



PREMIUM FAB™ SPECIAL TOOLING

for Thin Turret
Strippit® Machines



Strength. Performance. Innovation.

FAB STYLE

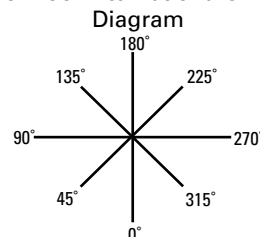
Special Shapes: Group A.....	3-5
Special Shapes: Group B.....	6-9
Special Shapes: Group C.....	10
Bridge Lance And Form • Form-Up.....	11
Card Guide • Form-Up.....	12
Coining Tools • Form-Up/Form-Down.....	13
Cluster Tool.....	14-16
EKO's • Form-Up/Form-Down.....	17-19
Emboss Forming Tools • Form-Up/Form-Down.....	20-21
Extrusion • Form-Up/Form-Down.....	22-23
EZ-Set™ Punch Head.....	24
Half Shear/Rooftop Half Shear • Form-Up.....	25
Hinge Tool • Form-Up.....	26
Stamping • Form-Up/Form-Down.....	27
Lance and Forms • Form-Up.....	28-29
Letter Stamps • Form-Down/Form-Up.....	30-31
Louvers • Form-Up/Form-Down.....	32
Progressive Louvers • Form-Up.....	33
Progressive Rib • Form-Up.....	34
Rollover Tool • Form-Down.....	35
Scrapless Shear.....	36
Thread Form • Form-Up/Form-Down.....	37
Thread Loop.....	38
Corner Rounding • Trim And Part.....	39
Light Spring Units.....	40

ORDERING INFORMATION

1. Machine model number and tooling type.
2. Material thickness and type.
3. Front of machine or key location.
4. .012" (0.3mm) minimum radius is standard on all corners.
Less than .012" (0.3mm) radius may increase lead time.

Note: When ordering special key location or special angle of shapes, use diagram to eliminate any confusion.

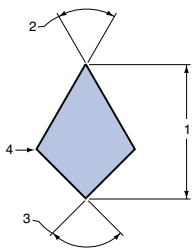
Front of Machine (Clamps)
WilsonTool International's Keying



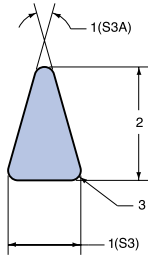
SPECIAL SHAPES

GROUP "A"

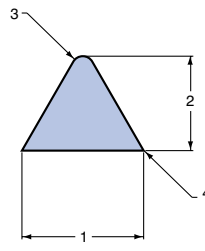
Note: Special Considerations May Alter Price and Lead Time



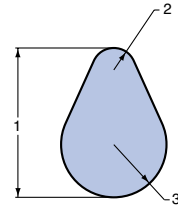
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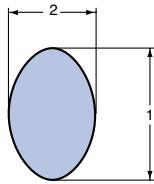
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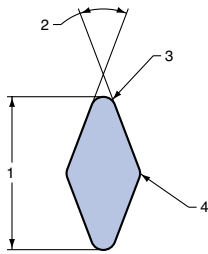
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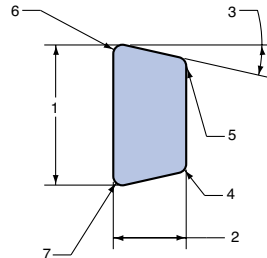
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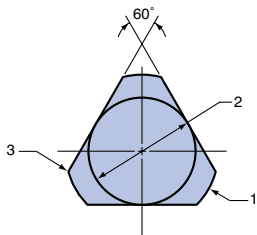
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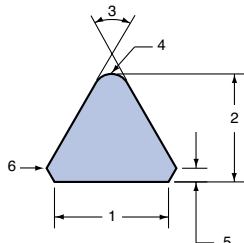
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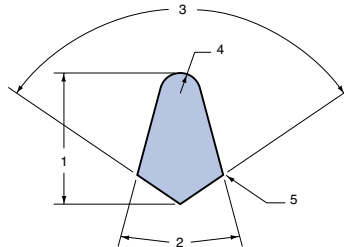
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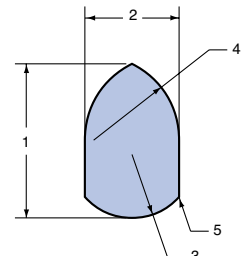
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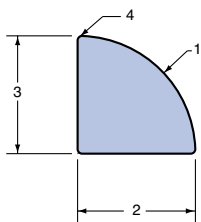
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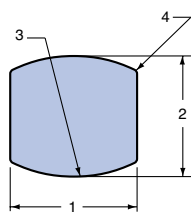
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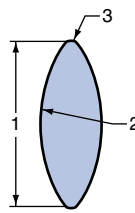
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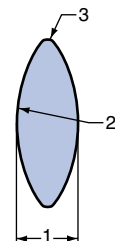
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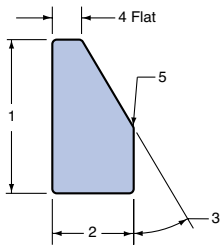


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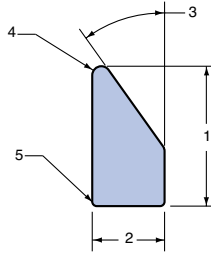


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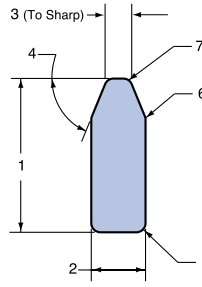
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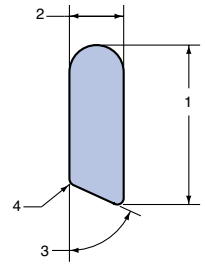
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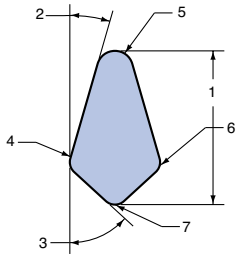
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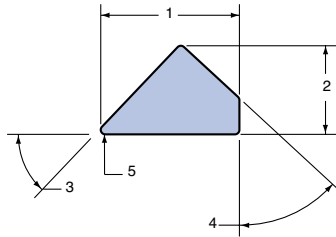
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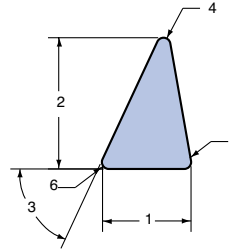
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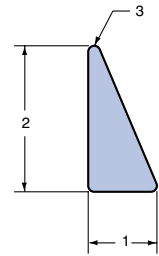
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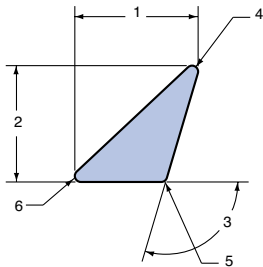
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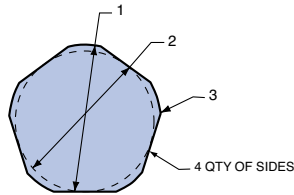
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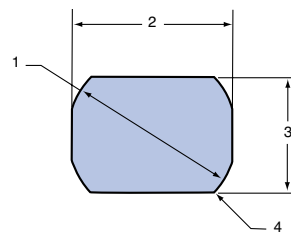
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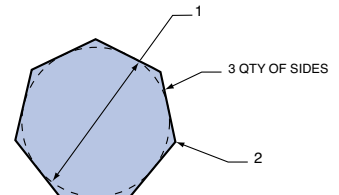
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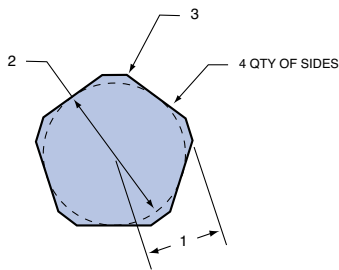
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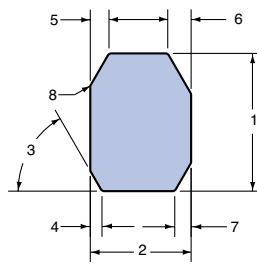
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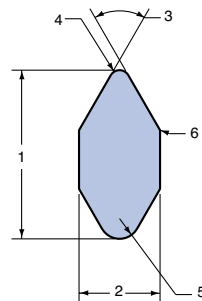
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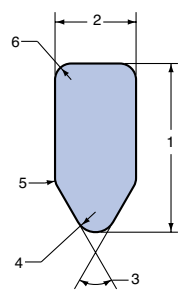
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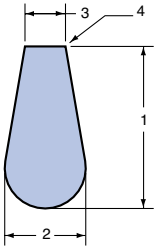
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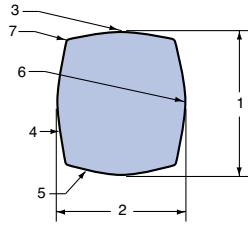
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SPECIAL SHAPES

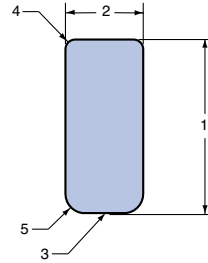
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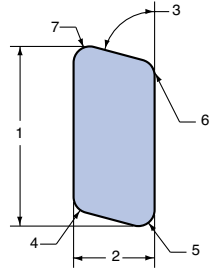
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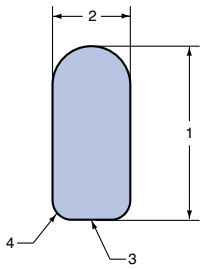
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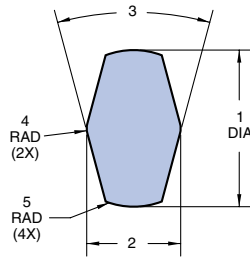
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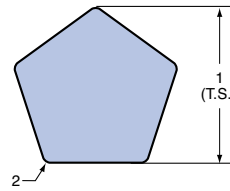
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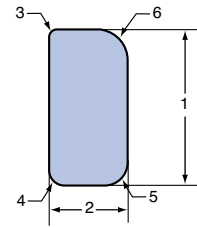
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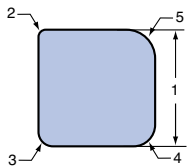
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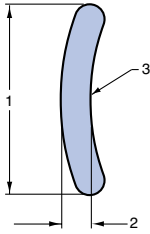


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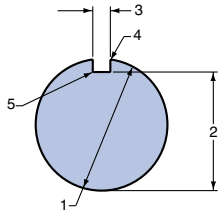


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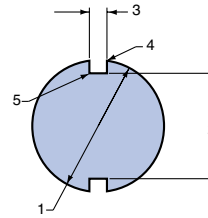
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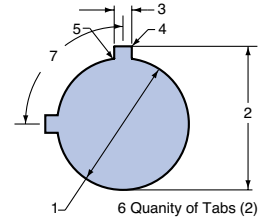
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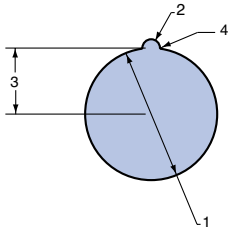
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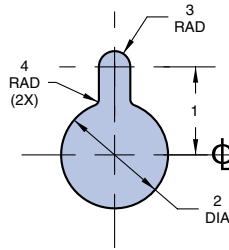
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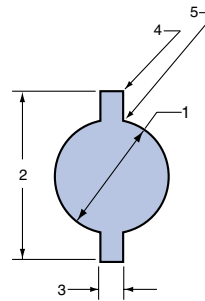
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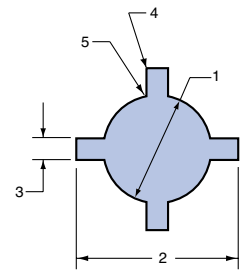
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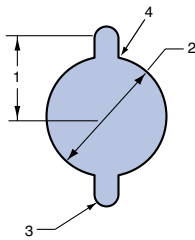
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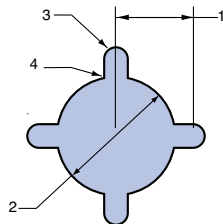
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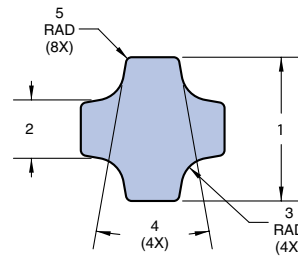
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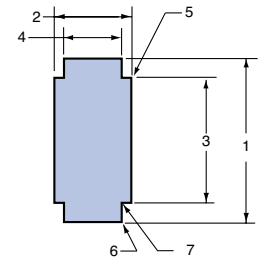
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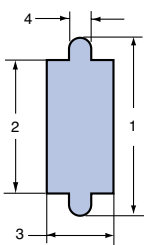
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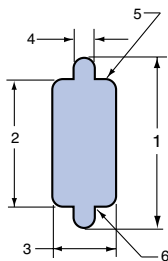
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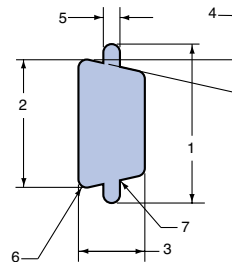
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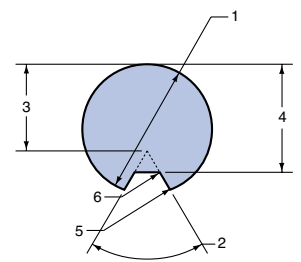
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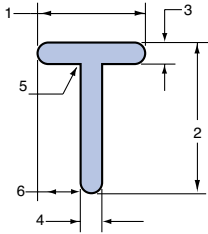
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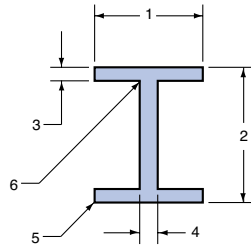
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SPECIAL SHAPES

