47188 |
| $1 / 4$ | 1 | $1 / 8$ | $1 / 4$ | $2-1 / 2$ | 47700 | 47189 |
| $3 / 8$ | $1 / 2$ | $1 / 64$ | $1 / 4$ | $2-5 / 32$ | 47794 | 47193 |
| $3 / 8$ | $1 / 2$ | $1 / 32$ | $1 / 4$ | $2-5 / 32$ | 47795 | 47191 |
| 3 | $1 / 2$ | $1 / 8$ | $1 / 4$ | 2 | 47718 | 47190 |
| $3 / 8$ | 1 | $1 / 8$ | $1 / 4$ | $2-5 / 8$ | 47718 | 47195 |
| $1 / 2$ | $1 / 2$ | $1 / 16$ | $1 / 4$ | 2 | 47718 | 47192 |
| $1 / 2$ | $1 / 2$ | $1 / 16$ | $1 / 2$ | $2-3 / 4$ | 47718 | 47194 |
| $1 / 2$ | 1 | $1 / 8$ | $1 / 4$ | $2-5 / 8$ | 47720 | 47197 |



## FLUSH TRIM ‘V’ GROOVE

Carbide Tipped • 2 Flute with Ball Bearing Guide
Trim the edges of face frames flush with cabinet sides with this bit. At the same time, cut a decorative ' $V$ ' groove to conceal the seam between the frame and the case.

| and the case. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | OD1 | B | Ød | L | Tool No. |
| DD | $1 / 2$ | 1 | $1 / 4$ | $2-5 / 8$ | 47160 |
| $5 / 8$ | $1 / 2$ | 1 | $1 / 2$ | $3-1 / 4$ | 47162 |
| $5 / 8$ |  |  |  |  |  |

Replacement bearing \#47706



BEVEL TRIM
Carbide Tipped • 2 Flute with Ball Bearing Guide
This is a steel-bodied, carbide-tipped bit for bevel trimming laminate with a standard router. The solid construction reduces vibration for the smoothest cut possible with a two-flute bit.

(H)

| ØD | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Repl. <br> Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $7^{\circ}$ | $3 / 8$ | $1 / 4$ | $1-7 / 8$ | 47775 | MR0106 * |
| $1 / 2$ | $22.5^{\circ}$ | $1 / 2$ | $1 / 4$ | $1-7 / 8$ | 47775 | MR0107 * |
| $9 / 16$ | $45^{\circ}$ | $1 / 4$ | $1 / 4$ | $1-7 / 8$ | 47775 | MR0108 * |
| $5 / 8$ | $15^{\circ}$ | $1 / 4$ | $1 / 4$ | $2-3 / 32$ | 47706 | 47200 |
| $1 / 2$ | $22^{\circ}$ | $5 / 16$ | $1 / 4$ | $1-3 / 4$ | 47723 | 47201 |
| $3 / 4$ | $25^{\circ}$ | $1 / 4$ | $1 / 4$ | $2-3 / 32$ | 47706 | 47202 |
| $3 / 4$ | $25^{\circ}$ | $27 / 64$ | $1 / 4$ | $2-3 / 64$ | 47702 | 47206 |
| $1-1 / 16$ | $45^{\circ}$ | $9 / 32$ | $1 / 4$ | 2 | 47706 | 47204 |

Note: Tool \#47206 has a 3/8" diameter bearing for closer inside corner cutting. * Miniature $3 / 16$ " ball bearing guide \#47775.

## BEVEL TRIM

Carbide Tipped
2 Flute with Ball Bearing Guide


| $\boldsymbol{\emptyset}$ | ØD1 | $\mathbf{B}$ | $\mathbf{a}^{\circ}$ | $\boldsymbol{\emptyset} \mathbf{d}$ | $\mathbf{L}$ | Repl. <br> Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $5 / 8$ | $1 / 2$ | $1 / 4$ | 15 | $1 / 4$ | $1-7 / 8$ | 47712 | 47212 |
| $3 / 4$ | $1 / 2$ | $1 / 4$ | 25 | $1 / 4$ | $1-7 / 8$ | 47714 | 47214 |

## BEVEL TRIM

Carbide Tipped • 3 Flute with Ball Bearing Guide
The solid construction of this carbide-tipped bit reduces vibration, and its three-flute configuration produces a very smooth cut. Intended for use in a standard router.


| ØD | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $7^{\circ}$ | $7 / 16$ | $1 / 4$ | 2 | 47302 |
| $51 / 64$ | $15^{\circ}$ | $7 / 16$ | $1 / 4$ | 2 | 47301 |
| $15 / 16$ | $22^{\circ}$ | $7 / 16$ | $1 / 4$ | $1-7 / 8$ | 47300 |
| $1-3 / 32$ | $30^{\circ}$ | $7 / 16$ | $1 / 4$ | 2 | 47304 |

Replacement bearing \#47716.

## BEVEL TRIM

Solid Carbide Insert
2 Flute with Ball Bearing Guide
These knives are canted for bevel-trimming.

| ØD | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Knives | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $13 / 16$ | $15^{\circ}$ | $7 / 16$ | $1 / 4$ | $2-1 / 4$ | AMA-12 | RC-1008 |
| $31 / 32$ | $25^{\circ}$ | $7 / 16$ | $1 / 4$ | $2-1 / 4$ | AMA-12 | RC-1010 |
| $1-1 / 16$ | $45^{\circ}$ | $7 / 16$ | $1 / 4$ | $2-1 / 4$ | AMA-12 | RC-1014 |
| $1-1 / 16$ | $75^{\circ}$ | $9 / 16$ | $1 / 4$ | $2-3 / 16$ | AMA-12 | RC-1016 |

Note: All bevel trim bits have four cutting edges per knife.
Torx ${ }^{\circledR}$ key included.
Replacement bearing for RC-1014 use \#47701. All others use \#47712 bearing. AMA-12 Replacement knife screws \#67115.

## SPECIAL BEVEL TRIM

Carbide Tipped • 2 Flute with Ball Bearing Guide
A very shallow bevel angle and the gap between the cutting edges and the ball-bearing pilot are the key features of this carbide-tipped bit. The gap collects adhesive residue that usually fouls the pilot and thus degrades the cut.


| ØD | $\mathbf{a}^{\circ}$ | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $5 / 8$ | $8^{\circ}$ | $15 / 32$ | $1 / 4$ | $2-1 / 4$ | 47210 |

Note: Tool \#47210 is a special $8^{\circ}$ bevel tool with a gap (.287") to reduce glue build-up.
Standard replacement bearing (.500" dia.) \#47706 or new \#47715 (.492" dia.) for use after resharpening.

## 45 MITER JOINT UNDER-CUT ASSEMBLY <br> Carbide Tipped • 4-Wing with 'Ultra-Glide'm' Ball Bearing Assembly

Eliminate that dark line at the edge of a counter or other laminate-covered surface. With this bit assembly, the laminate cemented to the substrate can be trimmed and mitered in one pass. Then a pre-mitered edging strip can be applied. The resulting seam is clean and crisp. Not intended for use in a laminate trimmer.
a. Laminated top is 'under-cut', as shown.
b. Apron laminate is pre-cut at 45 .
c. Adhere pre-cut laminate for a perfect fit. A fine file may be used to remove the sharp edge after joining


| ØD | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-3 / 8$ | $45^{\circ}$ | $1 / 4$ | $1 / 4$ | $2-3 / 8$ | 55312 |
| $1-3 / 8$ | $45^{\circ}$ | $1 / 4$ | $1 / 2$ | $2-3 / 8$ | 55314 |

Replacement parts: 1/4" Shank arbor \#47600; 1/2" Shank arbor \#47604.
$45^{\circ}$ cutter only \#55310.
'Ultra-Glide ${ }^{\text {Tw" }}$ bearing \#47727.
Nut \#67088.

## BEVEL TRIM CUTTER ASSEMBLY

Carbide Tipped • 4-Wing
Includes cutter, arbor \& ball bearing guide
An assembly offers the option of switching cutters - from flush trim to either of two bevel trims - without removing the bit from the router or even changing the depth-ofcut setup. Four flutes yield a smooth, crisp cut finish.
All parts can be replaced individually.


| ØD | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $7 / 8$ | Flush | $1 / 4$ | $1 / 4$ | $2-3 / 8$ | 47400 |
| 1 | $15^{\circ}$ | $1 / 4$ | $1 / 4$ | $2-3 / 8$ | 47404 |

Replacement Parts: Arbors: 1/4" - \#47600, 3/8" - \#47602, 1/2" - \#47604.
Cutters: Flush - \#47500, $15^{\circ}$ - \#47502.
Bearing \#47708.
Nut \#67088.

## 4-WING CUTTERS ONLY

Carbide Tipped
Cutters for the above assembly are available separately.


| ØD | $\mathbf{a}^{\circ}$ | B | Ød1 | Usage | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $7 / 8$ | Flush | $1 / 4$ | $5 / 16$ | T or B | 47500 |
| 1 | $15^{\circ}$ | $1 / 4$ | $5 / 16$ | $T^{*}$ | 47502 |
| 1 | $15^{\circ}$ | $1 / 4$ | $5 / 16$ | $\mathrm{~B}^{* *}$ | $47502-\mathrm{L}$ |
| $1-1 / 16$ | $25^{\circ}$ | $1 / 4$ | $5 / 16$ | T* $^{*}$ | 47504 |
| $1-1 / 16$ | $25^{\circ}$ | $1 / 4$ | $5 / 16$ | $\mathrm{~B}^{* *}$ | $47504-\mathrm{L}$ |

* Top cutter.
** Bottom cutter


## COMBINATION BEVEL AND FLUSH TRIM

Carbide Tipped • Single \& 2 Flute
Cut, trim, and bevel laminates with this one bit. Change depth-of-cut setting to shift from flush to bevel-trimming. Must be used with an edge or bearing guide or fence. Designed specifically for use in laminate trimmers.


| ØD | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | B1 | B2 | Flute | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $23^{\circ}$ | $1 / 2$ | $19 / 64$ | $13 / 64$ | 2 | $1 / 4$ | $1-3 / 4$ | 51100 |
| $11 / 32$ | $22.5^{\circ}$ | $1 / 2$ | $19 / 64$ | $13 / 64$ | 2 | $1 / 4$ | $1-5 / 8$ | 51400 |
| $11 / 32$ | $25^{\circ}$ | $1 / 2$ | $17 / 64$ | $15 / 64$ | 1 | $1 / 4$ | $15 / 16$ | 51500 |
| $13 / 32$ | $22^{\circ}$ | $9 / 32$ | - | - | 2 | $1 / 4$ | $15 / 16$ | 51600 * |

* Bevel trim only.
- No resharpening
- Interlocking hex design
- Economical alternative to brazed bits


Cut laminate, MDF, plywood, wood \& acrylic straight and flush with each and every cut, without ever re-sharpening your bits.
E-Z Change ${ }^{T M}$ router bits are an economical alternative to standard router bits. They feature replaceable head carbide tipped cutters, saving you money by replacing only the cutters when the knives become dull, instead of the entire tool. You won't need a second bit while yours is in the sharpening shop; instead, just change the cutters. You won't even lose your set-up because the E-Z Change ${ }^{\mathrm{TM}}$ cutters can be replaced with the bit in the router collet. The interlocking hex design guarantees that the cutting surfaces will not slip during use.


FLUSH TRIM REPLACEABLE CUTTER
Replaces Ocemco \#TA-150
Carbide Tipped • 2 Flute


| $\boldsymbol{0} \mathbf{D}$ | $\mathbf{B}$ | d | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $1 / 2$ | $1 / 4$ | $1-31 / 32$ | 47170 |
| 3-Pack of Carbide Tipped Cutters for | \#47170 | (Replaces | Ocemco \#TA-156) | 55170 |

## Replacement Parts

1/4" Shank (screw \# 67096 \& washer \#67082 included): \#47624.
Bearing ( $3 / 16^{\prime \prime} \emptyset \mathrm{d} \mathrm{x} \mathrm{1/2"} \emptyset \mathrm{D}$ ): \#47706.


DADO CLEAN OUT REPLACEABLE CUTTER
Carbide Tipped • 2 Flute


| ØD | B | d | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $1 / 4$ | $1 / 4$ | $1-11 / 16$ | 47173 |
| 3-Pack of Carbide Tipped Cutters for \#47173 |  | 55173 |  |  |

## Replacement Parts

1/4" Shank: \#47628.
Bearing (3/16" Ød x 1/2" ØD): \#47706.


## TEMPLATE

REPLACEABLE CUTTER
Replaces Ocemco \#TA-170
Carbide Tipped • 2 Flute


| ØD | B | d | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $1 / 2$ | $1 / 4$ | $1-15 / 16$ | 47174 |
| 3-Pack of Carbide | Tipped Cutters for | \#47174 (Replaces | Ocemco \#TA-176) | 55174 |

## Replacement Parts

1/4" Shank: \#47626.
Bearing (3/16" Ød x 1/2" ØD): \#47706.

## BEVEL/TAPERED TRIM REPLACEABLE CUTTER

Replaces Ocemco \#TA-151
Carbide Tipped • 2 Flute


| 0D | ØD1 | $\mathrm{a}^{\circ}$ | B | d | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5/8 | 1/2 | $10^{\circ}$ | 1/2 | 1/4 | 2 | 47178 |
| 3-Pack of Carbide Tipped Cutters for \#47178 (Replaces Ocemco \#TA-157) |  |  |  |  |  | 55178 |
| 5/8 | 1/2 | $15^{\circ}$ | 1/4 | 1/4 | 1-3/4 | 47179 |
| 3-Pack of Carbide Tipped Cutters for \#47179 |  |  |  |  |  | 55179 |

## Replacement Parts

1/4" Shank (screw \#67096 \& washer \#67124 included): \#47624 for \#47178
1/4" Shank (screw \#67096 \& washer \#67124 included): \#47629 for \#47179
Bearing (3/16" Ød x 1/2" ØD): \#47706.

## PANEL PILOT

Solid Carbide • Single Flute
The ideal laminate trimming bit for high-volume production. Solid carbide and integral pilot (no bearing to maintain) extend life of bit, slim configuration reduces vibration. Suitable for routers and trimmers.


* \#51204 has a short/flat pilot for dado clean out/ dado cleaning.


## AITiN COATED PANEL PILOT

Solid Carbide • Single Flute
AITiN coated for longer tool life.


| ØD | B | Ød | $\mathbf{L}$ | Type of Cut | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $1 / 4$ | $1 / 4$ | $1-1 / 2$ | Flush | $51200 \times \mathbf{L}$ |
| $1 / 4$ | $1 / 4$ | $1 / 4$ | $1-1 / 2$ | $7^{\circ}$ Bevel | $51202 X L$ |

## DOUBLE END PANEL PILOT

Solid Carbide • Single Flute
The ideal laminate trimming bit for high-volume production. Solid carbide and integral pilot (no bearing to maintain) extend life of bit, slim configuration reduces vibration. Suitable for routers and trimmers.
Unique double ended panel pilot bits provide 2 cutting sides in one tool. When the bit dulls, just flip it over!


| ØD | B | Ød | L | Type of Cut | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $1 / 4$ | $1 / 4$ | 2 | Flush | 51201 |
| $1 / 4$ | $1 / 4$ | $1 / 4$ | 2 | $7^{\circ}$ Bevel | 51203 |

AITIN COATED BITS



## HOLE AND FLUSH CUT TRIMMER



Solid Carbide • Single Flute
This bit is used where laminate is applied over pre-cut openings in the substrate. In a continuous operation, bore through the laminate and cut the laminate out of the opening. The plunge point bores through the laminate to begin, and the integral pilot rides along the opening's inside edge to guide the trimming cut.


| ØD | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $1 / 4$ | $1 / 4$ | $1-1 / 2$ | 51712 |
| $1 / 4$ | $1 / 4$ | $1 / 4$ | $3-3 / 8$ | 51714 |
| $1 / 4$ | $1 / 4$ | $1 / 4$ | $4-1 / 4$ | 51716 |

## COMBINATION FLUSH AND $7{ }^{\circ}$ BEVEL TRIMMER

## Solid Carbide • Single Flute

A bit designed specifically for use in a laminate trimmer, that will both flush and bevel trim. A change in cut depth is all it takes to switch from one to the other. Must be used with a separate ball-bearing or edge guide.


| ØD | $\mathbf{a}^{\circ}$ | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $7^{\circ}$ | $3 / 8$ | $1 / 4$ | $1-1 / 2$ | 51706 |

## RIP AND SLOTTING

Solid Carbide • Single Flute
Use this bit for cutting sheets of laminate, paneling, and other thin material, as well as plowing narrow slots, dadoes, and grooves.


| $\emptyset \mathbf{D}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $5 / 16$ | $1 / 4$ | $1-1 / 2$ | 51708 |

## V-GROOVING

Solid Carbide • Single Flute
Rout fine-line V-Grooves in laminate covered and wooden surfaces with this solid-carbide bit, designed specifically for use in a laminate trimmer.


| $\emptyset \mathbf{D}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $3 / 8$ | $1 / 4$ | $1-1 / 2$ | 51710 |

## WEATHERSEAL STRAIGHT \& PROFILE

Carbide Tipped • Single Flute
Used to re-groove door and window frames to allow for insulating inserts to block wind and drafts.


| ØD | $\mathbf{D 1}$ | $\mathbf{B}$ | $\mathbf{a}^{\circ}$ | Ød | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | - | $1 / 2$ | - | $1 / 4$ | $2-1 / 4$ | Straight | 43813 |



## T-SLOT

Carbide Tipped • 2 Flute
Designed for creating T-slot wall panels (used to cut their characteristic slots for many purposes) and radiused edges on the T-slots (allow easier adjustment of fixtures on the completed wall panels).
Bits are not designed for plunging operations.


| Edge Type | $\emptyset \mathbf{D}$ | $\boldsymbol{\emptyset D} 1$ | $\mathbf{R}$ | $\mathbf{a}^{\circ}$ | $\mathbf{a}^{\circ} \mathbf{1}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\boldsymbol{\emptyset} \mathbf{d}$ | $\mathbf{L}$ | Tool No. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Straight | $1-1 / 8$ | $3 / 8$ | - | - | - | $13 / 16$ | $5 / 16$ | $1 / 2$ | $2-1 / 2$ | 45660 |
| Radius | $1-3 / 16$ | $3 / 8$ | $1 / 8$ | - | - | $3 / 4$ | $9 / 32$ | $1 / 2$ | $2-3 / 8$ | 45666 |
| Radius | $1-13 / 64$ | $13 / 32$ | $1 / 16$ | - | - | $43 / 64$ | $23 / 64$ | $1 / 2$ | $2-13 / 32$ | 45661 |
| Straight | $1-3 / 8$ | $1 / 2$ | - | - | - | $7 / 8$ | $3 / 8$ | $1 / 2$ | $2-1 / 2$ | 45662 |
| Radius | $1-3 / 8$ | $1 / 2$ | $1 / 8$ | - | - | $7 / 8$ | $3 / 8$ | $1 / 2$ | $2-1 / 2$ | 45667 |
| Bevel | $1-3 / 8$ | $3 / 8$ | - | $30^{\circ}$ | $15^{\circ}$ | $35 / 64$ | $1 / 4$ | $1 / 2$ | $2-3 / 64$ | 45671 |
| Bevel | $1-3 / 8$ | $3 / 8$ | - | $30^{\circ}$ | $15^{\circ}$ | $1 / 4$ | $1 / 16$ | $1 / 2$ | $2-3 / 8$ | DRB-300-RH |

Note: These tools are designed for 'groove-forming' T-slot wall panels. They are not designed for plunging operations.
4) Polycrystalline Diamond (PCD) for extremely long life.

A Warning: CNC use only.




Countersink


Counterbore


## SCREW SLOT

Carbide Tipped • 2 Flute
For securing large panels or tabletops in a way that allows them to expand or contract, due to changes in temperature or humidity. The screw slots prevent the wood from splitting and the screw from failing. Great for drilling and creating slots in one operation.


| ØD | ØD1 | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $7 / 16$ | $11 / 64$ | $13 / 16$ | $1 / 2$ | $1 / 2$ | $2-1 / 2$ | Countersink | 55230 |
| $1 / 2$ | $11 / 64$ | $15 / 16$ | $1 / 2$ | $1 / 2$ | $2-1 / 2$ | Counterbore | 55232 |

## SPECIAL AMEROCK ${ }^{\circledR}$ HINGE

Carbide Tipped • 2 Flute
This bit is designed to produce a T-slot for Amerock ${ }^{\circledR}$ hinges. For best results use in a table-mounted router.


| ØD | ØD1 | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $3 / 8$ | $5 / 64$ | $21 / 32$ | $5 / 32$ | $3 / 8$ | 2 | 48100 * |
| $1-1 / 8$ | $3 / 8$ | $5 / 64$ | $21 / 32$ | $5 / 32$ | $1 / 2$ | $2-1 / 8$ | 48101 * |
| $1-19 / 32$ | $3 / 8$ | $5 / 64$ | $21 / 32$ | $5 / 32$ | $3 / 8$ | 2 | 48102 * |

* Note: These bits are not guaranteed due to fragility and application.


1:148102


## KEYHOLE

Carbide Tipped - Single Flute
Form keyhole slots in plaques, picture frames, and other wall-hanging items with this plunge-cutting bit. Plunge to form the entry, then advance the router to cut a short T-slot.


| ØD | ØD1 | B | B1 | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 8$ | $13 / 64$ | $3 / 8$ | $3 / 16$ | $1 / 4$ | $1-1 / 2$ | 45650 |
| $1 / 2$ | $5 / 16$ | $3 / 8$ | $3 / 16$ | $1 / 4$ | $1-1 / 2$ | 45652 |

## BOWL \& TRAY

Carbide Tipped • 2 Flute
For routing solid wood serving trays, flat dishes, shallow bowls, and similar objects, use this 3 -in-1 specialty plunging bit. It cuts flat, smooth bottom surfaces, vertical walls, and a transition radius between them, all in one pass. It can be used in handheld, table-mounted and CNC routers.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $1 / 8$ | $1 / 2$ | $1 / 4$ | $2-1 / 8$ | 45981 |
| $3 / 4$ | $1 / 4$ | $5 / 8$ | $1 / 4$ | $2-5 / 8$ | 45982 |
| $3 / 4$ | $1 / 4$ | $5 / 8$ | $1 / 2$ | $2-5 / 8$ | 45984 |
| $1-1 / 8$ | $1 / 4$ | $5 / 8$ | $1 / 2$ | $2-5 / 8$ | 45986 |



## BOWL \& TRAY

Carbide Tipped • 2 Flute with Upper Ball Bearing Guide
Same bit as above, but with a shank-mounted bearing so the bit can be used with a template or pattern.

|  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 日D | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Bearing | Collar | Tool No. |
| $1 / 2$ | $1 / 8$ | $1 / 2$ | $1 / 4$ | $2-1 / 8$ | 47701 | 47724 | 45983 |
| $3 / 4$ | $1 / 4$ | $5 / 8$ | $1 / 4$ | 2 | 47714 | 47724 | 45988 |
| $3 / 4$ | $1 / 4$ | $5 / 8$ | $1 / 2$ | $2-5 / 8$ | 47721 | 47739 | 45990 |
| $1-1 / 8$ | $1 / 4$ | $5 / 8$ | $1 / 2$ | $2-5 / 8$ | 47738 | 47740 | 45992 |



1:1


BALL END
Carbide Tipped • 2 Flute
Cut channels for pipes or cables using the ball end bit. The profile requires the cut to be made in a single pass. To reduce stress on the bit, cut an initial groove using a straight bit matching the D1 dimension of the ball end bit.

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ØD | OD1 | R | B | 0 d | L | Tool No. |
| 1/2 | 1/4 | 1/4 | 7/16 | 1/2 | 2-1/4 | 45960 |
| 5/8 | 9/32 | 5/16 | 9/16 | 1/2 | 2-3/8 | 45962 |
| 3/4 | 5/16 | 3/8 | 11/16 | 1/2 | 2-1/2 | 45964 |
| 7/8 | 5/16 | 7/16 | 13/16 | 1/2 | 2-5/8 | 45966 |
| 1 | 11/32 | 1/2 | 15/16 | 1/2 | 2-3/4 | 45968 |
| 4-Pc. 1/2 Shank Set Includes 45960, 45962, 45964 \& 45968 |  |  |  |  |  | AMS-557 |

Note: Profile is useful as a 'conduit' for cables, pipes, etc.


Set AMS-557


## CNC BALL END

Insert Carbide • 2 Flute
Cut channels for pipes or cables using the ball end bit. The profile requires the cut to be made in a single pass. To reduce stress on the bit, cut an initial groove using a straight bit matching the D1 dimension of the ball end bit.


| ØD | ØD1 | B | $\mathbf{R}$ | Ød | $\mathbf{L}$ | Screw | Knife | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $43 / 64$ | $15 / 16$ | $1 / 2$ | $1 / 2$ | $2-7 / 8$ | 67115 | RCK-54 | RC-1126 $\star$ |

Note: Profile is useful as a 'conduit' for cables, pipes, etc.
A Warning: Maximum $\mathrm{RPM}=18,000$
$\star$ Warning: These tools have an open flute design (not anti-kickback) and are intended for high feed-rate CNC machine use only. Do not use in portable routers.
$\square$ CNC feed and speed available online


## CORE BOX

Carbide Tipped • 2 Flute
Cut half-round grooves for fluted moldings columns millwork and signs using these core box bits. Used with an edge guide they can cut coves. Can be used with handheld table-mounted and CNC routers.

## Excellent For Cutting:

- Soft/Hardwood
- Veneered Plywood
- Laminate
- MDF

| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 16$ | $3 / 8$ | $1 / 4$ | $1-3 / 4$ | $45900^{*}$ |
| $1 / 4$ | $1 / 8$ | $3 / 8$ | $1 / 4$ | $2-1 / 2$ | DRB-432 |
| $3 / 16$ | $3 / 32$ | $1 / 2$ | $1 / 4$ | $1-3 / 4$ | $45902^{*}$ |
| $3 / 16$ | $3 / 8$ | $1 / 2$ | $3 / 8$ | 3 | DRB-433 |
| $5 / 16$ | $5 / 32$ | $3 / 4$ | $1 / 4$ | 2 | 45903 |
| $1 / 4$ | $1 / 8$ | $1 / 4$ | $1 / 4$ | $1-5 / 8$ | 45904 |
| $5 / 16$ | $5 / 32$ | $3 / 4$ | $1 / 2$ | $2-5 / 8$ | 45905 |
| $3 / 8$ | $3 / 16$ | $1 / 4$ | $1 / 4$ | $1-1 / 2$ | 45906 |
| $3 / 8$ | $3 / 16$ | $1 / 4$ | $1 / 2$ | 2 | 45908 New |
| $3 / 8$ | $3 / 16$ | $1 / 2$ | $1 / 4$ | 2 | 45901 |
| $1 / 2$ | $1 / 4$ | $3 / 8$ | $1 / 4$ | $1-1 / 2$ | 45910 |
| $1 / 2$ | $1 / 4$ | $1 / 2$ | $1 / 4$ | $2-1 / 8$ | RC-45910 |
| $1 / 2$ | $1 / 4$ | $3 / 8$ | $1 / 2$ | $2-1 / 8$ | 45912 New |
| $1 / 2$ | $1 / 4$ | $5 / 8$ | $1 / 4$ | $2-1 / 4$ | 45907 New |
| $5 / 8$ | $5 / 16$ | $3 / 8$ | $1 / 4$ | 2 | 45909 |
| $5 / 8$ | $5 / 16$ | $7 / 16$ | $1 / 4$ | $1-5 / 8$ | 45914 |
| $5 / 8$ | $5 / 16$ | $7 / 16$ | $1 / 2$ | 2 | 45916 |
| $3 / 4$ | $3 / 8$ | $7 / 16$ | $1 / 4$ | $1-3 / 4$ | 45918 |
| $3 / 4$ | $3 / 8$ | $7 / 16$ | $1 / 2$ | 2 | 45920 |
| $7 / 8$ | $7 / 16$ | $1 / 2$ | $1 / 2$ | $2-1 / 4$ | 45922 |
| 1 | $1 / 2$ | $5 / 8$ | $1 / 4$ | $1-3 / 4$ | 45924 |
| 1 | $1 / 2$ | $11 / 16$ | $1 / 2$ | $2-1 / 8$ | 45926 |
| $1-1 / 4$ | $5 / 8$ | $3 / 4$ | $1 / 2$ | $2-5 / 16$ | 45928 |

A Warning: \#RC-45910 for CNC use only.
A 20 Maximum RPM $=20,000$

* Solid carbide (brazed to steel shank).

0 Replacement knife for \#RC-45910: \#RCK-266 (RC-45910 - single flute).
Replacement bearing for \#RC-45910: \#47701.
44. Polycrystalline Diamond (PCD) for extremely long life. Maximum recommended material depth in one pass varies from 0.5 mm to 3.0 mm depends on the hardness. The harder the material, the less depth.

- Use in a table-mounted router. Not for use in a handheld router!


## 8-PC. CORE BOX

1/4" Shank •Carbide Tipped Router Bit Collection
Cut half-round grooves for fluted moldings columns millwork and signs using these core box bits. Used with an edge guide they can cut coves. Can be used with handheld table-mounted and CNC routers.
Excellent For Cutting:

- Soft/Hardwood
- Veneered Plywood
- Laminate
- MDF

| Dia. | Radius | Cut Height | Shank | Length | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 16$ | $3 / 8$ | $1 / 4$ | $1-3 / 4$ | 45900 * |
| $3 / 16$ | $3 / 32$ | $1 / 2$ | $1 / 4$ | $1-3 / 4$ | $45902^{*}$ |
| $1 / 4$ | $1 / 8$ | $1 / 4$ | $1 / 4$ | $1-5 / 8$ | 45904 |
| $3 / 8$ | $3 / 16$ | $1 / 4$ | $1 / 4$ | $1-1 / 2$ | 45906 |
| $1 / 2$ | $1 / 4$ | $3 / 8$ | $1 / 4$ | $1-1 / 2$ | 45910 |
| $5 / 8$ | $5 / 16$ | $7 / 16$ | $1 / 4$ | $1-5 / 8$ | 45914 |
| $3 / 4$ | $3 / 8$ | $7 / 16$ | $1 / 4$ | $1-3 / 4$ | 45918 |
| 1 | $1 / 2$ | $5 / 8$ | $1 / 4$ | $1-3 / 4$ | 45924 |
| $8-P c$. Set Includes the following radii: $1 / 16$ | $3 / 32$ | $1 / 8$ | $3 / 16$ | $1 / 4$ | $5 / 16$ |

* Solid carbide (brazed to steel shank).


RCK-266
$\leftrightarrow D \rightarrow$
RC-45910



## CLASSICAL GROOVE

Carbide Tipped • 2 Flute
Use this bit to form a bead-sided groove with a rounded bottom to embellish solid wood surfaces. It can be used in handheld, table-mounted and CNC routers, guided with an edge guide, fence, or in conjunction with a template guide bushing.


| ØD | R | R1 | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $3 / 32$ | $9 / 64$ | $7 / 16$ | $1 / 4$ | 2 | 56108 |
| $3 / 4$ | $9 / 64$ | $5 / 32$ | $1 / 2$ | $1 / 4$ | $2-1 / 16$ | 56110 |
| $3 / 4$ | $9 / 64$ | $5 / 32$ | $1 / 2$ | $1 / 2$ | $2-3 / 4$ | 56112 |
| 1 | $13 / 64$ | $1 / 4$ | $11 / 16$ | $1 / 2$ | 3 | 56114 |



## BOTTOM ROUND

Solid Carbide • 3 Flute
Developed for producing round bottomed grooves in hardwood and softwood, plywood and composition material. Used for engraving and carving.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $1 / 8$ | $3 / 8$ | $1 / 4$ | $2-1 / 2$ | 45784 |

## CLASSICAL GROOVE

Carbide Tipped • 2 Flute with Upper Ball Bearing Guide
Rout decorative grooves on solid wood or MDF panels and surfaces with a handheld or CNC router. Form edges with a hand router equipped with an edge guide or on a router table. Shank-mounted bearing allows cuts to be guided by a template mounted atop the work-piece.


| ØD | R | R1 | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $7 / 8$ | $5 / 32$ | $7 / 32$ | $1 / 2$ | $1 / 4$ | 2 | 56130 |
| $1-3 / 8$ | $1 / 4$ | $13 / 32$ | $9 / 16$ | $1 / 2$ | $2-5 / 8$ | 56140 |

## Replacement Parts:

| Ball Bearing | Lock Ring | Tool No. |
| :---: | :---: | :---: |
| 47708 | 47748 | 56130 |
| 47734 | 47750 | 56140 |



## CLASSICAL GROOVE

Carbide Tipped • 2 Flute with Upper Ball Bearing Guide
Rout decorative grooves on solid wood or MDF panels and surfaces with a handheld or CNC router. Form edges with a hand router equipped with an edge guide, or on a router table. Shank-mounted bearing allows cuts to be guided by a template mounted atop the work-piece.


| ØD | ØD1 | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $7 / 8$ | .319 | $9 / 64$ | $3 / 8$ | $1 / 4$ | 2 | 56148 |
| $1-3 / 8$ | .522 | $13 / 64$ | $9 / 16$ | $1 / 2$ | $2-5 / 8$ | 56150 |

Replacement Parts:

| Ball Bearing | Lock Ring | Tool No. |
| :---: | :---: | :---: |
| 47708 | 47748 | 56148 |
| 47734 | 47750 | 56150 |




Use Tool \#56125 with
Tongue \& Groove Assembly \#55400 on page 169.


* Solid carbide.