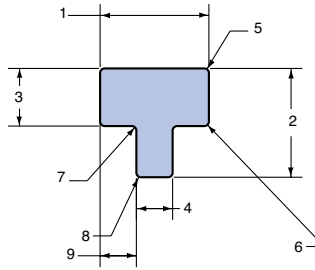
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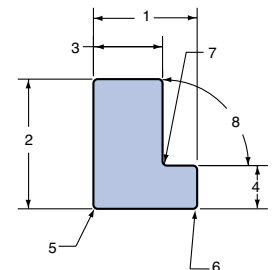
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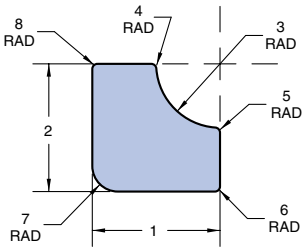
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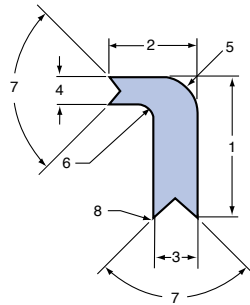
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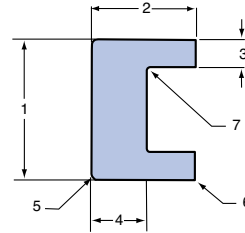
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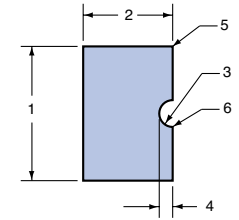
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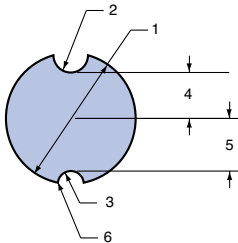
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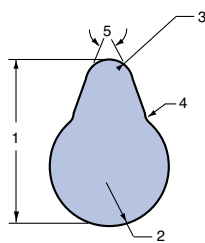
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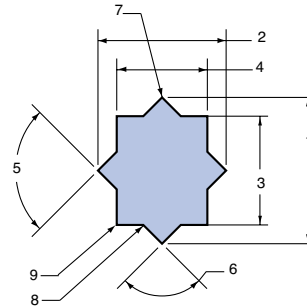
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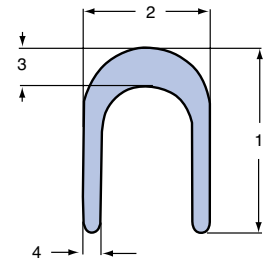
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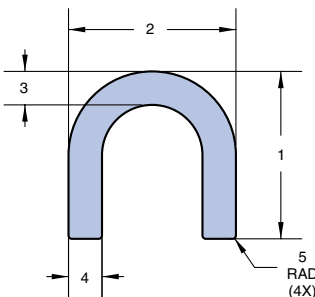
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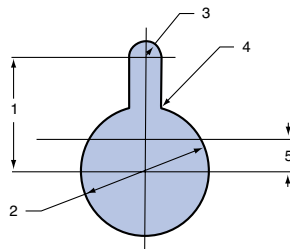
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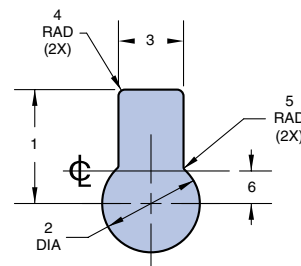
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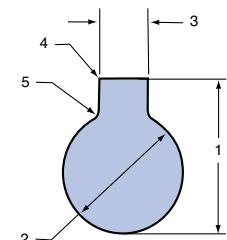
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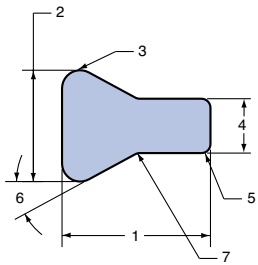


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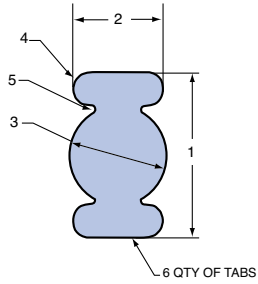


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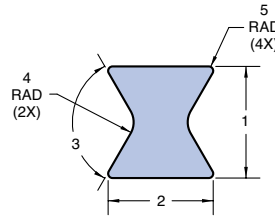
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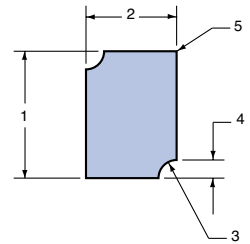
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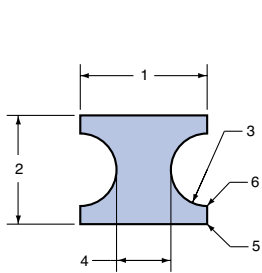
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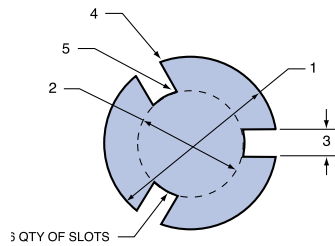
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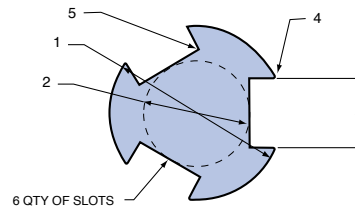
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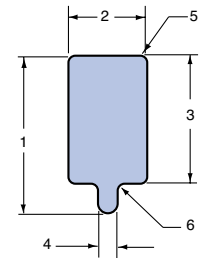
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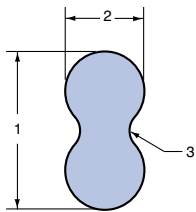
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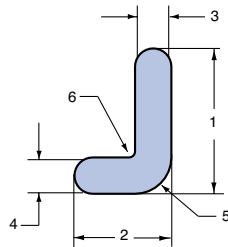
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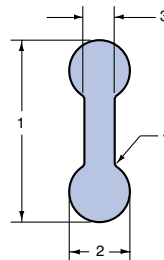
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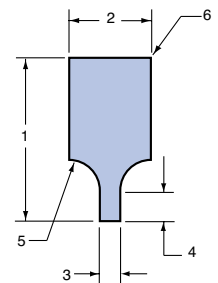
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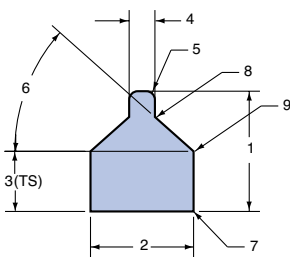
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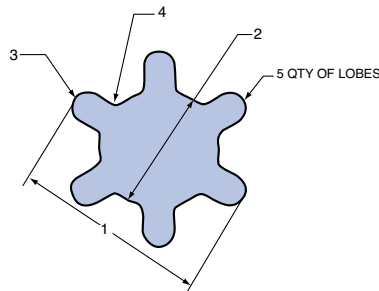
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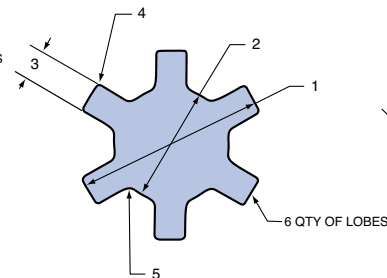
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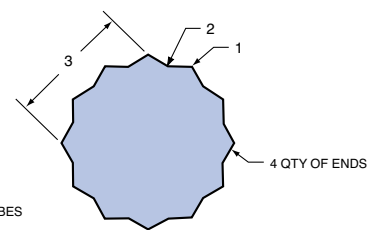
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S115



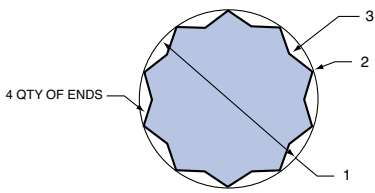
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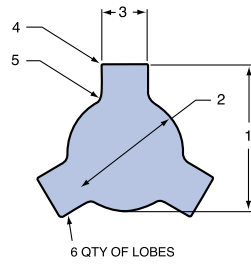
S117

SPECIAL SHAPES

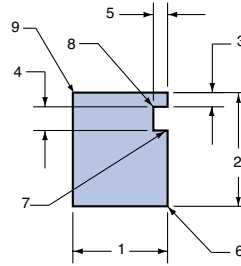
GROUP "B"



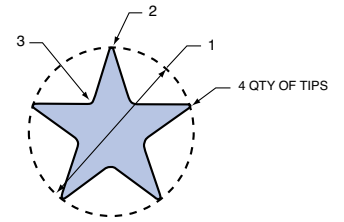
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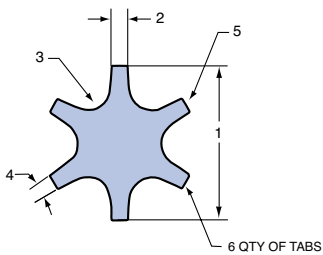
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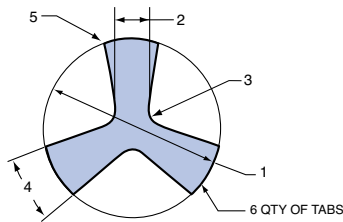
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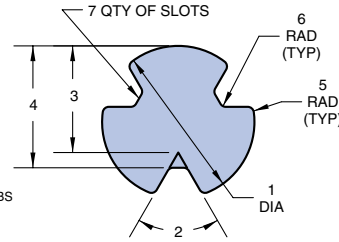
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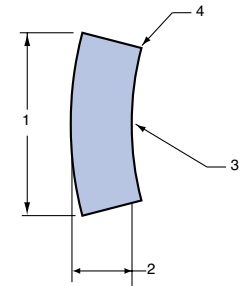
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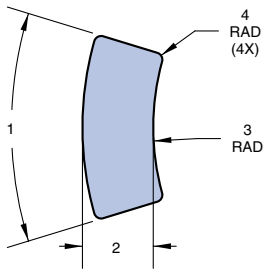
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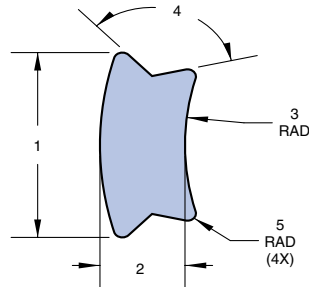
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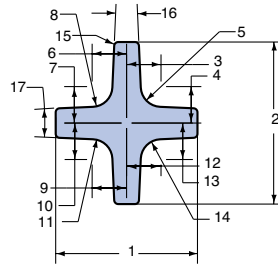
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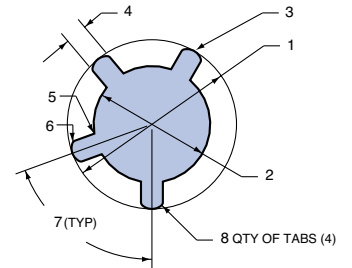
S141A



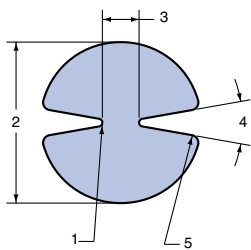
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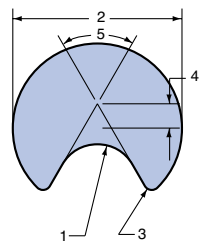
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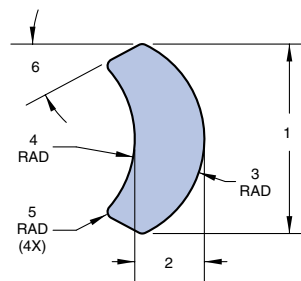
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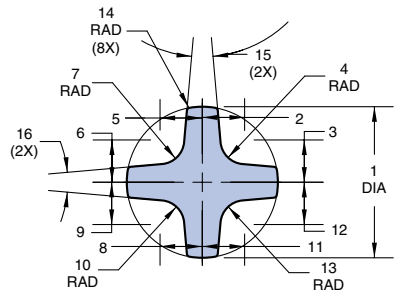
S171



S172

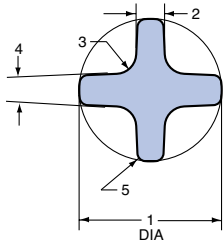


S174

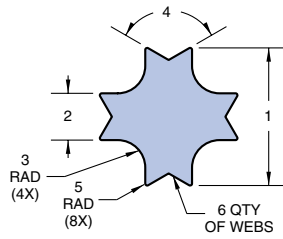


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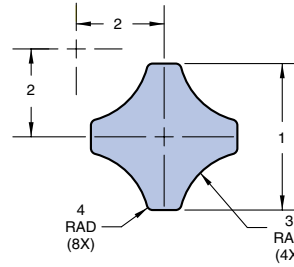
GROUP "C"