## ROUND OVER GROOVE

Carbide Tipped • 2 Flute
This bit creates a flat-bottom groove between two quarter-round shapes. Short vertical walls extending below the radius lend extra depth to the appearance. Depending upon the cut depth adjustment, the radii can be flush with the work surface or recessed. The profile can be formed on an edge using an edge guide or, on the router table using a fence.


| ØD | ØD1 | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\boldsymbol{\emptyset d}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | .240 | $1 / 4$ | $1 / 2$ | $3 / 8$ | $1 / 2$ | 2 | 49700 |
| 615 | .240 | $3 / 16$ | $1 / 2$ | $3 / 16$ | $1 / 2$ | $2-1 / 8$ | 49701 |
| $7 / 8$ | .245 | $5 / 16$ | $9 / 16$ | $7 / 16$ | $1 / 2$ | $2-1 / 16$ | 49702 |
| $7 / 8$ | $1 / 2$ | $1 / 8$ | $1-1 / 4$ | $1-1 / 8$ | $1 / 2$ | $2-1 / 2$ | $49720{ }^{*}$ |
| 1 | .250 | $3 / 8$ | $5 / 8$ | $15 / 32$ | $1 / 2$ | $2-1 / 8$ | 49704 |
| $1-3 / 8$ | .363 | $1 / 2$ | 1 | $3 / 4$ | $1 / 2$ | $2-1 / 2$ | 49706 |
| $1-3 / 4$ | .500 | $5 / 8$ | $1-1 / 4$ | 1 | $1 / 2$ | $2-3 / 4$ | $49708 \mathbf{1}_{14}$ |
| 2 | .500 | $3 / 4$ | $1-7 / 16$ | $1-1 / 8$ | $1 / 2$ | $2-15 / 16$ | $49710 \mathbf{A}_{14}$ |

A Warning: Maximum RPM $\boldsymbol{\Lambda}_{14}=\mathbf{1 4 , 0 0 0}$
$\checkmark$ Use in a table-mounted router. Not for use in a handheld router!

* Elongated plunge.



## ROUND OVER GROOVE

Carbide Tipped • 2 Flute • Plunge Ovolo Router Bits
Rout decorative grooves on solid wood or MDF panels and surfaces with a handheld or CNC router. Form edges using an edge guide.

| ØD | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-3 / 4$ | $23 / 32$ | - | $23 / 32$ | $1 / 2$ | $2-3 / 16$ | 49570 |
| $1-5 / 8$ | 1 | - | $23 / 32$ | $1 / 2$ | $2-3 / 16$ | 49572 |
| $1-5 / 8$ | $19 / 32$ | $1 / 4$ | $23 / 32$ | $1 / 2$ | $2-3 / 16$ | 49574 |



## BEADING GROOVE

Carbide Tipped • 2 Flute
Quarter-round profiles are formed by this bit as it grooves, one on each side of a flat. The scale and depth of the beading profile distinguishes it from the round over at left. Used with a fence or edge guide, this beading bit can be used as an edge former.


| ØD | 0D1 | R | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25/64 | 1/8 | 3/32 | 23/64 | 1/4 | 1-29/32 | 56100 |
| 1/2 | 1/4 | 1/8 | 3/8 | 1/4 | 1-7/8 | 56170 |
| 3/4 | 1/2 | 1/8 | 3/8 | 1/4 | 2 | 56172 |
| 7/8 | 1/2 | 13/64 | 15/32 | 1/4 | 2-3/16 | 56174 |
| 1-1/8 | 1/2 | 5/16 | 9/16 | 1/2 | 2-3/4 | 56178 |

A Warning: Maximum RPM ${ }_{14}=14,000$

- Use in a table-mounted router. Not for use in a handheld router!


## OGEE GROOVE

Carbide Tipped • 2 Flute
Rout a flat-bottom groove with ogee shoulders. Decorate any solid wood surface using a handheld or CNC router.


| ØD | ØD1 | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | .157 | $5 / 64$ | $3 / 8$ | $1 / 4$ | 2 | 56122 |
| $3 / 4$ | .256 | $9 / 64$ | $1 / 2$ | $1 / 2$ | $2-3 / 4$ | 56118 |




## OGEE GROOVE

Carbide Tipped • 2 Flute
This bit is similar to the ogee groove bits on the previous page, but these form a flat-bottom groove with a reverse ogee and step profile for the shoulders.

| ØD | ØD1 | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $13 / 16$ | $5 / 16$ | $1 / 8$ | $33 / 64$ | $1 / 4$ | $1-49 / 64$ | 56200 |
| 1 | $5 / 16$ | $5 / 32$ | $43 / 64$ | $1 / 4$ | $1-59 / 64$ | 56204 |
| 1 | $3 / 8$ | $3 / 16$ | $19 / 32$ | $1 / 2$ | $2-3 / 32$ | 56208 |
| $1-3 / 16$ | $15 / 32$ | $15 / 64$ | $19 / 32$ | $1 / 2$ | $2-3 / 32$ | 56210 |



## ROUND \& OGEE GROOVE

Carbide Tipped • 2 Flute
Rout decorative grooves on solid wood or MDF panels and surfaces with a handheld or CNC router. Form edges using an edge guide.


| ØD | R | R1 | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-5 / 8$ | $3 / 8$ | $3 / 4$ | $23 / 32$ | $1 / 2$ | $2-3 / 16$ | 49232 |



## RAISED PANEL GROOVE

Carbide Tipped • 2 Flute
Rout decorative grooves on solid wood or MDF panels and surfaces with a handheld or CNC router. Form edges using an edge guide.


| $\emptyset D$ | $\emptyset D 1$ | $\mathbf{a}^{\circ}$ | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | .454 | $30^{\circ}$ | $1 / 2$ | $1 / 2$ | $2-3 / 4$ | 56116 |




## CHAMFER

Carbide Tipped • 2 Flute with Ball Bearing Guide
Chamfer or bevel edges for decorative effect or to form edge miter joints. Produce crisp, uniform edges at accurate angles to make 4-, 6-, $8-$, 12-, or 16 -sided boxes. For best results use in a router table.


| $\mathrm{a}^{\circ}$ | ØD | B | C | 0 d | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $45^{\circ}$ | 1-1/4 | 1/2 | 5/8 | 1/4 | 2 | 49400 |
| $45^{\circ}$ | 1-1/4 | 1/2 | 5/8 | 1/2 | 2-3/8 | 49402 |
| $45^{\circ}$ | 1-31/32 | 3/4 | 1-1/16 | 1/2 | 2-23/32 | 49404 * |
| $45^{\circ}$ | 2-3/8 | 1 | 1-3/8 | 1/2 | 2-7/8 | 49406 * ${ }_{18} \dagger$ |
| $45^{\circ}$ | 3 | 1-1/16 | 1-3/8 | 1/2 | 3-1/2 | 49405 A $_{18}$ |
| 11-1/4 ${ }^{\circ}$ | 7/8 | 1 | 1 | 1/2 | 2-7/8 | 49407 |
| $15^{\circ}$ | 7/8 | 3/4 | 25/32 | 1/4 | 2-1/4 | 49408 |
| 22-1/2 ${ }^{\circ}$ | 1-1/4 | 15/16 | 7/8 | 1/2 | 2-7/8 | 49410 |
| $30^{\circ}$ | 1-3/8 | 13/16 | 7/8 | 1/4 | 2-1/4 | 49412 |
| $30^{\circ}$ | 1-3/8 | 13/16 | 7/8 | 1/2 | 2-3/4 | 49414 |
| $60^{\circ}$ | 1-1/2 | 5/8 | 9/16 | 1/2 | 2-5/8 | 49420 New |
| $60^{\circ}$ | 2-1/2 | 11/16 | 1-1/8 | 1/2 | 2-3/4 | 49416 - ${ }_{16}$ |

Replacement bearings: \#49400 \& 49402 use \#47704.
\#49405 use \#47710. All other tools use \#47706.

* 49404 will completely chamfer $3 / 4$ " material.
$\dagger 49406$ will completely chamfer 1 " material.
© Warning: Maximum RPM $\boldsymbol{\Delta}_{16}=16,000 ;{ }_{18}=18,000$
- Use in a table-mounted router. Not for use in a handheld router!



49412 6 sides ( $30^{\circ}$ )


49410 8 sides $\left(22.5^{\circ}\right)$

$3^{\circ}$ Door Edge Chamfers See page 27

## 5-PC. CHAMFER New

$11-1 / 4^{\circ}, 15^{\circ}, 22-1 / 2^{\circ}, 30^{\circ}$ and $45^{\circ}$ Carbide Tipped Router Bit Collection


Chamfer or bevel edges for decorative effect or to form edge miter joints. Produce crisp, uniform edges at accurate angles to make 4-, 6-, $8-$, 12-, or 16 -sided boxes. For best results use in a router table.

## Excellent For Cutting:

- Wood

| Angle | Dia | Cut Height | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $45^{\circ}$ | $1-1 / 4$ | $1 / 2$ | $1 / 2$ | $2-3 / 8$ | 49402 |
| $11-1 / 4^{\circ}$ | $7 / 8$ | 1 | $1 / 2$ | $2-7 / 8$ | 49407 |
| $15^{\circ}$ | $7 / 8$ | $3 / 4$ | $1 / 4$ | $2-1 / 4$ | 49408 |
| $22-1 / 2^{\circ}$ | $1-1 / 4$ | $15 / 16$ | $1 / 2$ | $2-7 / 8$ | 49410 |
| $30^{\circ}$ | $1-3 / 8$ | $13 / 16$ | $1 / 2$ | $2-3 / 4$ | 49414 |
| $60^{\circ}$ | $1-1 / 2$ | $5 / 8$ | $1 / 2$ | $2-5 / 8$ | RB-116 |
| $5-P C$ Set includes $49402,49407,49408,49410,49414 \& R B-116$ | AMS-184 |  |  |  |  |




## ADJUSTABLE INSERT CHAMFER SYSTEM FOR CNC, HANDHELD AND ROUTER TABLES

In-Bevel insert router bit complete with two cutting flutes. Suitable for producing chamfer, rabbet, bevel and spoilboard cuts at various angles in softwood, hardwood and man-made boards. Cutting angle can be adjusted in $7.5^{\circ}$ steps by using a notched scale. Good for use in CNC machine, handheld router and router table machines.
Insert knives are coated for longer cutting life with two cutting edges that allow users to rotate the knife when one side becomes dull.


| ØD | ØD1 | ØD2 | $\mathbf{B}$ | $\mathbf{a}^{\circ}$ | Ød | $\mathbf{L}$ | Max | Repl. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-7 / 8$ | 25 mm | 11.5 mm | $31 / 32$ | $-45^{\circ}$ to $+90^{\circ}$ | $1 / 2$ | $2-13 / 16$ | 16,000 | RCK-460 | (2) |
| RC-2375 |  |  |  |  |  |  |  |  |  |

Optional carbide grade knife, optimal for MDF \#RCK-462 (2). Replacement screws \#67133.


## CNC INSERT CARBIDE ADJUSTABLE CHAMFER

Insert router bit complete with two cutting flutes. Suitable for producing chamfer cuts at various angles in softwood, hardwood and man-made boards. Cutting angle can be adjusted in $7.5^{\circ}$ steps by using a notched scale. Fine adjustment of $1^{\circ}$ is also possible. For use on routers and machining centers with CNC control. Max RPM=12,000

| ØD | B | $\mathbf{a}^{\circ}$ | Ød | L | Repl. Knife | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $85 \mathrm{~mm}(3-3 / 8)$ | $40 \mathrm{~mm}(1-1 / 2)$ | $-45^{\circ}$ to $+90^{\circ}$ | $3 / 4$ | $100 \mathrm{~mm}(4)$ | RCK-40 (2) | RC-2370 | 85mm(3-3/8) $40 \mathrm{~mm}(1-1 / 2) \quad-45^{\circ}$ to $+90^{\circ} 3 / 4100 \mathrm{~mm}(4)$ RCK-40 (2) RC-2370-LH* * Left hand rotation.

Replacement screws use \#67183.


## VARIABLE DOUBLE CHAMFER ASSEMBLY

Carbide Tipped • 3-Wing with Ball Bearing Guide
Chamfer both corners of an edge in one pass with this assembly. Switch from $30^{\circ}$ or $45^{\circ}$ chamfers by switching cutter positions on the arbor. Interchangeable spacers adjust assembly to accommodate different stock thicknesses. The assembly includes the arbor, a pair of multi-angle cutters, pilot bearing, spacers and shims. Replacement parts are available separately.


| ØD | $\mathbf{a}^{\circ} \mathbf{1}$ | $\mathbf{a}^{\circ} \mathbf{2}$ | B1 | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-3 / 8$ | $30^{\circ}$ | $45^{\circ}$ | $9 / 16$ | $1 / 2$ | $4-1 / 4$ | 49730 |

Replacement Parts:

| Description | Tool No. |
| :---: | :---: |
| Top Replacement Cutter (R/H) | 49732 |
| Bottom Replacement Cutter (L/H) | 49734 |
| Ball Bearing Guide, 5/16 x .865 | 47708 |
| 1/2" Shank Arbor With Nut | 47618 |
| 6 mm Spacer (2 required) | 55368 |
| 0.5 mm Shims (1 required) | 55404 |
| 0.1 mm Shims (4 required) | 55357 |
| 1.0 mm Black Washer (4 required) | 55402 |



Bottom



B Max. With Ball Bearing
B Min. Without Bearing, Deduct Approx. 5/16" From Min. Dimension.

## DOUBLE ROUND OVER ADJUSTABLE 'EASING' ASSEMBLY

Carbide Tipped • 3-Wing with Ball Bearing Guide
Round over both the top and bottom edges in just one pass with this assembly. Interchangeable spaces after cutting spacing to accommodate different stock thickness up to $1-1 / 4^{\prime \prime}$. The assembly includes the arbor, a pair of multi-angle cutters, pilot bearing, spacers and shims. Replacement parts are available separately. For best results use in a router table!


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 2$ | $3 / 16$ | $3 / 4$ to $1-1 / 4$ * | $19 / 64$ | $1 / 2$ | $3-5 / 8$ | 49750 |
| $1-19 / 32$ | $1 / 4$ | $13 / 16$ to $1-11 / 32 *$ | $3 / 8$ | $1 / 2$ | $3-5 / 8$ | 49755 |

* Minimum thickness with ball bearing. Without bearing, deduct approx. 5/16" from the smaller dimension.

Replacement Parts:

|  | Quantity Required |  |  |
| :--- | :---: | :---: | :---: |
| Description | $\mathbf{4 9 7 5 0}$ | $\mathbf{4 9 7 5 5}$ | Tool No. |
| Top 3/16" Radius Cutter (R/H) | 1 | - | 49752 |
| Bottom 3/16" Radius Cutter (L/H) | 1 | - | 49754 |
| Top 1/4" Radius Cutter (R/H) | - | 1 | 49757 |
| Ball Bearing Guide, $8 \mathrm{~mm} \times 28 \mathrm{~mm}$ | 1 | 1 | 47736 |
| 1/2 Arbor with Nut | 1 | 1 | 47620 |
| 3.0mm Spacer | 2 | 2 | 55366 |
| 6.0mm Spacer | 1 | 1 | 55368 |
| 1.0mm Black Washer | 5 | 5 | 55402 |
| 0.50mm Shim | 2 | 2 | 55404 |



CORNER ROUNDING
Carbide Tipped • 2 Flute with Ball Bearing Guide
Rounds an edge to a given radius. The tool is shouldered to cut a fillet. The cut can be used to ease edges, as a simple profile, or as a part of a complex one.



| $\emptyset \mathrm{D}$ | 0 D1 | R | B | $\emptyset d$ | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5/16 | 3/16 | 1/16 | 5/16 | 1/4 | 1-13/16 | MRR108 ** |
| 3/8 | 3/16 | 3/32 | 3/8 | 1/4 | 1-13/16 | MR0110 ** |
| 7/16 | 3/16 | 1/8 | 3/8 | 1/4 | 1-13/16 | MR0112 ** |
| 1/2 | 3/16 | 5/32 | 3/8 | 1/4 | 1-13/16 | MR0114 ** |
| 9/16 | 3/16 | 3/16 | 3/8 | 1/4 | 1-13/16 | MRR110 ** |
| 5/8 | 1/2 | 1/16 | 5/16 | 1/4 | 1-3/4 | 49492 |
| 11/16 | 3/16 | 1/4 | 13/32 | 1/4 | 1-7/8 | MRR112 ** New |
| 5/8 | 1/2 | 1/16 | 5/16 | 1/2 | 2-1/4 | 49494 |
| 3/4 | 1/2 | 1/8 | 3/8 | 1/4 | 2 | 49496 |
| 3/4 | 1/4 | 1/4 | 1/2 | 1/4 | 1-7/8 | 49505 |
| 3/4 | 1/2 | 1/8 | 3/8 | 1/2 | 2-5/16 | 49498 |
| 13/16 | 1/2 | 5/32 | 3/8 | 1/4 | 2 | 49499 |
| 13/16 | 1/2 | 5/32 | 3/8 | 1/2 | 2-1/4 | 49501 |
| 7/8 | 3/8 | 1/4 | 1/2 | 1/4 | 1-5/16 | 49527 |
| 7/8 | 1/2 | 3/16 | 1/2 | 1/4 | 2 | 49500 |
| 7/8 | 1/2 | 3/16 | 1/2 | 1/2 | 2-7/16 | 49502 |
| 1 | 1/4 | 3/8 | 5/8 | 1/4 | 2 | 49511 |
| 1 | 1/2 | 1/8 | 3/8 | 1/4 | 2-3/16 | RC-49496 |
| 1 | 1/2 | 1/4 | 1/2 | 1/4 | 2 | 49504 |
| 1 | 1/2 | 1/4 | 1/2 | 1/4 | 2-1/16 | RC-49504 |
| 1 | 1/2 | 1/4 | 1/2 | 1/4 | 2-1/16 | DRB-504 - ${ }^{\text {a }}$ |
| 1 | 1/2 | 1/4 | 1/2 | 1/2 | 2-7/16 | 49506 |
| 1-1/8 | 3/8 | 3/8 | 5/8 | 1/4 | 2-1/8 | 49531 |
| 1-1/8 | 1/2 | 5/16 | 1/2 | 1/4 | 2-1/16 | 49508 |
| 1-1/8 | 1/2 | 5/16 | 1/2 | 1/2 | 2-7/16 | 49510 |
| 1-1/4 | 1/2 | 3/8 | 5/8 | 1/4 | 2-3/16 | 49512 |
| 1-1/4 | 1/2 | 3/8 | 5/8 | 1/2 | 2-9/16 | 49514 |
| 1-3/8 | 1/2 | 7/16 | 5/8 | 1/2 | 2-9/16 | 49515 |
| 1-1/2 | 1/2 | 1/2 | 3/4 | 1/4 | 2-1/4 | 49516 |
| 1-1/2 | 1/2 | 1/2 | 3/4 | 1/2 | 2-5/8 | 49518 |
| 1-5/8 | 1/2 | 9/16 | 3/4 | 1/2 | 2-5/8 | 49517 |
| 1-3/4 | 1/2 | 5/8 | 7/8 | 1/2 | 2-3/4 | 49519 A ${ }_{28}$ |
| 2 | 1/2 | 3/4 | 1 | 1/2 | 2-7/8 | 49520 A 22 |
| 2-1/4 | 1/2 | 7/8 | 1-1/4 | 1/2 | 3-1/16 | 49521 A ${ }_{22}$ |
| 2-1/2 | 1/2 | 1 | 1-1/4 | 1/2 | 3-3/16 | 49522 A ${ }^{\text {* * }}$ |
| 2-3/4 | 1/2 | 1-1/8 | 1-3/8 | 1/2 | 3-1/4 | 49523 A ${ }_{16}{ }^{*}$ |
| 3 | 1/2 | 1-1/4 | 1-1/2 | 1/2 | 3-1/4 | 49524 A $_{16}{ }^{*}$ |
| 3-1/2 | 1/2 | 1-1/2 | 1-3/4 | 1/2 | 3-5/8 | 49526 A ${ }_{15}{ }^{*}$ |

* Not guaranteed due to extreme diameter and radius. For best results it is recommended to use a smaller radius bit or chamfer the material prior to using these large radius tools. Tool life will be prolonged and a smoother finish will result.
** Miniature with $3 / 16^{\prime \prime}$ ball bearing \#47775.
Replacement knife \#RCK-268 (2 required). Replacement knife \#RCK-272 (2 required). Replacement bearing \#47706. Replacement bearing for 49505 \& 49511 \#47723.
Replacement bearing for 49527 \& 49531 \#47704.
© Warning: Maximum RPM $\boldsymbol{\Delta}_{15=15,000 ;} \boldsymbol{\Delta}_{16=16,000 ;} \boldsymbol{\Delta}_{18}=18,000$;
A $22=22,000 ; \boldsymbol{A}_{28}=28,000$
- Use in a table-mounted router. Not for use in a handheld router!
- 7 Polycrystalline Diamond (PCD) for extremely long life.


## 4 FLUTE CORNER ROUNDING <br> Carbide Tipped with Ball Bearing Guide

4 flute design for super-smooth finish.


| OD | ØD1 | $\mathbf{R}$ | $\mathbf{B}$ | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $5 / 8$ | $1 / 4$ | $7 / 16$ | $1 / 2$ | $2-9 / 16$ | 49541 |
| $1-3 / 8$ | $5 / 8$ | $3 / 8$ | $5 / 8$ | $1 / 2$ | $2-11 / 16$ | 49543 |
| $1-5 / 8$ | $5 / 8$ | $1 / 2$ | $11 / 16$ | $1 / 2$ | $2-3 / 4$ | 49545 |

## BEADING

Carbide Tipped • 2 Flute with 3/8" Diameter Ball Bearing Guide
Cut a quarter-round shape bounded by fillets, known as a bead, in one pass by this bit. The width of one fillet is set by the pilot bearing size, while the other is controlled by the depth of cut. A beading bit can be transformed into a corner rounding bit by changing the bearing (and vice versa).


| $\boldsymbol{\sigma} \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\boldsymbol{0 d}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $5 / 8$ | $1 / 16$ | $5 / 16$ | $1 / 4$ | $1-3 / 4$ | 49592 |
| $3 / 4$ | $1 / 8$ | $3 / 8$ | $1 / 4$ | 2 | 49596 |
| $3 / 4$ | $1 / 8$ | $3 / 8$ | $1 / 2$ | $2-5 / 16$ | 49598 |
| $7 / 8$ | $3 / 16$ | $1 / 2$ | $1 / 4$ | 2 | 49600 |
| $7 / 8$ | $3 / 16$ | $1 / 2$ | $1 / 2$ | $2-7 / 16$ | 49602 |
| 1 | $1 / 4$ | $1 / 2$ | $1 / 4$ | 2 | 49604 |
| 1 | $1 / 4$ | $1 / 2$ | $1 / 2$ | $2-7 / 16$ | 49606 |
| $1-1 / 8$ | $5 / 16$ | $1 / 2$ | $1 / 4$ | $2-1 / 16$ | 49608 |
| $1-1 / 8$ | $5 / 16$ | $1 / 2$ | $1 / 2$ | $2-7 / 16$ | 49610 |
| $1-1 / 4$ | $3 / 8$ | $5 / 8$ | $1 / 4$ | $2-3 / 16$ | 49612 |
| $1-1 / 4$ | $3 / 8$ | $5 / 8$ | $1 / 2$ | $2-9 / 16$ | 49614 |
| $1-1 / 2$ | $1 / 2$ | $3 / 4$ | $1 / 4$ | $2-1 / 4$ | 49616 |
| $1-1 / 2$ | $1 / 2$ | $3 / 4$ | $1 / 2$ | $2-5 / 8$ | 49618 |
| $1-3 / 4$ | $5 / 8$ | $7 / 8$ | $1 / 2$ | $2-3 / 4$ | $49619 \mathbf{A}_{28}$ |
| 2 | $3 / 4$ | 1 | $1 / 2$ | $2-7 / 8$ | $49620 \mathbf{\Lambda}_{22}$ |
| $2-1 / 2$ | 1 | $1-1 / 4$ | $1 / 2$ | $3-3 / 16$ | $49622 \mathbf{A}_{18}$ * |

Replacement bearing \#47702.

* Not guaranteed due to extreme diameter and radius. For best results it is recommended to use a smaller radius bit or chamfer the material prior to using these large radius tools. Tool life will be prolonged and a smoother finish will result.
© Warning: Maximum RPM $\boldsymbol{\Lambda}_{18}=18,000$; $\boldsymbol{\Lambda}_{22}=22,000 ; \boldsymbol{\Lambda}_{28}=28,000$

- Use in a table-mounted router. Not for use in a handheld router!


## 8-PC. CORNER ROUND

Carbide Tipped Router Bit Collections
The basic edge-forming bit, the corner-rounding bit rounds an edge to a given radius. The tool is shouldered to cut a fillet. The cut can be used to ease edges, as a simple profile, or as a part of a complex one. If a smaller pilot bearing is used, a second shoulder can be produced, in effect making the bit a beading bit.

Set \#AMS-550


| Dia | Radius | Cut Length | Shank | Length | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 2$ | $1 / 2$ | $3 / 4$ | $1 / 4$ | $2-1 / 4$ | 49516 |
| $5 / 8$ | $1 / 16$ | $5 / 16$ | $1 / 4$ | $1-3 / 4$ | 49492 |
| $1-1 / 8$ | $5 / 16$ | $1 / 2$ | $1 / 4$ | $2-1 / 16$ | 49508 |
| $7 / 8$ | $3 / 16$ | $1 / 2$ | $1 / 4$ | 2 | 49500 |
| 1 | $1 / 4$ | $1 / 2$ | $1 / 4$ | 2 | 49504 |
| $13 / 16$ | $5 / 32$ | $3 / 8$ | $1 / 4$ | 2 | 49499 |
| $3 / 4$ | $1 / 8$ | $3 / 8$ | $1 / 4$ | 2 | 49496 |
| $1-1 / 4$ | $3 / 8$ | $5 / 8$ | $1 / 4$ | $2-3 / 16$ | 49512 |
|  |  |  |  |  |  |
| Set \#AMS-555 |  |  |  |  |  |
|  |  |  |  |  |  |


| Dia | Radius | Cut Length | Shank | Length | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 4$ | $3 / 8$ | $5 / 8$ | $1 / 2$ | $2-9 / 16$ | 49514 |
| $7 / 8$ | $3 / 16$ | $1 / 2$ | $1 / 2$ | $2-7 / 16$ | 49502 |
| 1 | $1 / 4$ | $1 / 2$ | $1 / 2$ | $2-7 / 16$ | 49506 |
| 2 | $3 / 4$ | 1 | $1 / 2$ | $2-7 / 8$ | 49520 |
| $3 / 4$ | $1 / 8$ | $3 / 8$ | $1 / 2$ | $2-5 / 16$ | 49498 |
| $1-3 / 4$ | $5 / 8$ | $7 / 8$ | $1 / 2$ | $2-3 / 4$ | 49519 |
| $1-1 / 2$ | $1 / 2$ | $3 / 4$ | $1 / 2$ | $2-5 / 8$ | 49518 |
| $1-1 / 8$ | $5 / 16$ | $1 / 2$ | $1 / 2$ | $2-7 / 16$ | 49510 |



$\rightarrow 1$


## CORNER ROUNDING

Carbide Tipped • 2 Flute with Ultra-Glide ${ }^{T M}$ Radius Bearing
A unique pilot bearing allows you to produce a true $180^{\circ}$ bullnose with this corner rounding bit. Unlike a regular square-edge bearing, it follows the radiused surface produced on the first pass. Will neither leave a flat spot nor gouge the edge. Use the (optional) regular $1 / 4^{\prime \prime} \times 5 / 8$ " steel bearing for the first pass.


Repl.

| ØD | $\mathbf{A}$ | $\mathbf{R}$ | ØD1 | $\mathbf{B}$ | $\boldsymbol{\emptyset d}$ | $\mathbf{L}$ | Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-9 / 32$ | $3 / 4$ | $3 / 8$ | $5 / 8$ | $9 / 16$ | $1 / 2$ | $2-5 / 8$ | 47766 | 57191 |
| $1-5 / 8$ | 1 | $1 / 2$ | $5 / 8$ | $3 / 4$ | $1 / 2$ | $2-3 / 4$ | 47767 | 57190 |
| $2-1 / 8$ | $1-1 / 2$ | $3 / 4$ | $5 / 8$ | 1 | $1 / 2$ | 3 | 47768 | 57192 |
| $2-5 / 8$ | 2 | 1 | $5 / 8$ | $1-1 / 4$ | $1 / 2$ | $3-3 / 16$ | 47769 | $57194 \mathbf{A}_{18}$ |

Standard steel $1 / 4^{\prime \prime} \times 5 / 8^{\prime \prime}$ bearing - use \#47712 (order separately).
A Warning: Maximum RPM $\boldsymbol{\wedge}_{18}=18,000$

- Use in a table-mounted router. Not for use in a handheld router!




## MATCHING CORNER ROUND/COVE

Carbide Tipped • 2 Flute with Double Ball Bearing Guide
Cut rule joints with a single bit carrying perfectly matched profiles. Switch from the cove to the quarter-round profile simply by changing the extension of the bit. Use in handheld or table-mounted routers.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $1 / 4$ | $17 / 32$ | $1 / 4$ | $2-1 / 2$ | 49150 |
| $1-1 / 4$ | $5 / 16$ | $21 / 32$ | $1 / 4$ | $2-11 / 16$ | 49152 |

Replacement bearings \#47712 (2 required).
Replacement snap ring to retain upper bearing \#47748.


## CORNER ROUNDING 3D

Carbide Tipped • 2 Flute
This is no ordinary corner rounding bit! A guide ring on the bit perimeter coupled with a guide bearing above the profile allows you to round the edges of stock that curves in two planes. Just what's needed for shaping chairs or any furniture that has compound curves.
This unique tool is available in a $1 / 8^{\prime \prime}$ or $1 / 4^{\prime \prime}$ radius.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Repl. Alum. Ring | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $1 / 8$ | $1 / 8$ | $1 / 2$ | $3-27 / 32$ | 47790 | 49528 |
| $1-1 / 4$ | $15 / 64$ | $1 / 4$ | $1 / 2$ | $3-29 / 32$ | 47792 | 49529 |

Replacement parts:
Bearings \#47706 and \#47721.
Allen screw \#67011.
Lock ring \#67176.
Allen key \#67165.


## BULLNOSE

Carbide Tipped • 2 Flute \& 3 Flute (51566 Only)
Shape the full edge of a work-piece with a bullnose radius bit. Ideal for shaping stair treads, window sills, table and counter edges, shelves, and making moldings. The "nose diameter" (M) is the thickness of stock that can be nosed, i.e., given a full 180-degree round over. Flats at top and bottom of the cutting edges create fillets on stock thicker than the nose diameter. Must be used
with an edge guide on handheld routers or the fence on a router table.

| 'M'* | R | B | ØD | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5/32 | 5/64 | 1/2 | 17/32 | 1/4 | 1-3/4 | 51540 |
| 3/16 | 3/32 | 1/2 | 21/32 | 1/4 | 1-5/8 | 51541 |
| 7/32 | 7/64 | 1/2 | 19/32 | 1/4 | 1-3/4 | 51542 |
| 1/4 | 1/8 | 9/16 | 23/32 | 1/4 | 1-11/16 | 51543 |
| 19/64 | 9/64 | 3/4 | 21/32 | 1/4 | 1-7/8 | 51544 |
| 3/8 | 3/16 | 7/8 | 7/8 | 1/4 | 2 | 51545 |
| 1/2 | 1/4 | 1 | 1 | 1/4 | 2-1/8 | 51547 |
| 5/32 | 5/64 | 1/2 | 17/32 | 1/2 | 2 | 51550 |
| 3/16 | 3/32 | 1/2 | 21/31 | 1/2 | 2 | 51551 |
| 7/32 | 7/64 | 1/2 | 19/32 | 1/2 | 2 | 51552 |
| 1/4 | 1/8 | 9/16 | 23/32 | 1/2 | 2-1/16 | 51553 |
| 9/32 | 9/64 | 3/4 | 21/32 | 1/2 | 2-1/4 | 51554 |
| 3/8 | 3/16 | 7/8 | 7/8 | 1/2 | 2-3/8 | 51555 |
| 27/64 | 13/64 | 3/4 | 7/8 | 1/2 | 2-1/4 | 51556 |
| 1/2 | 1/4 | 1 | 1 | 1/2 | 2-1/2 | 51557 |
| 35/64 | 17/64 | 1 | 1-1/32 | 1/2 | 2-1/2 | 51558 |
| 5/8 | 5/16 | 1 | 1-1/8 | 1/2 | 2-1/2 | 51559 |
| 3/4 | 3/8 | 1-5/16 | 1-1/4 | 1/2 | 2-3/4 | 51560 |
| 7/8 | 7/16 | 1-1/2 | 1-1/2 | 1/2 | 3 | 51549 |
| 1 | 1/2 | 1-9/16 | 1-11/16 | 1/2 | 3-1/16 | 51562 |
| 1-1/8 | 9/16 | 1-1/2 | 1-13/16 | 1/2 | 3 | 51563 |
| 1-1/4 | 5/8 | 2 | 2 | 1/2 | 3-1/2 | 51564 |
| 1-1/2 | 3/4 | 2 | 2-3/8 | 1/2 | 3-1/2 | 51566 |

* ' $M$ ' denotes thickness of material on which a full $180^{\circ}$ round over can be accomplished.
$\dagger$ \#51566 is 3 flute (all others are 2 flute).
A Warning: Maximum RPM ${ }_{19}=19,000$
- Use in a table-mounted router. Not for use in a handheld router!


## 3D ADAPTERS FOR ROUTER BITS

These 3D adapters are versatile devices used for making compound curves by inserting the adapter over any $1 / 4^{\prime \prime}$ shank router bit. By making it as an adapter and not a solid tool, the system becomes much more flexible as well as cost effective.
Tool \#55110 will fit all tools with up to a $3 / 4^{"}$ cutting diameter and \#55112 will fit all tools with up to a 1 " cutting diameter. The cutting length is adjustable and is limitless to shapes and tools this adapter may be used for.
This 3D system may be useful especially for small objects, artistic works and other delicate projects. May also be used for small jobs with a drill machine (when one does not have a router). In this case, the outer ring, which revolves against the tool, serves as a small "router table". For this application, we recommend a minimum of $3,000 \mathrm{RPM}$.
\#55110 can be used with Miniature Router Bits found on pages 178-179 as well as tool \#49492 and \#49496.
\#55112 can be used with tool \#49492, \#49496, \#49499, \#49500 and \#49504.

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| OD | OD1 | $\mathbf{B}$ | Od | $\mathbf{L}$ | Tool No. |
| $1-1 / 16$ | $25 / 32$ | 1 | $1 / 2$ | $3-13 / 32$ | 55110 |
| $1-7 / 32$ | $1-1 / 64$ | 1 | $1 / 2$ | $3-13 / 32$ | 55112 |

## A Warning: Maximum RPM $=18,000$

Each adapter comes with two Allen Keys: \#5009 - 1/8" Allen Key for the screw on the side \#5003 - 5/32" Allen Key
Use to set screw M8 inside the shank of the tool.
This screw makes it easier to adjust the length accurately and safely.


Use Amana Tool ${ }^{\circledR}$ Allen key \#5003 (5/32") to adjust the required length of the shank. Only then, you can tighten the set screw that holds the tool from the side.


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## BULLNOSE

Carbide Tipped • 2 Flute with Ball Bearing Guide
Shape the full edge of a work-piece with a bullnose radius bit. Ideal for shaping stair treads, window sills, table and counter edges, shelves, and making moldings. The "nose diameter" $(M)$ is the thickness of stock that can be nosed, i.e., given a full 180 -degree round over. Flats at top and bottom of the cutting edges create fillets on stock thicker than the nose diameter. Must be used with an edge guide on handheld routers or the fence on a router table.


| 'M'* | $\mathbf{R}$ | $\mathbf{B}$ | ØD | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | $1 / 16$ | $1 / 2$ | $5 / 8$ | $1 / 4$ | $2-1 / 8$ | 51565 |
| $3 / 16$ | $3 / 32$ | $1 / 2$ | $11 / 16$ | $1 / 4$ | $2-1 / 8$ | 51567 |
| $1 / 4$ | $1 / 8$ | $3 / 4$ | $3 / 4$ | $1 / 4$ | $2-3 / 8$ | 51568 |
| $3 / 8$ | $13 / 64$ | $3 / 4$ | $7 / 8$ | $1 / 2$ | $2-3 / 4$ | 51569 |
| $35 / 64$ | $17 / 64$ | 1 | $1-1 / 16$ | $1 / 2$ | $2-7 / 8$ | 51570 |
| $3 / 4$ | $3 / 8$ | $1-5 / 16$ | $1-3 / 8$ | $1 / 2$ | $3-1 / 4$ | 51572 |
| 1 | $1 / 2$ | $1-19 / 32$ | $1-13 / 16$ | $1 / 2$ | $3-1 / 2$ | 51574 |
| $1 / 20$ |  |  |  |  |  |  |
| $1-1 / 4$ | $5 / 8$ | 2 | 2 | $1 / 2$ | $3-7 / 8$ | 51576 |

* ' $M$ ' denotes thickness of material on which a full $180^{\circ}$ round over can be accomplished.

Replacement bearings:
Tool \#'s 51565, 51567, 51568, 51569, 51570 use \#47706.
Tool \#51572 use \#47716.
Tool \#'s 51574 \& 51576 use \#47714.
$\triangle$ Warning: Maximum RPM $\boldsymbol{\Delta}_{14}=14,000 ; \boldsymbol{\Delta}^{18}=18,000 ; \boldsymbol{\Delta}_{20}=20,000$
$\bullet$ Use in a table-mounted router. Not for use in a handheld router!


## CORNER BEADING

Carbide Tipped • 2 Flute with Ball Bearing Guide
Produce three slightly different profiles using this bit - an edge bead with or without a fillet and a full corner bead - by altering the bit extension or rolling the work-piece between passes. This group of hard-to-find tools is particularly suitable for antique reproductions and restoration projects. Use in a handheld or table-mounted router.


Replacement bearing for \#54160 - \#54163 use \#47706.
All other tools use \#47716.


## COVE \& BEAD

Carbide Tipped • 2 Flute with Ball Bearing Guide
The reverse cove-and-bead bit, which has the cove coming off the bearing, produces the reverse of the classical cove and bead. Radii of both cove and bead are identical. Use in a handheld or table-mounted router.

| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool $\mathbf{N o}$. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $5 / 32$ | $5 / 8$ | $1 / 4$ | $2-1 / 8$ | 49208 |
| 1 | $5 / 32$ | $5 / 8$ | $1 / 2$ | $2-1 / 2$ | 49210 |
| $1-3 / 8$ | $1 / 4$ | $7 / 8$ | $1 / 4$ | $2-1 / 4$ | 49212 |
| $1-3 / 8$ | $1 / 4$ | $7 / 8$ | $1 / 2$ | $2-5 / 8$ | 49214 |



## CLASSICAL BEAD \& COVE

Carbide Tipped • 2 Flute with Ball Bearing Guide
This bead and cove combines the two basic forms, separating them with a fillet. The cove comes off the pilot bearing. Produce a complex profile in a single pass. Use in a handheld or table-mounted router.


| ØD | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 4$ | $13 / 64$ | $5 / 16$ | $1 / 2$ | $1 / 4$ | 2 | 54102 |
| $1-1 / 4$ | $13 / 64$ | $5 / 16$ | $1 / 2$ | $1 / 2$ | $2-3 / 8$ | 54104 |
| $1-1 / 2$ | $7 / 32$ | $15 / 64$ | $5 / 8$ | $1 / 4$ | $2-1 / 8$ | 54106 |
| $1-1 / 2$ | $7 / 32$ | $15 / 64$ | $5 / 8$ | $1 / 2$ | $2-1 / 2$ | 54108 |

Replacement bearing \#47706.



## CLASSICAL COVE \& BEAD

Carbide Tipped • 2 Flute with Ball Bearing Guide
The positions of the bead and the cove are reversed on this series of bits, with the bead coming off the bearing. With the optional $3 / 8$ " pilot bearing, the bit produces a fillet at the base of the bead. Largest diameter bits should be run at reduced speed. Use in a handheld or table-mounted router.


| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | $\boldsymbol{O d}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $5 / 32$ | $5 / 32$ | $1 / 2$ | $1 / 4$ | 2 | 54128 |
| $1-3 / 8$ | $1 / 4$ | $3 / 16$ | $11 / 16$ | $1 / 4$ | $2-3 / 16$ | 54130 |
| $1-1 / 8$ | $5 / 32$ | $5 / 32$ | $1 / 2$ | $1 / 2$ | $2-3 / 8$ | 54132 |
| $1-3 / 8$ | $1 / 4$ | $3 / 16$ | $11 / 16$ | $1 / 2$ | $2-9 / 16$ | 54134 |
| $1-1 / 2$ | $3 / 16$ | $5 / 16$ | $5 / 8$ | $1 / 2$ | $2-1 / 2$ | 54292 |
| 2 | $11 / 32$ | $11 / 32$ | $1-1 / 4$ | $1 / 2$ | $3-1 / 8$ | $54100 \mathbf{A}_{18}$ |
| 2 | $3 / 8$ | $3 / 8$ | 1 | $1 / 2$ | $2-3 / 4$ | $54135 \mathbf{\Lambda}_{18}$ |

A Standard $1 / 2^{\prime \prime}$ bearing \#47706 (included).
B Optional 3/8" bearing \#47702 (order separately).
A Warning: Maximum RPM $\mathbf{A}_{18}=18,000$


## COVE

Carbide Tipped • 2 Flute with Ball Bearing Guide
The covetto form - produced by the cove bit - is one of the classic building blocks for many molding profiles. Use it alone or in combination with beads and fillets. Use the cove to detail the edges of casework, doors and drawers, posts and columns. The cove also makes up one-half of the rule joint used on drop-leaf tables, the other half is the corner-round.
For best results with a large radius cutter, make a preliminary cut with a smaller radius bit or chamfer the work-piece to reduce the amount of stock to be removed in the finish pass. This will produce a smoother finish and prolong tool life. The largest diameter bits must be run at reduced speed.
Use in a handheld or table-mounted router.


| $\emptyset 0$ | R | B | 0d | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1/2 | 1/16 | 1/2 | 1/4 | 2 | 49092 |
| 5/8 | 1/8 | 1/2 | 1/4 | 2 | 49094 |
| 3/4 | 3/16 | 9/16 | 1/4 | 2 | 49100 |
| 3/4 | 3/16 | 9/16 | 1/2 | 2-3/8 | 49102 |
| 7/8 | 1/4 | 9/16 | 1/4 | 2 | 49104 |
| 1 | 1/4 | 1/2 | 1/4 | 2-1/16 | RC-49104 0 |
| 7/8 | 1/4 | 9/16 | 1/2 | 2-3/8 | 49106 |
| 1 | 5/16 | 9/16 | 1/4 | 2-1/8 | 49108 |
| 1 | 5/16 | 9/16 | 1/2 | 2-3/8 | 49110 |
| 1-1/8 | 3/8 | 9/16 | 1/4 | 2 | 49112 |
| 1-1/8 | 3/8 | 9/16 | 1/2 | 2-3/8 | 49114 |
| 1-3/8 | 1/2 | 3/4 | 1/4 | 2-1/4 | 49116 |
| 1-3/8 | 1/2 | 3/4 | 1/2 | 2-1/2 | 49118 |
| 1-5/8 | 5/8 | 11/16 | 1/2 | 2-1/2 | 49119 A $_{18}$ |
| 2 | 3/4 | 1 | 1/2 | 2-7/8 | 49120 A $_{12}$ |
| 2-1/4 | 7/8 | 1-1/4 | 1/2 | 3-1/8 | 49121 A $^{12}$ ¢ |
| 2-1/2 | 1 | 1-1/4 | 1/2 | 3 | 49122 А ${ }^{12} \dagger$ |

$\dagger$ Not guaranteed due to extreme diameter \& radius. For best results, it is recommended to use a smaller radius bit or chamfer the material prior to using these large radius tools. Tool life will be prolonged and a smoother finish will result.
Replacement bearings: Tool \#49120, \#49121 \& \#49122 use \#47706.
All other tools use \#47704 bearing.
0 Replacement knife \#RCK-274 (2 required).
© Warning: Maximum RPM $\boldsymbol{\Delta}_{12}=12,000 ; \boldsymbol{\Delta}_{18}=18,000$

## - Use in a table-mounted router. Not for use in a handheld router!




## LARGE RADIUS OVOLO

Carbide Tipped • 2 Flute
Now you can make extra-large coves with your router. This bit is perfect for creating beautiful coves for furniture or architectural crown moldings. With this bit you can make large coves in any wood species that you want. You'll never need to purchase cove molding again.


## CLASSICAL COVE

Carbide Tipped • 2 Flute with Ball Bearing Guide
A cove flanked by step fillets, a classical project used in period moldings, is produced by this tool. Use in a handheld or table-mounted router.

| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $3 / 16$ | $1 / 2$ | $1 / 4$ | 2 | 54144 |
| $1-3 / 8$ | $5 / 16$ | $5 / 8$ | $1 / 2$ | $2-1 / 2$ | 54150 |

Replacement bearing \#47706.


## OGEE FILLET

Carbide Tipped • 2 Flute with Ball Bearing Guide
This ogee pattern has a step at the end of the concave portion of the curve. Using the optional $3 / 8^{\prime \prime}$ bearing produces a profile with a fillet at the convex end of the curve. Use in a handheld or table-mounted router.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-3 / 8$ | $5 / 32$ | $1 / 2$ | $1 / 4$ | $2-1 / 16$ | 54110 |
| $1-3 / 8$ | $5 / 32$ | $1 / 2$ | $1 / 2$ | $2-1 / 2$ | 54112 |
| $1-5 / 8$ | $1 / 4$ | $3 / 4$ | $1 / 2$ | $2-5 / 8$ | 54114 |
| $2-1 / 4$ | $3 / 8$ | $15 / 16$ | $1 / 2$ | $2-7 / 8$ | $54127 \mathbf{\Lambda}_{18} 18$ |

A Standard $1 / 2^{\prime \prime}$ bearing \#47706 (included).
B Optional $3 / 8^{\prime \prime}$ bearing \#47702 (order separately).

© Warning: Maximum RPM ${ }_{18}=18,000$


## ROMAN OGEE

Carbide Tipped • 2 Flute with Ball Bearing Guide
The Roman ogee bit, which has a convex curve coming off the bearing, produces the reverse of the ogee (it isn't an upside-down ogee). The curve starts at the top as a concave, and fairs down into a convex curve. Use in a handheld or table-mounted router.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $9 / 16$ | $3 / 32$ | $5 / 16$ | $1 / 4$ | $1-7 / 8$ | MR0104 * |
| $11 / 16$ | $5 / 32$ | $27 / 64$ | $1 / 4$ | $1-7 / 8$ | MR1010 * |
| 1 | $5 / 32$ | $5 / 8$ | $1 / 4$ | $2-1 / 8$ | 49200 |
| 1 | $5 / 32$ | $5 / 8$ | $1 / 2$ | $2-1 / 2$ | 49202 |
| $1-3 / 8$ | $1 / 4$ | $13 / 16$ | $1 / 4$ | $2-1 / 4$ | 49204 |
| $1-3 / 8$ | $1 / 4$ | $13 / 16$ | $1 / 2$ | $2-5 / 8$ | 49206 |
| 2 | $3 / 8$ | 1 | $1 / 2$ | 3 | 49207 |



* Miniature with $3 / 16^{\prime \prime}$ ball bearing guide \#47775.

Replacement bearing for \#49207 use \#47706.
All others use \#47704 bearing.



Body type ' A ' includes both concave and convex knife retainers and ball bearing guide.


Knives are marked to indicate which retainer is needed.

## NOVA SYSTEM ${ }^{\text {TM }}$

Multi-Profile Router Cutter System
The Nova System ${ }^{\text {TM }}$ provides a wide range of profiling options in a single router bit with replaceable insert solid carbide knives. The innovation is in the bit. The easily replaceable hard carbide blades give a whole range of profile options in a single bit, as well as other vital advantages such as durability, versatility, safety, service-free and cost effectiveness.

TOOL BODY TYPE A (EDGE FORM)
For Edge Form Routing


| Description | L | Tool No. |
| :--- | :--- | :--- |
| Body A (1/4 Shank) | 3 | NS-104 |
| Body A (1/2 Shank) | 3 | NS-106 |

EDGE FORM KNIVES FOR BODY A (SOLD AS PAIR)
Corner Round

| R | R 1 | $\mathrm{a}^{\circ}$ | $\emptyset \mathrm{D}$ | B | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 8$ | - | - | $1-3 / 8$ | $11 / 16$ | NRC-A03 |
| $3 / 16$ | - | - | $1-3 / 8$ | $11 / 16$ | NRC-A04 |
| $1 / 4$ | - | - | $1-3 / 8$ | $11 / 16$ | NRC-A05 |
| $5 / 16$ | - | - | $1-3 / 8$ | $11 / 16$ | NRC-A06 |
| $3 / 8$ | - | - | $1-1 / 2$ | $11 / 16$ | NRC-A07 |
|  |  |  |  |  |  |
| Beading |  | - | - | $1-3 / 8$ | $11 / 16$ |
| $3 / 16$ | - | - | $1-1 / 2$ | $11 / 16$ | NRC-A10 |

Chamfer

| - | - | $30^{\circ}$ | $1-1 / 2$ | $11 / 16$ | NRC-A01 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| - | - | $45^{\circ}$ | $1-1 / 2$ | $11 / 16$ | NRC-A02 |


| Cove |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $1 / 4$ | - | - | $1-3 / 8$ | $11 / 16$ | NRC-A11 |
| $3 / 8$ | - | - | $1-1 / 2$ | $11 / 16$ | NRC-A13 |
| Special Cove |  |  |  |  |  |
| $3 / 16$ | - | - | $1-3 / 8$ | $11 / 16$ | NRC-A14 |


| Ogee |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|      <br> $5 / 32$ $11 / 64$ - $1-3 / 8$ $11 / 16$ | NRC-A15 |  |  |  |  |
| $5 / 32$ | $11 / 64$ | - | $1-1 / 2$ | $11 / 16$ | NRC-A16 |

Roman Ogee

| $5 / 32$ | - | - | $1-3 / 8$ | $11 / 16$ | NRC-A17 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Cove \& Bead

| $5 / 32$ | - | - | $1-3 / 8$ | $11 / 16$ | NRC-A18 |
| :--- | :--- | :--- | :--- | :--- | :--- |

Double Roman Ogee

| $5 / 32$ | - | - | $1-1 / 2$ | $11 / 16$ | NRC-A20 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Classical Cove |  |  |  |  |  |
| 3/16 | - | - | $1-3 / 8$ | $11 / 16$ | NRC-A21 |
| Classical Molding |  |  |  |  |  |
| $5 / 32$ | - | - | $1-1 / 2$ | $11 / 16$ | NRC-A23 |

Ordering Instructions: Choose the edge form type body 'A' \#NS-104 (1/4 shank) or \#NS-106 ( $1 / 2$ shank), then select the desired profile knives listed above.
Replacement parts: Knife retaining screws \#67084 (2 required); Hex key \#5007; Ball bearing \#47714; Hex lock nut \#67089.

| Description | L | Tool No. |
| :--- | :---: | :---: |
| Body B (1/4 Shank) | $2-5 / 8$ | NS-100 |
| Body B (1/2 Shank) | $2-5 / 8$ | NS-102 |

## PLUNGE KNIVES FOR BODY B (SOLD AS PAIR)

'V' Groove

| $R$ | $a^{\circ}$ | $\emptyset D$ | $B$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| - | $45^{\circ}$ | $3 / 8$ | $1 / 4$ | NRC-B51 |
| - | $30^{\circ}$ | $1 / 2$ | $3 / 8$ | NRC-B52 |

Core Box

| $1 / 4$ | - | $1 / 2$ | $3 / 8$ | NRC-B53 |
| :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | - | 1 | $1 / 2$ | NRC-B54 |


| Classical |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $5 / 32$ | - | $3 / 4$ | $7 / 16$ | NRC-B55 |

Ordering Instructions: Choose the plunge type body ‘B’ \#NS-100 (1/4 shank) or \#NS-102 ( $1 / 2$ shank), then select the desired profile knives listed above.
Replacement parts: Knife retaining screws \#67084 (2 required); Hex key \#5007.


Body Type A (Edge Form Routing) Profiles


NRC-A01


NRC-A08


NRC-A17


NRC-A02


NRC-A10


NRC-A18


NRC-A03


NRC-A11


NRC-A20


NRC-A04


NRC-A13


NRC-A21


NRC-A05


NRC-A14


NRC-A06


NRC-A15


NRC-A07


NRC-A16

Body Type B (Plunge Routing) Profiles

NRC-B51

NRC-B52


NRC-B54



## HAND GRIP PLUNGE

Carbide Tipped • 2 Flute
Intended for forming and edging internal hand-helds and cutouts in a single pass, this bit will also cut a soft bullnose on any exposed edge. Use in a CNC or other automatic router. Plunge cuts on router table are not recommended.


| $\emptyset \mathbf{D}$ | $\mathbf{a}^{\circ}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{B 2}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $45^{\circ}$ | $1 / 2$ | $1-9 / 16$ | $7 / 8$ | $1-1 / 4$ | $1 / 2$ | $3-5 / 8$ | 51590 |



## BULLNOSE/COVE EDGE

## Carbide Tipped • 2 Flute with Ball Bearing Guide

Cut a thumbnail in a single pass, flanked top and bottom by a fillet and a cove, a combination often called an astragal. Three sizes scaled for stock $3 / 4^{\prime \prime}$ through $1-1 / 2^{\prime \prime}$ thick. Should be used in a table-mounted router. The tool is equipped with a ball-bearing guide for template work.


| ØD | R | R1 | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $1 / 8$ | $1 / 4$ | 1 | $1 / 2$ | $2-7 / 8$ | 51530 |

Replacement bearing \#47716.


## CONVEX EDGING

Carbide Tipped • 2 Flute with or without Ball Bearing Guide
Cuts a shallow arc - the fingernail shape - rather than a full 180 -degree round over. Like the bullnose radius bit, it has short flats above and below the cutter arc, which produce fillets on stock thicker than 7/8." Must be used with an edge guide on handheld routers, or the fence on a router table.

| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $13 / 16$ | $23 / 32$ | $1-1 / 4$ | $27 / 32$ | $1 / 4$ | $2-1 / 2$ | 51580 |
| $13 / 16$ | $23 / 32$ | $1-1 / 4$ | $27 / 32$ | $1 / 2$ | $2-3 / 4$ | 51582 |
| $29 / 32$ | $23 / 32$ | $1-1 / 4$ | $27 / 32$ | $1 / 2$ | $2-3 / 4$ | 51586 *† |

Cuts a shallow radius ('thumbnail' shape) on board edges.

* Replacement bearing for \#51586 use (2) \#47712.
$\dagger$ Not for use in CNC machines.



## CLASSICAL MOLDING

Carbide Tipped • 2 Flute with Ball Bearing Guide
A double quarter-round profile is produced by this tool. The depth-of-cut setting determines whether or not a fillet is formed at the top. Switching from the standard pilot bearing to the optional $3 / 8^{\prime \prime}$ bearing introduces a fillet at the bottom of the profile. Use in a handheld or table-mounted router.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $5 / 32$ | $1 / 2$ | $1 / 4$ | 2 | 54136 |
| $1-3 / 8$ | $7 / 32$ | $11 / 16$ | $1 / 4$ | $2-3 / 16$ | 54138 |
| $1-1 / 8$ | $5 / 32$ | $1 / 2$ | $1 / 2$ | $2-3 / 8$ | 54140 |
| $1-3 / 8$ | $7 / 32$ | $11 / 16$ | $1 / 2$ | $2-9 / 16$ | 54142 |
| $1-1 / 2$ | $1 / 4$ | $3 / 4$ | $1 / 2$ | $2-3 / 4$ | 54141 |

A Standard 1/2" bearing \#47706 (included).
B Optional 3/8" bearing \#47702 (order separately).


## WAVY EDGE

Carbide Tipped • 2 Flute with Ball Bearing Guide
This bit produces an undulating curve with two convex forms flanking a concave form. All the radii are equal. A shoulder on the cutter can form a fillet, depending upon the depth-of-cut setting. Use in a handheld or table-mounted router.

| 0D | R | B |  |  | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $0 d$ | L | Tool No. |
| 1-1/4 | 5/32 | 11/16 | 1/4 | 2-1/4 | 54180 |
| 1-1/4 | 5/32 | 11/16 | 1/2 | 2-5/8 | 54182 |

[^8]


## REED EDGE

Carbide Tipped • 2 Flute
Produces a thumbnail flanked by full beads, an elegant edge profile. Must be used with an edge guide or router-table fence to control the cut. For stock between $3 / 4$ " and 1 " thick.

| ØD | R | R1 | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $5 / 64$ | $15 / 64$ | 1 | $1 / 4$ | $2-1 / 8$ | 54360 |



## OGEE

Carbide Tipped • 2 Flute with Ball Bearing Guide
The ogee is one of the basic shapes used in moldings and decorative profiles. An S-shaped curve, it is convex at the top fairing down into a concave (shown inverted). The ogee bit is characterized by the concave shape coming off the pilot bearing. Using the optional $3 / 8^{\prime \prime}$ bearing produces a profile with a fillet at the convex end of the curve. Use in a handheld or table-mounted router.

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\emptyset \mathrm{D}$ | R | R1 | B | $\emptyset d$ | L | Tool No. |
| 1-1/8 | 5/32 | 5/32 | 1/2 | 1/4 | 2 | 54120 |
| 1-1/8 | 5/32 | 5/32 | 1/2 | 1/2 | 2-3/8 | 54124 |
| 1-3/8 | 1/4 | 3/16 | 11/16 | 1/4 | 2-3/16 | 54122 |
| 1-3/8 | 1/4 | 3/16 | 11/16 | 1/2 | 2-5/8 | 54126 |
| A Standard 1/2" bearing \#47706 (included). |  |  |  |  |  |  |
| B Optional 3/8" bearing \#47702 (order separately). |  |  |  |  |  |  |



## 'LEAF-EDGE' BEADING

Carbide Tipped • 2 Flute with Ball Bearing Guide
In one pass, this bit forms a round-edged groove near the corner of the workpiece. A second pass on the adjoining face yields a delicate leaf-shaped corner bead. Use in a handheld or table-mounted router.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $3 / 16$ | $1 / 2$ | $1 / 4$ | $2-1 / 2$ | 54190 |
| $1-1 / 8$ | $1 / 4$ | $5 / 8$ | $1 / 4$ | $2-5 / 8$ | 54192 |

Replacement bearings \#47712 (2 required).
Replacement collar \#47724.


## FLUTE \& BEAD SET

Carbide Tipped • 2 Flute
Cut joints for staved assemblies, such as circular planters, canoes, kayaks and hot tubs, with this pair of bits. One bit flutes an edge, and the other forms the mating bead. Use in CNC or table-mounted routers. It will cut plywood, hardwood, softwood and composition materials. For the best and accurate match, we recommend using a table-mounted router.


| ØD | $\mathbf{A}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\boldsymbol{\emptyset d}$ | $\mathbf{L}$ | $\mathbf{L 1}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 2$ | $1 / 8$ | $1 / 8$ | $15 / 32$ | $1 / 4$ | $1 / 2$ | $1-31 / 32$ | $1-3 / 4$ | 54176 |

Set of 2 bits. Not sold separately.



## VARIABLE BEADING <br> Carbide Tipped • 2 Flute

Three different radii of beads are stacked on this one bit. Rout all three on an edge, or use it to nose thin stock. Router-table use recommended for best control, but use in a handheld router is possible. Must be used with an edge guide.


## MATCHED BEAD

## Carbide Tipped • 2 Flute with Ball Bearing Guide

This dual purpose bit produces both moldings and joints. Use in place of matched flute-and-bead bit sets to mill the edges of strips used in various stave constructions like planters, canoes and hot tubs. Switch from fluting to beading by raising or lowering the bit. Pilot bearing allows use for template-guided cuts. Recommended for router table use; smaller sizes can be used with an edge-guide


Replacement bearing for \#54186 use \#47706.
Replacement bearing for \#54188 use \#47716.
© Warning: Maximum RPM $\boldsymbol{A}_{18}=18,000$


## EDGE MOLDING

Carbide Tipped • 2 Flute with Ball Bearing Guide
The torus-and-cove profile produced by this bit make an excellent edge detail or molding. The pilot bearing allows you to make template-guided cuts with the bit. Use in a handheld or table-mounted router.


| ØD | R | R1 | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 4$ | $5 / 32$ | $5 / 32$ | $7 / 8$ | $1 / 2$ | $2-3 / 4$ | 54322 |
| $1-9 / 16$ | $7 / 32$ | $15 / 64$ | $1-3 / 16$ | $1 / 2$ | 3 | 54324 |

Replacement bearing for \#54322 use \#47706.
Replacement bearing for \#54324 use \#47712.


## MULTI-EDGE BEADING

Carbide Tipped • 2 Flute with Double Ball Bearing Guide
Produce beading detail on edges or moldings. Use in a handheld or table-mounted router.


| ØD | R | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $3 / 16$ | $7 / 8$ | $1 / 4$ | $2-7 / 8$ | 54296 |

Replacement parts: Bearings \#47712 (2 required); Collar \#47724.


## EDGE BEADING

Carbide Tipped • 2 Flute
Similar to the corner bead, but with a radiused, rather than a hard-edged quirk. Since this bit lacks a pilot, it must be used with a fence or edge guide. Use in a handheld or table-mounted router.


| ØD | ØD1 | R | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $7 / 8$ | $1 / 2$ | $5 / 32$ | $1-1 / 32$ | $1 / 2$ | $2-3 / 4$ | 54208 |




## EDGE FLUTING

Carbide Tipped • 2 Flute with Ball Bearing Guide
This bit produces a fingernail flute, rather than a full $180^{\circ}$ radius flute. Creates an interesting edge detail, and can be used to make small-scale cornice-type moldings. Use in a handheld or a table-mounted router.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\boldsymbol{\text { Od }}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $5 / 16$ | $1 / 2$ | $1 / 8$ | $1 / 2$ | $2-3 / 4$ | 54302 |
| $7 / 8$ | $15 / 32$ | $3 / 4$ | $3 / 16$ | $1 / 2$ | 3 | 54304 |
| $7 / 8$ | $3 / 4$ | 1 | $3 / 16$ | $1 / 2$ | $3-1 / 4$ | 54306 |
| 1 | $1-1 / 4$ | $1-1 / 2$ | $1 / 4$ | $1 / 2$ | $3-3 / 4$ | 54308 |

Replacement bearing \#47706.


## EDGE-FLUTING ASSEMBLY

Carbide Tipped • 2 Flute with Upper \& Lower Ball Bearing Guides
Cut individual flutes - shallow, small-radius grooves - in narrow edges without having to balance a router on that edge. The bit cuts at right angles to the bit axis. Flute depth is controlled by the pilot bearing, the flute's position by the router's bit-height setting. Use in a handheld or table-mounted router.


| ØD | R | B | C | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $1 / 8$ | $1 / 4$ | $1 / 8$ | $1 / 4$ | $2-1 / 4$ | 54330 |
| $7 / 8$ | $13 / 64$ | $3 / 8$ | $1 / 4$ | $1 / 4$ | $2-3 / 8$ | 54332 |

Replacement parts: Bearings \#47701 (upper) and \#47706 (lower); Collar \#47724.


## DOUBLE BEADING

Carbide Tipped • 2 Flute with Ball Bearing Guide
Produce pairs of beads on the edges of shelving or narrow molding strips. Use in a handheld or table-mounted router.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $17 / 64$ | .039 | $11 / 32$ | $1 / 4$ | $1-7 / 8$ | MR1020 * |
| $7 / 8$ | $1 / 8$ | $3 / 4$ | $1 / 2$ | $2-5 / 8$ | 54294 |

Replacement bearing \#47716.

* Miniature with $3 / 16^{\prime \prime}$ ball bearing guide \#47775.



## TRIPLE BEADING/FLUTING

Carbide Tipped • 2 Flute with Ball Bearing Guide
Three uniform beads or flutes are formed in one pass with these bits. Produce reeded or fluted pilasters or table legs referencing opposite faces of the work-piece. Use in a handheld or table-mounted router.


| ØD | Type | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $7 / 8$ | Bead | $1 / 8$ | 1 | $1 / 4$ | $2-5 / 8$ | 54211 |
| $7 / 8$ | Bead | $1 / 8$ | 1 | $1 / 2$ | $2-59 / 64$ | 54213 |
| $7 / 8$ | Flute | $1 / 8$ | 1 | $1 / 2$ | 3 | 54217 |

Replacement bearing \#47716.


## TRIPLE BEADING

Carbide Tipped • 2 Flute
Three uniform beads are formed in one pass with this bit. Use it to produce reeded pilasters or table legs. Must be used with an edge guide or fence. Use in a handheld or table-mounted router.

| $\boldsymbol{\emptyset D}$ | Type | R | B | Ø |
| :---: | :---: | :---: | :---: | :---: |
| $7 / 8$ | Bead | $1 / 8$ | 1 | $1 / 4$ |
| $7 / 8$ | Bead | $1 / 8$ | 1 | $1 / 2$ |
|  |  |  |  |  |
|  |  |  |  |  |




## HAND GRIP PLUNGE

Carbide Tipped • 2 Flute
Intended for forming and edging internal hand-helds and cutouts in a single pass, this bit will also cut a soft bullnose on any exposed edge. Use in a CNC or other automatic router. Plunge cuts on router table are not recommended.


| $\emptyset \mathbf{D}$ | $\mathbf{a}^{\circ}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{B 2}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $45^{\circ}$ | $1 / 2$ | $1-9 / 16$ | $7 / 8$ | $1-1 / 4$ | $1 / 2$ | $3-5 / 8$ | 51590 |



## BULLNOSE/COVE EDGE

## Carbide Tipped • 2 Flute with Ball Bearing Guide

Cut a thumbnail in a single pass, flanked top and bottom by a fillet and a cove, a combination often called an astragal. Three sizes scaled for stock $3 / 4^{\prime \prime}$ through $1-1 / 2^{\prime \prime}$ thick. Should be used in a table-mounted router. The tool is equipped with a ball-bearing guide for template work.


| ØD | R | R1 | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $1 / 8$ | $1 / 4$ | 1 | $1 / 2$ | $2-7 / 8$ | 51530 |

Replacement bearing \#47716.


## CONVEX EDGING

Carbide Tipped • 2 Flute with or without Ball Bearing Guide
Cuts a shallow arc - the fingernail shape - rather than a full 180 -degree round over. Like the bullnose radius bit, it has short flats above and below the cutter arc, which produce fillets on stock thicker than 7/8." Must be used with an edge guide on handheld routers, or the fence on a router table.

| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $13 / 16$ | $23 / 32$ | $1-1 / 4$ | $27 / 32$ | $1 / 4$ | $2-1 / 2$ | 51580 |
| $13 / 16$ | $23 / 32$ | $1-1 / 4$ | $27 / 32$ | $1 / 2$ | $2-3 / 4$ | 51582 |
| $29 / 32$ | $23 / 32$ | $1-1 / 4$ | $27 / 32$ | $1 / 2$ | $2-3 / 4$ | 51586 *† |

Cuts a shallow radius ('thumbnail' shape) on board edges.

* Replacement bearing for \#51586 use (2) \#47712.
$\dagger$ Not for use in CNC machines.