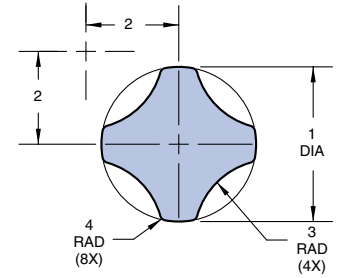
S177



S179

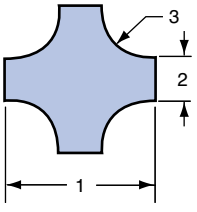


S19A



S19B

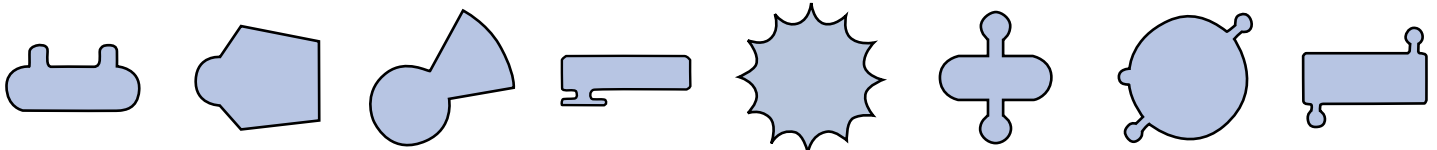
4-Way Radius Tools - Standard Sizes



RADIUS		DIM. 1		DIM. 2		DIM. 3	
.062	(1.58mm)	.500	(1.58mm)	.250	(6.35mm)	.062	(1.58mm)
.094	(2.39mm)	.625	(2.39mm)	.250	(6.35mm)	.094	(2.39mm)
.125	(3.18mm)	.625	(3.18mm)	.250	(6.35mm)	.125	(3.18mm)
.156	(3.96mm)	.750	(3.96mm)	.250	(6.35mm)	.156	(3.96mm)
.188	(4.78mm)	.750	(4.78mm)	.250	(6.35mm)	.188	(4.78mm)
.250	(6.35mm)	.875	(6.35mm)	.250	(6.35mm)	.250	(6.35mm)
.312	(7.93mm)	1.000	(7.93mm)	.250	(6.35mm)	.312	(7.93mm)
.375	(9.53mm)	1.125	(9.53mm)	.250	(6.35mm)	.375	(9.53mm)
.500	(12.7mm)	1.250	(12.7mm)	.250	(6.35mm)	.500	(12.7mm)

SPECIAL SHAPES

GROUP "C"



FAB STYLE



Shown with optional EZ-Set™ punch head.

SINGLE BRIDGE LANCE AND FORM	CAT. NO.
1-1/4" STATION Punch and die assembly (set)* Punch tip only Ejector only Die assembly only	54
3-1/2" STATION Punch holder and die assembly (set) Punch tip only Ejector only Die assembly only	10121
DOUBLE BRIDGE LANCE AND FORM	CAT. NO.
1-1/4" STATION Punch and die assembly (set)* Punch tip only Ejector only Die assembly only	55
3-1/2" STATION Punch holder and die assembly (set) Punch tip only Ejector only Die assembly only	10112

*

EZ-Set™ punch head not included in set price.

BENEFITS

- The Bridge Type Lance and Form can be used for:
 - Shear stops
 - Card guides
 - Locators
 - Dividers
 - Ventilation
 - Wire tie downs
- When the Bridge Type Lance and Form is used as a shear stop, its higher form makes it easier to pick up gauging.
- The Wilson design gives a positive form, which ensures a high quality part.
- Tools for form-down operations on request.
- Optional lead-in available on Double Bridge. Consult sales desk for pricing.
- Holder assembly design provides cost saving replaceable punch tip and ejector.
- EZ-Set™ punch head recommended for fast and easy adjustments (no shims needed). Cat. No.10037. See EZ-Set™ punch head page for details.

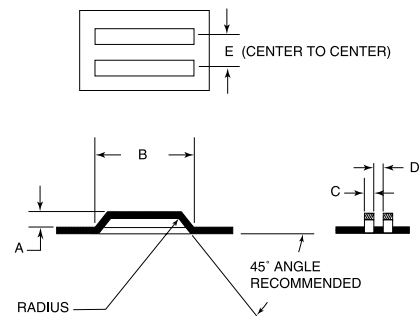
CONSIDERATIONS

- Bridge Lance and Forms are made for one specific material thickness. Thinner material may be used, but the form will change. Never punch material thicker than what the tool was designed for.
- Bridge width should be 1.5 times the material thickness in mild steel and aluminum and 2 times the material thickness in stainless steel to warranty.
- Widths less than .070" (1.78mm) will alter price. Consult sales desk.
- Form-down Bridge Lance and Forms are not recommended in N.C. machines.



INFORMATION NEEDED

- Machine model
- Material thickness and type
- Length, width, height and center to center
- Drawing of pattern for relief
- Top, side and end views



FAB STYLE



CARD GUIDE	FORM-UP	CAT. NO.
1-1/4" STATION Punch and die assembly (set)* Punch tip only Ejector Die assembly only	1.000" (25.40MM) LENGTH MAX.	10098
3-1/2" STATION Punch holder and die assembly (set) Punch tip only Ejectors only (set of 2) Die assembly only	3.250" (82.55MM) LENGTH MAX.	412

* EZ-Set™ punch head not included in set price.

BENEFITS

- This unique universal holder design offers fast and easy length adjustments with the spring loaded adjusting plunger.
- The form is internally stripped for best results.
- Lower costs with replaceable inserts that can be converted to different size Card Guides.
- To change Card Guide size, only the punch tip, ejectors and die assembly are required.
- Wilson Tool will estimate the web of material to be formed on all Card Guides.
- Special lead-ins available. Consult the sales desk for pricing.
- Wilson Tool can develop the pre-punch shape and size on special Card Guides at an additional charge. Consult the sales desk for pricing.

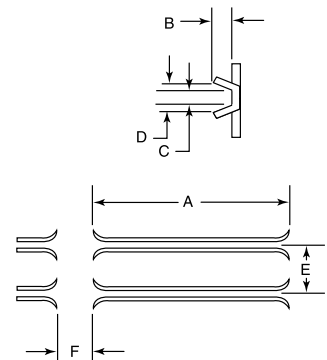
CONSIDERATIONS

- Form heights of less than two times the material thickness are not recommended because the web may twist (one side will form higher than the other).
- For proper design, closest center-to-center and narrowest pre-punch are required.
- Special applications may affect pricing.



INFORMATION NEEDED

- Machine model
- Material thickness and type
- Drawing of card guide desired, center-to-center location and narrowest pre-punch
- Pre-punch shape: Rectangle, obround, or rectangle with radius corners
- Length of pre-punch if material is less than .050" (1.27mm)



FAB STYLE



Shown with optional EZ-Set™ punch head.

COINING TOOLS	FORM-DOWN	CAT. NO.	
1-1/4" STATION	ROUND INSERT DESIGN	438	
Punch & guide assembly & die w/pilot (set)*			
Punch & guide assembly & die w/out pilot (set)*			
Insert with pilot only			
Insert without pilot only		438	
Die only			
1-1/4" STATION ROUND	SOLID PUNCH DESIGN		
Punch & guide assembly & die w/pilot (set)*			
Punch body only w/out pilot		10262	
Die only			
1-1/4" STATION SHAPE	SOLID PUNCH DESIGN		
Punch & guide assembly & die w/pilot (set)*			
Punch body only w/out pilot		66	
Die only			
COINING TOOLS	FORM-UP		CAT. NO.
1-1/4" STATION ROUND			66
Punch holder and die assembly (set)*			
Die assembly only		10167	
1-1/4" STATION SHAPE			
Punch holder and die assembly (set)*			
Die assembly only			

* EZ-Set™ punch head is not included in set price.

Note: Solid design is used for all counterbores, shape coins and round coins exceeding 10 gauge.

BENEFITS

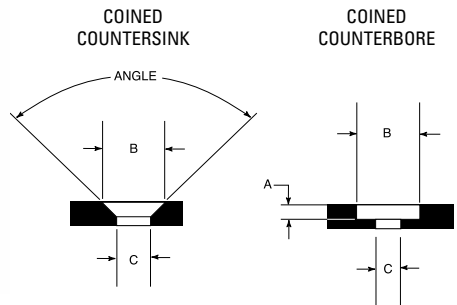
- Coining operations on the punch press eliminate the costly and time consuming secondary operation of drilling countersinks.
- The interchangeable tip design allows you to change the size of your coin easily and inexpensively.
- The replaceable insert design also lowers tooling costs and inventory.
- In many cases, you can pierce and coin in one hit. However, a pre-punched hole will help reduce the burr for a cleaner looking part.
- General guidelines for prepunching material (before coining):
 - Aluminum—.125" (3.18mm) thick or greater
 - Mild steel—.090" (2.29mm) thick or greater
 - Stainless steel—.060" (1.52mm) thick or greater
- EZ-Set™ punch head is recommended for fast and easy length adjustments (no shims needed). See EZ-Set™ punch head page for further details.

CONSIDERATIONS

- A pre-punched hole is necessary on all form-up coins and strongly recommended on form-down counterbores.
- Consult the sales desk for size and tonnage restrictions.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material thickness and type
- Angle, coin diameter, thru-hole
- With or without pilot



Estimated pre-punch formula:
 $B - [(B - C) \times .75] = \text{Pre-punch}$

FAB STYLE



BENEFITS

- The most cost effective method to manufacture perforations or other repetitive applications.
- Saves machine punching time and tool maintenance.
- The best choice when punching a pattern of holes that require extremely close center-to-center tolerances.
- Different design styles are available to suit your needs.
- The replaceable insert design (Style B) provides additional cost savings with a replaceable punch tip.
- Finished parts produced with each hit when your cluster tool is made to progressively pierce and blank, or pierce, form and blank.
- Optima® coating is available for extending tool life on widths or diameters exceeding .098" (2.50 mm).
- Slug Huggers® are available for most applications.

CONSIDERATIONS

- To warranty the die, round holes must have a web between holes of .125"(3.18mm) or two (2) times the material thickness, whichever is greater.
- Long and narrow shapes must have a web between holes:
 - Up to .500" length (12.70mm)
 - .125" minimum (3.18mm)
 - .501-1.000" length (12.73-25.40mm)
 - .187" minimum (4.75mm)
 - 1.001-2.00" length (25.43-50.80mm)
 - .250" minimum (6.35mm)
 - 2.001" & up length (50.83mm)
 - .312" minimum (7.92mm)

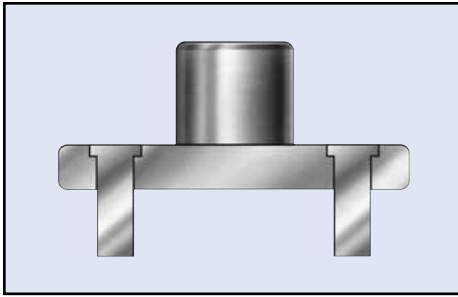
Material thickness, type and pattern may alter minimum web requirements. Consult the sales desk.
- Due to variety of hole patterns, number and size of holes, and styles of tools, contact the sales desk for pricing.
- Special applications may affect pricing.

INFORMATION NEEDED

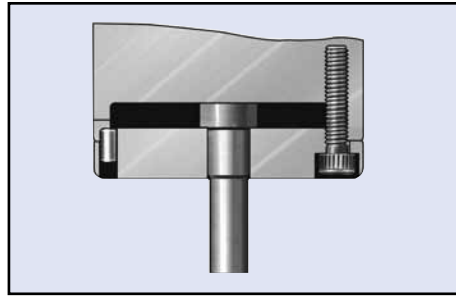
- Machine model
- Material type and thickness or range
- Number of hole clusters
- Straight or staggered pattern
- Center-to-center dimensions
- A, B or C style desired (see next page)
- Style of guide assembly being used (see next page)

CLUSTER TOOL

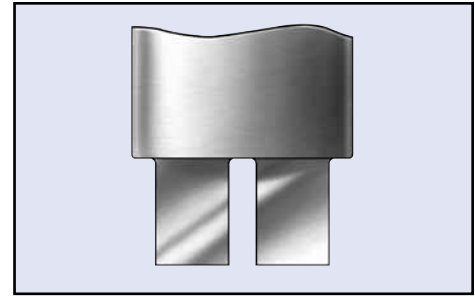
FAB STYLE



STYLE "A": In this cluster, the punches are inserted through the body of the punch and are backed by the punch holder. The limitation of this style is that replaceable inserts cannot be designed to be under the shank of the punch.



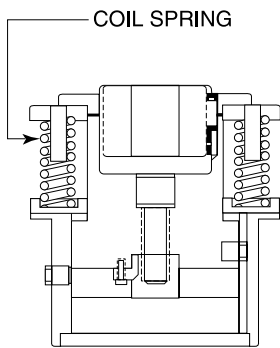
STYLE "B": This design provides economy and flexibility, particularly on long run jobs. The ability to replace the punch tip and inserts makes this the "style of choice" of most manufacturers. The added benefit is the ability to change the cluster pattern and insert size and shape by purchasing only the punch tip and inserts.



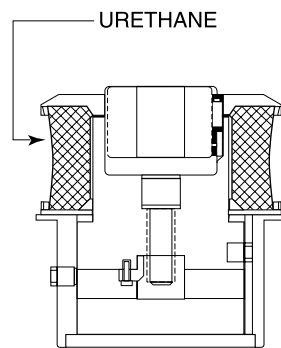
STYLE "C": The cluster pattern is precision machined and ground from a solid punch. This design tends to be less expensive for short run jobs. However, if damage does occur to this punch, an entirely new punch must be ordered, rather than an inexpensive insert as in styles "A" and "B".

WILSON STYLE AND STRIPPIT® STYLE HOLDERS

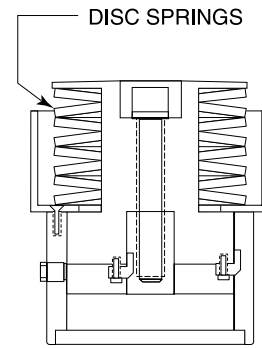
When ordering a cluster tool, it is important to specify to the sales desk the style holder for which you want the cluster made. The various holders available in the industry are shown below.



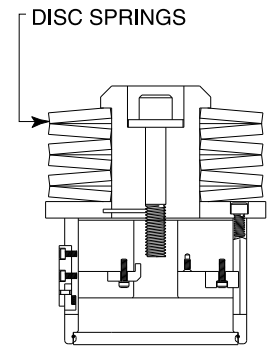
type #1
Strippit® Style holder



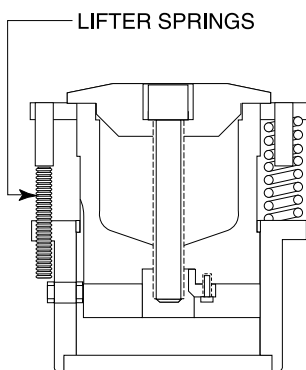
type #2
Strippit® Style holder



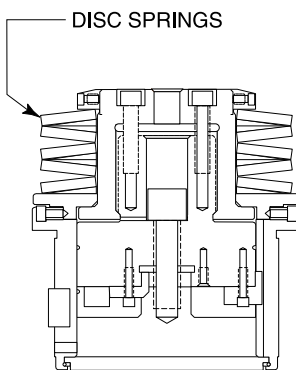
type #3
Strippit® Style holder



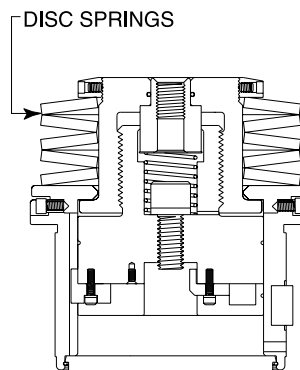
type #3A
Strippit® Style holder



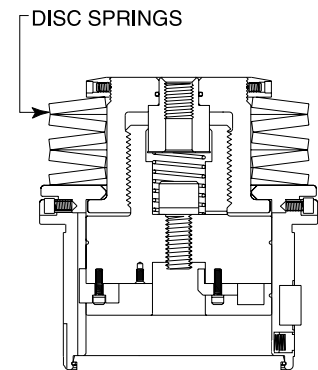
type #4
Strippit® Style holder



type #5
Wilson Style holder
(Wilson Series 80®)



type #5A
Wilson Style holder
(Wilson Series 80 Plus®)



type #5B
Wilson Style holder
(Wilson Series 90®)

Note: Specify thread size on all holder types.

FAB STYLE



Shown with optional EZ-Set™ punch head.

SINGLE EKO (1-1/4" STATION) FORM-UP		CAT. NO.
1-1/4" STATION .375" (9.53MM) & UNDER ROUND Punch and die assembly (set)*		10199
1-1/4" STATION .250" (9.53MM) "A" & UNDER SHAPE Punch and die assembly (set)		10290
1-1/4" STATION .376"-.875" (9.55-22.23MM) ROUND Punch and die assembly .376" - .500" (9.55 - 12.70mm) (set)*		7
Punch and die assembly .501" - .875" (12.73 - 22.23mm) (set)*		10210
Punch and die assembly .875" (22.23mm) stock (set)*		8
1-1/4" STATION .251"-.875" (9.55-22.23MM) "A" SHAPE Punch and die assembly (set)*		10291
1-1/4" STATION .876"-1.125" (22.25-28.58MM) ROUND Punch & die assembly .876" - .937" (22.25 - 23.80mm) dia. (set)*		46
Punch & die assembly .938" - 1.125" (23.83 - 28.58mm) dia. (set)*		10208
Punch & die assembly 1.125" (28.58mm) stock (set)*		26
1-1/4" STATION .876"-1.125" (22.25-28.58MM) "A" SHAPE Punch and die assembly (set)*		10292
DOUBLE EKO (1-1/4" STATION) FORM-UP		CAT. NO.
1-1/4" STATION 1.125" (28.58MM) MAXIMUM ROUND Punch and die assembly (set)*		10209
Punch and die assembly stock (set)*		12

* EZ-Set™ punch head not included in set price.

BENEFITS

- Interchangeable design provides economy and flexibility.
- Purchase only punch tip(s), ejector, and die assembly when changing sizes.
- Most EKO's can be used in a small range of material thicknesses (example: 16-14 gauge).
- Available in rounds, standard shapes and special shapes.
- EZ-Set™ punch head is recommended for fast and easy length adjustments on the 1-1/4" station (no shims needed.) See EZ-Set™ punch head page for further details.
- Available stock sizes are:
 Single EKO .875" (22.23mm) diameter
 Single EKO 1.125" (28.58mm) diameter
 Double EKO .875 x 1.125" (22.23 x 28.58mm) diameter
 (with .010" (0.25mm) clearance for 16 and 14 gauge mild steel)

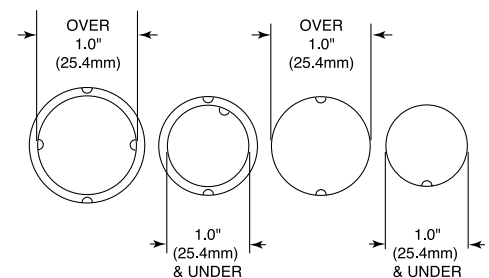
CONSIDERATIONS

- Slow machine speed or program in post delay to give the tool time to strip.
- Consult the sales desk for material thickness range when exceeding 14 gauge.
- Special applications may affect pricing.



INFORMATION NEEDED

- Machine model
- Material thickness & type
- Actual diameter
- Specify STD. or SPL. tab location & size
- Specify center-to-center if more than one knockout exists on the sheet



FAB STYLE

SINGLE EKO (3-1/2" STATION) FORM-UP		CAT. NO.
3-1/2" STATION	1.126" - 2.688" (28.60-68.28MM) ROUND	10
Punch holder and die assembly (set)		
Punch tip only		
Ejector only		
Die assembly only		
3-1/2" STATION	2.688" (68.28MM) MAXIMUM "A" SHAPE	10293
Punch holder and die assembly (set)		
Punch tip only		
Ejector only		
Die assembly only		
DOUBLE EKO (3-1/2" STATION) FORM-UP		CAT. NO.
3-1/2" STATION	1.126" - 2.688" (28.60-68.28MM) ROUND	14
Punch holder and die assembly (set)		
O.D. punch tip only		
Punch insert only		
Punch ejector only		
Die assembly only		

BENEFITS

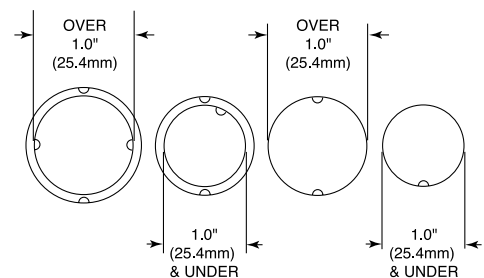
- Interchangeable design provides economy and flexibility.
- Purchase only punch tip(s), ejector, and die assembly when changing sizes.
- Use the same holder to interchange single and double EKO's.
- Fast and easy length adjustments can be made with the adjusting spring plunger, saving you costly set-up time.
- Most EKO's can be used in a small range of material thicknesses (example: 16-14 gauge).
- Available in rounds, standard shapes and special shapes.
- Triple and quad EKO's possible with multiple tools. Consult sales desk.
- Universal holder design gives you the flexibility of using the same upper unit holder for other applications.

CONSIDERATIONS

- Slow machine speed or program in post delay to give the tool time to strip.
- Consult the sales desk for material thickness range when exceeding 12 gauge.
- Special applications may affect pricing.

**INFORMATION NEEDED**

- Machine model
- Material thickness & type
- Actual diameter
- Specify STD. or SPL. tab location & size
- Specify center-to-center if more than one knockout exists on the sheet



FAB STYLE



Shown with optional EZ-Set™ punch head.

SINGLE EKO (1-1/4" STATION) FORM-DOWN		CAT. NO.
1-1/4" STATION .937" (23.80MM) & UNDER ROUND	Punch and die assembly (set)*	3
1-1/4" STATION .937" (23.80MM) & UNDER "A" SHAPE	Punch and die assembly (set)*	10288
1-1/4" STATION .938" (23.83MM) & GREATER ROUND	Punch and die assembly (set)*	5
1-1/4" STATION .938" (23.83MM) & GREATER "A" SHAPE	Punch and die assembly (set)*	10289
DOUBLE EKO (1-1/4" STATION) FORM-DOWN		CAT. NO.
1-1/4" STATION .875" x 1.125" (22.23-28.58MM) ROUND	Punch and die assembly (set)*	11

* EZ-Set™ punch head not included in set price.

BENEFITS

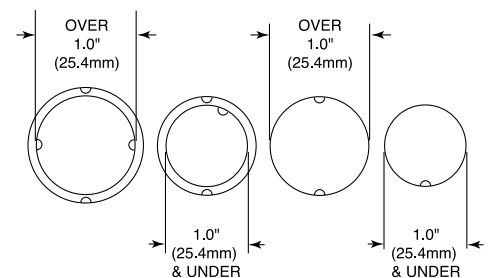
- Provides for fast machine set-up and trouble-free operation.
- Most EKO's can be used in a small range of material thicknesses (example: 16-14 gauge).
- Available in rounds, standard shapes and special shapes.
- Self-stripping design is standard on all form-down EKO's.
- EZ-Set™ punch head is recommended for fast and easy length adjustments (no shims needed). See EZ-Set™ punch head page for further details.

CONSIDERATIONS

- Slow machine speed or program in post delay to give the tool time to strip.
- Consult the sales desk for material thickness range when exceeding 14 gauge.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material thickness & type
- Actual diameter
- Specify STD. or SPL. tab location & size
- Specify center-to-center if more than one knockout exists on the sheet



FAB STYLE

Shown with optional relief.

SINGLE EKO (3-1/2" STATION) FORM-DOWN		CAT. NO.
3-1/2" STATION	1.126" - 3.500" (28.60-88.90MM) ROUND	9
Punch & die assembly and stripper (set)		
3-1/2" STATION	SHAPE	10134
Punch & die assembly and stripper (set)		
DOUBLE EKO (3-1/2" STATION) FORM-DOWN		CAT. NO.
3-1/2" STATION	1.126" - 2.468" (28.60-62.69MM) ROUND	13
Punch & die assembly and stripper (set)		

BENEFITS

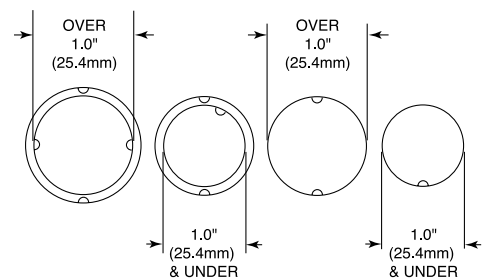
- Provides for fast machine set-up and trouble-free operation.
- Set-up time is reduced to a minimum with a Series 90® holder.
- Most EKO's can be used in a small range of material thicknesses (example: 16-14 gauge).
- Available in rounds, standard shapes and special shapes.
- Self-stripping design is standard on all form-down EKO's.
- Triple EKO's are possible with multiple tools. Consult the sales desk.

CONSIDERATIONS

- Slow machine speed or program in post delay to give the tool time to strip.
- Consult the sales desk for material thickness range when exceeding 12 gauge.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material thickness & type
- Actual diameter
- Specify STD. or SPL. tab location & size
- Specify center-to-center if more than one knockout exists on the sheet



FAB STYLE



Shown with optional EZ-Set™ punch head.