## CLASSICAL MOLDING

Carbide Tipped • 2 Flute with Ball Bearing Guide
A double quarter-round profile is produced by this tool. The depth-of-cut setting determines whether or not a fillet is formed at the top. Switching from the standard pilot bearing to the optional $3 / 8^{\prime \prime}$ bearing introduces a fillet at the bottom of the profile. Use in a handheld or table-mounted router.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $5 / 32$ | $1 / 2$ | $1 / 4$ | 2 | 54136 |
| $1-3 / 8$ | $7 / 32$ | $11 / 16$ | $1 / 4$ | $2-3 / 16$ | 54138 |
| $1-1 / 8$ | $5 / 32$ | $1 / 2$ | $1 / 2$ | $2-3 / 8$ | 54140 |
| $1-3 / 8$ | $7 / 32$ | $11 / 16$ | $1 / 2$ | $2-9 / 16$ | 54142 |
| $1-1 / 2$ | $1 / 4$ | $3 / 4$ | $1 / 2$ | $2-3 / 4$ | 54141 |

A Standard 1/2" bearing \#47706 (included).
B Optional 3/8" bearing \#47702 (order separately).


## WAVY EDGE

Carbide Tipped • 2 Flute with Ball Bearing Guide
This bit produces an undulating curve with two convex forms flanking a concave form. All the radii are equal. A shoulder on the cutter can form a fillet, depending upon the depth-of-cut setting. Use in a handheld or table-mounted router.

| 0D | R | B |  |  | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $0 d$ | L | Tool No. |
| 1-1/4 | 5/32 | 11/16 | 1/4 | 2-1/4 | 54180 |
| 1-1/4 | 5/32 | 11/16 | 1/2 | 2-5/8 | 54182 |

[^9]


## REED EDGE

Carbide Tipped • 2 Flute
Produces a thumbnail flanked by full beads, an elegant edge profile. Must be used with an edge guide or router-table fence to control the cut. For stock between $3 / 4$ " and 1 " thick.

| ØD | R | R1 | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $5 / 64$ | $15 / 64$ | 1 | $1 / 4$ | $2-1 / 8$ | 54360 |



## OGEE

Carbide Tipped • 2 Flute with Ball Bearing Guide
The ogee is one of the basic shapes used in moldings and decorative profiles. An S-shaped curve, it is convex at the top fairing down into a concave (shown inverted). The ogee bit is characterized by the concave shape coming off the pilot bearing. Using the optional $3 / 8^{\prime \prime}$ bearing produces a profile with a fillet at the convex end of the curve. Use in a handheld or table-mounted router.

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\emptyset \mathrm{D}$ | R | R1 | B | $\emptyset d$ | L | Tool No. |
| 1-1/8 | 5/32 | 5/32 | 1/2 | 1/4 | 2 | 54120 |
| 1-1/8 | 5/32 | 5/32 | 1/2 | 1/2 | 2-3/8 | 54124 |
| 1-3/8 | 1/4 | 3/16 | 11/16 | 1/4 | 2-3/16 | 54122 |
| 1-3/8 | 1/4 | 3/16 | 11/16 | 1/2 | 2-5/8 | 54126 |
| A Standard 1/2" bearing \#47706 (included). |  |  |  |  |  |  |
| B Optional 3/8" bearing \#47702 (order separately). |  |  |  |  |  |  |



## 'LEAF-EDGE' BEADING

Carbide Tipped • 2 Flute with Ball Bearing Guide
In one pass, this bit forms a round-edged groove near the corner of the workpiece. A second pass on the adjoining face yields a delicate leaf-shaped corner bead. Use in a handheld or table-mounted router.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $3 / 16$ | $1 / 2$ | $1 / 4$ | $2-1 / 2$ | 54190 |
| $1-1 / 8$ | $1 / 4$ | $5 / 8$ | $1 / 4$ | $2-5 / 8$ | 54192 |

Replacement bearings \#47712 (2 required).
Replacement collar \#47724.


## FLUTE \& BEAD SET

Carbide Tipped • 2 Flute
Cut joints for staved assemblies, such as circular planters, canoes, kayaks and hot tubs, with this pair of bits. One bit flutes an edge, and the other forms the mating bead. Use in CNC or table-mounted routers. It will cut plywood, hardwood, softwood and composition materials. For the best and accurate match, we recommend using a table-mounted router.


| ØD | $\mathbf{A}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\boldsymbol{\emptyset d}$ | $\mathbf{L}$ | $\mathbf{L 1}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 2$ | $1 / 8$ | $1 / 8$ | $15 / 32$ | $1 / 4$ | $1 / 2$ | $1-31 / 32$ | $1-3 / 4$ | 54176 |

Set of 2 bits. Not sold separately.



## VARIABLE BEADING <br> Carbide Tipped • 2 Flute

Three different radii of beads are stacked on this one bit. Rout all three on an edge, or use it to nose thin stock. Router-table use recommended for best control, but use in a handheld router is possible. Must be used with an edge guide.


## MATCHED BEAD

## Carbide Tipped • 2 Flute with Ball Bearing Guide

This dual purpose bit produces both moldings and joints. Use in place of matched flute-and-bead bit sets to mill the edges of strips used in various stave constructions like planters, canoes and hot tubs. Switch from fluting to beading by raising or lowering the bit. Pilot bearing allows use for template-guided cuts. Recommended for router table use; smaller sizes can be used with an edge-guide


Replacement bearing for \#54186 use \#47706.
Replacement bearing for \#54188 use \#47716.
© Warning: Maximum RPM $\boldsymbol{A}_{18}=18,000$


## EDGE MOLDING

Carbide Tipped • 2 Flute with Ball Bearing Guide
The torus-and-cove profile produced by this bit make an excellent edge detail or molding. The pilot bearing allows you to make template-guided cuts with the bit. Use in a handheld or table-mounted router.


| ØD | R | R1 | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 4$ | $5 / 32$ | $5 / 32$ | $7 / 8$ | $1 / 2$ | $2-3 / 4$ | 54322 |
| $1-9 / 16$ | $7 / 32$ | $15 / 64$ | $1-3 / 16$ | $1 / 2$ | 3 | 54324 |

Replacement bearing for \#54322 use \#47706.
Replacement bearing for \#54324 use \#47712.


## MULTI-EDGE BEADING

Carbide Tipped • 2 Flute with Double Ball Bearing Guide
Produce beading detail on edges or moldings. Use in a handheld or table-mounted router.


| ØD | R | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $3 / 16$ | $7 / 8$ | $1 / 4$ | $2-7 / 8$ | 54296 |

Replacement parts: Bearings \#47712 (2 required); Collar \#47724.


## EDGE BEADING

Carbide Tipped • 2 Flute
Similar to the corner bead, but with a radiused, rather than a hard-edged quirk. Since this bit lacks a pilot, it must be used with a fence or edge guide. Use in a handheld or table-mounted router.


| ØD | ØD1 | R | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $7 / 8$ | $1 / 2$ | $5 / 32$ | $1-1 / 32$ | $1 / 2$ | $2-3 / 4$ | 54208 |




## EDGE FLUTING

Carbide Tipped • 2 Flute with Ball Bearing Guide
This bit produces a fingernail flute, rather than a full $180^{\circ}$ radius flute. Creates an interesting edge detail, and can be used to make small-scale cornice-type moldings. Use in a handheld or a table-mounted router.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\boldsymbol{\text { Od }}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $5 / 16$ | $1 / 2$ | $1 / 8$ | $1 / 2$ | $2-3 / 4$ | 54302 |
| $7 / 8$ | $15 / 32$ | $3 / 4$ | $3 / 16$ | $1 / 2$ | 3 | 54304 |
| $7 / 8$ | $3 / 4$ | 1 | $3 / 16$ | $1 / 2$ | $3-1 / 4$ | 54306 |
| 1 | $1-1 / 4$ | $1-1 / 2$ | $1 / 4$ | $1 / 2$ | $3-3 / 4$ | 54308 |

Replacement bearing \#47706.


## EDGE-FLUTING ASSEMBLY

Carbide Tipped • 2 Flute with Upper \& Lower Ball Bearing Guides
Cut individual flutes - shallow, small-radius grooves - in narrow edges without having to balance a router on that edge. The bit cuts at right angles to the bit axis. Flute depth is controlled by the pilot bearing, the flute's position by the router's bit-height setting. Use in a handheld or table-mounted router.


| ØD | R | B | C | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $1 / 8$ | $1 / 4$ | $1 / 8$ | $1 / 4$ | $2-1 / 4$ | 54330 |
| $7 / 8$ | $13 / 64$ | $3 / 8$ | $1 / 4$ | $1 / 4$ | $2-3 / 8$ | 54332 |

Replacement parts: Bearings \#47701 (upper) and \#47706 (lower); Collar \#47724.


## DOUBLE BEADING

Carbide Tipped • 2 Flute with Ball Bearing Guide
Produce pairs of beads on the edges of shelving or narrow molding strips. Use in a handheld or table-mounted router.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $17 / 64$ | .039 | $11 / 32$ | $1 / 4$ | $1-7 / 8$ | MR1020 * |
| $7 / 8$ | $1 / 8$ | $3 / 4$ | $1 / 2$ | $2-5 / 8$ | 54294 |

Replacement bearing \#47716.

* Miniature with $3 / 16^{\prime \prime}$ ball bearing guide \#47775.



## TRIPLE BEADING/FLUTING

Carbide Tipped • 2 Flute with Ball Bearing Guide
Three uniform beads or flutes are formed in one pass with these bits. Produce reeded or fluted pilasters or table legs referencing opposite faces of the work-piece. Use in a handheld or table-mounted router.


| ØD | Type | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $7 / 8$ | Bead | $1 / 8$ | 1 | $1 / 4$ | $2-5 / 8$ | 54211 |
| $7 / 8$ | Bead | $1 / 8$ | 1 | $1 / 2$ | $2-59 / 64$ | 54213 |
| $7 / 8$ | Flute | $1 / 8$ | 1 | $1 / 2$ | 3 | 54217 |

Replacement bearing \#47716.


## TRIPLE BEADING

Carbide Tipped • 2 Flute
Three uniform beads are formed in one pass with this bit. Use it to produce reeded pilasters or table legs. Must be used with an edge guide or fence. Use in a handheld or table-mounted router.

| $\boldsymbol{\emptyset D}$ | Type | R | B | Ø |
| :---: | :---: | :---: | :---: | :---: |
| $7 / 8$ | Bead | $1 / 8$ | 1 | $1 / 4$ |
| $7 / 8$ | Bead | $1 / 8$ | 1 | $1 / 2$ |
|  |  |  |  |  |
|  |  |  |  |  |



Insert Carbide Knives • 2 Flute • Industrial Quality

Popular insert router bit profiles provide all woodworkers access to the industrial-grade technology, at an affordable price.
By replacing worn knives instead of sharpening standard carbide tipped bits, router bit dimensions, cutting quality and accuracy remain constant during the life of the tool. Ideal for routing softwood/hardwood as well as harder materials such as MDF and Chipboard.

| $\emptyset \mathrm{D}$ | C | R | B | $\mathrm{a}^{\circ}$ | a1 ${ }^{\circ}$ | $\emptyset d$ | L | Description | Repl. Knives | Repl. BB | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | - | 1/4 | 1/2 | - | - | 1/4 | 2-1/16 | Corner Round | RCK-272* | 47706 | RC-49504 |
| 1 | - | 1/4 | 1/2 | - | - | 1/4 | 2-1/16 | Cove | RCK-274* | 47706 | RC-49104 |
| 1-1/32 | - | 3/16 | 5/8 | - | - | 1/4 | 2-3/8 | Ogee Fillet | RCK-276* | 47706 | RC-54111 |
| 1-1/8 | 3/8 | - | 1/2 | - | - | 1/4 | 1-7/8 | Rabbet | RCK-264* | 47702 | RC-49300 |
| 1/2 | - | - | 20 mm | - | - | 1/4 | 2-5/16 | Flush Trim | RCK-262* | 47706 | RC-47104 |
| 1 | - | 1/8 | 3/8 | $45^{\circ}$ | - | 1/4 | 2-3/16 | (2 in 1) Corner Round or Bevel | RCK-268* | 47706 | RC-49496 |
| 11/16 | - | - | 21/64 | $90^{\circ}$ | $45^{\circ}$ | 1/4 | 1-61/64 | V-Groove/Signmaking | AMA-12† | - | RC-45711 |
| 11/16 | - | - | 21/64 | $90^{\circ}$ | $45^{\circ}$ | 1/2 | 2-3/16 | V-Groove/Signmaking | AMA-12† | - | RC-45712 |
| 1/2 | - | 1/4 | 1/2 | - | - | 1/4 | 2-1/8 | Core Box | RCK-266 | 47701 | RC-45910 |
| 1/2 | - | - | 30 mm | - | - | 1/4 | 2-5/8 | Straight Plunge | AMA-30 | - | RC-45226 |

* Replacement insert knives sold as a pair, † Optional MDF Knives: HMA-12



# Architectural Industrilal Router Bits 



## BASE MOLDING OGEE EDGE DETAIL

Carbide Tipped • 2 Flute
One of the easiest ways to dress up a room is to replace the skimpy base molding with a wide, bold profile. Amana Tool ${ }^{\circledR}$ offers classic ogee profiles in two sizes so that you can choose a size that best fits with the architectural details in the room. For quick easy installation we recommend that you attach the molding to the top of the base. This method greatly simplifies installation by allowing for a butt joint on inside corners.


Replacement parts: Bearing \#47706; Screw \#67014.

| ØD | R | R1 | B | B1 | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-7 / 16$ | $5 / 16$ | $3 / 8$ | $19 / 32$ | $1 / 4$ | $1 / 2$ | 2 | 54297 |
| $1-53 / 64$ | $19 / 64$ | $13 / 32$ | $3 / 8$ | $7 / 32$ | $1 / 2$ | $2-1 / 2$ | 54299 * |

* Not for use in CNC machines.




## COLONIAL DOOR CASING

Carbide Tipped • 2 Flute
Make your own door and window casing in cherry, oak or any wood specie that you prefer. This bit makes beautiful classic colonial window and door trim. You can even make curved window casing - perfect for trimming that Palladian window.


| ØD | ØD1 | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-17 / 32$ | $51 / 64$ | $3 / 8$ | $15 / 64$ | $2-61 / 64$ | $2-47 / 64$ | $1 / 2$ | $4-45 / 64$ | 54295 |



## DRAWING LINE

Carbide Tipped • 2 Flute with Ball Bearing Guide
An edge bead without a quirk is produced by this bit. Several different profile proportions are available. The depth-of-cut setting determines whether or not you get a fillet above the bead. Use in a handheld or table-mounted router.


| $\boldsymbol{\emptyset}$ | $\mathbf{R}$ | R1 | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | $3 / 32$ | $7 / 8$ | $1 / 2$ | $2-3 / 4$ | 54350 |
| 1 | $19 / 32$ | $5 / 32$ | $7 / 8$ | $1 / 2$ | $2-3 / 4$ | 54354 |
| 1 | $13 / 32$ | $3 / 16$ | $7 / 8$ | $1 / 2$ | $2-3 / 4$ | 54356 |

Replacement bearing \#47716.


## WAINSCOT SETS

Carbide Tipped • 2 Flute • 3/4" Material
No other architectural feature adds quality and value to your home like wainscot paneling. Now you can make your own wainscot with these wainscot router bit sets. Each three-piece set comes with a beautiful profile bit for the stile and rail edges, a cope bit for flawless joints at each intersection, and a chair rail bit for a beautiful finishing touch.

Bead, Bevel, Classic \& Ogee Styles


| ØD | R | R1 | B | B1 | Ød | L | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-21/32 | 1/8 | 1/4 | 1 | - | 1/2 | 2-7/8 | Chair Rail | 54266 |
| 1-1/8 | 1/4 | - | 3/8 | 1/4 | 1/4 | 2 | Bead Stile | 49640 |
| 1-1/4 | 1/4 | - | 5/16 | 7/64 | 1/4 | 2 | Bead Rail | 49642 |
| 3 Piece Set Including 49640, 49642 \& 54266649684 |  |  |  |  |  |  |  |  |
| 1-1/2 | 11/32 | - | 9/16 | 1/4 | 1/4 | 2 | Ogee Stile | 49664 |
| 1-9/32 | 11/32 | - | 3/8 | 1/8 | 1/4 | 2 | Ogee Rail | 49666 |
| 3 Piece Set Including 49664, $\mathbf{4 9 6 6 6 ~ \& ~} 54266$ |  |  |  |  |  |  |  | 49680 |
| 1-5/16 | 3/16 | - | 5/8 | 7/32 | 1/4 | 2 | Classical Stile | 49674 |
| 1-7/16 | 3/16 | - | 9/16 | 1/8 | 1/4 | 2 | Classical Rail | 49676 |
|  |  | Se | cludin | 9674, | 76 |  |  | 49682 |

Replacement bearing for stile cutters \#47702 (3/8" diameter).
Replacement bearing for rail cutters \#47701 (1/2" diameter). Replacement collar for rail cutters \#47724.



## CROWN MOLDING <br> Carbide Tipped • 2 Flute

Produce mid-sized crown, cove and bead molding profiles for architectural and furniture applications. The bits cut the profile and bevel, as necessary, which is the show face of the work-piece.


|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OD | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | Od | $\mathbf{L}$ | Tool No. |
| $1-1 / 4$ | $3 / 16$ | $7 / 16$ | $2-1 / 4$ | $1 / 2$ | $3-3 / 4$ | 54400 |
| $1-1 / 4$ | $1 / 2$ | $3 / 4$ | $2-1 / 4$ | $1 / 2$ | $3-3 / 4$ | 54402 |
| $1-1 / 4$ | $17 / 32$ | $17 / 32$ | $2-1 / 4$ | $1 / 2$ | $3-3 / 4$ | 54404 |

A Warning: Maximum RPM=22,000
Bevel the top and bottom edges on the table saw to complete the molding. Use a $2+$ horsepower router, mounted in a table, with a fence to guide the work. To prolong cutter life, reduce strain on the router. To get the best cut finish, make several passes to achieve full cut depth. Bevel back edges, cutting off $45^{\circ}$ excess, with one of our chamfer bits.


## REVERSIBLE CROWN MOLDING EXTENDER

Carbide Tipped • 2 Flute
Create crown molding up to 4-1/2" wide!
Now you can make extra-large architectural crown moldings with your table-mounted router. Our new extender bit enables you to make unique crown moldings in every type of wood. You're no longer limited to the small selection of crown moldings at the lumber dealer. This specially designed bit works in conjunction with either our vertical or horizontal crown molding bits allowing you to make crown moldings up to 4-1/2" wide. Bevel back edges, cutting off $45^{\circ}$ excess, with one of our chamfer bits.


| ØD | R | R1 | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 4$ | $7 / 16$ | $3-15 / 16$ | $2-3 / 8$ | $1 / 2$ | 4 | 54410 |

Can be used with other Crown Molding Bits
to create many different combinations!


## REVERSIBLE CROWN MOLDING

Carbide Tipped • 2 Flute
Give your ceilings that finished look!
With this bit you can easily make classic crown moldings with your table-mounted router. The beautiful profile is a large cove flanked by round overs. Use your fence to control the cutting depth and a featherboard to keep the stock firmly positioned against the fence. Bevel back edges, cutting off $45^{\circ}$ excess with one of our chamfer bits.


| ØD | R | R1 | R2 | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 4$ | $3 / 8$ | $7 / 8$ | $7 / 16$ | $2-7 / 16$ | $1 / 2$ | $4-1 / 16$ | 54412 |

Can be used with other Crown Molding Bits to create many different combinations!


## HORIZONTAL CROWN MOLDING

Carbide Tipped • 2 Flute
Now you can make large cove moldings for furniture and trim with your tablemounted router. This unique bit cuts a large, smooth arc; just what is needed to create a cove shaped crown molding for your next piece of furniture casework. Bevel back edges, cutting off $45^{\circ}$ excess, with one of our chamfer bits. For even greater versatility, combine this bit with our crown molding profiles on pages 142-143.

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ØD | $\mathbf{R}$ | $\mathbf{B}$ | B1 | Ød | $\mathbf{L}$ | Tool No. |
| $2-1 / 4$ | $1-3 / 4$ | $5 / 8$ | $13 / 32$ | $1 / 2$ | $2-3 / 8$ | 54414 |

Can be used with other Crown Molding Bits to create many different combinations!



Carbide Tipped • 2 Flute with Ball Bearing Guide
These bits are designed for routing architectural and furniture moldings and trim. Almost all have the profile laid out vertically, reducing the diameter of the bit. These bits should be used in a $2+$ horsepower, table-mounted router, and many should be run at reduced speed. Although most have ball-bearing guides, guiding the cuts with the fence is recommended.

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | ØD | R | R1 | R2 | R3 | B | $\emptyset d$ | L | Tool No. |
| \#2 | 7/8 | 5/32 | 5/16 | - | - | 1-3/8 | 1/2 | 3-3/8 | 54204 |
| \#3 | 1 | 9/64 | 3/16 | 25/32 | 15/64 | 1-5/8 | 1/2 | 3-1/4 | 54218 |
| \#4 | 1 | 1/8 | 7/8 | 3/8 | - | 1-11/16 | 1/2 | 3-1/4 | 54220 A |
| \#5 | 1-1/2 | 5/32 | - | - | - | 2 | 1/2 | 3-1/2 | 54250 A |
| \#7 | 1 | 9/64 | 3/32 | 3/4 | 9/32 | 1-3/4 | 1/2 | 3-5/8 | 54219 |

NOTE: Tool \#54250 does not have a bearing.
Replacement bearing for all others use \#47706.
© Warning: Maximum RPM $\boldsymbol{\Delta}_{12}=12,000 ; \boldsymbol{\Delta}_{14}=14,000$


Type \#3



(No ball bearing) Duplicates \#DC-98 molding pattern

## ARCHITECTURAL MOLDING

Carbide Tipped • 2 Flute with Ball Bearing Guide

|  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | ØD | ØD1 | R | R1 | R2 | R3 | B | Ød | $\mathbf{L}$ | Tool No. |  |
| $\# 8$ | $1-3 / 8$ | - | $1 / 8$ | $3 / 32$ | $1 / 4$ | $7 / 16$ | $1-5 / 8$ | $1 / 2$ | $3-1 / 2$ | 54222 | $\Lambda_{18}$ |
| $\# 9$ | $1-3 / 8$ | $7 / 8$ | $1 / 8$ | $1 / 16$ | $1 / 4$ | $7 / 16$ | $1-5 / 8$ | $1 / 2$ | $3-1 / 2$ | 54224 | $\mathbf{\Lambda}_{18}$ |

Replacement bearing \#47706.
© Warning: Maximum RPM=18,000


## ARCHITECTURAL MOLDING

Carbide Tipped • 2 Flute with Ball Bearing Guide


| Type | $\emptyset \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\# 12$ | $1-3 / 16$ | $1 / 2$ | $1 / 4$ | $1-3 / 8$ | $1 / 2$ | $3-1 / 4$ | 54234 |

Replacement bearing for \#54234 use \#47716.



SPECIAL INTEREST MOLDING
Carbide Tipped • 2 Flute with Ball Bearing Guide Designed for routing architectural and furniture moldings and trim, these bits should be used in a $2+$ horsepower, table-mounted router, and many should be run at reduced speed. Although most have ball-bearing guides, guiding the cuts with a fence is recommended.


Repl.

| ØD | $\mathbf{R}$ | R1 | R2 | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-9 / 16$ | $5 / 32$ | $1 / 2$ | - | $1-1 / 8$ | $1 / 2$ | 3 | 47712 | $54232 \boldsymbol{\Lambda}_{18}$ |
| $1-5 / 8$ | $1 / 8$ | $3 / 8$ | $1 / 4$ | $1-1 / 8$ | $1 / 2$ | 3 | 47706 | $54260 \boldsymbol{\Lambda}_{18}$ |
| 2 | $5 / 16$ | $1 / 4$ | - | 1 | $1 / 2$ | $2-7 / 8$ | 47706 | $54266 \boldsymbol{\Lambda}_{18}$ |

A Warning: Maximum RPM $=18,000$


SPECIAL INTEREST MOLDING
Carbide Tipped • 2 Flute with Ball Bearing Guide


## MULTI-FORM

Carbide Tipped • 2 Flute with Ball Bearing Guide
This one bit is designed to cut more than 40 different molding patterns. By making simple adjustments to the cutter height and fence position, and making two or more passes, you can produce a wide variety of profiles and architectural details. Use the bit only in a table-mounted router. Available with $1 / 2^{\prime \prime}$ shank only. Tool \#54198 is a miniature version of the multi-form bit.

© Warning: Maximum RPM $\boldsymbol{\Delta}^{12}=12,000$
Create over 40 different molding profiles with this one bit!


## CASING \& BRICK MOLDING

Carbide Tipped • 2 Flute
Make your own door and window casing in cherry, oak or any wood specie that you prefer. This bit makes beautiful classic colonial window and door trim. You can even make curved window casing - perfect for trimming that Palladian window.


| ØD | ØD1 | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | $\boldsymbol{\emptyset d}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3-1 / 2$ | - | $5 / 32$ | $15 / 64$ | $1 / 2$ | $1 / 2$ | $2-27 / 64$ | $54254^{*}$ |
| $1-5 / 8$ | $15 / 16$ | $1 / 8$ | $1 / 32$ | $2-1 / 2$ | $1 / 2$ | 4 | 54256 |
| $1-1 / 2$ | $19 / 32$ | $3 / 16$ | $1 / 32$ | $1-27 / 32$ | $1 / 2$ | $3-11 / 32$ | 54258 |

* Replacement bearing \#47706. Not for use in CNC.




## HAND/TABLE EDGE

Carbide Tipped • 2 Flute with Ball Bearing Guide
These special router bits are used for cutting table top edges or used with handrail side profile bits. Originally designed for easing and profiling the edges of tabletops, these bits also are widely used for the same purpose on handrails. See page 150 for handrail patterns. Eliminate hard edges, reduce the visual thickness of a tabletop, and add an elegant detail simultaneously with these bits.


| $\emptyset \mathrm{D}$ | R | R1 | B | B1 | B2 | 0 d | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-3/16 | 15/32 | - | 3/8 | - | - | 1/4 | 1-3/4 | 49540 |
| 1-3/16 | 15/32 | - | 3/8 | - | - | 1/2 | 2-1/4 | 49542 |
| 2-3/4 | 1-3/4 | - | 5/8 | - | - | 1/2 | 2-7/8 | $49550{ }^{\text {A }} 16$ |
| 2-1/2 | 3/8 | - | 3/4 | - | - | 1/2 | 2-3/4 | $49554{ }_{16}$ |
| 2-1/2 | 13/32 | 13/64 | 25/32 | 43/64 | 7/64 | 1/2 | 2-3/4 | 49556 A 16 |
| 2-5/16 | 19/64 | 1/4 | 7/8 | - | - | 1/2 | 2-3/4 | 49558 A ${ }_{16}$ |
| 2-9/16 | 11/64 | 1-3/32 | 3/4 | - | - | 1/2 | 2-3/4 | $49560{ }_{16}$ |

A Standard $1 / 2^{\prime \prime}$ bearing \#47706 (included).
B Optional 3/8" bearing \#47702 (order separately).
A Warning: Maximum RPM $\mathbf{A}_{16=16,000}$

## 49556 Ogee-And-Bead



49540/49542 Elliptical Edge
Cuts a narrow profile with an arc based on the ellipse rather than the circle. With the optional $3 / 8^{\prime \prime}$ bearing, it will produce a fillet at the cut's edge.


49550 Table Edge
〒 Cuts a wide profile with an arc based on the ellipse rather than the circle. With the optional $3 / 8^{\prime \prime}$ bearing, it will produce a fillet at the cut's edge. Good choice for handrails.


〒 49558 Double-Cove And Bead
Cuts the thumbnail arc coupled with a bead around the tabletop surface. With the optional $3 / 8^{\prime \prime}$ bearing, it will produce a fillet at the cut's edge.



Cuts a shallow ogee into the tabletop
$\bar{\pi}$ surface coupled with a bead at the edge. Bit will produce a fillet if set to cut deep enough. With the optional $3 / 8^{\prime \prime}$ bearing, it will produce a fillet at the cut's edge. Good choice for handrails.


49554 Ogee
Cuts a shallow, elongated ogee. With the optional $3 / 8^{\prime \prime}$ bearing, it will produce a fillet at the cut's edge. Good choice for handrails.


49560 Thumbnail And Bead
Cuts the thumbnail arc coupled with a bead around the tabletop surface. With the optional $3 / 8$ " bearing, it will produce a fillet at the cut's edge.


## TABLE EDGES

Carbide Tipped • 2 Flute with Ball Bearing Guide
Profiles are designed for 3/4" thick tops.
This selection of table edge profiles offers a wide variety of designs from which to choose. All will shape away the hard edge, add detail, and reduce the visual thickness of the top.


| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | $\boldsymbol{\emptyset d}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-21 / 64$ | $1 / 2$ | $1 / 4$ | $55 / 64$ | $1 / 2$ | $2-3 / 4$ | 49555 |
| $2-7 / 64$ | $1 / 4$ | $7 / 16$ | $27 / 32$ | $1 / 2$ | $2-3 / 4$ | 49557 |
| $1-57 / 64$ | $3 / 8$ | $5 / 16$ | $7 / 8$ | $1 / 2$ | $2-3 / 4$ | 49559 |
| 2 | $3 / 8$ | $1 / 4$ | $55 / 64$ | $1 / 2$ | $2-3 / 4$ | 49561 |
| $2-3 / 8$ | $1 / 16$ | - | $27 / 32$ | $1 / 2$ | $2-25 / 32$ | 49563 |

Replacement bearing \#47718.


49555 - Reverse Curve
The broad curves of this ogee create a wide, elegant table edge. Notice that the curve continues under the top slightly to make a large tabletop appear thin.



49557 - Cove \& Thumbnail
Cuts a small cove combined with a larger thumbnail. Works well when combined with a molding under the top.



49559- Ogee
This bit cuts the classic reverse curve so popular on period furniture designs.


Similar to the ogee edge, this profile joins the classic ogee curve with a small "fillet" or step to add a bit more refinement.


Cuts a classic thumbnail profile. It's just right for the edges of large tables and chest lids.


## HANDRAIL

Carbide Tipped • 2 Flute with Ball Bearing Guide
Shape the sides of a handrail to make it both attractive and easy to grip. Then ease the top edges with the table edge bits shown on pages 152-153. Use in a handheld or table-mounted router.


| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | $\boldsymbol{0 d}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-3 / 8$ | $1 / 8$ | $19 / 32$ | $1-1 / 2$ | $1 / 2$ | $3-3 / 8$ | 54262 |
| $1-1 / 4$ | $3 / 8$ | 1 | $1-1 / 2$ | $1 / 2$ | $3-3 / 8$ | 54268 |
| $1-1 / 4$ | $3 / 8$ | $1 / 2$ | $1-1 / 2$ | $1 / 2$ | $3-3 / 8$ | 54269 |

Replacement bearings \#54262 use \#47706.
Replacement bearings \#'s 54268 \& 54269 use \#47716.


## HANDRAIL PATTERNS

12 Different Patterns!


## MAKE CLEAN \& BEAUTIFUL DOVETAIL JOINTS!

The dovetail joint is the strongest construction method for drawers, boxes, chests and fine casework. Amana Tool ${ }^{\circledR}$ designs the bits needed by many router dovetail jigs that require cutting half-blind and through dovetails. We carry the bits for name brand dovetail jigs, including Leigh, ${ }^{\ominus}$ Keller, ${ }^{\text {TM }}$ Omnijig ${ }^{\circledR}$ and Incra. ${ }^{\circledR}$


Sliding Dovetail


Variable Spaced Dovetail


Half-Blind Dovetail


Through Dovetail

## DOVETAIL

Carbide Tipped • $7^{\circ}$ Angle
For the Keller"' Dovetail Templates and certain Incra ${ }^{\oplus}$ applications, $7^{\circ}$ dovetail bits are required. (Bits for the Keller"' system are supplied with shank-mounted bearings.) This angle is also used in cutting stair stringers.


| $\emptyset \mathrm{D}$ | B | Ød | L | Application | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9/32 | 1/2 | 1/4 | 2-13/32 | Porter-Cable ${ }^{\oplus}$ Jig 4212 | 45837 * |
| 11/32 | 3/8 | 1/4 | 2-1/8 | Keller ${ }^{\text {TM }}$ | 45809 † |
| 1/2 | 25/32 | 1/2 | 3-1/8 | Omnijig ${ }^{\circledR}$ Joinery System | 45831 |
| 17/32 | 25/32 | 1/2 | 2-3/16 | Porter-Cable ${ }^{\oplus}$ Jig 4210 \& 4212 | 45838 |
| 5/8 | 7/8 | 1/2 | 2-5/8 | Incra ${ }^{\text {® }}$ | 45808 |
| 3/4 | 7/8 | 1/2 | 2-5/8 | Incra ${ }^{\text {® }}$ | 45810 |
| 7/8 | 7/8 | 1/2 | 2-1/2 | Stair Tread | 45812 |

$\dagger$ For Keller ${ }^{\text {rw }}$ Dovetail jigs. Includes 5/8" dia. bearing. Replacement bearing \#47712, snap ring \#47752.

* $6.24^{\circ}$ Angle


Carbide Tipped • $7-1 / 2^{\circ}$ Angle


The $7-1 / 2^{\circ}$ dovetail bit is used with both $0 m n i j i g^{\circledR}$ \& the Incra ${ }^{\circledR}$ dovetail system.

| ØD | B | Ød | L | Application | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 4$ | $5 / 16$ | $1 / 4$ | $2-1 / 2$ | Incra $^{\otimes} /$ Omnijig $^{\circledR} \# 43639$ | 45820 |




Carbide Tipped • $10^{\circ}$ Angle
The $10^{\circ}$ dovetail bit is used with the Incra ${ }^{\oplus}$ and Leigh ${ }^{\oplus}$ dovetail systems.