EMBOSS FORMING TOOLS	FORM-UP	CAT. NO.
1-1/4" STATION	ROUND	
Punch and die assembly (set)*		10215
.375" (9.53mm) and less		52
.376" (9.55mm) and greater		
1-1/4" STATION	SHAPE	
Punch and die assembly (set)*		75
3-1/2" STATION	ROUND	
Punch, die and stripper		53
3-1/2" STATION	SHAPE	
Punch, die and stripper		74

* EZ-Set™ punch head not included in set price.

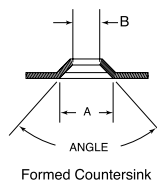
BENEFITS

- Emboss style forming tools are useful for: stand-offs, spacers, large countersinks and locks for nuts
- 0° and 90° standard keying on shape forms.
- 1-1/4" (B) Station is a full body design to give maximum bearing area to sheet.
- Series 80® Plus and Series 90® holders make length adjustments fast and easy, reducing down time.
- The tool can be tailored for your application.
- EZ-Set™ punch head for fast and easy length adjustments on the 1-1/4" station (no shims needed). See EZ-Set™ punch head page for details.



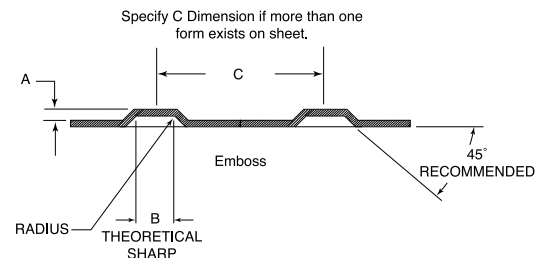
CONSIDERATIONS

- Large station forming tools must be run with a light spring in the upper unit.
- Keep forming tools as far from clamps and pierced holes as possible.
- A ring mark around the form indicates there is too much spring pressure in the upper unit or the tool is stroking too deep.
- A post delay should be programmed in to give the tool time to strip.
- For maximum size in different stations, please contact the sales desk.
- Never punch thicker material than what the tool was designed for.
- Sheet distortion is common in forming operations.
- Special applications may affect pricing.



INFORMATION NEEDED

- Machine model
- Material thickness
- Full dimensioning (height, dia. or shape, angle, radius, thru-hole, etc.)
- Drawing (if possible)
- Dimensions preferred to a theoretical sharp



FAB STYLE

Shown with optional EZ-Set™ punch head.

EMBOSS TOOLS	FORM-DOWN	CAT. NO.
1/2" SNAP APART Punch & guide assembly and die (set)	ROUND .281" (7.14MM) MAX.	10107
1/2" SNAP APART Punch & guide assembly and die (set)	SHAPE	10109
1-1/4" STATION Punch & guide assembly and die (set)*	ROUND	10104
1-1/4" STATION Punch & guide assembly and die (set)*	SHAPE	10105
3-1/2" STATION Punch, die and stripper (set)	ROUND	10120
3-1/2" STATION Punch, die and stripper (set)	SHAPE	10122

* EZ-Set™ punch head not included in set price.

BENEFITS

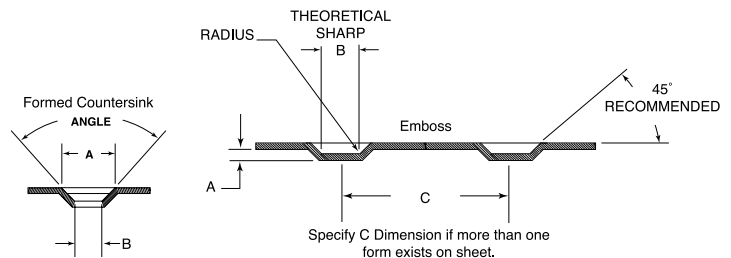
- Emboss style forming tools are useful for the following applications: Stand-offs, Spacers, Large countersinks, Locks for nuts
- 0° and 90° standard keying on shape forms.
- Other keying options available upon request.
- The correct tool can be tailored for your application.
- EZ-Set™ punch head is recommended for fast and easy length adjustments on the 1-1/4" station (no shims needed). See EZ-Set™ punch head page for further details.

CONSIDERATIONS

- For manual machines.
- May be used on N/C machines with special programming.
- Sheet distortion is common in forming operations.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material thickness and type
- Full dimensioning (height, dia. or shape, angle, radius, thru hole, etc.)
- Drawing (if possible)
- Dimensions preferred to a theoretical sharp



± .015 (0.38mm) Tolerance

FAB TURRET STYLE



Shown with optional EZ-Set™ punch head.

EXTRUSION (1-1/4" STATION)	FORM-UP	CAT. NO.
1-1/4" STATION Punch and guide and die assembly (set)* Lower unit insert only (.250" [6.35mm] max.) Lower insert (.375" [9.53mm] max.)	.375" (9.53MM) MAX. ROUND	
1-1/4" STATION Punch and guide and die assembly (set)*	.500" (12.70MM) MAX. "A" SHAPE	
1-1/4" STATION Punch and guide and die assembly (set)*	.376 - .500" (9.55-12.70MM) ROUND	
EXTRUSION (1-1/4" STATION)	FORM-DOWN	CAT. NO.
1-1/4" STATION Punch and guide and die assembly (set)*	.750" (19.05MM) MAX. ROUND	
1-1/4" STATION Punch and guide and die assembly (set)*	.750" (19.05MM) MAX. "A" SHAPE	

* EZ-Set™ punch head not included in set price.

BENEFITS

- Extrusions can be used in a broad spectrum of applications, such as self-tapping screws, cooling tube holders, air flow applications and tread plate.
- Extrusion diameters .375" (9.53mm) I.D. and less are made insert style for fast, easy, and economical replacement.
- Optima® coating provided on all Extrusions greater than .098" (2.50mm) for durability, longer life and ease of stripping (except when extruding in aluminum).
- Form-down extrusions made self-stripping for use in NC and CNC punch presses.
- EZ-Set™ punch head available for fast and easy length adjustments. See EZ-Set™ punch head page for further details.

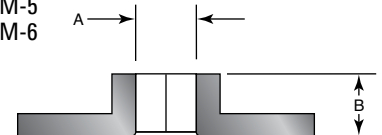
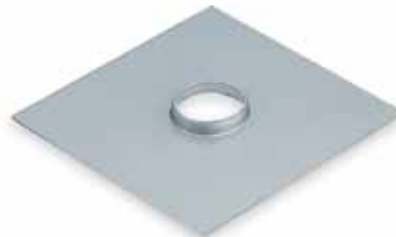
CONSIDERATIONS

- Slow machine speed or program in a post delay to give the tool time to strip.
- Form-up and form-down extrusions must be pre-punched.
- Extrusions are made for a specific material thickness and type.
- Consult the sales desk when extruding stainless steel.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material thickness and type
- I.D. and height or screw size and type
- Tolerance of I.D.
- Form-up or form-down
- Specify center-to-center if more than one extrusion exists on the sheet

STD	Sizes
.106	(6-32)
.136	(8-32)
.150	(10-24)
.159	(10-32)
.203	(1/4-20)
.098	M-3
.130	M-4
.165	M-5
.197	M-6



(LARGE STATION) FAB STYLE

EXTRUSION (3-1/2" STATION)	FORM-UP	CAT. NO.
3-1/2" STATION Punch, stripper & die assembly (set)	.500" (12.70MM) MAX. ROUND	62
3-1/2" STATION Punch holder and die assembly (set) Punch tip only Ejector only Die assembly only	OVER .500" (12.70MM) ROUND	10009
3-1/2" STATION Punch holder and die assembly (set) Punch tip only Ejector only Die assembly only	OVER .500" (12.70MM) "A" SHAPE	

Note: Consult the sales desk when exceeding 2.093" (53.16mm) diameter or when "A" dimension exceeds 2.093" (53.16mm).

BENEFITS

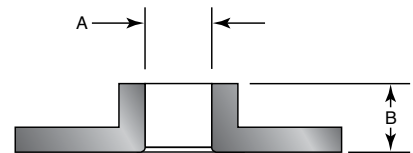
- Extrusions can be used in a broad spectrum of applications, such as self-tapping screws, cooling tube holders, air flow applications and tread plate.
- Interchangeable design on Extrusions greater than .500" (12.70mm) I.D. provides economy and flexibility. Purchase only punch tip, ejector and die assembly when changing size.
- Internal self-stripping design for consistent, trouble-free operation.
- Universal holder design gives you the flexibility of using the same upper unit holder for other applications, such as electrical knockouts and lance and forms.
- Fast and easy length adjustments can be made with the adjusting spring plunger to save costly set-up time.
- An Optima® coated lower unit provides durability, longer life and easier stripping.

CONSIDERATIONS

- Slow machine speed or program in post delay to give the tool time to strip.
- Form-up Extrusions must be pre-punched.
- Extrusions are made for a specific material type and thickness.
- Consult the sales desk when extruding stainless steel.
- Punch, stripper and die assembly designs on Extrusions less than .500" (12.70mm) I.D. require reduced spring pressure in upper unit.
- Special applications may affect pricing.

**INFORMATION NEEDED**

- Machine model
- Material thickness and type
- I.D. and height or screw size and type
- Tolerance of I.D.
- Form-up or Form-down
- Specify center-to-center if more than one Extrusion exists on the sheet



FAB STYLE



EZ-SET™ PUNCH HEAD AND ACCESSORIES	CAT. NO.
1-1/4" STATION	
EZ-Set™ punch head*	10037
Guide collar for EZ-Set™ punch head*	10056
Disc springs for EZ-Set™ punch head* (12)	10057
Coil spring for EZ-Set™ punch head*	

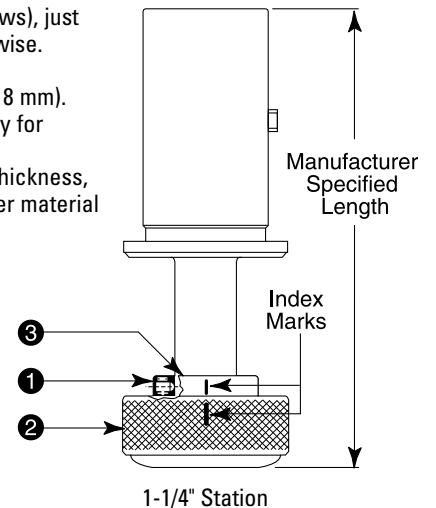
* Guide collar, disc or coil spring required on forming or coining tools that are designed as a punch and guide assembly.

BENEFITS

- The EZ-Set™ punch head provides quick turn-of-the-wrist adjustment. You can achieve just the right mark or form when using the EZ-Set™ punch head on 1-1/4" (B) station stamping and forming tools. Trial and error is streamlined by the EZ-Set™ punch head. Costly machine down time for tool adjustment is converted into productive machine up time.
- Each adjustment click provides a .0026" (0.066 mm) incremental change in the tool length. The maximum adjustment is approximately .125" (3.18 mm). A simple lift and turn of the adjustable head is all that is required. Fine length adjustments can now be made without removing the tool from the turret. You will see instant payback based on reduced machine down time.

INSTRUCTIONS FOR EZ-SET™ PUNCH HEAD

- Align the index marks on the two pieces of the EZ-Set™ punch head (Details #2 and #3).
- Holding the two pieces together, install the EZ-Set™ punch head onto the punch shank by turning the head clockwise to the manufacturer's specified length.
- Tighten the two 5 mm set screws (Detail #1).
- To increase the length (DO NOT loosen the set screws), just lift the outer ring (Detail #2) and turn counter clockwise.
- Each click is a .0026" (0.066 mm) adjustment.
- The maximum adjustment is approximately .125" (3.18 mm). When the limit is reached, the head will rotate freely for approximately one quarter turn.
- On forming tools made for more than one material thickness, set the manufacturer's specified length to the thicker material and adjust for the thinner material.
- Resetting the head for further adjustment is NOT RECOMMENDED because of reduced thread engagement. DAMAGE MAY OCCUR.



FAB STYLE



Shown with optional EZ-Set™ punch head.

HALF SHEAR FORM-UP		CAT. NO.
1-1/4" STATION	ROUND	
Punch and die assy. (set)* - stock		10203
Punch and die assy. (set)* - non-stock .375" (9.53mm) max. dia.		10200
Punch and die assy. (set)* - non-stock over .375" (9.53mm) dia.		10100
Die assembly only - solid design		
Replaceable insert only .250" (6.35mm) max. dia.		361
Replaceable insert only .375" (9.53mm) max. dia.		6868
1-1/4" STATION	SHAPE	
Punch and die assembly (set)*		10294
Replaceable insert only		
Die base only - solid design		
ROOFTOP HALF SHEAR FORM-UP		CAT. NO.
1-1/4" STATION		
Punch and die assembly (set)*		440
Punch tip only		
Ejector only		

* EZ-Set™ punch head not included in set price.

BENEFITS

- This handy, easy-to-use tool allows you to put in shear buttons and spot welding locators to the accuracy of your punch press.
- Round half shears make excellent locators for angular shearing.
- Replaceable insert design up to .375" (9.53mm) diameter in lower unit of 1-1/4" station half shear.
- Form-up half shears are available in stock sizes.
- Half shears can be used on an .125" (3.181 mm) range of material.
- Form-down and large station half shears are available. Consult the sales desk for pricing.
- Rooftop half shear gives you greater height protrusion from the metal which aids in picking up the locator on the sheet.
- EZ-Set™ punch head recommended for fast and easy length adjustments.

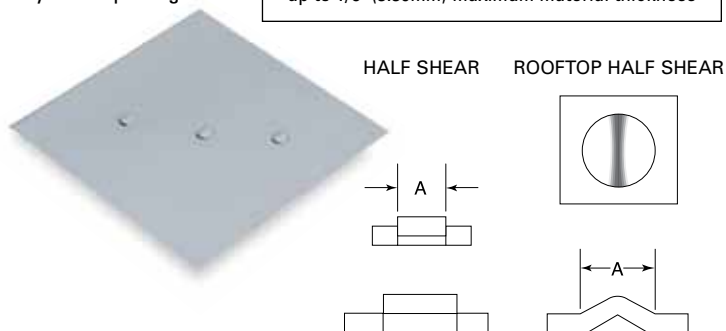
CONSIDERATIONS

- Half shears work best in thicker material.
- A holding tab similar to an electrical knockout may be required on thin material.
- Rooftop half shears have approximately a 3 gauge material thickness range.
- Minimum recommended rooftop half shear is .250" (6.35mm) diameter. The most common size is .400" (10.16mm) diameter.
- Never punch material thicker than what either tool was designed for.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material thickness and type (or range)
- Diameter or shape (on top of sheet)

Stock Sizes
 .125", .200", .250", 3mm, 4mm, 5mm and 6mm
 up to 1/8" (3.30mm) maximum material thickness



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salesdesk@wilsontool.com

FAB STYLE



Shown with optional EZ-Set™ punch head.

HINGE TOOL	FORM-UP	CAT. NO.
1-1/4" STATION	FIRST TOOL (2 HITS/FORM) Punch and die assembly (set)* Punch tip only (hammer)	10016
1-1/4" STATION	SECOND TOOL (1 HIT/CURL) Punch & guide assembly & die assembly (set)*	10017
3-1/2" STATION	FIRST TOOL (2 HITS/FORM) Punch holder and die assembly (set) Punch tip only (hammer)	10018
3-1/2" STATION	SECOND TOOL (1 HIT/CURL) Punch holder and die assembly (set)	10019

* EZ-Set™ punch head not included in set price.

BENEFITS

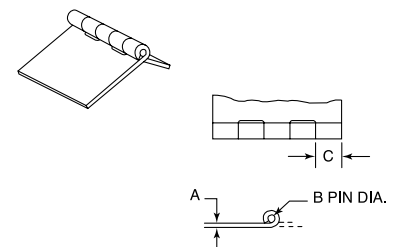
- Hinge Tools eliminate costly hardware, fitting and line-up assembly.
- The tooling allows you to fabricate complete panels with their own integrated hinges.
- A fully curled knuckle is achieved with two sets of tools. The first tool takes two hits and the second tool one hit.
- Hinges can be produced on the edge or in the middle of the sheet. Simply pre-punch the knuckle size and run the hinge tools as instructed.
- Tested on our turret prior to shipping to ensure proper functioning.
- Operating instructions with developed dimensions for easy programming are included with tool.
- Current standard design is for an 1/8" (3.18mm) pin in 16 gauge material. However, other sizes are available. Consult the sales desk for additional information.
- EZ-Set™ punch head is recommended for fast and easy adjustments.

CONSIDERATIONS

- Design parameters change when using stainless steel. Consult the sales desk.
- Maximum material and pin size may vary according to machine.
- Maximum material thickness is 18 gauge stainless steel, 14 gauge in mild steel, and .080" (2.03mm) in aluminum.
- Offset hinge tools are available. Consult the sales desk.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material thickness and type
- Drawing of application required
- Hole ID and tolerance
- Knuckle size



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www.wilsontool.com
salesdesk@wilsontool.com



FAB STYLE

Shown with optional EZ-Set™ punch head.

GROUND SYMBOL	FORM-DOWN	CAT. NO.
1-1/4" STATION	1-1/4" BODY WITH CIRCLE	
	Punch holder and blank die (set)* stock	10090
	Punch holder and blank die (set)* non-stock	10150
1-1/4" STATION	1-1/4" BODY WITHOUT CIRCLE	
	Punch holder and blank die (set)* stock	10091
	Punch holder and blank die (set)* non-stock	10151
GROUND SYMBOL	FORM-UP	CAT. NO.
1-1/4" STATION	WITH CIRCLE	
	Punch holder & die assembly (set)* stock	10092
	Punch holder & die assembly (set)* non-stock	10152
1-1/4" STATION	WITHOUT CIRCLE	
	Punch holder & die assembly (set)* stock	10093
	Punch holder & die assembly (set)* non-stock	10153
DASH TOOL	FORM-DOWN	CAT. NO.
1-1/4" STATION	1/2" BODY	
	Punch & guide assembly and die (set)	10097
1-1/4" STATION	1-1/4" BODY	
	Punch & guide assembly and die (set)*	10147

* EZ-Set™ punch head not included in set price.

BENEFITS

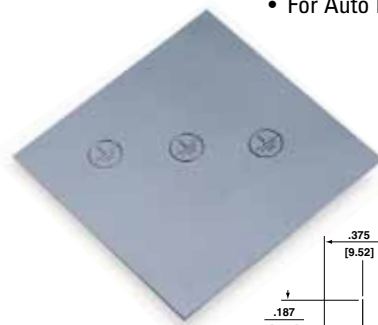
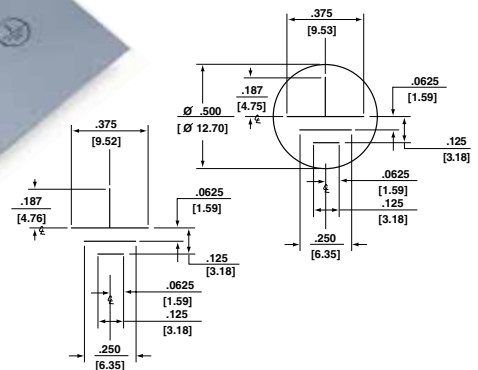
- Dash tools can be used in various applications, such as creating numbers or letters, coining a "V" groove on bend lines to aid in the bending of the sheet, and locators on a sheet.
- Ground symbols are widely used in the electrical industry. They are so popular that Wilson Tool has made them a stock item with or without the circle.
- Both dash tool and ground symbol available in form-up or form-down.
- Form-up is designed with self-stripping to prevent sheet marking and tool wear on both dash tool and ground symbol.
- Logos and other special stamps also can be manufactured. Consult sales desk for details.
- EZ-Set™ punch head is recommended for fast and easy adjustment. See EZ-Set™ punch head page for further details.

CONSIDERATIONS

- Thin material may polish on back side of sheet when stamped.
- Dash tool must be run in the Auto Index station when creating numbers or letters.
- Special applications may affect pricing.

INFORMATION NEEDED

- Model number
- Maximum material thickness and type
- Length of dash
- Size of ground symbol (stock or non-stock)
- Form-up or form-down
- For Auto Index station or standard

**GROUND SYMBOL STOCK DIMENSIONS**

(1-1/4" STATION) FAB STYLE



Shown with optional EZ-Set™ punch head.

LANCE AND FORMS (1-1/4" STATION) FORM-UP		CAT. NO.
1-1/4" STATION	OTHER THAN 90°	
Punch and die assembly (set)*		
.375" (9.53mm) or under		10330
.376" (9.55mm) or greater		64
1-1/4" STATION OF 90°		
Punch & guide assembly & die assembly (set)*		
.375" (9.53mm) or under		10331
.376" (9.55mm) or greater		10010

* EZ-Set™ punch head not included in set price.

BENEFITS

- Lance and forms are used in various applications, including air flow, decoration, card guides, location markers, shear tabs, wire harnesses and clip attachments.
- High-quality lance and forms other than 90° are assured with Wilson's positive form and self-stripping design.
- Replaceable tip and ejector design provides cost savings and flexibility.
- Optima® coating is available for extending tool life.
- EZ-Set™ punch head is recommended for fast and easy length adjustments. (No shims needed.) See EZ-Set™ punch head page for further details.

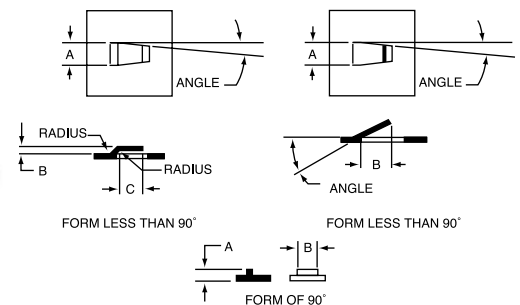


CONSIDERATIONS

- Lance and forms of 90° must form a minimum of two material thicknesses overall.
- Forms of 90° may need to be pre-punched around tab when punching aluminum or thin material.
- Lance and forms are made for a particular material thickness. Never run thicker material or damage will occur.
- Variations to line drawings will change pricing. Consult the sales desk.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material thickness and type
- Complete drawings of the lance and form showing length, width, height, angles, and other forms (if any) near lance so proper relief can be built into the tool



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(LARGE STATION) FAB STYLE

Universal holder designs A (Louver) and B (EKO)

LANCE AND FORMS (LG. STATION)	FORM-UP	CAT. NO.
3-1/2" STATION OTHER THAN 90° Punch holder and die assembly (set) Punch tip only Ejector only Die assembly only	HOLDER DESIGN A	10295
3-1/2" STATION OTHER THAN 90° Punch holder and die assembly (set) Punch tip only Ejector only Die assembly only	HOLDER DESIGN B	65
3-1/2" STATION OF 90° Punch, stripper and die assembly (set)		10011

Note: Reduced spring pressure required on above design. Pricing applies to forms shown in line drawings. Any variations will affect pricing (for all stations). Consult the sales desk.

BENEFITS

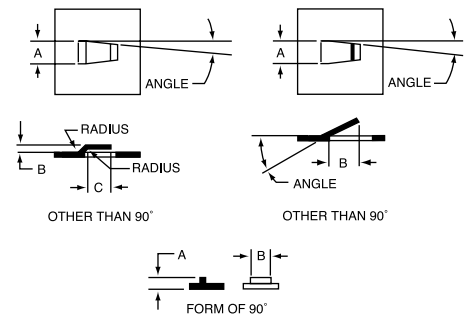
- Lance and forms are used in various applications, including air flow, decoration, card guides, location markers, shear tabs, wire harnesses and clip attachments.
- Most lance and forms made from complete holder design, eliminating need for spring changes, assembly and disassembly.
- Fast, easy length adjustments made with our adjusting spring plunger saves set-up time (no shims needed).
- The self-stripping design on lance and forms less than 90° assures consistent, trouble-free operation.
- Replaceable punch tip, ejector and inserts add cost savings.
- Both universal holder designs give you the flexibility of using the same upper unit holder for other applications, such as: Extrusions, EKO's, progressive ribs, edge forms and louvers, as well as various size lance and forms.

CONSIDERATIONS

- Lance and forms of 90° must form a minimum of two material thicknesses overall.
- Forms of 90° may need to be pre-punched around the tab when punching aluminum or thin material.
- Lance and forms are made for a particular material thickness. Never run thicker material or damage will occur.
- A taper of 5° per side should be added to aid in stripping large station lance and forms other than 90°.
- Variations to line drawings will change pricing. Consult the sales desk.
- Special applications may affect pricing.

**INFORMATION NEEDED**

- Machine model
- Material thickness and type
- Complete drawings of the lance and form showing length, width, height, angles, and other forms (if any) near lance so proper relief can be built into the tool
- Style guide assembly (on lance and form of 90° only)



FAB STYLE



Shown with optional EZ-Set™ punch head.

LETTER STAMPS	FORM-DOWN	CAT. NO.
1-1/4" STATION Punch assembly and die (set)*	SINGLE ROW	56
1-1/4" STATION Punch assembly and die (set)*	DOUBLE ROW	10111
3-1/2" STATION Punch assembly, stripper and die (set)	SINGLE ROW	58
3-1/2" STATION Punch assembly, stripper and die (set)	DOUBLE ROW	59
REPLACEABLE CHARACTERS		CAT. NO.
ALL STATIONS 1/8" x .750 long or .567 long 1/4" x .750 long Other character sizes		6896 6897 6898

* EZ-Set™ punch head not included in set price.
Note: For additional rows, consult the sales desk.

BENEFITS

- Stamping while in the machine eliminates secondary handling costs, and ensures consistent marking.
- Cost saving replaceable insert design allows for versatility as well as quick and easy replacement.
- Letter stamp tools give you the flexibility to change character size and number of rows simply by changing the punch tip and characters.
- All letter stamp tools are adjustable to stamp a 1/8" (3.18mm) range of material.
- Form-down logos available in coined or embossed styles. Consult the sales desk for price and availability.
- 1-1/4" single and double row letter stamp tools are in stock for 1/8" (3.18mm) characters, with maximum characters per row 1/8" (3.18mm) maximum material.
- EZ-Set™ punch head is recommended for fast and easy length adjustments on the 1-1/4" station (no shims needed).

CONSIDERATIONS

- Characters not included in set price.
- Special applications may affect pricing.