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Application | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $5 / 8$ | $1 / 2$ | $2-5 / 8$ | Incra ${ }^{\circledR}$ | 45805 |



## DOVETAIL

Carbide Tipped • $14^{\circ}$ Angle
The $14^{\circ}$ dovetail bit is used with common half-blind dovetail jigs, as well as with 0 mnijig , Incra ${ }^{\oplus}$ and Leigh ${ }^{\circledR}$ jigs.


| øD | B | 0 d | L | Application | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1/2 | 1/2 | 1/4 | 1-3/4 | - | 45804 |
| 1/2 | 1/2 | 1/4 | 2 | Incra ${ }^{\text {/ } / 0 m n i j i g ~}{ }^{\text {® }} 43705$ | 45832 |
| 1/2 | 1/2 | 1/4 | 2-3/8 | Leign \#120 | 45833 |
| 1/2 | . 532 | 1/2 | 2-1/2 | Incra ${ }^{\text {/ }}$ (Omnijig ${ }^{\text {® }} 43750$ | 45806 |
| 3/4 | 3/4 | 1/2 | 3 | Omnijig® 43774 | 45816 |
| 7/8 | 7/8 | 1/2 | 2-5/8 | - | 45818 |
| 1 | 1 | 1/2 | 2-3/4 | - | 45814 |

Carbide Tipped $\cdot 18^{\circ}$ Angle
The $18^{\circ}$ dovetail bit is used with the Leigh ${ }^{\ominus}$ jig.

| ØD | B | Ød | L | Application | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | .415 | $1 / 4$ | $2-1 / 4$ | Leigh $^{\circledR} \# 128$ | 45835 |

## $14^{\circ}$ BUTTERFLY SPLINE

## Carbide Tipped • 2 Flute

Cut butterfly keys, splines and inlays with this bit, which complements the Amana Tool $^{\circledR} 14^{\circ}$ dovetail bits.


| ØD | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $1-3 / 4$ | $1 / 2$ | $3-1 / 4$ | 45860 |

Use with Amana Tool ${ }^{\circ} 14^{\circ}$ dovetail bits \#'s 45804, 45806, 45814, 45816 or 45818.


## $14^{\circ}$ DOVETAIL

## Carbide Tipped • 2 Flute with Upper Ball Bearings

This dovetail bit has a shank-mounted ball bearing guide for routing dovetail slots following a template and pattern routing. The template must be mounted between the work-piece and the router. With a handheld router, the template must be on top of the work-piece. With a table-mounted router, the template must be underneath the workpiece.

| , |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\emptyset \mathrm{D}$ | B | 0 d | L | Type | Tool No. |
| 1/2 | 1/2 | 1/4 | 2-1/4 | Dovetail | 45850 * |
| 3/4 | 3/4 | 1/2 | 3 | Dovetail | 45852 †* |

$\dagger$ For pattern cutting or jigs.
Replacement parts:

* Bearing \#47701; Collar \#47724.
** Bearing \#47721; Collar \#47739.




## $7^{\circ}$ STAIRTREAD

## Carbide Tipped • 2 Flute

Cut stair stringers for the treads using this bit.
Available in right hand and left hand rotation versions.


| ØD | Rotation | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | Right Hand | $7 / 8$ | $1 / 2$ | $2-5 / 8$ | 45810 |
| $7 / 8$ | Right Hand | $7 / 8$ | $1 / 2$ | $2-1 / 2$ | 45812 |
| $7 / 8$ | Left Hand | $7 / 8$ | $1 / 2$ | $2-1 / 2$ | $45812-$ LH |
| 1 | Right Hand | $7 / 8$ | $1 / 2$ | $2-1 / 2$ | 45813 |
| 1 | Left Hand | $7 / 8$ | $1 / 2$ | $2-1 / 2$ | $45813-$ LH |



## DOVETAIL FOR BROOKMAN MACHINES

Carbide Tipped • 2 Flute
The following bit is specifically designed for use in Brookman machines:


| ØD | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $9 / 16$ | $10^{\circ}$ | $1 / 2$ | $3 / 8$ BSF $^{\star}$ | $1-1 / 2$ | 45839 |

* BSF $=$ British Standard Fine



## LEIGH ${ }^{\oplus}$ JIG STRAIGHT BITS

Carbide Tipped • 2 Flute
Leigh ${ }^{\circledR}$ dovetail jigs use $8^{\circ}$ dovetail bits for through dovetail tails. These are three straight bits used in the jig to cut depths relative to the pin board or draw front for that look of a hand-cut sophistication.


| ØD | B | Ød | L | Application | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $5 / 16$ | 1.03 | $1 / 4$ | $2-13 / 16$ | Leigh $^{\circledR} \# 140$ | 45270 |
| $7 / 16$ | $1-1 / 4$ | $1 / 2$ | 3 | Leigh $^{\circledR} \# 150$ | 45416 |
| $1 / 2$ | $1-1 / 4$ | $1 / 2$ | $3-9 / 64$ | Leigh $^{\circledR} \# 160$ | 45494 |



## KELLER ${ }^{T M}$ DOVETAIL SYSTEM

Carbide Tipped • 2 Flute
The popular Keller"' Templates require the use of straight and dovetail bits with shank-mounted pilot bearings.
The following bits are specifically designed for use in the Keller" ${ }^{\text {T" }}$ system:

## Straight Cutter with Upper Ball Bearing



| ØD | B | 0 d | L | Keller'" ${ }^{\text {² }}$ o. | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| . 615 | 1/2 | 1/4 | 2-1/4 | 1641 | 45469 A $_{18}$ |
| . 615 | 3/4 | 1/4 | 2-5/8 | 1643/2443 | 45470 A $_{16}$ |
| . 615 | 1/2 | 1/4 | 2-1/4 | 1641 | 45476 |
| . 615 | 3/4 | 1/4 | 2-1/2 | 1643/2443 | 45478 |
| 9/16 | 3/4 | 1/4 | 2-1/4 | 3032 | 45479 |

$7^{\circ}$ Dovetail Bit System with Upper Ball Bearing

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Keller'" No. | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 32$ | $3 / 8$ | $1 / 4$ | $2-1 / 4$ | $1631 / 15331$ | 45880 |
| $7 / 16$ | $3 / 4$ | $1 / 4$ | $2-5 / 8$ | $1633 / 1533$ | 45882 |
| $5 / 8$ | 1 | $3 / 8$ | $2-5 / 8$ | 2435 | 45884 |

$7^{\circ}$ Keller ${ }^{r m}$ Set 1601 Pro Series \& 1500 Journeyman
Standard Bit Set with Upper Ball Bearing

| $\emptyset \mathbf{D}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Bearing | Type | Keller $^{\mathrm{Tm}}$ No. Tool No. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $7 / 16$ | $3 / 4$ | $1 / 4$ | $2-5 / 8$ | 47712 | Dovetail | 1633 | 45882 |
| $5 / 8$ | $3 / 4$ | $1 / 4$ | $2-5 / 8$ | 47712 | Straight | $1643 / 1543$ | 45470 | $\mathbf{\Lambda}_{16}$

$7^{\circ}$ Dovetail - Small Bit Set with Upper Ball Bearing

| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Bearing | Type | Keller $^{\text {rw }}$ No. Tool No. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $11 / 32$ | $3 / 8$ | $1 / 4$ | $2-1 / 4$ | 47712 | Dovetail | 1631 | 45880 |
| .615 | $1 / 2$ | $1 / 4$ | $2-1 / 4$ | 47712 | Straight | $1641 / 1541$ | 45469 |



Template

$7^{\circ}$ Dovetail - Model 2401 Pro Series \& 2200 Journeyman with Upper Ball Bearing

| ØD | $\mathbf{B}$ | Ød | L | Bearing | Type | Keller $^{\text {rw }}$ No. Tool No. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $5 / 8$ | 1 | $3 / 8$ | $2-5 / 8$ | 47741 | Dovetail | 2435 | 45884 |

$14^{\circ}$ Dovetail - Model 3600 - Standard Bit Set with Upper
Ball Bearing

| ØD | B | Ød | L | Bearing | Type | Keller"' $^{\text {mo }}$ No. | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | $1 / 2$ | $2-3 / 4$ | 47738 | Dovetail | 3637 | 45890 |
| $5 / 8$ | $3 / 4$ | $1 / 4$ | $2-5 / 8$ | 47712 | Straight | $1643 / 2443 / 3643$ | $45470 \mathbf{A}_{16}$ |

Replacement bearing for \#'s 45469, 45470, 45474, 45880 and 45882 is \#47712.
Replacement bearing for \#45884 is \#47741.
© Warning: Maximum RPM $\boldsymbol{\Lambda}_{16}=16,000 ; \boldsymbol{\Lambda}_{18}=18,000$



## RABBET

Carbide Tipped • 2 Flute with Ball Bearing Guide
This is the basic rabbeting bit. It cuts $3 / 8^{\prime \prime}$ wide and up to $1 / 2^{\prime \prime}$ deep. Switch to one of four optional ball-bearing guides to alter the width of cut. Use in a handheld or table-mounted router.


| OD | A | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $5 / 16$ | $1 / 16$ | $1 / 2$ | $1 / 4$ | 2 | MR0101 * |
| $7 / 16$ | $1 / 8$ | $1 / 2$ | $1 / 4$ | $1-7 / 8$ | MR0100 |
| $1-1 / 4$ | $3 / 8$ | $1 / 2$ | $1 / 4$ | 2 | 49300 |
| $1-1 / 8$ | $3 / 8$ | $1 / 2$ | $1 / 4$ | $1-7 / 8$ | RC-49300 |
| $1-1 / 4$ | $3 / 8$ | $1 / 2$ | $1 / 2$ | $2-3 / 8$ | 49302 |

[8] Replacement knife \#RCK-264 (2).
Replacement bearing for \#RC-49300 use \#47702.

* Miniature with $3 / 16$ " ball bearing guide \#47775.

|  | A |  |
| :---: | :---: | :---: |
| Replacement Bearings: |  |  |
| Standard | $3 / 8$ | Rabbet -47706 |
| OR | $7 / 16$ | Rabbet -47702 |
| OR | $5 / 16$ | Rabbet -47718 |
| OR | $1 / 4$ | Rabbet -47720 |



RC-49300


|  | A |
| ---: | :---: | | Replacement Bearings: |
| ---: |
| $1 / 2$ | Rabbet $\quad 47702$



Set \#6000
Set \#6000: Complete replacement kit includes 6 bearings, hex key, washer \& screw. Screw \#67094. Washer \#67202.


## CNC STRAIGHT RABBETING

Insert Carbide with Scorer 2+2 Design
Insert rabbeting router bit complete with two cutting flutes and scorer. Suitable for trimming and rabbeting in softwood, hardwood and man-made boards. Scorer will give an improved finish at the bottom of the cut. For use on routers and machining centers with CNC control.


CNC feed and speed available online


## SPECIAL RABBET

Carbide Tipped • 2 Flute with Ball Bearing Guide
Designed for the "smart clip" backsplash system.
Depth of rabbet 9/32"


| ØD | A | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 16$ | $9 / 32$ | $7 / 8$ | $1 / 2$ | $2-5 / 8$ | 49310 |

Replacement bearing \#47706.


## SUPERABBET ${ }^{\text {™ }}$

Carbide Tipped • 2 Flute with Ball Bearing Guide
This ingenious tool features both interchangeable cutting edges and an interchangeable guide collar, enabling you to cut a wide range of rabbets. Changing the collars on the twin ball-bearing guide steps the cut width in $1 / 16^{\prime \prime}$ increments from flush through 3/4" with five extra "plywood" sizes.
Between the standard and optional collars, there are 18 different rabbet sizes available. The deep guide collar design adds stability to the tool for hand-held router operations. The basic 2 "-diameter bit includes a hex key, instructions, and all necessary parts for $5 / 8^{\prime \prime}$ and $3 / 4^{\prime \prime}$ width rabbets.


A Warning: Maximum RPM $=22,000$
Replacement screw for bearing \#67094. Replacement washer for bearing \#67202.
Replacement spacer bearing \#67206.

- Use in a table-mounted router. Not for use in a handheld router!




## INSERT SUPERABBET, JR ${ }^{\text {Tm }}$

Insert Carbide • 2 Flute with Ball Bearing Guide
A scaled-down version of the Superabbet,"' this tool features four-sided replaceable carbide knives and a reduced cut depth capacity. It uses the same twin ball-bearing guide collar assortment to produce the same extensive range of precise rabbet widths. The standard tool is supplied with a collar for $1 / 2^{\prime \prime}$ rabbet width. Optional collars are available individually and in five-piece and 17-piece kits.


| $\boldsymbol{0} \mathbf{D}$ | C | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :--- |
| $1-1 / 8$ | Flush to $5 / 16$ " $\dagger$ | $12 \mathrm{~mm}(.472)$ | $1 / 4$ | $2-1 / 4$ | RC-49357 New |
| $1-1 / 2$ | Flush to $1 / 2 " \dagger$ | $12 \mathrm{~mm}(.472)$ | $1 / 2$ | $2-19 / 32$ | RC-49355 |

## A Warning: Maximum RPM=22,000

$\dagger$ Using optional collars on next page. Standard depth=1/2"
Torx ${ }^{\circledR}$ key \#5005. Torx ${ }^{\circledR}$ screw \#67115.

* Standard general purpose replacement knives = \#AMA-12; Knives also available for MDF \& solid surface materials - see replacement carbide section on pages 240-245.


13 Different Depths With 1 Tool! See Optional Collars on Next Page.

ACCESSORIES FOR INSERT SUPERABBET ${ }^{\text {TM }}$ \& INSERT SUPERABBET, JR ${ }^{T M}$

Individual Collars

| Collar <br> Diameter | 49360/RC-49360 | Rabbet Depth (A) <br> RC-49355 | RC-49357 | Order No. |
| :---: | :---: | :---: | :---: | :---: |
| 2 | Flush | - | - | 67398 |
| $1-7 / 8$ | $1 / 16$ | - | - | 67400 |
| $1-3 / 4$ | $1 / 8$ | - | - | 67402 |
| $1-5 / 8$ | $3 / 16$ | - | - | 67404 |
| $1-17 / 32$ | $15 / 64(6 \mathrm{~mm})$ | - | - | 67406 |
| $1-1 / 2$ | $1 / 4$ | Flush | - | 67408 |
| $1-3 / 8$ | $5 / 16$ | $1 / 16$ | - | 67410 |
| $1-9 / 32$ | $23 / 64(9 \mathrm{~mm})$ | $7 / 64$ | - | 67412 |
| $1-1 / 4$ | $3 / 8$ | $1 / 8$ | - | 67414 |
| $1-1 / 8$ | $7 / 16$ | $3 / 16$ | Flush | 67416 |
| $1-1 / 16$ | $15 / 32(12 \mathrm{~mm})$ | $7 / 32$ | $1 / 32$ | 67418 |
| 1 | $1 / 2$ | $1 / 4$ | $1 / 16$ | 67420 |
| $7 / 8$ | $9 / 16$ | $5 / 16$ | $1 / 8$ | 67422 |
| $13 / 16$ | $19 / 32(15 \mathrm{~mm})$ | $11 / 32$ | $7 / 32$ | 67424 |
| $3 / 4$ | $5 / 8$ | $3 / 8$ | $3 / 16$ | 67426 |
| $3 / 4$ | $5 / 8$ | $3 / 8$ | $3 / 16$ | 67427 |
| $5 / 8$ | $11 / 16$ | $7 / 16$ | $1 / 4$ | 67428 |
| $9 / 16$ | $23 / 32(18 \mathrm{~mm})$ | $15 / 32$ | $9 / 32$ | 67430 |

Collar Kits:
Insert Superabbet ${ }^{\text {Tw }}$
\#67500: 6-piece collar kit includes: \#67398, \#67400, \#67402, \#67408, \#67414, \#67420.
\#67600: 5-piece collar kit includes: \#67404, \#67410, \#67416, \#67422, \#67428.
\#67800: 21-piece collar kit includes: two \#47701 bearings, \#67206 spacer, \#5000 allen key, \#67094 allen screw and 16 individual collars: \#67398, \#67400, \#67402, \#67404 \#67406, \#67408, \#67410, \#67412, \#67414, \#67416, \#67418, \#67420, \#67422, \#67424, \#67428, \#67430.

NOTE: $5 / 8^{\prime \prime}$ and $3 / 4^{\prime \prime}$ depth is standard with \#49360 \& \#RC-49360.

## Insert Superabbet, Jr"

\#67350: 5-piece collar kit includes: \#67408, \#67410, \#67414, \#67420, \#67426.
\#67355: 17-piece collar kit includes: two \#47701 bearings, \#67206 spacer, \#5000 allen key, \#67094 allen screw and 12 individual collars: \#67408, \#67410, \#67412, \#67414, \#67416, \#67418, \#67420, \#67422, \#67424, \#67426, \#67428, \#67430.


Collars and Kits

flush rabbet


1/8" rabbet


15/64"(6mm) rabbet

11/32" rabbet
23/64"(9mm) rabbet


7/64" rabbet


7/32" rabbet


5/16" rabbet


3/8" rabbet


7/16" rabbet


15/32"(12mm)


1/2" rabbet


9/16" rabbet


19/32"(15mm) rabbet


SLOT CUTTER SHIM-FREE \& ADJUSTABLE


## E-Z DIAL ${ }^{\text {™ }}$ SLOT CUTTERS

Carbide Tipped
Finally, a slot cutter without shims, spacers and the need to disassemble the bit. Just turn the dial and lock the setting, it's that easy. The E-Z Dial ${ }^{\text {Tm }}$ adjusts in just seconds and is accurate to .004." Cutting precise grooves has never been easier.

- Quick \& Easy Setup - Nothing to take apart, just dial it, lock it, cut it.
- Simply adjust the dial in 0.004" increments.
- Easily makes perfect grooves for today's undersized plywood.
- Perfect for edge ("T") molding installation.

Available in two sizes:

- \#55500 for $1 / 8^{\prime \prime}$ to $1 / 4^{\prime \prime}$ wide slots, $1 / 2^{\prime \prime}$ deep
- \#55510 for 1/4" to $1 / 2^{\prime \prime}$ wide slots, $1 / 2^{"}$ deep


| ØD | B | C | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2-1 / 8$ | $1 / 8$ to $1 / 4$ | $1 / 2$ | $1 / 2$ | $3-3 / 4$ | 55500 |
| $2-1 / 8$ | $1 / 4$ to $1 / 2$ | $1 / 2$ | $1 / 2$ | $3-3 / 4$ | 55510 |

Replacement parts: Bearing \#47738; Screw \#67110.

Each E-Z Dial"' Slot Cutter includes
Full Color Instruction Manual


## SLOTTING CUTTER ASSEMBLIES

Carbide Tipped
Groove edges for T-moldings, splines or biscuits, and other purposes. Rout tongue-and-groove joinery. Slotting cutters are available with either 2 -wing or 3 -wing cutters. Each assembly includes a cutter, bearing for a $1 / 2^{\prime \prime}$ deep cut, and either a $1 / 4$ "-, $3 / 8$ "-, or $1 / 2^{\text {" }}$-shank arbor. Use in a handheld or table-mounted router.

| General Specs: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1-7/8 | Kerf (from 1/6 to 1/4) | **1/2 | $1 / 4$ or 1/2 | 2-3/8 |
| B | 1/4" Shank <br> 2-Wing <br> Tool No. | 1/4" Shank <br> 3-Wing <br> Tool No. | $\begin{gathered} \text { 1/2" Shank } \\ \text { 2-Wing } \\ \text { Tool No. } \end{gathered}$ | 1/2" Shank 3-Wing Tool No. |
| 1/16 | 53300 | 53400 | 53300-1 | 53400-1 |
| 5/64 | 53302 | 53402 | 53302-1 | 53402-1 |
| 3/32 | 53304 | 53404 | 53304-1 | 53404-1 |
| 1/8 | 53306 | 53406 | 53306-1 | 53406-1 |
| 5/32* | 53307 | 53407 | 53307-1 | 53407-1 |
| 3/16 | 53308 | 53408 | 53308-1 | 53408-1 |
| 7/32 | 53309 | 53409 | 53309-1 | 53409-1 |
| 1/4 | 53310 | 53410 | 53310-1 | 53410-1 |

Note: All above assemblies include cutter, arbor and ball bearing.
Also available with $3 / 8$ " shank by adding '-2' to part \#. (example: \#53400-2).

* $5 / 32$ " size also used for 'biscuit-joint' cutting.
** See page 166 for "Vari-Depth'" bearings ( $1 / 4^{\prime \prime}$ and $3 / 8^{\prime \prime}$ depth).

| Replacement Arbor | Tool No. |
| :---: | :---: |
| $1 / 4^{\prime \prime}$ Shank | 47600 |
| $3 / 8^{\prime \prime}$ Shank | 47602 |
| $1 / 2^{\prime \prime}$ Shank | 47604 |



## 2 \& 3 WING SLOTTING CUTTERS

## Carbide Tipped

Two- and three-wing slotting cutters are available individually. Use a two-wing cutter for faster feed rates, three-wing cutters for better cut finish.


| ØD | B <br> Kerf | Ød1 <br> Bore | 2 Wing <br> Tool No. | $\mathbf{3}$ Wing <br> Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $1-7 / 8$ | $1 / 16$ | $5 / 16$ | 53100 | 53200 |
| $1-7 / 8$ | $5 / 64$ | $5 / 16$ | 53102 | 53202 |
| $1-7 / 8$ | $3 / 32$ | $5 / 16$ | 53104 | 53204 |
| $1-7 / 8$ | $1 / 8$ | $5 / 16$ | 53106 | 53206 |
| $1-7 / 8$ | $5 / 32$ | $5 / 16$ | 53107 | 53207 * |
| $1-7 / 8$ | $3 / 16$ | $5 / 16$ | 53108 | 53208 |
| $1-7 / 8$ | $7 / 32$ | $5 / 16$ | 53109 | 53209 |
| $1-7 / 8$ | $1 / 4$ | $5 / 16$ | 53110 | 53210 |

[^10]

Replacement Bearing 47708


## QUADRASET ${ }^{T M}$ ADJUSTABLE SLOTTING ASSEMBLY


Carbide Tipped • 2-Wing with Ball Bearing Guide
The Quadraset ${ }^{\text {Tw }}$ is an adjustable slotting assembly that includes $1 / 8$, ," $5 / 32$," $3 / 16$," and $1 / 4^{" ~ t w o-w i n g ~ c u t t e r s, ~ a ~ 1 / 2 " ~ s h a n k ~ a r b o r ~ w i t h ~ a ~ p i l o t ~ b e a r i n g, ~ a n d ~ a ~ h a n d f u l ~ o f ~}$ spacers, washers and shims.
Conceptually it is like a table-saw dado stack set. You can use the cutters individually on the arbor, or you can combine two, three or all of the cutters on the arbor. Thus you can cut slots that range in widths from $1 / 8^{\prime \prime}$ up to $23 / 32$ " in $1 / 32$ " increments.
For different depth of cut, see the Vari-Depth ${ }^{\text {TM }}$ bearings on bottom of this page.


| ØD | A | B-Kerf | Ød1 | Ød | L | Tool No. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-7 / 8$ | $1 / 2$ | $1 / 8$ to $23 / 32^{*}$ | $5 / 16$ | $1 / 2$ | 3 | 53600 |
| Extra $5 / 32$ two-wing cutter only. |  |  |  | 53107 |  |  |

Replacement parts: Bearing \#47708; Arbor \#47612.

* A full $3 / 4^{"}$ cut can be achieved using one additional \#53107 cutter (available separately).
$\checkmark$ Use in a table-mounted router. Not for use in a handheld router!


Create grooves 1/8" to 23/32" by using up to four cutters (included).


## Construct a Wainscot Door with Amana's Industrial Tooling

Wainscot doors can be a beautiful addition to an informal, country style kitchen; their beaded panels are reminiscent of times long past. Constructing wainscot doors is easy with Amana Tool ${ }^{\circledR}$ router bits. You'll need just two bits: the Quadraset ${ }^{\text {m" }}$ \#53600 and the corner bead bit \#54163. For information on how to Construct a Wainscot door, please see page 204.

## SLOT CUTTER 'VARI-DEPTH’™ BEARINGS <br> Carbide Tipped

All standard Amana Tool ${ }^{\oplus}$ slotting assemblies (including the Quadraset,', Duo-Set,'" and box joint) make a $1 / 2^{\prime \prime}$ deep cut. Reduce the cut depth to either $1 / 4^{\text {" }}$ or $3 / 8^{\text {" with }}$ Vari-Depth ${ }^{\text {"' }}$ precision ball bearings fitted with non-marring Delrin ${ }^{\oplus}$ sleeves.

| 'C' Depth of Cut | I.D. | O.D. | Tool No. |
| :---: | :---: | :---: | :---: |
| $1 / 4$ | $5 / 16$ | $1-3 / 8$ | 47727 |
| $3 / 8$ | $5 / 16$ | $1-1 / 8$ | 47728 |
| Two piece set (\#47727 \& \#47728) |  | 47729 |  |

## ‘BOX JOINT’ SET

Carbide Tipped • 3-Wing with Ball Bearing Guide
Cut strong, attractive box joints for small boxes, shallow drawers and trays. By taking three passes, it can be used with stock up to $1 / 2^{\prime \prime}$ thick and 4 " wide. The bit has five uniformly spaced 3 -wing slotting cutters and a ball-bearing guide on a $1 / 2^{\prime \prime}$ shank arbor. Use in a table-mounted router for best results.


© Warning: Maximum RPM $\boldsymbol{\wedge}_{13}=13,000$

## Replacement Parts:

| Description | Order \# |
| :---: | :---: |
| $5 / 32^{\prime \prime} 3$-Wing Cutters (5 required) | 53207 |
| $1 / 2^{\text {" }}$ Shank Arbor with Nut | 47620 |
| Steel Ball Bearing Guide (1/2" depth of cut) | 47708 |
| 5.5 mm Spacers ( 4 required) | 55369 |
| 1 mm Spacers $(2$ required) | 55402 |
| 0.5 mm Shim (1 required) | 55404 |



## FINGER JOINT ASSEMBLY

Carbide Tipped • 2-Wing with Ball Bearing Guide
For joining wood end-to-end as well as edge-to-edge. Rout one work-piece face up, the other face down. When the bit height is correct, the two pieces should slide together with their faces perfectly flush. The assembly includes five 2-wing finger cutters, one 2-wing straight cutter, a ball bearing guide, a 1/2" shank arbor, shims, spacers, and washers. The number of finger cutters used varies with the stock thickness; it can handle stock between $7 / 16^{\prime \prime}$ and $1-3 / 8^{\prime \prime}$ thick. For best results run at full speed in a 1-1/2 horsepower table-mounted router. Includes full-color instructions.


Replacement Parts:

| Description | Order \# |  |
| :---: | :---: | :---: |
| Finger Cutter (5 required) | 55394 |  |
| Straight Cutter (1 required) | 55396 |  |
| Ball Bearing (5/16" x 28mm) | 47736 |  |
| 1/2" Shank Arbor with Nut | 47620 |  |
| 3.4mm Spacer (7 required) | 55367 |  |
| 6.0mm Spacer (1 required) | 55368 |  |
| 0.1 mm Shim (10 required) | 55357 |  |
| 0.5mm Shim (1 required) | 55404 | Counter |
| 1.0mm Washer (2 required) | 55402 | Cut |
|  |  | Cut |

## FINGER JOINT

Carbide Tipped
Cut interlocking fingers for strong end-to-end or edge-to-edge glueups with this simple bit. Setup is fast. Center the cut profile on the stock, then cut, alternating the orientation of the show face - up when cutting one work-piece, down when cutting its mate. Use in all CNC and table-mounted routers.
For best results use in a router table.


| ØD | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{a}^{\circ}$ | $\mathbf{C}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-3 / 8$ | $1-9 / 16$ | $21 / 64$ | $14^{\circ}$ | $5 / 16$ | $1 / 2$ | 3 | 45796 |




## CNC ADJUSTABLE GROOVING

Insert Carbide
Hard wearing steel body complete with tungsten carbide knives and scorer for improved finish. Suitable for producing various thickness grooves and slots in softwood, hardwood and man-made boards (with or without coating). Cutting width can be adjusted in 0.1 mm steps by using supplied spacer rings. Replaceable inserts ensure a constant cutting diameter and finish quality. For use on routers and machining centers with CNC control.


| $\boldsymbol{\emptyset}$ | B | C | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $4-3 / 4(120 \mathrm{~mm})$ | $5 / 32-5 / 8(4-15.5 \mathrm{~mm})$ | $1-5 / 16$ | $3 / 4$ | $5-1 / 2(139 \mathrm{~mm})$ | RC-2340 $\mathbf{\Lambda}_{12}$ |

© Warning: Maximum RPM $\boldsymbol{\wedge}^{12}=12,000$


## Replacement Parts

Blades \#AMA-17(2), RCK-71(4), RCK-18(2)
Wedge \#WB-12
Hex screw \#67113
Washer set \#67208
Blade nut \#67056, 67172
Arbor \#47619
Washer \#67210
Cover \#67212
Arbor screw \#67060
Hex key \#5007
Torx key \#5090

## RAISED PANEL 'V' JOINT

Carbide Tipped
The principal benefit of this glue-joint bit is that the glue seam is far less evident on the bevels of raised panels. Equally important, setup is fast. Cut one half of each joint with the bit at any height. Simply raise or lower the bit $3 / 32$ " before cutting the mates. As with all glue-joint bits, the cutter profile expands the edge-to-edge glue surface, but more importantly, produces the precise surface alignment that's essential for fast glueups. For best results use in a router table.


| ØD | $\mathbf{B}$ | $\mathbf{a}^{\circ}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-3 / 8$ | $1-37 / 64$ | $80^{\circ}$ | $1 / 2$ | $3-1 / 16$ | 45790 |



## DRAWER LOCK

Carbide Tipped • 2 Flute
With this one bit, cut a lock joint that's ideal for quick construction of strong drawer boxes. Use in a table-mounted router only. The same bit setting is used for both halves of the joint; adjust the fence position slightly to switch between sides and fronts/backs. The drawer front (or back) is laid flat on the tabletop and fed across the cutter. The side is braced vertically against the fence and fed across the cutter. You can use stock of any thickness and any composition and produce flush or lipped drawers. For best results use in a table-mounted router.


| ØD | ØD1 | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $1 / 2$ | $1 / 2$ | $5 / 32$ | $1 / 4$ | $1-5 / 16$ | 55386 |
| 1 | $23 / 32$ | $1 / 2$ | $5 / 32$ | $1 / 2$ | $1-5 / 16$ | 55387 |



Bit height is identical for both cuts. Fence position must be adjusted.


## 45º LOCK MITER

## Carbide Tipped • 2 Flute

The lock miter is an interlocking edge-to-edge joint, typically used at the corners of casework. Used in a table-mounted router, run at reduced speed, this bit cuts both halves of the joint. The same setup of bit and fence cuts both parts. One part is laid flat on the tabletop and fed across the cutter. The second is braced vertically against the fence and fed across the cutter. For best results use in a table-mounted router.

| $\emptyset \mathrm{D}$ | D1 | B | $\mathrm{a}^{\circ}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Od | 1 | Material | Tool ${ }^{\text {No. }}$ |
| 1-1/2 | 12.1 mm | 1/2 | $45^{\circ}$ | 1/4 | 1-5/8 | 5/16-7/16 | 55393 |
| 1-5/8 | 13.2 mm | 5/8 | $45^{\circ}$ | 1/4 | 1-3/4 | 3/8-1/2 | 55391 |
| 1-3/4 | 6.4 mm | 7/8 | $45^{\circ}$ | 1/2 | 2-1/8 | 3/8-3/4 | 55389 |
| 2-11/16 | 9.2 mm | 1-3/16 | $45^{\circ}$ | 1/2 | 2-5/8 | 1/2-1-1/8 | 55390 A |

© Warning: Maximum RPM $\boldsymbol{\wedge}_{18}=18,000$


Each $45^{\circ}$ Lock Miter Cutter includes
Full Color Instruction Manual


## $22.5^{\circ}$ LOCK MITER SET

## Carbide Tipped • 2 Flute

Intended primarily for corner cabinetry, this two-bit set produces a $45^{\circ}$ assembly. One bit bevels \& grooves the work-piece, the second bevels and forms a tiny tongue on the mating edge. The set can be used in assembling any octagonal structure, from boxes and planters up to posts. Works on stock thicknesses minimum 3/8" to max $3 / 4$." For best results use the bits in a table-mounted router, and adjust each to the same elevation. That is, measure from the tabletop to the bit top when you make the cuts with the first bit, then set the second bit to the same height.


## 2 PIECE EDGE BANDING SETS

Carbide Tipped • 2 Flute
This two-piece bit set provides an economical way to create your own edge banding from the wood of your choice. This is a great way to create a finished edge on plywood or MDF panels and shelves which blends perfectly with the rest of your project.
Using this bit set is simple. Just position each bit so that it is centered on the stock thickness and make the cut. For the best results we recommend that you cut the edge band stock slightly oversize and then flush trim it after assembly.
This unique set is available in two styles: $90^{\circ}$ or $60^{\circ}$.
The $90^{\circ}$ bits can also be used to create V-grooves or double-sided chamfers while the $60^{\circ}$ set creates a larger surface area for glue.
Carbide tipped for long life. For stock $3 / 4^{\prime \prime}$ to $1^{\prime \prime}$ in thickness.
For use only in a table-mounted router.


| ØD | ØD1 | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{a}^{\circ}$ | $\mathbf{a 1}^{\circ}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-25 / 32$ | $1-13 / 16$ | $1-1 / 32$ | - | $90^{\circ}$ | - | $1 / 2$ | $2-21 / 32$ | 55466 |
| $1-19 / 32$ | $1-45 / 64$ | 1 | $5 / 32$ | $30^{\circ}$ | $60^{\circ}$ | $1 / 2$ | $2-5 / 8$ | 55468 |



Replacement bearing for \#55466 use (2) \#47720.
Replacement bearing for \#55468 use (1) \#47720 and (1) \#47718.