INFORMATION NEEDED

- Machine model
- Material thickness and type
- Size character, number of rows, number of characters per row
- Station size and style of tooling

MAXIMUM NUMBER OF CHARACTERS PER ROW FOR FAB STYLE			
SIZE	1-1/4"(B) STN	3-1/2"(D) STN	5" STN
1/16" (1.57mm)	16	48	72
3/32" (2.36mm)	10	32	48
1/8" (3.18mm)	8	24	36
3/16" (4.75mm)	5	16	24
1/4" (6.35mm)	4	12	18
3/8" (9.53mm)	2	8	12

Maximum Characters for one or two rows

Local
Tel: 651-286-6001
Fax: 651-286-5959

Toll Free U.S.A. & Canada
Tel: 800-328-9646
Fax: 800-222-0002

Toll Free Mexico
Tel: 001-800-741-2510
Fax: 001-800-544-2096

Website & Email
www.wilsontool.com
salesdesk@wilsontool.com



FAB STYLE



Shown with optional EZ-Set™ punch head.

LETTER STAMPS	FORM-UP (SELF-STRIPPING)	CAT. NO.
1-1/4" STATION Punch and die assembly (set)*	SINGLE ROW	10132
1-1/4" STATION Punch and die assembly (set)*	DOUBLE ROW	10133
3-1/2" STATION Punch, stripper and die assembly (set) †	SINGLE ROW	10116
3-1/2" STATION Punch, stripper and die assembly (set) †	DOUBLE ROW	10115
REPLACEABLE CHARACTERS		CAT. NO.
ALL STATIONS 1/8" x .750 long or .567 long 1/4" x .750 long Other character sizes		6896 6897 6898

* EZ-Set™ punch head not included in set price.

† Reduced spring pressure required on 3-1/2" single and double row designs.

Note: For additional rows, consult sales desk.

BENEFITS

- Stamping while in the machine eliminates secondary handling costs, and ensures consistent marking.
- The self-stripping design reduces character wear and sheet marking.
- Interchangeable character design allows for versatility as well as quick and easy replacement.
- All letter stamp tools are adjustable to stamp a 1/8" (3.18mm) range of material.
- Form-up logos available in coined or embossed styles. Consult the sales desk for price and availability.
- Self-stripping 1-1/4" single and double row letter stamp tools are in stock for 1/8" (3.18mm) characters, with maximum characters per row (1/8" (3.18mm) maximum material).
- EZ-Set™ punch head is recommended for fast and easy length adjustments on the 1-1/4" station (no shims needed).

CONSIDERATIONS

- Characters not included in set price.
- Faster character wear will occur in stainless steel and more sheet marking will occur in aluminum if the die is not made self-stripping. Consult the sales desk for pricing of non-self-stripping letter stamps.
- Special applications may affect pricing.



INFORMATION NEEDED

- Machine model
- Material thickness and type
- Character size, number of rows, number of characters per row
- Station size and style of tooling

SIZE	1-1/4"(B) STN		3-1/2"(D) STN	
	1 Row	2 Rows	1 Row	2 Rows
1/16" (1.57mm)	20	20	53	53
3/32" (2.36mm)	14	14	35	35
1/8" (3.18mm)	10	10	26	26
3/16" (4.75mm)	7	N/A	17	17
1/4" (6.35mm)	5	N/A	13	13
3/8" (9.53mm)	3	N/A	8	N/A

FAB STYLE



LOUVERS (STANDARD SIZES) FORM-UP*					CAT. NO.
3-1/2" STATION	"A"	"B"	"C"	"D"	
Punch holder & die (set)	2" (50.80mm)	1/2" (12.70mm)	3/16" (4.75mm)	3/4" (19.05mm)	21
Punch holder & die (set)	2 1/2" (63.50mm)	1/2" (12.70mm)	3/16" (4.75mm)	3/4" (19.05mm)	22
Punch holder & die (set)	3" (76.20mm)	5/8" (15.88mm)	1/4" (6.35mm)	15/16" (23.81mm)	23
Punch holder & die (set)	3 1/2" (88.90mm)	5/8" (15.88mm)	1/4" (6.35mm)	15/16" (23.81mm)	24
Punch holder & die (set)	4" (101.60mm)	3/4" (19.05mm)	1/4" (6.35mm)	1 1/8" (28.58mm)	25

LOUVERS (STANDARD SIZES) FORM-DOWN*					CAT. NO.
3-1/2" STATION	"A"	"B"	"C"	"D"	
Punch, stripper & die (set)	2" (50.80mm)	1/2" (12.70mm)	3/16" (4.75mm)	3/4" (19.05mm)	17
Punch, stripper & die (set)	2 1/2" (63.50mm)	1/2" (12.70mm)	3/16" (4.75mm)	3/4" (19.05mm)	18
Punch, stripper & die (set)	3" (76.20mm)	5/8" (15.88mm)	1/4" (6.35mm)	15/16" (23.81mm)	19
Punch, stripper & die (set)	3 1/2" (88.90mm)	5/8" (15.88mm)	1/4" (6.35mm)	15/16" (23.81mm)	20

* Non-standard sizes priced on application.

Note: Form-down Louvers are for manual machines only.

BENEFITS

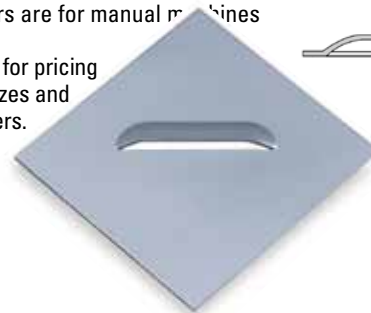
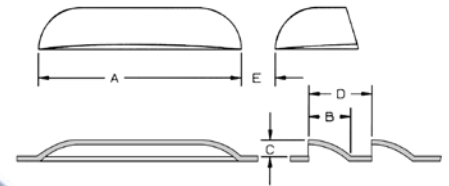
- Universal holder design (form-up only) includes spring loaded adjusting plunger for quick and easy length adjustments. No shims needed!
- Lower costs with replaceable inserts that can be converted to different size Louvers.
- The universal holder allows you to use the same upper unit for other applications, such as progressive louvers and a wide range of lance and forms (new inserts and die assembly needed).
- Optima® coating provided on inserts for longer life.
- Single hit Louvers can be placed back to back (no web between Louvers).
- Keying at 0°, 90°, 180°, 270° is standard on form-up Louvers. Standard keying on form-down Louvers is 0° and 90°.
- Sharpening instructions sent with the tools or factory sharpening is available.

CONSIDERATIONS

- Maximum width Louver on our standard design is .750" (19.05mm), special wide Louvers available.
- The higher the form the more noticeable the "drawing back" of material.
- Maximum material thickness for our standard design is .125" (3.18mm) mild steel. Consult sales desk for Louvers in thicker material.
- A specially designed forming insert is required when using stainless steel.
- Form-down Louvers are for manual machines only.
- Consult sales desk for pricing on non-standard sizes and 1-1/4" station Louvers.

INFORMATION NEEDED

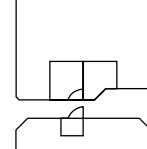
- Machine model
- Material thickness and type
- Form-up or Form-down
- A, B, C, D, and E dimensions



FAB STYLE

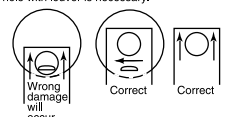


DO'S AND DON'TS OF PROGRESSIVE LOUVER



Progressive louver die is not self-stripping, so caution is needed.
A separate pocket insert is required for each material thickness being run.
Maximum feed rate is .250" (6.35mm). For best results a feed rate of .020" (0.5mm) should be used. The lesser the feed rate, the better the look of the louver.
Marking and distortion can be kept to a minimum with proper programming.

If there is a large hole in the sheet, avoidance of hole with louver is necessary.



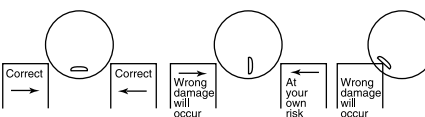
I have read the do's and don'ts of using the progressive louver and understand them.

(Company Name)

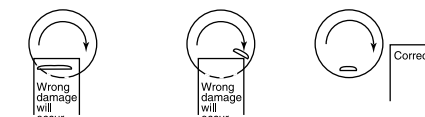
does hereby release Wilson Tool from any and all damages that may occur during the improper use of their progressive louver tool, I am aware that the first hit may leave a slight deformation.

Authorized Signature: _____
Date: _____

When programming, sheet direction travel in relation to louver is important.



Sheet should be away from turret when indexing or damage will occur.



PROGRESSIVE LOUVERS (STANDARD SIZES) *				CAT. NO.
3-1/2" STATION	B"	"C"	"D"	
Punch holder & die assembly (set)	1/2" (12.70mm)	3/16" (4.75mm)	3/4" (19.05mm)	369
Punch holder & die assembly (set)	5/8" (15.88mm)	1/4" (6.35mm)	15/16" (23.81mm)	10334
Punch holder & die assembly (set)	3/4" (19.05mm)	1/4" (6.35mm)	1 1/8" (28.58mm)	10333

* Non-standard sizes priced on application.

BENEFITS

- Universal holder design includes spring loaded adjusting plunger for quick and easy length adjustments. No shims needed!
- Lower costs with replaceable inserts that can be converted to different size louvers.
- The universal holder allows you to use the same upper unit for other applications, such as single hit louvers and a wide range of lance and forms (new inserts and die assembly needed).
- Optima® coating provided on inserts for longer life.
- No restrictions on the length of the louver. Simply program in any length.
- Keying at 0°, 90°, 180°, 270° is standard.
- Sharpening instructions sent with the tools or factory sharpening is available.
- Do's and don'ts information, release form at right.

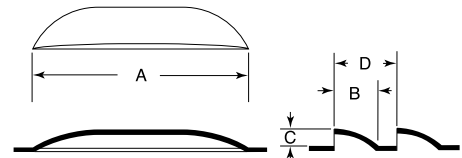
CONSIDERATIONS

- Maximum width louver on our standard design is .750" (19.05mm), special wide louvers available.
- The higher the form the more noticeable the "drawing back" of material.
- Maximum material thickness in mild steel and aluminum is .125" (3.18mm) and .090" (2.29mm) for stainless steel.
- A specially designed forming insert is required when using stainless steel.
- Progressive louvers are made for a specific material thickness. A separate pocket insert is required for each material thickness.
- Consult sales desk for pricing on non-standard sizes.



INFORMATION NEEDED

- Machine model
- Material thickness and type
- B, C and D dimensions



"A" dimension is programmable to any length.
Form length on first full hit is approximately 2-1/4" (57mm) long.

FAB STYLE



Shown with optional EZ-Set™ punch head.

PROGRESSIVE RIB	FORM-UP	CAT. NO.
1-1/4" STATION Punch and die (set)* Punch body only (exact repeat) Punch body only (different material thickness) Die only	STANDARD SIZE	467
1-1/4" STATION Punch and die (set)* Punch body only (exact repeat) Punch body only (different material thickness) Die only	NON-STANDARD SIZE	10278
3-1/2" STATION Punch holder assembly and die (set) Punch tip only (exact repeat) Punch tip only (different material thickness)	NON-STANDARD SIZE	10119 Die only

* EZ-Set™ punch head not included in set price.

BENEFITS

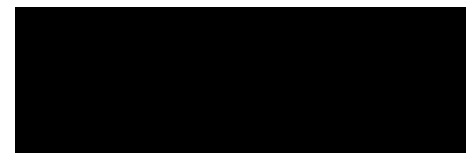
- Produces quality stiffening ribs on your turret.
- Programmable to any length.
- Rib quality can be increased by decreasing the increment moves to .020"-.080" (0.51-2.03mm).
- When changing material thicknesses, only the upper punch or punch tip is required.
- Large station universal holder design gives you the flexibility of using the same upper unit holder for other applications, such as extrusions, EKO's and edge forms, as well as various size lance and forms.
- Fast and easy length adjustments can be made with our EZ-Set™ punch head or adjusting spring plunger, saving you costly set-up time (no shims needed).

CONSIDERATIONS

- For best results, inside radius should be equal to or greater than the height.
- Slight deformation will occur on first hit.
- Maximum material thickness:
Mild steel & aluminum—.105" (2.67mm)
Stainless steel—.090" (2.29mm)
- Ends of rib blend down to sheet (not a distinct radius).
- Maximum recommended "C" dimension is three times the material thickness.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material thickness and type
- B and C dimensions



"A" dimension programmable to any length
Standard size: B = 3/8" (9.53mm)
C = 3/16" (4.75mm)

FAB STYLE

ROLLOVER TOOL	FORM-DOWN	CAT. NO.
1-1/4" STATION Punch & guide assembly and die (set)	ROUND	10279
1-1/4" STATION Punch & guide assembly and die (set)	SHAPE	10281
3-1/2" STATION Punch, die and stripper (set)	ROUND	10280
3-1/2" STATION Punch, die and stripper (set)	SHAPE	10282

BENEFITS

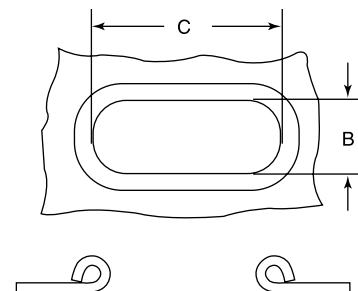
- The Rollover or curling tool can be used in many applications: Hand holds, wire feeds, grommets.
- Reduces costly secondary operations and handling.
- Three operations to achieve finished rollover:
 1. Pre-punch
 2. Form-up extrusion
 3. Rollover
- Pre-punch hole developed by Wilson Tool free of charge.