54272


## MULTI-SIDED GLUE JOINT/BIRD'S-MOUTH

Carbide Tipped • 2 Flute
If you're looking for a better way to construct multi-sided boxes, planters, and columns, then look no further. With these bits, there's no need for complex miters and time-consuming set-ups. Instead, simply choose the bit based upon the number of sides on the box, rout the joint, and assemble. Unlike a miter joint, the joint created by these bits aligns itself. And the joint stays in alignment while gluing; no more slipping and sliding out of position.

| ØD | $\mathbf{B}$ | \# Sides | $\mathbf{a}^{\circ}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-5 / 8$ | $1-1 / 4$ | 16 | $67.5^{\circ} / 22.5^{\circ}$ | $1 / 2$ | $2-7 / 8$ | 54270 |
| $1-3 / 4$ | $1-3 / 64$ | 8 | $45^{\circ} / 45^{\circ}$ | $1 / 2$ | $2-21 / 32$ | 54272 |
| $1-7 / 8$ | $1-1 / 4$ | 6 or 12 | $60^{\circ} / 30^{\circ}$ | $1 / 2$ | $2-7 / 8$ | 54274 |



## GLUE JOINT

Carbide Tipped • 2 Flute
The glue joint cut by this bit is strong and self-aligning. One setup produces both halves of the joint. Adjust the bit so the center of its profile aligns with the stock center. Cut one part face down, the mate face up.
For stock between $5 / 8^{\prime \prime}$ and $1^{\prime \prime}$ in thickness. Must be used in a table-mounted router. Since there is no guide bearing, use the router-table fence to control the cut.


| ØD | ØD1 | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-7 / 8$ | $1-7 / 16$ | $1-3 / 32$ | $1 / 2$ | $2-5 / 8$ | 55388 |



## TONGUE \& GROOVE ASSEMBLY

Carbide Tipped • 2-Wing with Ball Bearing Guide
Cut perfectly fitted tongue-and-groove joints on stock between $3 / 8^{\prime \prime}$ and $1-1 / 8^{"}$ thick with a table-mounted router and this assembly. The tool consists of an arbor with an integral shank, two identical, removable slotting cutters, and a pair of bearings. To cut tongues, sandwich one bearing between the two cutters (as in assembly ' A ').
To cut slots, mount one cutter between the two bearings (as in assembly ' $B$ ').

## 1-Piece Assembly

| ØD | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{C}$ | Ød | $\mathbf{t}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-5 / 8$ | $3 / 4$ | $1 / 4$ | $3 / 8$ | $1 / 2$ | $1 / 4$ | 3 | $55400+$ |
| $1-5 / 8$ | $1-1 / 8$ | $3 / 8$ | $3 / 8$ | $1 / 2$ | $3 / 8$ | $3-3 / 8$ | 55401 |

+ Can be used on $1 / 2^{\prime \prime}$ through $3 / 4^{\prime \prime}$ thick material.
- Can be used on $3 / 4^{\prime \prime}$ through $1-1 / 8^{\prime \prime}$ thick material.



## TONGUE \& GROOVE 2-PC. SET

Carbide Tipped • 2-Wing with Ball Bearing Guide
Each set contains two complete tongue \& groove assemblies, one to cut tongues, one to cut slots.

| ØD | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{C}$ | Ød | $\mathbf{t}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-5 / 8$ | $17 / 32$ | $13 / 64$ | $3 / 8$ | $1 / 2$ | $1 / 8$ | 3 | $55408 *$ |
| $1-7 / 8$ | $3 / 4$ | $1 / 4$ | $1 / 2$ | $1 / 2$ | $1 / 4$ | 3 | $55407+$ |
| $1-5 / 8$ | $1-1 / 8$ | $7 / 16$ | $3 / 8$ | $1 / 2$ | $1 / 4$ | $3-5 / 16$ | $55416 \dagger$ New |
| $1-5 / 8$ | $1-1 / 4$ | $7 / 16$ | $3 / 8$ | $1 / 2$ | $3 / 8$ | $3-5 / 16$ | 55418 • New |

* Can be used on $3 / 8^{\prime \prime}$ through $1 / 2^{\text {" thick material. }}$
+ Can be used on $1 / 2^{\prime \prime}$ through $3 / 4^{\prime \prime}$ thick material.
$\dagger$ Can be used on $1 / 2^{\prime \prime}$ through $1-1 / 8^{\prime \prime}$ thick material.
- Can be used on $5 / 8^{\prime \prime}$ through 1-1/4" thick material.

Replacement Parts for Tongue \& Groove:

| Description | Order \# |
| :---: | :---: |
| 1/4" Kerf Cutters (2 required) for Tool \#55400 | 55354 |
| 3/8" Kerf Cutters (2 required) for Tool \#55401 | 55353 |
| 1/2" Shank Arbor With Nut For Tool \#55400 | 47612 |
| 1/2" Shank Arbor With Nut For Tool \#55401 | 47613 |
| Ball Bearing Guide (2 required) | 47708 |
| .05mm Shims (3 required) | 55356 |
| .10 mm Shims (3 required) | 55357 |
| 1 mm Black Washer | 55402 |
| 6 mm Steel Spacer | 55368 |



## WEDGE TONGUE \& GROOVE

## Carbide Tipped • 2 Flute

The tongue-and-groove joint cut by this two-bit set can be used for applications as diverse as assembling broad tabletops and other panels and making strip flooring. Use it on stock from 5/8" through 1-1/4" thick. The bits are available individually or as a two-piece set. Use in a table-mounted router.


| ØD | ØD1 | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Description | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 4$ | $9 / 16$ | $15^{\circ}$ | $1-1 / 4$ | $1 / 4$ | $1 / 2$ | $2-3 / 4$ | Wedge Groove | 55410 |
| $1-1 / 4$ | $9 / 16$ | $15^{\circ}$ | $1-1 / 4$ | $7 / 16$ | $1 / 2$ | $2-3 / 4$ | Wedge Tongue | 55412 |
| Complete Wedge Tongue \& Groove 2 Piece Set (Includes $55410 \& 55412)$ |  |  |  |  |  |  | 55414 |  |



## OGEE WINDOW SASH \& RAIL

Carbide Tipped • 2 Flute with Ball Bearing Guide
This reversible assembly is designed to cut window sash and glass door parts, including rails, stiles, mullions, and muntins, on stock between $1-1 / 8^{\prime \prime}$ and 1-3/4" thick. Assembly includes an ogee profile cutter, a rabbet cutter, one bearing, a 1/2" shank arbor, spacers, shims, and washers. Configure as shown in the drawing to cut profile and rabbet on all parts. Switch bearing and profile cutter and replace rabbet cutter with spacers to rout the copes. Use in a table-mounted router.


| ØD | $\mathbf{R}$ | 'A' Reveal | B | B1 | B2 | B3 | Ød | $\mathbf{L}$ | Tool No |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-3 / 8$ | $1 / 8$ | $1 / 4$ | $1-55 / 64$ | $5 / 16$ | $43 / 64$ | $7 / 8$ | $1 / 2$ | $3-3 / 4$ | 55340 |
| $1-3 / 8$ | $1 / 8$ | - | $21 / 32$ | $1 / 16$ | $27 / 64$ | - | $1 / 2$ | $2-1 / 8$ | 55341 |
| $1-9 / 64$ | $1 / 8$ | - | $43 / 64$ | $5 / 16$ | - | - | $1 / 2$ | $2-1 / 8$ | 55343 |



Each Ogee Window Sash \& Rail Cutter includes Full Color Instruction Manual


## BEAD AND 'V’ PANELING ASSEMBLY

Carbide Tipped • 2-Wing with Ball Bearing Guide
These assemblies are designed to cut tongue \& groove joinery for solid wood paneling. Two patterns, a $1 / 4$ ' bead (\#55330) or a $45^{\circ}$ ' $V$ ' (\#55320), are available individually or as a set. Each assembly comprises a profile cutter, a rabbet cutter and a groove cutter, two different-size bearings, a 1/2" shank arbor, and a selection of washers, shims and spacers. Assemble the profile cutter, small bearing, and rabbet cutter as shown in the solid drawing to cut the tongue. To rout the groove, mount the groover and large bearing with the profiler, as shown in the ghosted drawing. The tool will work with stock from 1/2" through 1" thick.


| ØD | ØD1 | $\mathbf{R}$ | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-13 / 16$ | $1-5 / 16$ | - | $45^{\circ}$ | $1 / 2$ to $1-3 / 16$ | $1 / 2$ | $3-1 / 8$ | ${ }^{\circ}$ ' | 55320 |
| $1-15 / 16$ | $1-5 / 16$ | $1 / 4$ | - | $1 / 2$ to $1-3 / 16$ | $1 / 2$ | $3-1 / 8$ | Bead | 55330 |



## ADJUSTABLE 'V' PANEL SET

Carbide Tipped • 2-Wing
This assembly is designed to create attractive ' $V$ ' groove paneling. Included in this set are spacers to produce ' $V$ ' paneling from $1 / 2$,' $3 / 4$ ' or 1 " thick stock.


| ØD | ØD1 | B | B1 | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-11 / 64$ | $1-37 / 64$ | $1-1 / 8$ | $5 / 32$ to $5 / 16$ | $1 / 2$ | $3-3 / 8$ | 55346 |




# Flooring Solutions 



## TONGUE \& GROOVE FLOORING SETS

Carbide Tipped • 2 Flute with Nail Slot
Build your own wood floor with the wood of your choice! Amana Tool ${ }^{\circledR}$ now has the solution for this task. Set \#55456 was designed for $5 / 8^{\prime \prime}$ to $3 / 4^{\prime \prime}$ stock thickness, while set \#55454 is for $1 / 2^{\prime \prime}$ to $5 / 8^{\prime \prime}$ stock thickness.

| Material Size | $\boldsymbol{\emptyset D}$ | $\boldsymbol{\emptyset D 1}$ | $\mathbf{a}^{\circ}$ | $\mathbf{a 1}^{\circ}$ | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{T}$ | $\mathbf{C}$ | $\mathbf{C 1}$ | $\mathbf{B}$ | $\mathbf{d}$ | $\mathbf{L}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ to $5 / 8$ | $1-1 / 4$ | $15 / 16$ | $45^{\circ}$ | $60^{\circ}$ | - | - | $13 / 64$ | .163 | .197 | $3 / 4$ | $1 / 2$ | $2-3 / 4$ |
| $5 / 8$ to $3 / 4$ | $1-13 / 64$ | 1 | $45^{\circ}$ | - | $1 / 8$ | $1 / 16$ | $1 / 4$ | $1 / 4$ | - | $15 / 16$ | $1 / 2$ | $2-7 / 8$ |

Replacement bearing \#47706.


Tongue \& Groove Shaper Cutters for Custom Wood Flooring
See page 334.

## - Bearing stays cool unlike brass pilots

- Rout intricate contours for delicate projects

- Perfect for crafters \& hobbyists
- Lettering/signmaking
- Fine musical instruments


## Carbide Tipped • Reach Tighter Corners Without Burn Marks!



We've created the smallest bearing guides in the industry! If you've often wanted to trim and shape small details in tight corners, but were disappointed by the scoring and burning left behind by solid pilot bits, we've got what you've been looking for: the most commonly used profiles in miniature sizes - complete with tiny miniature ball bearing guides. These bits are perfect for signs, lettering, small boxes, and musical instruments!

| $\emptyset \mathrm{D}$ | 0 D1 | R | R1 | $\mathrm{a}^{\circ}$ | B | B1 | A | Ød | L | Description | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5/16 | 3/16 | - | - | - | 1/2 | - | 1/16 | 1/4 | 2 | Rabbet | MR0101 |
| 7/16 | 3/16 | - | - | - | 1/2 | - | 1/8 | 1/4 | 1-7/8 | Rabbet | MR0100 |
| 3/16 | 3/16 | - | - | - | 7/16 | - | - | 1/8 | 1-23/32 | Flush Trim | MR0105 |
| 3/16 | 3/16 | - | - | - | 7/16 | - | - | 1/4 | 2 | Flush Trim | MR0102 |
| 3/16 | 3/16 | - | - | - | 3/4 | - | - | 1/4 | 2-7/16 | Flush Trim | MR0103 |
| 9/16 | 3/16 | 3/32 | - | - | 5/16 | - | - | 1/4 | 1-7/8 | Roman Ogee | MR0104 |
| 11/16 | 3/16 | 5/32 | - | - | 27/64 | - | - | 1/4 | 1-7/8 | Roman Ogee | MR1010 |
| 39/64 | 3/16 | 5/64 | 1/8 | - | 11/32 | 17/64 | - | 1/4 | 1-13/16 | Edge Molding | MR1004 |
| 1/4 | 3/16 | - | - | $7^{\circ}$ | 3/8 | - | - | 1/4 | 1-7/8 | Bevel Trim | MR0106 |
| 1/2 | 3/16 | - | - | $22.5{ }^{\circ}$ | 1/2 | - | - | 1/4 | 1-7/8 | Bevel Trim | MR0107 |
| 9/16 | 3/16 | - | - | $45^{\circ}$ | 1/4 | - | - | 1/4 | 1-7/8 | Bevel Trim | MR0108 |
| 5/16 | 3/16 | 1/16 | - | - | 5/16 | - | - | 1/4 | 1-13/16 | Corner Rounding | MRR108 |
| 3/8 | 3/16 | 3/32 | - | - | 3/8 | - | - | 1/4 | 1-13/16 | Corner Rounding | MR0110 |
| 7/16 | 3/16 | 1/8 | - | - | 3/8 | - | - | 1/4 | 1-13/16 | Corner Rounding | MR0112 |
| 1/2 | 3/16 | 5/32 | - | - | 3/8 | - | - | 1/4 | 1-13/16 | Corner Rounding | MR0114 |
| 9/16 | 3/16 | 3/16 | - | - | 3/8 | - | - | 1/4 | 1-13/16 | Corner Rounding | MRR110 |
| 11/16 | 3/16 | 1/4 | - | - | 13/32 | - | - | 1/4 | 1-7/8 | Corner Rounding | MRR112 New |
| 17/64 | 3/16 | . 039 | - | - | 11/32 | - | - | 1/4 | 1-7/8 | Double Bead | MR1020 |

Replacement bearing \#47775; Hex nut \#67135; Lock washer \#67129.


[^11]
## FLUSH TRIM PLUNGE TEMPLATE

Carbide Tipped with Mini Upper Ball Bearing Guide
Each Amana Tool ${ }{ }^{\text {exclusive miniature bit features either a } 3 / 16 \text { " or }}$ $1 / 4^{\prime \prime}$ diameter ball bearing guide that is much smaller than other ball bearing router bits on the market, making the bits ideal for delicate projects such as signmaking, building musical instruments, routing letter edges, flush trimming and plunging tight corners and confined areas and high production.
The cutting edge of each router bit is engineered from our exclusive carbide grade designed to deliver the highest quality of cut, maximum cutting efficiency prolonged tool life. The bits can fit into tight spaces and sharp corners where a larger diameter bearing cannot, making it easier for users to work on finely detailed work pieces that have intricate contours, tight confines and narrow openings.
The series' innovative design also delivers a consistent edge that eliminates hand sanding or filing, thus saving users time and labor. Can be used on wood and plastics.


| $\boldsymbol{\emptyset} \mathbf{D}$ | $\mathbf{B}$ | $\mathbf{d}$ | $\mathbf{L}$ | Repl. Bearing | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 16$ | $1 / 2$ | $1 / 8$ | 2 | $47775(3 / 16)$ | 47220 |
| $3 / 16$ | $1 / 2$ | $1 / 4$ | 2 | $47775(3 / 16)$ | 47222 |
| $3 / 16$ | $1 / 4$ | $1 / 4$ | $1-3 / 4$ | $47775(3 / 16)$ | $47222-$ S |
| $1 / 4$ | $1 / 4$ | $1 / 8$ | $1-15 / 16$ | $47723(1 / 4)$ | $47223-$ S |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-7 / 16$ | $47723(1 / 4)$ | 47224 |
| $1 / 4$ | $1 / 4$ | $1 / 4$ | $1-15 / 16$ | $47723(1 / 4)$ | $47224-S$ |



Attention: Due to extremely small diameter (D), reduce RPM and Feed Rates (IPM) by $30-50 \%$ to prevent tool breakage. Bits are not guaranteed due to extremely small diameter.

A Warning: Maximum RPM=35,000

## MINI COMPRESSION SPIRAL \& ADAPTER

## Solid Carbide

Unique extra small diameter solid carbide compression spiral bit for intricate work, signmaking, cutting out lettering and shapes. Features special adapter to fit handheld trim routers, routers and CNC machines.


|  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Description | OD | ID | B | B1 | Ød | L | Tool No. |
| Set Includes Two \#46180 Bits and One \#47632 Router Adapter | - | 46184 |  |  |  |  |  |
| S.C. Compression Bit | $1 / 8$ | - | $13 / 16$ | $7 / 32$ | $1 / 8$ | $2-1 / 2$ | 46180 |
| Router Adapter | - | $1 / 8$ | - | - | $1 / 4$ | - | 47632 |





## FLOORING - STRAIGHT \& ROUNDED CUTTERS

Carbide Tipped • 2 Flute • For "Undercutting"
Dedicated cutters with changeable bearings. These bits are designed for slotting wood flooring, inlays and medallions.


| ØD | $\mathbf{R}$ | $\mathbf{C}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Replacement |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bearing | Collar | Type | Tool No. |  |  |  |  |  |  |
| 0.894 | - | 5 mm | 4.5 mm | $1 / 4$ | $2-1 / 4$ | 47701 | 47724 | Straight | 45663 |
| $1-1 / 8$ | - | $1 / 4$ | $1 / 8$ | $1 / 4$ | $1-7 / 8$ | 47712 | 47724 | Straight | 45672 |
| $1-1 / 4$ | - | $3 / 8$ | $1 / 4$ | $1 / 4$ | $1-7 / 8$ | 47701 | 47724 | Straight | 45668 |
| $1-1 / 4$ | $1 / 8$ | $3 / 8$ | $1 / 4$ | $1 / 4$ | $1-7 / 8$ | 47701 | 47724 | Rounded | 45676 |
| $1-1 / 4$ | - | $3 / 16$ | $5 / 32$ | $1 / 4$ | $1-7 / 8$ | 47708 | 47724 | Straight | 45674 |
| $1-1 / 4$ | - | $1 / 4$ | $1 / 4$ | $1 / 4$ | $1-7 / 8$ | 47714 | 47724 | Straight | 45669 |
| $1-1 / 4$ | $1 / 8$ | $5 / 16$ | $1 / 4$ | $1 / 4$ | $1-7 / 8$ | 47712 | 47724 | Rounded | 45678 |
| $1-39 / 64$ | - | $9 / 64$ | $7 / 64$ | $1 / 4$ | $1-41 / 64$ | 47778 | 47724 | Straight | 45680 |

Note: See pages 93-94 for upper bearing bits used in flooring industry. For medallion inserts (\#45481, \#45460-S, \#45462-S, \#45464-S).

## FLUSH TRIM PLUNGE TEMPLATE

Carbide Tipped • 2 Flute with Upper Ball Bearing
A versatile bit, useful for template/pattern routing of parts, joints, and internal cuts. It can be used in handheld and table-mounted routers.


|  |  | Replacement |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Bearing | Collar | Tool $\mathbf{N o}$. |
| $3 / 16$ | $1 / 4$ | $1 / 4$ | $1-3 / 4$ | 47775 | - | $47222-\mathrm{S}$ |
| $3 / 16$ | $1 / 2$ | $1 / 8$ | 2 | 47775 | - | 47220 |
| $3 / 16$ | $1 / 2$ | $1 / 4$ | 2 | 47775 | - | 47222 |
| $1 / 4$ | $1 / 4$ | $1 / 8$ | $1-15 / 16$ | 47723 | - | $47223-S$ |
| $1 / 4$ | $1 / 4$ | $1 / 4$ | $2-1 / 2$ | 47723 | - | $47224-S$ |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-7 / 16$ | 47723 | - | 47224 |
| $1 / 2$ | $3 / 8$ | $1 / 4$ | $2-1 / 4$ | 47701 | 47724 | $45481 *$ |
| $1 / 2$ | $1 / 4$ | $1 / 4$ | $1-5 / 8$ | 47701 | 47724 | $45460-S$ |
| $1 / 2$ | $1 / 2$ | $1 / 4$ | $1-15 / 16$ | 47706 | - | $47174 \dagger$ |
| $1 / 2$ | $1 / 2$ | $1 / 4$ | 2 | 47701 | 47724 | 45487 |
| $1 / 2$ | $3 / 4$ | $1 / 4$ | $2-1 / 4$ | 47701 | 47724 | 45491 |

* For use on hardwood \& flooring medallions. See page 90 for additional flooring bits.
$\dagger$ Replaces 0cemco TA-170. See page 104 for more info.



# Rattle-Free Cabinet Doors <br> Designed for Undersized Plywood 



## instile

CUT PRECISE GROOVES TO PROVIDE UNDERSIZED PLYWOOD VENEERED PANELS WITH A SNUG, RATTLE-FREE FIT.

- Adjust the panel groove width (3/16" to $9 / 32^{\prime \prime}$ for $1 / 4$ " plywood), ( $7 / 16^{\prime \prime}$ to $17 / 32^{\prime \prime}$ for $1 / 2^{\prime \prime}$ plywood).
- Cuts frame stock from $5 / 8^{\prime \prime}$ through $1-1 / 4^{"}$ thickness.
- Designed to cut precise grooves to provide undersized plywood veneered panels with a snug rattle-free fit.
- Each set includes 2 pcs. ( 1 for stile cuts and 1 for rail cuts and shims).

"Thick" Configuration Assembly 7/16" to 17/32" for 1/2" plywood panel ( $1-1 / 4^{\prime \prime}$ doors)
"Thin" Configuration Assembly 3/16" to 9/32" for $1 / 4$ " plywood panel (3/4" doors)

Each Instile \& Rail System ${ }^{\text {t" }}$ includes
Full Color Instruction Manual


## Watch Video Online

www.amanatool.com/videos

## FLAT PANEL STILE \& RAIL SETS

Carbide Tipped with Ball Bearing Guide • 5/8" to 1-1/4" Material

Bits in these sets have profile and groove or rabbet cutters and ball-bearing guide mounted on a $1 / 2^{\prime \prime}$ shank. Respacing of the components should only be necessary - using the provided shims - after the cutters have been resharpened. Guide straight cuts with the fence; use the pilot bearing only for cuts on curved rails or stiles.

| OD | R | B | B1 for 1/4" Plywood | B1 for 1/2" Plywood | c | Ød | L | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-5/8 | 5/32 | 5/8 to 1-1/8 | 3/16 to 9/32 | 7/16 to 17/32 | 3/8 | 1/2 | 3-11/32 | Concave | 55433 |
| 1-5/8 | 1/4 | $5 / 8$ to 1-1/8 | $3 / 16$ to 9/32 | 7/16 to 17/32 | 3/8 | 1/2 | 3-11/32 | Ogee | 55436 |
| 1-5/8 | 3/16 | $5 / 8$ to $1-1 / 8$ | $3 / 16$ to 9/32 | 7/16 to 17/32 | 3/8 | 1/2 | 3-11/32 | Bead | 55437 |
| 1-5/8 | - | $5 / 8$ to 1-1/8 | $3 / 16$ to 9/32 | 7/16 to 17/32 | 3/8 | 1/2 | 3-11/32 | Mission (Straight) | 55438 |
| 1-7/8 | - | $5 / 8$ to 1-1/8 | $3 / 16$ to 9/32 | 7/16 to 17/32 | 1/2 | 1/2 | 3-11/32 | Mission (Straight) | 55439 |
| 1-7/8 | - | 5/8 to 1-1/8 | $3 / 16$ to 9/32 | 7/16 to 17/32 | 1/2 | 1/2 | 3-11/32 | Straight with Bevel | 55432 |



instile
ADJUSTABLE MISSION STYLE TONGUE \& GROOVE SET
Insert Carbide • For 5/8" to 1-3/16" Material
Adjust the panel groove width from 5.4 mm to 6.6 mm using the easy to use adjustment knob - no shims necessary.
The perfect fix for undersized plywood flat panel "Mission Style, Arts \& Crafts and Shaker" cabinet doors!
Set includes unique adjustment system

- Designed to cut precise grooves to provide undersized plywood veneered panels with a snug rattle-free fit.
- Each set includes 2 pcs. ( 1 for stile cuts and 1 for rail cuts).


| ØD | $\mathbf{B}$ | Ød | $\mathbf{C}$ | $\mathbf{T}$ | $\mathbf{L}$ | Max. RPM | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-3 / 8$ | $1-3 / 16$ | $1 / 2$ | $3 / 8$ | 6.1 mm to $6.6 \mathrm{~mm}(1 / 4 \pm)$ | $2-15 / 16$ | 18,000 | RC-4022 |

Replacement knives sold individually ( 2 replacement knives required per bit). Replacement screw \#67117 \& key \#5005.

6.1 mm to $6.6 \mathrm{~mm}(1 / 4 \pm)$ Panel Groove


Optional Knives:

- For 5.5 mm undersized $1 / 4^{\prime \prime}$ plywood.
- For 5.9 mm oversized $1 / 4^{\prime \prime}$ veneered plywood.
5.4 mm to 6.0 mm Panel Groove



## 2-PIECE STILE \& RAIL SETS

Carbide Tipped • 2-Wing with Ball Bearing Guide
Our stile \& rail sets give you two complete bits, one for doing the rail cuts, one for the stiles. Make cabinet doors and all varieties of frame-and-panel assemblies for furniture and architectural applications. These sets are offered in two configurations, one for working material up to 1 " thick, the other for material between $5 / 8^{\prime \prime}$ and $7 / 8^{\prime \prime}$ in thickness. The same three profiles are available in either configuration.

## 3/4" Material

Bits in this set have profile and groove or rabbet cutters and ball-bearing guide mounted on a $1 / 2^{\prime \prime}$ shank. Respacing of the components should only be necessary using the provided shims - after the cutters have been resharpened. Use in a tablemounted router. Guide straight cuts with the fence; use the pilot bearing only for cuts on curved rails or stiles.

| L | Type | Tool No. |
| :---: | :---: | :---: |
| 3-1/8 | Concave | 55421 |
| -1/8 | Ogee | 55431 |
| 3-1/8 | Bead | 55441 |

Complete listing of replacement parts can be found online.




## 2-PIECE STILE \& RAIL SETS

Carbide Tipped • 2-Wing with Ball Bearing Guide

## 3/4" to 1" Material

In addition to the components provided with sets of the first type, these sets include two trim cutters for stock 7/8" through 1" in thickness. (These trim cutters can be removed for making bearing-guided cuts on stock under 7/8" thick.)
Use in a table-mounted router. Guide straight cuts with the fence, setting it tangent to the trim cutters. Use the pilot bearing only for cuts on curved rails or stiles; for cuts on curved parts $7 / 8^{\prime \prime}$ to $1^{\prime \prime}$ thick, a template must to used.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{C}$ | Ød | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-5 / 8$ | $1 / 4$ | $1-1 / 16$ | $1 / 4$ | $3 / 8$ | $1 / 2$ | $3-5 / 16$ | Concave | 55420 |
| $1-5 / 8$ | $1 / 4$ | $1-1 / 16$ | $1 / 4$ | $3 / 8$ | $1 / 2$ | $3-5 / 16$ | Ogee | 55430 |
| $1-5 / 8$ | $3 / 16$ | $1-1 / 16$ | $1 / 4$ | $3 / 8$ | $1 / 2$ | $3-5 / 16$ | Bead | 55440 |


| Individual Components: Description | Qty. Required for Tool No. |  |  | Order \# |
| :---: | :---: | :---: | :---: | :---: |
|  | 55420 | 55430 | 55440 |  |
| Concave Profile Cutter | 1 | - | - | 55422 |
| Concave Cope Cutter | 1 | - | - | 55424 |
| Ogee Profile Cutter | - | 1 | - | 55352 |
| Ogee Cope Cutter | - | 1 | 1 | 55434 |
| Bead Profile Cutter | - | - | 1 | 55442 |
| Bead Cope Cutter | - | - | 1 | 55444 |
| .250" Groove Cutter | 1 | 1 | 1 | 55354 |
| .300" Trim Cutter (.865" dia.) | 1 | 1 | 1 | 55448 |
| .433" Trim Cutter (.865" dia.) | 1 | 1 | 1 | 55450 |
| .400" Rabbet Cutter (1.615" dia.) | 1 | 1 | 1 | 55452 |
| .865" Ball Bearing | 2 | 2 | 2 | 47708 |
| 1/2" Shank Arbor With Nut | 2 | 2 | 2 | 47622 |
| .002" Shims | 4 | 4 | 4 | 55356 |
| .040" Shims | 4 | 4 | 4 | 55402 |
| .004" Shims | 4 | 4 | 4 | 55357 |
| 3.4mm Spacers | 4 | 4 | 4 | 55367 |



## REVERSIBLE STILE \& RAIL ASSEMBLIES

Carbide Tipped • 2-Wing with Ball Bearing Guide
3/4" Material
Cut both the stiles \& rails with a single economical assembly. Switch from the stile cut to the rail cut simply by rearranging the cutters and bearing on the arbor. Because the profile and the cope are cut with the same cutter, you get a perfect fit. The assembly order for each setup is shown in the drawing. Use in a table-mounted router. Guide straight cuts with the fence; use the pilot bearing only for cuts on curved rails or stiles.

| ØD | Pattern Type | C | B |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | B1 | 0 d | L | Tool No. |
| 1-5/8 | Ogee | 3/8 | 11/16 | 7/8 | 1/2 | 3 | 55350 |
| 1-5/8 | Traditional | 3/8 | 11/16 | 7/8 | 1/2 | 3 | 55370 |
| 1-5/8 | Classical | 3/8 | 11/16 | 7/8 | 1/2 | 3 | 55380 |

Note: Stile \& Rail assemblies can be used on $5 / 8^{\prime \prime}$ through $7 / 8^{\prime \prime}$ material.




Ogee Knives Included


## STILE \& RAIL SET

Insert Carbide • For 3/4" To 1-3/16" Material
Our stile \& rail sets give you two complete bits, one for doing the rail cuts and one for the stiles. Make cabinet doors and all varieties of frame-and-panel assemblies for furniture and architectural applications.

| ØD | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{R}$ | Ød | $\mathbf{C}$ | $\mathbf{L}$ | Max. RPM | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-5 / 8$ | $1-11 / 64$ | $1 / 4$ | $1 / 4$ | $1 / 2$ | $3 / 8$ | $3-1 / 8$ | 18,000 | RC-1130* |

* Set comes with Ogee knives installed (\#RCK-215 \& \#RCK-216). Replacement parts: Screw \#67117; Key \#5005.



## Additional Knives Sold Separately



## ONE PIECE STILE \& RAIL

Carbide Tipped • 2 Flute
These one piece stile \& rail bits are an easy and effective technique for creating cabinet door frames. You simply adjust the height of the bit accordingly in the router table to cut the profile cut (with bit lowered in the table) and the cope cut (with bit raised in the table).


| ØD | ØD1 | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{C}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | $1-1 / 4$ | $7 / 32$ | $1-9 / 32$ | $15 / 64$ | $3 / 8$ | $1 / 2$ | $4-3 / 32$ | 55460 |
| 2 | $1-1 / 4$ | $7 / 32$ | $1-9 / 32$ | $15 / 64$ | $3 / 8$ | $1 / 2$ | $4-3 / 32$ | 55462 |
| 2 | $1-1 / 4$ | $9 / 32$ | $1-9 / 32$ | $15 / 64$ | $3 / 8$ | $1 / 2$ | $4-3 / 32$ | 55464 |

Replacement parts: Bearing \#47744 (2 required); Nut \#67131; Washer \#67125.



CABINET DOOR \& DRAW EDGE FRONT FACE EDGE
Carbide Tipped • 2 Flute
Cuts a decorative edge on cabinet fronts.
Shallow design will also work well with European hinges


| ØD | ØD1 | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{R 2}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\boldsymbol{0} \mathbf{d}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 4$ | $1 / 2$ | $5 / 64$ | - | - | $3 / 8$ | - | $1 / 2$ | $1-7 / 8$ | 49530 |
| $15 / 16$ | - | $9 / 64$ | - | - | $1 / 4$ | - | $1 / 4$ | $1-5 / 8$ | 49532 |
| $1-1 / 4$ | - | $7 / 32$ | $9 / 64$ | - | $7 / 16$ | $3 / 8$ | $1 / 2$ | $2-25 / 64$ | 49534 |
| $1-9 / 16$ | $1 / 2$ | $9 / 64$ | $11 / 32$ | - | $7 / 16$ | - | $1 / 2$ | $2-19 / 64$ | 49535 |
| $1-3 / 4$ | $1 / 2$ | $7 / 64$ | $17 / 32$ | $3 / 32$ | $7 / 16$ | - | $1 / 2$ | $2-1 / 2$ | 49536 |
| $1-3 / 4$ | $1 / 2$ | $1 / 8$ | $31 / 64$ | - | $7 / 16$ | - | $1 / 2$ | $2-1 / 4$ | 49537 |
| $1-3 / 4$ | $1 / 2$ | $1 / 4$ | $17 / 64$ | - | $7 / 16$ | - | $1 / 2$ | $2-1 / 2$ | 49538 |

Replacement bearing \#47706.



## CNC CABINET DOOR EDGE

Insert Carbide
This innovative cutter is part of our Nova System ${ }^{\text {TM }}$ (see pages 130-131).
The hard, durable carbide blades provide durability, even on abrasive sheet stock. And because the profiles are interchangeable, you'll only need to purchase one bit. Choose from a wide variety of popular profiles illustrated below.


| ØD | $\mathbf{B}$ | Ød | $\mathbf{L}$ | L1 | Max RPM | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40 mm | 17.5 mm | $3 / 4$ | 110.5 mm | 2.5 mm | 28,000 | RC-2470* |
| $(1-1 / 2)$ | $(11 / 16)$ |  | $(4-3 / 8)$ | $(3 / 32)$ |  |  |

* NRC-A13 included.


MULTI-FACE PROFILES
For use with \#RC-2470 cutter (above).