CONSIDERATIONS

- Consult the sales desk for size and material thickness limitations.
- Tearing may occur in widths or diameters less than .625" (15.88mm).
- See form-up extrusion catalog page for pricing of operation 2.
- Height in the extruding operation controls how much curl can be achieved.
- Standard tolerance +/- .031" (0.79mm).
Special tolerance—price on application.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material thickness and type
- Diameter or length and width (opening)
- Tolerance of opening
- Application (hand hold, wire feed, etc.)
- Style of guide assembly



FAB STYLE



3-1/2" Station Scrapless Shear tool shown with a Series 90® guide assembly with a light spring pack.

* EZ-Set™ punch head not included in price.
 † Set price does not include the guide assembly or light spring pack. Light spring pack included with Series 80 Plus® and Series 90®.
 Note: Punch assembly and die assembly required to make a complete set for 1-1/4" station scrapless shear tooling.

SCRAPLESS SHEAR	CAT. NO.
1-1/4" STATION Punch assembly only* Die assembly only	10332
3-1/2" STATION Punch holder and die assembly with stripper (set)†	SERIES 80 PLUS® & SERIES 90® 10088

BENEFITS

- Eliminate the set-up time of a secondary shear operation by shearing material while on the turret.
- Benefits include improved product quality, reduced scrap and higher yield of finished products.
- The Scrapless Shear tool eliminates hit marks, slugs and curls when shearing edges.
- Reduce costs on 3-1/2" station with replaceable inserts.
- Optima® coating is included for extending the life of the tool.
- Maximum material range up to 11 gauge mild steel for 3-1/2" station; up to 14 gauge or 2mm mild steel for 1-1/4" station.
- Increase flexibility of the tool when used in auto index stations.
- EZ-Set™ punch head is recommended on 1-1/4" station Scrapless Shear tool for fast and easy length adjustments.

CONSIDERATIONS

- 3-1/2" station Scrapless Shear tools must be run with a Series 80®, Series 80 Plus® or Series 90® Guide assembly (assembled with a light spring pack).
- Maximum slit length changes with different material thicknesses (instructions sent with tools).
- Shearing must begin from a pre-punched hole or open edge.
- Machine alignment, keys, turret bores or bushings must be in good condition.
- Special precautions may be required to control sheet marking in aluminum.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material type and thickness or range
- Station size

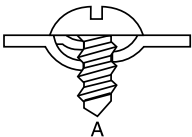
FAB STYLE





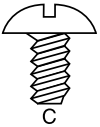
Shown with optional EZ-Set™ punch head.

Thread Form Data Chart

Maximum Material Thickness without Coining		
Thread Size	Inches	mm
6-18	.033	(0.84)
6-20	.029	(0.74)
6-32	.017	(0.43)
7-16	.038	(0.97)
8-15	.040	(1.02)
8-18	.033	(0.84)
8-32	.017	(0.43)
10-12	.052	(1.32)
10-16	.038	(0.97)
10-24	.024	(0.61)
10-32	.017	(0.43)
12-11	.057	(1.45)
12-14	.044	(1.12)
14-10	.063	(1.60)
20-9	.070	(1.78)
1/4-14	.044	(1.12)
1/4-20	.029	(0.74)
5/16-12	.052	(1.32)
5/16-18	.033	(0.84)
M-4 (36 threads)	.017	(0.43)
M-5 (32 threads)	.017	(0.43)
M-6 (26 threads)	.022	(0.56)

SCREW TYPE	Thread Size
	6-18 8-15 10-12 12-11 14-10 20-9

		6-20 8-18 10-16 12-14 1/4-14 5/16-12
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	6-32 8-32 10-24 10-32 1/4-20 5/16-18
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(Machine Screws)

THREAD FORM	FORM-UP	CAT. NO.
1-1/4" STATION Punch & guide assembly & die assembly (set)*		10064
THREAD FORM	FORM-DOWN	CAT. NO.
1-1/4" STATION Punch & guide assembly & die assembly (set)*		10065

* EZ-Set™ punch head not included in set price.

BENEFITS

- A great solution for threading holes in thin material.
- The Thread Form tool allows for significant reduction in manufacturing time, supplemental hardware and assembly time.
- Pre-punch information provided.
- Optima® coating available for extending the life of the tool.
- EZ-Set™ punch head available for fast and easy length adjustment on the 1-1/4" station (no shims needed).
- The same tool can be used in material thinner than what the tool was designed for—simply adjust the length for the different material (never run material thicker than what the tool was designed for).
- Non-standard Thread Forms available. Consult the sales desk.
- Sheet feed direction provided on form-down Thread Forms.

CONSIDERATIONS

- Operations to produce a Thread Form: Pre-punch, coin*, and Thread Form. (*When exceeding recommended material thickness, coining is required to prevent screw threads from cutting into material.)
- Keyhole pre-punch recommended for stainless and for #10 and M-5 screw size or smaller for all materials. (Keyhole pre-punch provides the necessary clearance to engage screws, as well as to extend tool life.)
- Consult the sales desk for size and material thickness restrictions.
- To assure proper fit, a sample screw may be required on non-standard sizes.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material thickness and type
- Thread size and type (see Thread Form data chart at right).



FAB STYLE



Shown with optional EZ-Set™ punch head.

THREAD LOOP		CAT. NO.
1-1/4" STATION	3 TAB Punch and guide and die assembly (set)*	10296
1-1/4" STATION	4 TAB Punch and guide and die assembly (set)*	10298
1-1/4" STATION	5 TAB Punch and guide and die assembly (set)*	10300
3-1/2" STATION	3 TAB Punch, stripper and die assembly (set)	10297
3-1/2" STATION	4 TAB Punch, stripper and die assembly (set)	10299
3-1/2" STATION	5 TAB Punch, stripper and die assembly (set)	10301

* EZ-Set™ punch head not included in set price.

BENEFITS

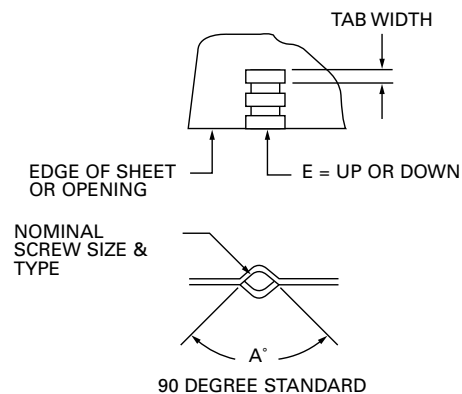
- The Thread Loop tool allows a significant reduction in manufacturing time, supplemental hardware and assembly time.
- Optima® coating is included for extending the life of the tool.
- The Wilson design gives a positive form, which ensures a high quality part.
- EZ-Set™ punch head available for fast and easy length adjustment on the 1-1/4" station (no shims needed). See EZ-Set™ punch head page for further details.

CONSIDERATIONS

- The Thread Loop tool is made for one specific material thickness. Never punch material thicker than what the tool was designed for.
- Widths less than .070" (1.78mm) will alter price. Consult the sales desk.
- Special applications may affect pricing.

INFORMATION NEEDED

- Machine model
- Material thickness and type
- Number of threadloop tabs
- Width of tab
- Diameter of opening or screw size and type
- Drawing if possible



FAB STYLE

CORNER ROUNDING (STANDARD SIZES)		CAT. NO.
1-1/4" STATION UP TO .187" (4.75MM) THICK MATERIAL Punch & guide assembly and die (set) Note: Maximum radius for 1-1/4" station is .750" (19.05mm).		10430
CORNER ROUNDING (NON-STANDARD SIZES)		CAT. NO.
1-1/4" STATION UP TO .187" (4.75MM) THICK MATERIAL Punch & guide assembly and die (set) Note: Maximum radius for 1-1/4" station is .750" (19.05mm).		10430
1-1/4" STATION OVER .187" (4.75MM) THICK MATERIAL Punch & guide assembly and die (set)		10430
3-1/2" STATION UP TO .187" (4.75MM) THICK MATERIAL Punch, stripper and die (set) Note: Maximum radius for 3-1/2" station is 2.000" (50.80mm).		10434
3-1/2" STATION OVER .187" (4.75MM) THICK MATERIAL Punch, stripper and die (set)		10434
TRIM AND PART		CAT. NO.
1-1/4" STATION UP TO .187" (4.75MM) THICK MATERIAL Punch & guide assembly and die (set) Note: Maximum radius for 1-1/4" station is .375" (9.53mm).		49
1-1/4" STATION OVER .187" (4.75MM) THICK MATERIAL Punch & guide assembly and die (set)		10286
3-1/2" STATION UP TO .187" (4.75MM) THICK MATERIAL Punch, stripper and die (set) Note: Maximum radius for 3-1/2" station is 1.125" (28.58mm).		50
3-1/2" STATION OVER .187" (4.75MM) THICK MATERIAL Punch, stripper and die (set)		10287

BENEFITS

- Corner rounding dies are self-gauging, making it possible to radius any external corner of the sheet.
- Tools are designed for easy sharpening.
- Angles other than 90° (for gauging) are available for corner rounding tools. Consult sales desk for pricing.
- Standard sizes available on corner roundings for 1-1/4" station (up to .187" [4.75mm] thick material):

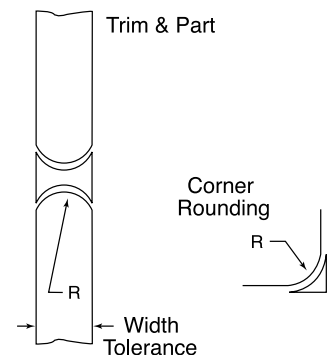
.062" (1.57mm)	.312" (7.92mm)
.093" (2.36mm)	.375" (9.53mm)
.125" (3.18mm)	.437" (11.10mm)
.156" (3.96mm)	.500" (12.70mm)
.187" (4.75mm)	.625" (15.88mm)
.250" (6.35mm)	.750" (19.05mm)
- Trim and part tools provide an economical means of radiusing two ends of strip stock.
- Trim and part punches come standard with a double heel to prevent side loading when punching strip stock.

CONSIDERATIONS

- For manual machines only
- Consult sales desk for material over .187" (4.75mm) thick.
- Special applications may affect pricing.

**INFORMATION NEEDED**

- Machine model
- Material thickness and type
- Radius
- Width and tolerance of strip stock (for trim and part only)



FAB STYLE



LIGHT SPRING UNITS		CAT. NO.
1-1/4" STATION	Light spring only	N/A
3-1/2" STATION	SERIES 80® Partial light spring pack w/flat spring support	10008
	Partial light spring pack w/stepped spring support	10148
3-1/2" STATION	SERIES 90® AND SERIES 80 PLUS® Partial light spring pack	10085

Note: Spring units are used with 1-1/4" and 3-1/2" form-up form only, form-up embosses, form-up lance and forms of 90°, form-up letter stamps, and the 3-1/2" scrapless shear tool.

BENEFITS

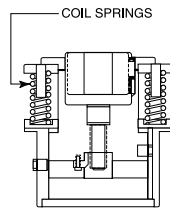
- Helps reduce sheet and form distortion.
- Fast and easy assembly and disassembly with Series 80®, Series 80 Plus® and Series 90®. Simply spin off the existing spring unit and spin on the partial light spring unit.
- Helps reduce sheet marking in piercing operations. Consult the sales desk.
- Sold in partial or complete spring units.

CONSIDERATIONS

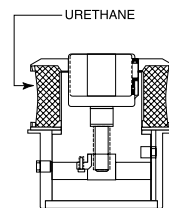
- Series 80 Plus® and Series 90® spring units are not interchangeable with Series 80® holders.

INFORMATION NEEDED

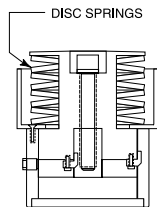
- Type of holder



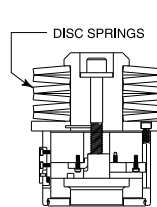
TYPE #1



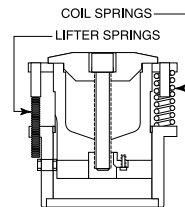
TYPE #2



TYPE #3



TYPE #4



TYPE #5

FAB STYLE

Spring modification is required when running forming tools in any of the 3-1/2" station holders, types #1 through #4:
 TYPE #1: Reduce quantity of coil springs
 TYPE #2: Purchase special spring cage unit
 TYPE #3 & TYPE #3A: Replace disc springs and any required additional disc springs per tool instructions
 TYPE #4: Reduce quantity of coil springs

Note: A special spring cage unit is required for 5" station holder.

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