Includes both concave and convex knife retainers.



## RAISED PANEL

Carbide Tipped • 2 Flute with Ball Bearing Guide
Create raised panels for cabinet doors, frame-and-panel furniture, and architectural paneling with a raised-panel bit. The cutter forms a fillet to delineate the raised field, a shaped band around the field, and an integral tongue to fit the panel groove in the frame members. The profile contour and the reveal width varies. All tools have 1/2" shanks. Must be used in a table-mounted 3+ horsepower router and run at reduced speed. Use these bits for panels with curved edges. Multiple passes recommended.

## Architectural



Replacement bearing \#47706.


## Traditional



| ØD | ${ }^{*}{ }^{\prime} \mathbf{A}^{\prime}$ Reveal | $\mathbf{a}^{\circ}$ | B | B1 | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-5 / 8$ | ${ }^{*} 9 / 16$ | $25^{\circ}$ | $1 / 2$ | - | $1 / 2$ | $2-3 / 8$ | 54116 |
| $3-3 / 8$ | ${ }^{*} 1-7 / 16$ | $15^{\circ}$ | $1 / 2$ | $5 / 16$ | $1 / 2$ | $2-3 / 8$ | 54117 A $_{14}$ |

Replacement bearing \#47706.
© Warning: Maximum RPM $\mathbf{A 1}_{14}=14,000$


* Note: Reveal ('A') on all tools shown above, reflects the total length of cut. Therefore, you must deduct $3 / 8^{\prime \prime}$ (usually) for allowing the panel to recess into the frame.


## RAISED PANEL (CONT’D)

Cove

| ØD | ${ }^{*}$ ' $\mathbf{A}$ ' Reveal | R | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3-3 / 8$ | ${ }^{*} 1-7 / 16$ | $1-9 / 16$ | $1 / 2$ | $1 / 2$ | $2-3 / 8$ | $54119 \mathbf{A}_{14}$ |

Replacement bearing \#47706.
© Warning: Maximum RPM $\boldsymbol{\wedge}{ }^{14}=14,000$


Replacement bearing \#47706.
© Warning: Maximum RPM $\boldsymbol{\wedge}_{14}=14,000 ; \boldsymbol{\Delta}_{20}=20,000$


## RAISED PANEL BACK CUTTER

Carbide Tipped • 2 Flute
Designed to cut back side of raised panels for a flush alignment with door frames. This cutter can be used with any of our raised panel router bits found on pages 186 and 187.

| and 187. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\emptyset \mathrm{D}$ | *'A' Reveal | R | B | $0 d$ | L | Tool No. |
| 1-3/4 | 5/8 | 1/4 | 7/16 | 1/2 | 2-1/16 | 54278 |

Replacement bearing \#47706.


[^12] deduct $3 / 8^{\prime \prime}$ (usually) for allowing the panel to recess into the frame.


RAISED PANEL WITH BACK CUTTER
Carbide Tipped • 2 Flute with Ball Bearing Guide
Raised panels fit standard panel grooves, even when the panel thickness exceeds 5/8." As the main cutter raises the front of the panel, the back cutter mills the back to produce a standard-thickness tongue around the panel. Each tool is supplied with two different guide bearings, enabling you to stage cuts on curved edges effectively and safely. All tools have $1 / 2^{\prime \prime}$ shanks. Must be used in a table-mounted 3+ horsepower router and run at reduced speed. Multiple passes recommended.

Traditional


* Note: Reveal ('A') on all tools shown above, reflects the total length of cut. Therefore, you must deduct $3 / 8^{\prime \prime}$ (usually) for allowing the panel to recess into the frame.
** Note: To receive ('A1') use bearing \#47713. Bearing included with tool.
Replacement bearing \#47713 ( $8 \mathrm{~mm} \times 16 \mathrm{~mm}$ ) and \#47763 ( $8 \mathrm{~mm} \times 1-1 / 4$ ").
Back Cutter \#55435 = 1/4" Kerf; 5/16" Radius Cutter.
© Warning: Maximum RPM ${ }_{12}=12,000$

| ØD | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{R 2}$ | $\mathbf{C}$ | $\mathbf{A}$ | $\mathbf{T}$ | $\mathbf{O d}$ | $\mathbf{L}$ | $\mathbf{L 1}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-15 / 32$ | 1 | $55 / 64$ | $1 / 4$ | $5 / 64$ | - | $1 / 2$ | - | $7 / 32$ | $1 / 2$ | $2-13 / 16$ | $2-15 / 16$ | Stile \& Rail Set | 55428 |
| $3-9 / 16$ | $1 / 2$ | - | $5 / 32$ | $1-23 / 32$ | $57 / 64$ | - | $1-17 / 32$ | - | $1 / 2$ | $2-1 / 4$ | - | Raised Panel | 54113 |
| $1-1 / 4$ | $7 / 16$ | - | $7 / 32$ | $9 / 64$ | - | $3 / 8$ | - | - | $1 / 2$ | $1-15 / 16$ | - | Door Edge | 49534 |

Replacement bearing \#47706.



## RAISED PANEL

Insert Carbide • 2 Flute • Ogee
Insert Raised panel bits for CNC machine or router table. Bits include ball bearing and anti-dust plug. May also be used with optional back cutter below.


| ØD | $\mathbf{B}$ | Ød | $\mathbf{R}$ | $\mathbf{A}$ | $\mathbf{L}$ | Knife | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3-3 / 8$ | $3 / 4$ | $1 / 2$ | $7 / 8$ | $1-3 / 8$ | $2-3 / 4$ | RCK-226 | RC-4012* |

Above insert raised panel bit includes plug, ball bearing and retaining screw.
Replacement bearing \#47706.

* Remove bearing before CNC use.



## BACK CUTTER

(Optional) • Insert Carbide • 2 Flute
$\stackrel{F}{\boldsymbol{F}}$
For use in above insert raised panel cutters.

| ØD | B | R | Repl. Knife | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $2-1 / 8$ | $23 / 64$ | $5 / 16$ | RCK-232 | RC-4102 |



## INFINITY $\overline{\text { SYSTEM }}$

## CNC MULTI PROFILE RAISED PANEL

Insert Carbide
Insert profile router bit with two cutting flutes. Suitable for producing various raised panel profiles in softwood, hardwood and man-made boards. Optional small trimmer is available for machining the edge of the panel. One router will take all five different profiles. For use on routers and machining centers with CNC control.


| $\boldsymbol{\emptyset} \mathbf{D}$ | $\boldsymbol{\emptyset D} 1$ | $\mathbf{B}$ | $\boldsymbol{0}$ | $\mathbf{L}$ | Repl. Knife | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $112 \mathrm{~mm}(4-7 / 16)$ | $18 \mathrm{~mm}(23 / 32)$ | $28 \mathrm{~mm}(1-1 / 8)$ | $3 / 4$ | $110 \mathrm{~mm}(4-11 / 32)$ | RCK-200 | RC-4000 |
| $112 \mathrm{~mm}(4-7 / 16)$ | $18 \mathrm{~mm}(23 / 32)$ | $28 \mathrm{~mm}(1-1 / 8)$ | $3 / 4$ | $110 \mathrm{~mm}(4-11 / 32)$ | RCK-210 | RC-4001 |
| $112 \mathrm{~mm}(4-7 / 16)$ | $18 \mathrm{~mm}(23 / 32)$ | $28 \mathrm{~mm}(1-1 / 8)$ | $3 / 4$ | $110 \mathrm{~mm}(4-11 / 32)$ | RCK-220 | RC-4002 |
| $112 \mathrm{~mm}(4-7 / 16)$ | $18 \mathrm{~mm}(23 / 32)$ | $28 \mathrm{~mm}(1-1 / 8)$ | $3 / 4$ | $110 \mathrm{~mm}(4-11 / 32)$ | RCK-230 | RC-4003 |
| $112 \mathrm{~mm}(4-7 / 16)$ | $18 \mathrm{~mm}(23 / 32)$ | $28 \mathrm{~mm}(1-1 / 8)$ | $3 / 4$ | $110 \mathrm{~mm}(4-11 / 32)$ | RCK-260 | RC-4006 |

A Warning: Maximum RPM=8,000
Maximum depth of cut per pass $=1.85^{\prime \prime}$
Feed Rate $=240$ inches per minute (IPM)
Chip Load $=0.012^{\prime \prime}$

## TRIMMER BIT

(Optional) • Insert Carbide • 2 Flute


| ØD1 | B | B1 | Ød | L | Repl. Knife | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $18 \mathrm{~mm}(23 / 32)$ | $12 \mathrm{~mm}(15 / 32)$ | $18 \mathrm{~mm}(23 / 32)$ | $8 \mathrm{~mm}(5 / 16)$ | $31 \mathrm{~mm}(1-1 / 4)$ | AMA-12 | RC-4100 |



INSERT CARBIDE KNIVES FOR MULTI PROFILE RAISED PANEL
(Wood profiles not shown at actual size.)



## VERTICAL RAISED PANEL <br> Carbide Tipped • 2 Flute

Raised panels with a low-horsepower, fixed speed router using these VERTICAL raised panel bits. You must do the work on a router table, with the work on edge, braced against the fence. Arched or curved shapes (i.e.: "cathedral" door panels) cannot be routed. To prolong tool life and get the best cut finish, several passes are recommended.


| $\boldsymbol{\emptyset D}$ | $\boldsymbol{0} 1$ | $\mathbf{B}$ | $\mathbf{a}^{\circ}$ | $\mathbf{R 1}$ | $\mathbf{R 2}$ | $\mathbf{R 3}$ | $\boldsymbol{} \mathbf{d}$ | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-3 / 16$ | $7 / 16$ | $1-5 / 8$ | - | $7 / 8$ | $23 / 32$ | - | $1 / 2$ | $3-1 / 8$ | Ogee | 54520 |
| $1-1 / 8$ | $9 / 32$ | $1-5 / 8$ | - | $1-9 / 16$ | - | - | $1 / 2$ | $3-1 / 8$ | Cove | 54524 |
| $1-3 / 16$ | $3 / 16$ | $1-5 / 8$ | - | $7 / 8$ | $23 / 32$ | $1 / 8$ | $1 / 2$ | $3-1 / 8$ | Ogee w/Bead | 54528 |
| $1-1 / 8$ | $19 / 32$ | $1-5 / 8$ | $15^{\circ}$ | - | - | - | $1 / 2$ | $3-1 / 8$ | Traditional | 54532 |



## CNC MULTI PROFILE

Insert Carbide • For MDF and Wood Cabinet Doors

## VIOLA STYLE

W = width of the frame.
$H=$ maximum depth of the frame.
The dimension W determines the frame width. The dimension H determines the profile depth. In the example shown, $\mathrm{W}=50$ and $\mathrm{H}=13$. Any change in the dimensions of the frame width and depth should be done according to the formula that is written on each tool drawing.

Excellent for Cutting:


- MDF
- Wood


A Warning: Maximum RPM $=10,000$

# MDF Cabinet Door 

## CNC Insert Router Bits

Excellent for Cutting MDF \& Wood!

| ØD | D1 | B | Style | B1 | Ød | L | Repl. Knife | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $7 / 16$ | $7 / 16$ | Cove \& Bead | $1 / 8$ | $1 / 2$ | $2-5 / 8$ | RCK-490 | RC-2490 |
| $25 / 32$ | $7 / 16$ | $23 / 64$ | Bead | $3 / 16$ | $1 / 2$ | $2-5 / 8$ | RCK-480 | RC-2480 |
| $25 / 32$ | $7 / 16$ | $15 / 32$ | Ogee | - | $1 / 2$ | $2-5 / 8$ | RCK-481 | RC-2481 |
| $25 / 32$ | $7 / 16$ | $7 / 16$ | Ogee | $1 / 4$ | $1 / 2$ | $2-5 / 8$ | RCK-482 | RC-2482 |
| $27 / 32$ | $7 / 16$ | $19 / 64$ | Bead | $7 / 64$ | $1 / 2$ | $2-5 / 8$ | RCK-494 | RC-2494 |
| $1-17 / 64$ | $7 / 16$ | $27 / 64$ | Ogee | - | $1 / 2$ | $2-5 / 8$ | RCK-496 | RC-2496 |
| $1-11 / 32$ | $7 / 16$ | $19 / 64$ | Corner Rounding | - | $1 / 2$ | $2-5 / 8$ | RCK-498 | RC-2498 |
| $1-11 / 32$ | $7 / 16$ | $23 / 64$ | Classical Cove | - | $1 / 2$ | $2-5 / 8$ | RCK-499 | RC-2499 |
| $1-3 / 8$ | $15 / 32$ | $25 / 64$ | Traditional | - | $1 / 2$ | $2-5 / 8$ | RCK-483 | RC-2483 |
| $1-7 / 64$ | $7 / 16$ | $1 / 4$ | Ogee | $7 / 64$ | $1 / 2$ | $2-5 / 8$ | RCK-484 | RC-2484 |
| $1-11 / 32$ | $23 / 64$ | $17 / 64$ | Cove | - | $1 / 2$ | $2-5 / 8$ | RCK-485 | RC-2485 |
| $1-11 / 32$ | $25 / 64$ | $21 / 64$ | Traditional | - | $1 / 2$ | $2-5 / 8$ | RCK-486 | RC-2486 |

Each tool includes 2 knives. Tool body \#NS-102.
Replacement knives are interchangeable and may be purchased separately.


Insert Carbide for Cabinet Simulated Raised Panel \& Door Edge
Series of profiles utilizing our Nova ${ }^{\text {m" }}$ Tool body system of interchangeable solid carbide knives (see pages 130-131) are designed to give the appearance of a Raised Panel door in MDF or solid panels. One pass is all that is needed for a simple raised panel look using one of the "Plunge Form" profiles. Replacement knives are MDF Grade Carbide and will last much longer than standard brazed carbide tipped bits.

## Plunge Form/Door Edge




RC-2481


RC-2482


RC-2483


RC-2490


RC-2494


RC-2496


RC-2498


RC-2499

Raised Panel


RC-2484


RC-2485


RC-2486

CREATE A MORE AUTHENTIC RAISED PANEL WITH A DEEPER REVEAL
Use one of the many "Raised Panel" profiles in conjunction with the "Plunge Form" profile for one pass each. Complete the look with one pass of the door edge using any "Plunge Form" bit.







3/4" To 7/8" Material
If you've wanted to construct true divided light doors for fine furniture and cabinets, look no further. Mullions are $3 / 4^{\prime \prime}$ wide.

| ØD | ØD1 | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{R}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-1 / 8$ | $1-1 / 4$ | 1 | $1 / 4$ | $3 / 16$ | $1 / 2$ | $3-1 / 8$ | 55360 |

Replacement bearing \#47759.


7/8" To 1-1/2" Material
The wide mullions are perfect for large-scale furniture, cabinets, and architectural woodwork such as casement windows. Mullions are 1" wide.

| ØD | ØD1 | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{R}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-3 / 16$ | $1-7 / 16$ | $1-5 / 8$ | $1 / 4$ | $1 / 4$ | $1 / 2$ | $3-3 / 4$ | 55362 |

Replacement bearing \#47759.


STUB SPINDLE\&
COPE CUTTER DOOR

Carbide Tipped • 2 Flute


角


Want the beauty of traditional cope and stick doors with the strength and longevity of true mortise-and-tenon joinery? Our design allows you to make beautiful doors with tenons of any length you choose.
This unique door-making system utilizes a "stub" spindle \& cope cutter arrangement. The counterbored cope cutter is secured to the spindle with a cap screw. A matching profile bit is used to shape the decorative ogee "sticking" along the edges of the stiles and rails. As the cope is cut on the ends of the rails, the tenon passes over the top of the bit unobstructed.


## ENTRY DOOR SYSTEM

1-3/4" Material

| ØD | ØD1 | $\mathbf{B}$ | $\mathbf{R}$ | Ød | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | $3 / 4$ | $11 / 16$ | $11 / 32$ | $1 / 2$ | 2 | Cope Cutter w/Stub Spindle 47511 |  |
| $1-3 / 4$ | - | $11 / 16$ | $11 / 32$ | $1 / 2$ | $2-3 / 16$ | Ogee Bit | 54131 |

Replacement Parts: Cope cutter: \#47510.
Stub spindle with screw: \#47617.
Screw for stub spindle: \#67012.
Ball bearing: \#47706.

## SCREEN DOOR SYSTEM

1-1/8" Material

| ØD | ØD1 | $\mathbf{B}$ | $\mathbf{R}$ | Ød | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 2$ | $3 / 4$ | $15 / 32$ | $7 / 32$ | $1 / 2$ | 2 | Cope Cutter w/Stub Spindle 47513 |  |
| $1-1 / 4$ | - | $15 / 32$ | $7 / 32$ | $1 / 2$ | $1-7 / 16$ | Ogee Bit | 54173 |

Replacement Parts: Cope cutter: \#47512. Stub spindle with screw: \#47617.
Screw for stub spindle: \#67012. Ball bearing: \#47706.

## CABINET DOOR SYSTEM

7/8" Material

| ØD | ØD1 | B | R | Ød | L | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-5 / 8$ | $3 / 4$ | $3 / 8$ | $1 / 4$ | $1 / 2$ | 2 | Cope Cutter w/Stub Spindle 47515 |  |
| $1-3 / 8$ | - | $3 / 8$ | $1 / 4$ | $1 / 2$ | $1-31 / 32$ | Ogee Bit | 54175 |

Replacement Parts: Cope cutter: \#47514. Stub spindle with screw: \#47617. Screw for stub spindle: \#67012. Ball bearing: \#47706.




You'll need just two bits: the Quadraset \#53600 and Corner Bead \#54163.

CONSTRUCT YOUR OWN WAINSCOT DOOR
Wainscot doors can be a beautiful addition to an informal, country style kitchen; their beaded panels are reminiscent of times long past.


| ØD | ØD1 | $\mathbf{A}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-7 / 8$ | - | $1 / 2$ | - | $1 / 8$ to $23 / 32^{*}$ | - | $1 / 2$ | 3 | 53600 |
| $49 / 64$ | $11 / 16$ | - | $3 / 32$ | $25 / 64$ | $3 / 16$ | $1 / 4$ | $1-3 / 4$ | 54163 |

* A full $3 / 4$ " cut can be achieved using one additional \#53107 cutter
- Use in a table-mounted router. Not for use in a handheld router!

(1) Cut Joint Frame
(2) Shape the Wainscot
(3) Assemble



## HISTORICAL SHAKER DOOR

Carbide Tipped • 2 Flute
7/8" Frame Material and 5/8" Panel Material
If you'd like to reproduce exact Shaker details on your next project, we've got the bits that you need. This Shaker door set creates a short, steep 20 degree beveled panel edge just like doors on Shaker originals. A simple thumbnail profile along the inside edges of the frame duplicates the original profile to complete the authentic look.

| ØD | D1 | $\mathbf{B}$ | $\mathbf{R}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-13 / 16$ | 1 | $33 / 64$ | - | - | $1 / 2$ | $2-1 / 64$ | Raised Panel | 54133 |
| $1-5 / 8$ | $1-1 / 2$ | $7 / 8$ | $3 / 8$ | $1 / 4$ | $1 / 2$ | $3-1 / 2$ | 2 Piece Set | 55426 |

Replacement bearing \#47708 for tool \#55426.


## INDUSTRIAL

Tambours
No Cloth, Gue orWires!


## TAMBOUR DOOR SET

## U.S. Patent No. 7,810,532



Carbide Tipped • 2 Flute

- Unique 3-piece router bit set with antique solid brass knob
- Shapes tambours that interlock with a ball-and-socket joint
- Unlike ordinary tambours, there is no need for cloth, glue or wires
- Each slat measures approximately $1 / 2^{\prime \prime} \times 1^{\prime \prime}$
- Minimum radius for the tambour door is $3-1 / 2^{\prime \prime}$

The set is easy to set up and use. The first bit (\#54310) shapes the face of the stock; cutting from each face completes the contour of the ball. Afterwards, a second bit (\#54312) is used to shape the socket. A third bit in the set (\#49498) is used to shape the end of the tambour which provides a place to mount a pull for opening the completed tambour.
And, assembly is easy. Simply slide the slats together to create a beautiful, flexible tambour that's perfect for creating your own roll top desk, breadbox, kitchen countertop storage areas and more.


| ØD | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Complete 3 Piece |  |  |  |  |  | Set Includes |
| 2 | Antique | Knob and: |  | 54314 |  |  |
| $1-3 / 16$ | $1 / 8$ | $5 / 64$ | $1-1 / 4$ | $1 / 2$ | $2-3 / 4$ | 54310 |
| $1 / 2$ | $5 / 64$ | - | $3 / 8$ | $1 / 2$ | 3 | 54312 |
| $3 / 4$ | $1 / 8$ | - | $3 / 8$ | $1 / 2$ | $2-5 / 16$ | 49498 |



## Watch Video Online

http://www.amanatool.com/videos


## STACKING BOXES SET

Carbide Tipped • 2 Flute
The carefully crafted sides of each box feature fine details that you create yourself with a router and the Amana Tool ${ }^{\circledR}$ Stacking Boxes Router Bit Set. The set also includes an ogee bit to rout the profile on the lid, two antique brass knobs, and a complete set of instructions to guide you step-by-step through the entire construction process.

| ØD | ØD1 | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Complete |  | 4 | Piece | Router Bit Set | Includes | 2 |
| Antique Knobs and: | 58110 |  |  |  |  |  |
| $1-3 / 16$ | $15 / 32$ | $15 / 64$ | $19 / 32$ | $1 / 2$ | $1-7 / 8$ | 56210 |
| $7 / 8$ | - | - | $1-1 / 4$ | $1 / 2$ | $2-7 / 8$ | 45446 |
| $3 / 4$ | $1 / 2$ | $1 / 8$ | $3 / 8$ | $1 / 4$ | 2 | 56172 |
| $1-3 / 4$ | - | $23 / 64$ | 1 | $1 / 2$ | 3 | 54286 |

Replacement bearing \#47708 for Tool \#55426.



OFFSET MORTISE-AND-TENON FOR MISSION STYLE GLASS DOOR
Carbide Tipped • 2 Flute
The strongest construction method for making doors is the mortise-and-tenon joint. These new bits allow you to make tenons with offset shoulders. This makes it easy to construct offset mortise-and-tenon joints for Mission Style glass doors.


| ØD | ØD1 | B | B1 | B2 | T | Ød | $\mathbf{L}$ | Use <br> Mortise | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-7 / 8$ | $2-3 / 8$ | $1-1 / 8$ | $3 / 8$ | $3 / 8$ | $1 / 4$ | $1 / 2$ | $2-5 / 8$ | $609-120$ | 53632 |

Replacement parts: Bearing \#47708; Screw \#67090; Key \#5004.


## LOUVER/SHUTTERS

Carbide Tipped • 2 Flute with Ball Bearing Guide
Create custom louver doors. Now you can easily simulate the timeless look of wooden shutters (louvers) with this new industrial quality router bit.


| $\emptyset \mathbf{D}$ | ØD1 | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{C}$ | $\mathbf{a}^{\circ}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 4$ | $22 m m$ | $5 / 32$ | $2-29 / 32$ | $2-9 / 32$ | $3 / 16$ | $15^{\circ}$ | $1 / 2$ | $5-5 / 32$ | $54246 \mathbf{\Lambda}_{12}$ |

Replacement bearing \#47776.
© Warning: Maximum RPM ${ }_{12}=12,000$


Carbide Tipped • 2 Flute with Ball Bearing Guide
$\underset{F}{\square}$
For glass doors, window, paneling as well as stile and rail work (the panel groove and stub tenon must be cut separately).
The inverted hand cutters will produce copes that nest perfectly into the profiles cut by the matching "regular" bits. In addition, the inverted head allows you to profile edges that are out of the reach of regular profile bits. Equipped with ball bearing guides, either on the tip or on the shank.


| ØD | R | B | B1 | Ød | L | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Piece Bead Set Including 49640 \& 49642 |  |  |  |  |  |  | 49643 |
| $1-1 / 8$ | $1 / 4$ | $1 / 2$ | $1 / 4$ | $1 / 4$ | 2 | Bead Stile | 49640 |
| $1-1 / 4$ | $1 / 4$ | $5 / 16$ | $7 / 64$ | $1 / 4$ | 2 | Bead Rail | 49642 |
| 2-Piece Bead Set Including 49644 \& 49646 |  |  |  |  |  |  | 49647 |
| $1-5 / 16$ | $23 / 64$ | $19 / 32$ | $17 / 64$ | $1 / 4$ | $2-3 / 16$ | Bead Stile | 49644 |
| $1-7 / 16$ | $23 / 64$ | $15 / 32$ | $1 / 8$ | $1 / 4$ | $1-59 / 64$ | Bead Rail | 49646 |


CLASSIC SETS $\qquad$


Set \#49673


Set \#49677

| ØD | R | B | B1 | Ød | L | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Piece Classical Stile \& Rail Set Including | 49670 | \& 49672 | 49673 |  |  |  |  |
| $1-3 / 32$ | $9 / 64$ | $1 / 2$ | $3 / 16$ | $1 / 4$ | 2 | Classical Stile | 49670 |
| $1-1 / 4$ | $9 / 64$ | $3 / 8$ | $5 / 64$ | $1 / 4$ | 2 Classical Rail | 49672 |  |

2-Piece Classical Stile \& Rail Set Including 49674 \& 4967649677
$1-5 / 16 \quad 3 / 16 \quad 5 / 8 \quad 7 / 32 \quad 1 / 4 \quad 2$ Classical Stile 49674

1-7/16 $3 / 16 \quad 9 / 16 \quad 1 / 8 \quad 1 / 4 \quad 2$ Classical Rail 49676

Replacement bearing for stile cutters \#47702 (3/8" dia.). Replacement bearing for rail cutters \#47701 (1/2" dia.). Replacement collar for rail cutters \#47724.


| ØD | R | B | B1 | $\emptyset d$ | L | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Piece Ogee Stile \& Rail Set Including 49660 \& 49662 |  |  |  |  |  |  | 49663 |
| 1-11/32 | 11/32 | 1/2 | 1/4 | 1/4 | 2 | Ogee Stile | 49660 |
| 1-1/2 | 11/32 | 3/8 | 3/32 | 1/4 | 2 | Ogee Rail | 49662 |
| 2-Piece Ogee Stile \& Rail Set Including 49664 \& 49666 |  |  |  |  |  |  | 49667 |
| 1-1/2 | 11/32 | 9/16 | 1/4 | 1/4 | 2 | Ogee Stile | 49664 |
| 1-19/32 | 11/32 | 3/8 | 1/8 | 1/4 | 2 | Ogee Rail | 49666 |


$\qquad$ WINDOW SET $\qquad$


Set \#49653

| ØD | R | B | B1 | Ød | L | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2-Piece Window Stile \& Rail Set Including |  |  |  |  |  | $\mathbf{4 9 6 5 0}$ \& 49652 | 49653 |
| $1-1 / 16$ $11 / 16$ $11 / 16$ $11 / 64$ $1 / 4$ 2 <br> $1-7 / 32$ $11 / 16$ $5 / 8$ $1 / 8$ $1 / 4$ 2 Window Stile | 49650 |  |  |  |  |  |  |

 inside edges of all the frame members.


53820


FINGER GRIP/DRAWER PULL/DOOR LIP
Carbide Tipped • 2 Flute
Produce clean, modern chests and cabinets uninterrupted by hardware pulls and knobs by integrating the pulls into the doors, drawers and lids. These one-pass cutters offer many appearance and ergonomic options, providing positive grips and softened, easy-on-the-fingers edges. All bits can be used in CNC and table-mounted routers. Larger diameter cutters will work in edge-guide or template-guide equipped handheld routers.


| ØD | ØD1 | R | R1 | B | B1 | Ød | L | Tool No |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | $25 / 64$ | $3 / 32$ | $3 / 16$ | $3 / 4$ | $39 / 64$ | $1 / 2$ | $2-1 / 4$ | 53806 |
| $1-31 / 64$ | $11 / 16$ | $5 / 64$ | $15 / 64$ | $53 / 64$ | $45 / 64$ | $1 / 2$ | $2-21 / 64$ | 53808 |
| $1-49 / 64$ | $11 / 16$ | $5 / 64$ | $13 / 64$ | $53 / 64$ | $43 / 64$ | $1 / 2$ | $2-21 / 64$ | 53810 |
| 2 | $3 / 4$ | $1 / 4$ | $3 / 16$ | $1-1 / 4$ | - | $1 / 2$ | $2-3 / 4$ | 53812 |

## WINDOW SILL EDGE

Carbide Tipped • 2 Flute
These bits shape a flowing ogee edge for creating traditional window sills.


| ØD | $\mathbf{D 1}$ | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{C}$ | $\boldsymbol{0} \mathbf{d}$ | $\mathbf{L}$ | Tool No |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 4$ | $1 / 2$ | $7 / 32$ | $1 / 4$ | $7 / 8$ | $11 / 16$ | $3 / 8$ | $1 / 2$ | $2-7 / 8$ | 53822 |
| $1-7 / 16$ | $5 / 8$ | $3 / 8$ | $5 / 16$ | $1-1 / 8$ | 1 | $13 / 32$ | $1 / 2$ | $3-7 / 8$ | 53824 |
| $1-1 / 4$ | $3 / 8$ | $7 / 32$ | $11 / 32$ | 1 | $7 / 8$ | $5 / 16$ | $1 / 2$ | 3 | 53826 |
| $1-7 / 16$ | $11 / 16$ | $23 / 64$ | $9 / 16$ | $1-3 / 8$ | $1-1 / 8$ | $3 / 8$ | $1 / 2$ | $3-3 / 8$ | 53828 |

## DOOR EDGE DETAIL FOR DECO DOOR

Carbide Tipped • 2 Flute
Use these bits to shape the edges of cabinet doors. Style \#53820 also eliminates the need for a pull to create a clean, uncluttered look.


| ØD | ØD1 | ØD2 | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | $23 / 32$ | $31 / 32$ | $3 / 8$ | $1 / 8$ | $1-3 / 16$ | $1 / 2$ | $2-1 / 2$ | 53820 |
| $1-3 / 4$ | - | - | $3 / 8$ | $1 / 8$ | $11 / 16$ | $1 / 2$ | $2-5 / 8$ | $49562^{*}$ |

* Replacement bearing \#47706


## DOOR LIP ASSEMBLY

Carbide Tipped • 2 Flute $\cdot$ Corner Round \& Taper Rabbet
Mill the edges of doors and drawer fronts with this corner round and taper rabbet complete assembly, rounding the show edge and simultaneously forming a rabbet with a tapered shoulder on the back edge. Works on straight stock from $5 / 8$ " through 1 " in thickness. Must be used in a table-mounted router.

| ØD | $\mathbf{R}$ | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-9 / 16$ | $3 / 8$ | $10^{\circ}$ | 1 | $1 / 2$ | 3 | 55300 |

Replacement Parts:

| Description | Tool No. |
| :---: | :---: |
| $3 / 8^{\prime \prime}$ Corner Round Cutter | 55302 |
| $10^{\circ}$ Taper Rabbet Cutter | 55304 |
| $1 / 2^{\prime \prime}$ Shank Arbor With Nut | 47612 |

# Solid Surface IIDUSTRIAL Router Bits 



A Warning: Before use, read router bit safety guidelines on pages 248-250.


FOR FABRICATING SOLID SURFACE MATERIALS
Wilsonart, Gibraltar, Corian, Surell, Fountainhead, Avonite, Etc.

Amana Tool ${ }^{\oplus}$ has developed a line of over 100 special tools for the fabrication of solid surface materials on the market. There are special tools for face-inlay, trimming, corner rounding and bullnosing as well as bits for counter-tops and bowls.
Some of our tools with ball bearings utilize our Ultra-Glide ${ }^{\text {Tm }}$ high-performance ball bearing guide assembly. The Ultra-Glide ${ }^{T M}$ is a steel ball bearing fitted with a non-marring Delrin ${ }^{\circledR}$ sleeve.
For decorative work, our other carbide-tipped router bits can also be used for solid surface materials.

## COUNTER-TOP ‘NO-DRIP’ DESIGN

Carbide Tipped • 2 Flute with Ball Bearing Guide
This bit will cut a 'no-drip' edge on kitchen and vanity counter-tops in one pass. Use in a handheld router.


| ØD | ØD1 | $\mathbf{A}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $3 / 4$ | $1 / 2$ | $5 / 16$ | $7 / 8$ | $5 / 8$ | $1 / 2$ | 3 | 57118 |
| 1 | $3 / 4$ | $3 / 4$ | $5 / 16$ | $1-1 / 8$ | $15 / 16$ | $1 / 2$ | $3-1 / 4$ | 57120 |

Replacement Ultra-Glide ${ }^{\text {™ }}$ bearing \#47709 (includes \#5003 5/32" hex key). Replacement steel bearing (old style) \#47714.


## COUNTER-TOP ‘NO-DRIP’ DESIGN

Carbide Tipped • 2 Flute
This bit cuts the inner portion of a 'no-drip' edge on kitchen and vanity counter-tops, where there's no edge for a guide bearing to reference. Typically used with edge-guide-equipped router. (Use the $5 / 16$ " radius corner-rounding bits shown on page 214 to do the outer portion.)


| ØD | A | B | B1 | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $3 / 4$ | $1 / 2$ | $1 / 8$ | $1 / 2$ | $2-1 / 8$ | 57148 |



Note: The application specifications, current at time of publication, are intended for reference purposes and are subject to change without notice. Please refer to the Fabrication Guides provided with the particular material or bowl you are using for more specific installation instructions.
Amana Tool ${ }^{\circledR}$ makes no endorsements whatsoever to manufacturers of the solid surface materials listed herein.

## ROUND OVER

Carbide Tipped • 2 Flute with Ultra-Glide ${ }^{\text {tw }}$ Ball Bearing Guide Assembly
This tool is intended for use on $1 / 2^{\prime \prime}$ thick material. It will put a $3 / 8^{\prime \prime}$ radius round over on the counter-top. Furnished with Ultra-Glide ${ }^{T m}$ non-marring Delrin ${ }^{\circledR}$-sleeved ball-bearing guide.
For use on "Vaso Sink Collection" by Dupont ${ }^{\circledR}$.


| ØD | ØD1 | $\mathbf{a}^{\circ}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-7 / 8$ | $3 / 4$ | $10^{\circ}$ | $3 / 8$ | 1 | $25 / 32$ | $1 / 2$ | $2-29 / 32$ | 57170 |

Replacement Ultra-Glide ${ }^{\text {tw }}$ bearing assembly \#47774 (includes \#5009 1/8" hex key).


## CORNER ROUNDING

Carbide Tipped • 2 Flute with Ultra-Glide ${ }^{T M}$ Radius Bearing
This unique tool produces a true $180^{\circ}$ bullnose in two passes. Make the first pass with a regular $1 / 4^{\prime \prime} \times 5 / 8^{\prime \prime}$ steel bearing (optional). Switch to the Ultra-Glide ${ }^{T m \times 1}$ radius bearing for the second pass. This unique bearing follows the curved surface, eliminating the flat track typical of the two-pass cut with the regular bearing.


Standard steel $1 / 4 \times 5 / 8$ bearing - use \#47712 - (order separately).
© Warning: Maximum RPM $\boldsymbol{\Lambda}_{18=18,000}$



## CORNER ROUNDING

Carbide Tipped • 2 Flute with Ultra-Glide ${ }^{\text {rw }}$ Ball Bearing Guide Assembly
Use this bit for rounding edges where there's access to a flat surface for the Ultra-Glide ${ }^{\text {Tm }}$ non-marring bearing to reference. Used in concert with either the Counter-top ('No-Drip') Design bit or the corner-rounding bit with a radius bearing, this bit will produce a no-drip edge or a bullnose in two passes.


| ØD | $\mathbf{A}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\boldsymbol{0} \mathbf{d}$ | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | - | $1 / 8$ | $3 / 8$ | $1 / 2$ | $2-5 / 16$ | 57147 |
| 1 | - | $1 / 4$ | $1 / 2$ | $1 / 2$ | $2-7 / 16$ | 57149 |
| $1-1 / 8$ | $3 / 4$ | $5 / 16$ | $1 / 2$ | $1 / 4$ | $1-7 / 8$ | 57150 |
| $1-1 / 8$ | $3 / 4$ | $5 / 16$ | $1 / 2$ | $1 / 2$ | $2-1 / 4$ | 57152 |
| $1-1 / 2$ | - | $1 / 2$ | $3 / 4$ | $1 / 2$ | $2-3 / 8$ | 57139 |
| 2 | - | $3 / 4$ | 1 | $1 / 2$ | $2-3 / 8$ | 57141 |

Replacement Ultra-Glide ${ }^{\text {tw }}$ bearing assembly \#47707 (includes \#5000 1/8" hex key).


## ROUND UNDER

Carbide Tipped • 2 Flute with Upper Ball Bearing
Round the lower edge of a counter with the router resting on the upper surface. No need to turn the heavy material over. This tool is especially useful for "job-site" work. (To complete a full $180^{\circ}$ bullnose on $1 / 2$, ," 1, , $1-1 / 2^{\prime \prime}$ or $2 "$ thick stock, use the corner-rounding bit with the radius bearing.) Furnished with Ultra-Glide ${ }^{T M}$ non-marring Delrin ${ }^{\circledR}$-sleeved ball-bearing guide.


| ØD | $\mathbf{A}$ | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-1 / 8$ | 1 | $1 / 2$ | $3 / 4$ | $1 / 2$ | $2-7 / 8$ | 57138 |
| $2-5 / 8$ | $1-1 / 2$ | $3 / 4$ | 1 | $1 / 2$ | 3 | $57140 \mathbf{\Lambda}_{14}$ |

Replacement parts: Ultra-Glide ${ }^{\text {™ }}$ bearing \#47737; Collar \#47740.
A Warning: Maximum RPM $\mathbf{A}_{14}=14,000$


## BOWL \& SINK TRIM

Carbide Tipped • 2 Flute with Ultra Glide ${ }^{\text {Tm }}$ Ball Bearing Guide
Trim a sink cut-out flush with the bowl in stages using these "over-hang" and flush trim bits in tandem. The overhang bits are equipped with non-marring Ultra-Glide ${ }^{\text {TM }}$ bearings that are tapered to match the slope of the bowl's side. A first pass with the appropriate overhang bit cleans the cut-out edge, leaving a very slight overhang at the underside of the counter.
A pass with the flush-trim bit completes the operation.


| ØD | $\mathbf{B}$ | $\mathbf{a}^{\circ}$ | $\boldsymbol{\emptyset} \mathbf{d}$ | $\mathbf{L}$ | Description | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | 1 | $10^{\circ}$ | $1 / 2$ | $3-1 / 4$ | $1 / 16$ Over-Hang | 57153 |
| $49 / 64$ | $1-1 / 2$ | $5^{\circ}$ | $1 / 2$ | $3-1 / 2$ | $1 / 8$ Over-Hang | 57155 |
| $3 / 4$ | 1 | $0^{\circ}$ | $1 / 2$ | $3-1 / 2$ | Flush Trim | 57154 |

Replacement Ultra-Glide ${ }^{\text {Tw }}$ Bearing Assemblies: (Includes \#5003 5/32" hex key).

| Bearing Assembly | Tool No. |
| :---: | :---: |
| 47726 | 57153 |
| 47709 | 57154 |
| 47733 | 57155 |




## BEVEL TRIM

Carbide Tipped • 2 Flute • For Wilsonart ${ }^{\oplus}$ HD Laminate Sinks
Only minimal sanding is required after using this bevel trim bit to profile the laminate and adhesive of a Wilsonart ${ }^{\circledR} \mathrm{HD}$ sink.


| ØD | ØD1 | ØD2 | B | $\mathbf{a}^{\circ}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-55 / 64$ | $15 / 16$ | $7 / 8$ | $3 / 8$ | $50^{\circ}$ | $1 / 4$ | $1-7 / 8$ | 57159 |




## FLUSH TRIM

Carbide Tipped • 4 Flute with Ball Bearing Guide
For a super-smooth cut finish with a flush trimming bit, use one with four flutes. Feed rate is reduced, but chipping is virtually eliminated.


| $\boldsymbol{\emptyset} \boldsymbol{D}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| $3 / 4$ | 1 | $1 / 2$ | 3 | 57184 |
| $3 / 4$ | $1-1 / 2$ | $1 / 2$ | 4 | 57185 |
| $3 / 4$ | 2 | $1 / 2$ | $4-1 / 2$ | 57186 |
| $3 / 4$ | 2 | $1 / 2$ | $4-3 / 4$ | 57187 ** |

Standard replacement bearing (steel) use \#47714.
Optional Delrin ${ }^{\oplus}$ replacement bearing use \#47709 for solid surface application.
** Replacement parts: Bearings \#47714 (bottom), \#47721 (2 top); Retaining collar \#47740.



## ULTRATRIM"' SPIRAL TRIM

Solid Carbide • 2 Flute with Double Ball Bearing Guide
For the ultimate, chip-free finish in solid-surface, laminate, and melamine, and for template work of all kinds, use this solid carbide up-spiral bit. The twin ball-bearing pilot enhances the stability of the tool.


| ØD | B | Ød | L | L1 | 'Up-cut' <br> Tool No. | 'Down-cut' <br> Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 2$ | $1-1 / 4$ | $1 / 2$ | 4 | $5 / 32$ | 46300 | 46400 |
| $1 / 2$ | 2 | $1 / 2$ | 5 | $5 / 32$ | 46304 | 46404 |

Replacement bearing: use \#47701 (2).
Lock ring: use \#47752.
Washer: use \#67053.


## CNC SPIRAL ‘ 0 ’ FLUTE

Solid Carbide • Single Flute •Up-Cut \& Down-Cut
Produce super clean, smooth cuts, especially in acrylic materials (Plexiglas, Lucite ${ }^{\oplus}$ ), other plastics, solid surfaces and wood.

Made according to strict tolerances from an exclusive carbide grade and polished to a mirror finish using Amana's unique process. Designed to eject chips either up or down. Ideal for industrial applications.


| $\boldsymbol{0}$ | $\mathbf{B}$ | $\boldsymbol{0} \mathbf{d}$ | $\mathbf{L}$ | 'Up-Cut' Tool No. | 'Down-Cut' Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1 / 16$ | $1 / 4$ | $1 / 8$ | 2 | $51415 \dagger$ | $51515 \dagger$ |
| $1 / 16$ | $1 / 4$ | $1 / 4$ | 2 | 51441 | - |
| $1 / 8$ | $1 / 4$ | $1 / 8$ | 2 | $51437+$ New | - |
| $1 / 8$ | $3 / 4$ | $1 / 8$ | 2 | $51443 \dagger$ | - |
| $1 / 8$ | $1 / 4$ | $1 / 4$ | 2 | 51416 | - |
| $1 / 8$ | $5 / 16$ | $1 / 4$ | $1-1 / 2$ | - | 51523 New |
| $1 / 8$ | $5 / 16$ | $1 / 8$ | 2 | $51453+$ | - |
| $1 / 8$ | $1 / 2$ | $1 / 8$ | 2 | $51410 \dagger$ | $51510 \dagger$ |
| $1 / 8$ | $1 / 2$ | $1 / 4$ | 2 | 51411 | 51511 |
| $1 / 8$ | $5 / 8$ | $1 / 4$ | $2-1 / 2$ | 51445 | - |
| $1 / 8$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 51446 | - |
| $5 / 32$ | $9 / 16$ | $1 / 4$ | 2 | 51447 | 51516 |
| $3 / 16$ | $3 / 8$ | $3 / 16$ | 2 | 51448 | 51518 |
| $3 / 16$ | $3 / 8$ | $1 / 4$ | 2 | 51449 | - |
| $3 / 16$ | $5 / 8$ | $3 / 16$ | 2 | 51412 | 51512 |
| $3 / 16$ | $5 / 8$ | $1 / 4$ | 2 | 51417 | 51517 |
| $3 / 16$ | $5 / 8$ | $1 / 4$ | $2-1 / 2$ | 51423 | New |
| $3 / 16$ | $7 / 8$ | $1 / 4$ | $2-1 / 2$ | 51442 | - |
| $3 / 16$ | $1-1 / 4$ | $1 / 4$ | 3 | 51418 | - |
| $7 / 32$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 51424 | - |
| $1 / 4$ | $3 / 8$ | $1 / 4$ | 2 | 51425 | - |
| $1 / 4$ | $5 / 8$ | $1 / 4$ | 2 | 51419 | 51519 |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | 2 | 51404 | - |
| $1 / 4$ | $3 / 4$ | $1 / 4$ | $2-1 / 2$ | 51421 | 51504 |
| $1 / 4$ | $7 / 8$ | $1 / 4$ | $2-1 / 2$ | 51444 | 51524 |
| $1 / 4$ | 1 | $1 / 4$ | $2-1 / 2$ | 51405 | - |
| $1 / 4$ | $1-1 / 16$ | $1 / 4$ | 3 | 51409 | 51505 |
| $1 / 4$ | $1-1 / 4$ | $1 / 4$ | 3 | 51407 | - |
| $1 / 4$ | $1-3 / 8$ | $1 / 4$ | 3 | 51403 | 51507 |
| $1 / 4$ | $1-1 / 2$ | $1 / 4$ | 3 | 51413 | - |
| $1 / 4$ | $2-1 / 4$ | $1 / 4$ | $3-1 / 4$ | 51646 | New |
| $3 / 8$ | $3 / 8$ | $3 / 8$ | 3 | 51641 | New |
| $3 / 8$ | $5 / 8$ | $3 / 8$ | $2-1 / 2$ | 51429 | 51513 |
| $3 / 8$ | $3 / 4$ | $3 / 8$ | 3 | 51426 | - |
| $3 / 8$ | $1-1 / 8$ | $3 / 8$ | 3 | 51414 | 51509 |
| $3 / 8$ | $1-5 / 8$ | $3 / 8$ | $3-1 / 2$ | 51427 | 51514 |
| $1 / 2$ | $1-1 / 4$ | $1 / 2$ | 3 | 51645 | New |
| $1 / 2$ | $1-3 / 8$ | $1 / 2$ | $3-1 / 2$ | 51644 | 51529 |
| $1 / 2$ | $1-5 / 8$ | $1 / 2$ | $3-1 / 2$ | 51428 | - |
| $1 / 2$ | 2 | $1 / 2$ | 4 | 51648 | New |
|  |  |  |  |  | - |

## Metric Sizes

| ØD | $\mathbf{B}$ | $\boldsymbol{0 d}$ | $\mathbf{L}$ | 'Up-Cut' Tool No. | 'Down-Cut' Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 mm | 6 mm | 3 mm | 50 mm | 51634 | - |
| 3 mm | 12 mm | 3 mm | 64 mm | 51491 | - |
| 3 mm | 12 mm | 6 mm | 50 mm | - | 51526 |
| 4 mm | 12 mm | 4 mm | 64 mm | 51636 | - |
| 5 mm | 16 mm | 5 mm | 64 mm | 51493 | - |
| 6 mm | 16 mm | 6 mm | 63 mm | 51638 | - |
| 6 mm | 20 mm | 6 mm | 64 mm | 51495 | - |
| 6 mm | 30 mm | 6 mm | 75 mm | 51497 | - |
| 6 mm | 32 mm | 6 mm | 75 mm | - | 51527 |
| 6 mm | 38 mm | 6 mm | 75 mm | 51499 | - |

Excellent for Cutting:

- Plastic/Acrylic

High Density Polyethylene (HDPE)

- Acetal and Nylon
- Acrylic Stone
- Acrylonitrile Butadiene Styrene (ABS)
- Alupanel ${ }^{\text {® }}$
- Corian
- Coroplast ${ }^{\oplus}$ *
- Correx Boards**
- Corrugated Polypropylene
- Delrin
- Gator Board
- Foam Board
${ }^{*}$ Coroplast ${ }^{\oplus}$ is a soft plastic cardboard made with super soft, super flexible PVC.
**Correx refers to a wide range of extruded twin-wall plastic-sheet products produced from high-impact Polypropylene resin with a similar make-up to corrugated fiberboard.
$\square$ CNC feed and speed available online



## CUT-OUT

Carbide Tipped • 4-Wing
Use for cutting out under-mount bowls, Surell, ${ }^{\text {® }}$
Fountainhead ${ }^{\circledR}$ and other solid surface under-mount
bowls. For Corian ${ }^{\circledR}$ bowls, must be used with a
Corian ${ }^{\circledR}$ bowl template.


| $\emptyset \mathbf{D}$ | $\mathbf{B}$ | $\mathbf{C}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | $3 / 16$ | $7 / 8 \& 1$ | $1 / 2$ | $3-5 / 32$ | $57165 \mathbf{\Lambda}_{12}$ |
| $3-5 / 8$ | $1 / 4$ | 1 | $1 / 2$ | $3-9 / 32$ | $57166 \mathbf{\Lambda}_{12}$ |


| Bearing | Spacer | Collar | Key | Tool No. |
| :---: | :---: | :---: | :---: | :---: |
| 47745,47747 | 55371 | 47739 | 5002 | 57165 |
| 47749 | 55363 | 47739 | 5002 | 57166 |

Note: To achieve the best possible results use these bits with a variable speed router: Minimum horsepower: 2-1/2 Speed: 12,000 RPM or less.
© Warning: Maximum RPM $\boldsymbol{A}_{12}=12,000$


## COUNTER-TOP TRIM

## Carbide Tipped • 6-Wing

Create extra-smooth shallow recesses in counter-tops with this 6 -wing tool. The radiused cutting tips produce an edge that's easy on the fingers and simple to clean. Use in a handheld router.


| ØD | B | C | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2-1 / 16$ | $1 / 4$ | $1 / 2$ | $1 / 2$ | $3-5 / 16$ | 57136 |



## COVE/BACKSPLASH

Carbide Tipped • 2 Flute with Ultra Glide ${ }^{\text {TM }}$ Ball Bearing Guide
Radius the transition from horizontal counter-top surface to vertical backsplash with this bit. The cutting profile is a modified cove, having rounded corners separated by a flat. A shank-mounted Ultra-Glide ${ }^{\text {Tm }}$ bearing guides the cut. Use in a handheld router.


| ØD | $\mathbf{R}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $3 / 8$ | $1 / 2$ | $1 / 2$ | $2-7 / 8$ | 57232 |

Replacement parts: Ultra-Glide ${ }^{\text {m" }}$ bearing \#47737; Collar \#47740.


## ROMAN OGEE

Carbide Tipped • 2 Flute with Ultra Glide ${ }^{T M}$ Ball Bearing Guide
Form a classic Roman ogee profile on the edges of solid-surface materials without concern that the bearing will damage it. This bit's Ultra-Glide ${ }^{T w}$ bearing is gentle on the material.


| ØD | $\mathbf{R}$ | $\mathbf{R 1}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 8$ | $1 / 8$ | $5 / 32$ | $5 / 8$ | $3 / 8$ | $1 / 2$ | $2-1 / 2$ | 57127 |

Replacement Ultra-Glide ${ }^{\text {T" }}$ bearing \#47707.
Optional replacement steel bearing \#47706.


## DRAIN-BOARD

Carbide Tipped • 2 Flute
This bit is perfect for cutting custom drain-board patterns in solid surface materials, as well as wooden counter-tops and cutting boards. It produces a flat-bottomed groove with radiused corners. Use in a handheld router guided by a template, fence or edge guide.


| ØD | $\mathbf{B}$ | $\mathbf{R}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $5 / 8$ | $1 / 2$ | $1 / 8$ | $1 / 2$ | 2 | 57115 |
| $3 / 4$ | $1 / 2$ | $1 / 8$ | $1 / 2$ | 2 | 57116 |




## UNDERMOUNT BOWL

Carbide Tipped • 2 Flute with Ultra Glide ${ }^{\text {TM }}$ Ball Bearing Guide
These bits prepare and/or finish counter-top edges in conjunction with undermount bowl installations. The round over and ogee bits trim and profile the counter-top edges after the bowl is mounted. The bevel bit trims the sink cut-out flush with an installed undermount bowl, but it also can be used with a template to prepare a sink cut-out for a bevel-mount bowl. All these tools can be used for undermount applications of Corian ${ }^{\oplus}$ sink and bowl \#'s 802S, 804S, 805S, 809S \& 871S.


Replacement Ultra-Glide ${ }^{\text {Tw }}$ bearing assembly \#47726 (all tools).
(Includes \#5003 5/32" hex key and \#67093 Allen screw).


## UNDERMOUNT BOWL

Carbide Tipped • 2 Flute with Ultra Glide ${ }^{T w}$ Ball Bearing Guide For Corian ${ }^{\circledR}$ Bowl \#'s 874S, 810AS, 850, 857B, 859S, 871S, 872S, 891S \& 893S
These bits are designed specifically for use in undermount installations of Corian ${ }^{\circledR}$ bowl \#874-S. They trim and profile the counter-top edges after the bowl is mounted.


| $\boldsymbol{\emptyset}$ | $\mathbf{a}^{\circ}$ | $\mathbf{R}$ | $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | $\boldsymbol{0} \mathbf{d}$ | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 4$ | $10^{\circ}$ | - | $1 / 2$ or $3 / 4$ | 1 | - | $1 / 2$ | 3 | Bevel | 57168 |
| $1-25 / 32$ | $17^{\circ}$ | $3 / 8$ | $1 / 2$ | $11 / 16$ | $17 / 32$ | $1 / 2$ | $2-1 / 2$ | Round Over | 57156 |
| 2 | $14^{\circ}$ | $1 / 2$ | $1 / 2$ | $11 / 16$ | $17 / 32$ | $1 / 2$ | $2-1 / 2$ | Round Over | 57158 |
| $2-1 / 8$ | $17^{\circ}$ | $1 / 2$ | $3 / 4$ | 1 | $25 / 32$ | $1 / 2$ | $2-7 / 8$ | Round Over | 57160 |
| $2-1 / 4$ | $15^{\circ}$ | $3 / 4$ | $3 / 4$ | $1-1 / 4$ | $25 / 32$ | $1 / 2$ | 3 | Round Over | $57162 \mathbf{A}_{20}$ |



Replacement Ultra-Glide ${ }^{\text {T"w }}$ bearing assembly \#47731 (includes \#5009 1/8" hex key and \#67146 special flat head machine screw).
© Warning: Maximum RPM $\boldsymbol{\Delta}_{20}=20,000$



## UNDERMOUNT BOWL

Carbide Tipped • 2 Flute with Ultra Glide ${ }^{T m}$ Ball Bearing Guide
These bits trim and profile the counter-top edges after the bowl is mounted. Each bit has a cutting draft with a bearing that matches, enabling the cutter to do more work so you have to do less.

## $10^{\circ}$ Cutting Draft

Designed specifically for use in undermount installations of:
Gemstone Vanity \#'s 1514-VO, 1812-VO, 1613-VSO, 1814-V0, 1814-EV0, 1313-V0, 1513-V0, 1711-V0
Gemstone Bar \& Kitchen Sink \#'s 1014-S, 1016-S, 1318-S, 1411-S, 1507-S, 1515-S, 1815-S, 1524-S, 1517-S, 1616-S, N1616-S, 1616-ES, 2116-US, 2015-S, 2318-S, 2416-ES, 2615-S, 2716-US, 2718-S, 2818-S, 2033-S, 2916-UD, 1729-D, 2917-D, 1930-DL, 1630-D, 3016-D, 3118-D, 3218-D
$\pi$ Livingstone Vanity \#K-140G
Livingstone Kitchen Sink \#'s K130-G, K140G, K160G
DuPont Kitchen Vanity \#'s 810P, 8252, 8254, 850P
DuPont Kitchen Sink \#850-P
Wilsonart ${ }^{\oplus}$ Vanity \#'s BV1514, BV1812, BV1313, BV1711
Wilsonart ${ }^{\oplus}$ Kitchen Sink \#'s BK2015, BK1515, BD1630, BD3016, BK2716US Formica Vanity \#L080
Formica Kitchen Sink \#'s K080A, K250A


| ØD | D1 | $\mathbf{a}^{\circ}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-9 / 64$ | $13 / 16$ | $10^{\circ}$ | $33 / 64$ | $63 / 64$ | $25 / 32$ | $1 / 2$ | $2-25 / 32$ | Round Over | 57267 |

Replacement parts: Ultra-GlideTw bearing for \#47787; Screw \#67146; Allen Key \#5009.

## $14^{\circ}$ Cutting Draft

Designed specifically for use in undermount installations of:
Gemstone Vanity \#'s 1410-V0, 1613-UV0, 1914-V0, 2114-V0
Livingstone Vanity \#V130-G
Wilsonart ${ }^{\oplus}$ Vanity \#'s BV1410, BV1613
Formica Vanity \#'s L075, L100
Avonite Vanity \#'s VS-1815, VS2015


| ØD | D1 | $\mathbf{a}^{\circ}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-3 / 16$ | $55 / 64$ | $14^{\circ}$ | $33 / 64$ | $63 / 64$ | $25 / 32$ | $1 / 2$ | $2-25 / 32$ | Round Over | 57268 |

Replacement parts: Ultra-Glide ${ }^{\text {Tw }}$ bearing \#47785; Screw \#67146; Allen Key \#5009.

## $18^{\circ}$ Cutting Draft

Designed specifically for use in undermount installations of:
Corian ${ }^{\oplus}$ Vanity \# 74-12
Gemstone Vanity \#'s 1512-V0, 1610-V0, 1612-V0, 1713-V, 1319-VF0, 1321-V0, 2213-V0 (Baby Bath), 1311-S
Wilsonart ${ }^{\oplus}$ Vanity \#'s BV1612, BV1512, BV2213
Formica Vanity \#L065
They trim and profile the counter-top edges after the bowl is mounted.


| ØD | D1 | $\mathbf{a}^{\circ}$ | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-7 / 32$ | $13 / 16$ | $18^{\circ}$ | $33 / 64$ | $63 / 64$ | $25 / 32$ | $1 / 2$ | $2-25 / 32$ | Round Over | 57269 |

Replacement parts: Ultra-Glide ${ }^{\text {ma }}$ bearing \#47788; Screw \#67146; Allen Key \#5009.

## KARRAN ${ }^{\circledR}$ STAINLESS STEEL SINK EDGE BITS

Carbide Tipped • 2 Flute with Ultra Glide ${ }^{\text {m" }}$ Ball Bearing Guide
These bits are designed specifically for use for the Karran stainless steel Edge Sinks for laminate and 1/2" solid surface materials. They trim the counter-top edge after the bowl is mounted.


| ØD | A | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Description | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-3 / 16$ | $1 / 2$ or $3 / 4$ | $11.5^{\circ}$ | 1 | $1 / 2$ | $3-1 / 8$ | Bevel | 57169 |
| $49 / 64$ | $1 / 2$ or $3 / 4$ | - | $1-1 / 2$ | $1 / 2$ | $3-1 / 2$ | Flush | 57155 |
| $7 / 8$ | $1 / 2$ or $3 / 4$ | $15^{\circ}$ | $7 / 8$ | $1 / 4$ | $2-1 / 4$ | Bevel | 49409 |
| $1-3 / 4$ | $1 / 2$ or $3 / 4$ | $24^{\circ}$ | $7 / 8$ | $1 / 2$ | $2-7 / 8$ | Bevel | $57171^{*}$ New |
| $2-3 / 8$ | $1 / 2$ or $3 / 4$ | $45^{\circ}$ | $13 / 16$ | $1 / 2$ | $2-7 / 8$ | Bevel | 57163 |

* For use on the Edge Series Sinks with solid surface countertops.

Replacement Ultra-Glide ${ }^{\text {T"M }}$ bearing assembly \#47733 (fits \#57169 \& \#57155 and includes \#5009 1/8" hex key and \#67146 special flat head machine screw).


Steel ball bearing \#47718 (fits \#49409).
Ultra-Glide ${ }^{\text {T"W }}$ bearing \#47765 (fits \#57163), Screw \#67147.
Ultra-Glide ${ }^{\text {tw" }}$ bearing \#47797 (fits \#57171), Screw \#67147, Key \#5009.
 Stainless Steel Sink



Bevel



1-Flute Plunge


## WILSONART ${ }^{\circledR}$ BOWL

Carbide Tipped • 2 Flute with Ultra Glide ${ }^{\text {min }}$ Ball Bearing Guide
These bits, designed specifically for use with the Wilsonart ${ }^{\circledR}$ bowl, produce two different edge treatments - a bevel with a hard edge and a bevel with a rounded-over edge. Use with any handheld router; the Ultra-Glide ${ }^{\text {TM }}$ bearing guides the cut.

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OD | $\mathbf{a}^{\circ}$ | $\mathbf{R}$ | Counter-top |  |  |  |  |  |  |
| Thickness(A) | $\mathbf{B}$ | $\mathbf{B 1}$ | Ød | $\mathbf{L}$ | Type | Tool No. |  |  |  |
| $1-1 / 2$ | $12^{\circ}$ | - | $1 / 2$ to $1-1 / 4$ | $1-1 / 4$ | - | $1 / 2$ | $3-1 / 16$ | Bevel | 57129 |
| $2-3 / 8$ | $12^{\circ}$ | $9 / 16$ | $1 / 2$ to $3 / 4$ | $7 / 8$ | $11 / 16$ | $1 / 2$ | $2-11 / 16$ | Round Over | 57161 |

Replacement Ultra-Glide ${ }^{\text {m"M }}$ bearing assembly \#47732 (includes \#5009 1/8" hex key and \#67146 special flat bead machine screw).


## TOP-MOUNT ROUTER EUROPEAN TYPE

Carbide Tipped • 2 Flute
For sink cut-outs and to prepare counter-top for top-mount installation of sink or bowl.
Among others, can be used for Corian ${ }^{\circledR}$ sink and bowl \#'s 830A, 852RA, 852LA, and 854RA.


| $\boldsymbol{\emptyset}$ | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Type | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 / 8$ | - | 1 | $1 / 2$ | $2-3 / 4$ | 1-Flute Plunge | 45302 |
| $29 / 32$ | $15^{\circ}$ | $15 / 16$ | $1 / 2$ | $2-1 / 2$ | 2-Flute Bevel | 57132 |




## DECORATIVE EDGE

Carbide Tipped • 2 Flute with Ultra-Glide ${ }^{\text {Tw }}$ Ball Bearing Guide Assembly
Amana $\mathrm{Tool}^{\circledR}$ has a wider variety of profile cutters designed specifically for use on solid surface materials than any other manufacturer. This series of profile cutters are scaled for thick or even built-up solid surface structures. With most profiles, uncomfortably sharp edges are entirely eliminated, replaced with soft curves. All bits are equipped with easy-on-the-material Ultra-Glide ${ }^{\text {TM }}$ pilot bearings. All are large bits that must be run at reduced speed in a high-horsepower router.

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DD | $\mathbf{R}$ | $\mathbf{B}$ | $\mathbf{B 1}$ | Od | $\mathbf{L}$ | Tool No. |
| $2-5 / 8$ | $5 / 16$ | $1-5 / 8$ | $15 / 16$ | $1 / 2$ | $3-1 / 2$ | 57200 |

Replacement Ultra-Glide ${ }^{\text {T" }}$ bearing \#47709 (includes \#5003 5/32" hex key).
A Warning: Maximum RPM $=12,000$


Note: Can also be used for woodworking applications by substituting \#47709 Ultra-Glide ${ }^{\text {TMM }}$ bearing for \#47714 steel bearing. Order \#47714 separately.


## CHAMFER

Carbide Tipped • 2 Flute with Ultra-Glide ${ }^{\text {m" }}$ Ball Bearing Guide Assembly
Chamfer bevel solid-surface edges with one of these two bits. These large bits must be run at reduced speed in a high-horsepower router.

| ØD | $\mathbf{a}^{\circ}$ | $\mathbf{B}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | $45^{\circ}$ | $3 / 4$ | $1 / 2$ | $2-5 / 8$ | 57220 |
| $2-17 / 32$ | $30^{\circ}$ | $1-3 / 4$ | $1 / 2$ | $3-5 / 8$ | $57258 \mathbf{\Lambda}_{12}$ |

Replacement Ultra-Glide ${ }^{\text {Tw }}$ bearing \#47707.
© Warning: Maximum RPM $\boldsymbol{\Delta}^{12}=12,000$




| ØD | $\mathbf{B}$ | $\mathbf{B 1}$ | $\mathbf{R}$ | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-5 / 16$ | $1-1 / 16$ | $7 / 32$ | $1-3 / 8$ | $1 / 2$ | $3-1 / 8$ | 57257 |

Replacement bearing \#47709.


## DOUBLE BULLNOSE

Carbide Tipped • 2 Flute with Ball Bearing Guide
Cut bullnose profiles on two layers in a stack in one pass with this large cutter.


| ØD | ØD1 | R | B | B1 | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1-1 / 2$ | $1-1 / 8$ | $15 / 64$ | 2 | $1-1 / 2$ | $1 / 2$ | $3-1 / 8$ | 57238 |

Replacement bearing \#47712.



DECORATIVE EDGE
Carbide Tipped • 2 Flute with Ultra-Glide ${ }^{\text {rw }}$ Ball Bearing Guide Assembly
Cut a table-edge type profile on the edge of a solid-surface counter-top with this large bit. The profile is an elongated ogee. Because of its large diameter, this bit should only be used in a high-horsepower router and run at reduced speed.


| ØD | $\mathbf{R}$ | R1 | B | Ød | $\mathbf{L}$ | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | $5 / 16$ | $1 / 2$ | $1-1 / 8$ | $1 / 2$ | $3-1 / 8$ | 57248 |

Replacement Ultra-Glide ${ }^{\text {tw }}$ bearing assembly \#47709.
A Warning: Maximum RPM $=15,000$


This bit produces a table-edge type profile on a solid-surface counter-top. The bit combines the traditional ogee form with a large quarter-round. Because of its large diameter, this bit should only be used in a high-horsepower router and run at reduced speed.


This bit combines a traditional shallow ogee form with a substantial quarter-round to produce a table-edge type profile on a solid-surface counter-top. Adjust cut depth of router to control the margin of the profile. Because of its large diameter, this bit should only be used in a high-horsepower router and run at reduced speed.

| ØD | R | R1 | B | Ød | L | Tool No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2-1 / 2$ | $19 / 32$ | $19 / 64$ | $7 / 8$ | $1 / 2$ | $2-3 / 4$ | 57254 |

Replacement Ultra-Glide ${ }^{\text {Tm }}$ bearing assembly \#47707.



[^0]:    ** Tools for IntelliCarve.

[^1]:    - Aluminum
    - Coroplast ${ }^{\bullet}$

[^2]:    $\underset{\text { mathe }}{ }$
    CNC feed and speed available online

[^3]:    CNC feed and speed available online

[^4]:    $\frac{\text { EDT }}{\text { Anse }}$
    CNC feed and speed available online

[^5]:    CNC feed and speed available online

[^6]:    $\xrightarrow[A \text { dice }]{ }$
    CNC feed and speed available online

[^7]:    + Attention: Reduce RPM \& Feed Rates (IPM) by $30-50 \%$ to prevent tool breakage due to extremely small diameter (D). Bits are not guaranteed due to extremely small diameter.
    * Single bearing. **Double bearing.

[^8]:    Replacement bearing \#47706.

[^9]:    Replacement bearing \#47706.

[^10]:    * $5 / 32$ " size also used for 'biscuit-joint' cutting. See above for complete assemblies including arbor and ball bearing guide. Arbor sold separately.

[^11]:    $\triangle$ Recommendation: The miniature router bits with $3 / 16$ " and $1 / 4$ " diameter ball bearing guides were designed for use in intricate and delicate projects with or without tight spaces. Do not cut material more than half the diameter of the bearing and slow down feed to reduce load. Not guaranteed due to their extremely small size.

[^12]:    * Note: Reveal ('A') on all tools shown above, reflects the total length of cut. Therefore, you must

