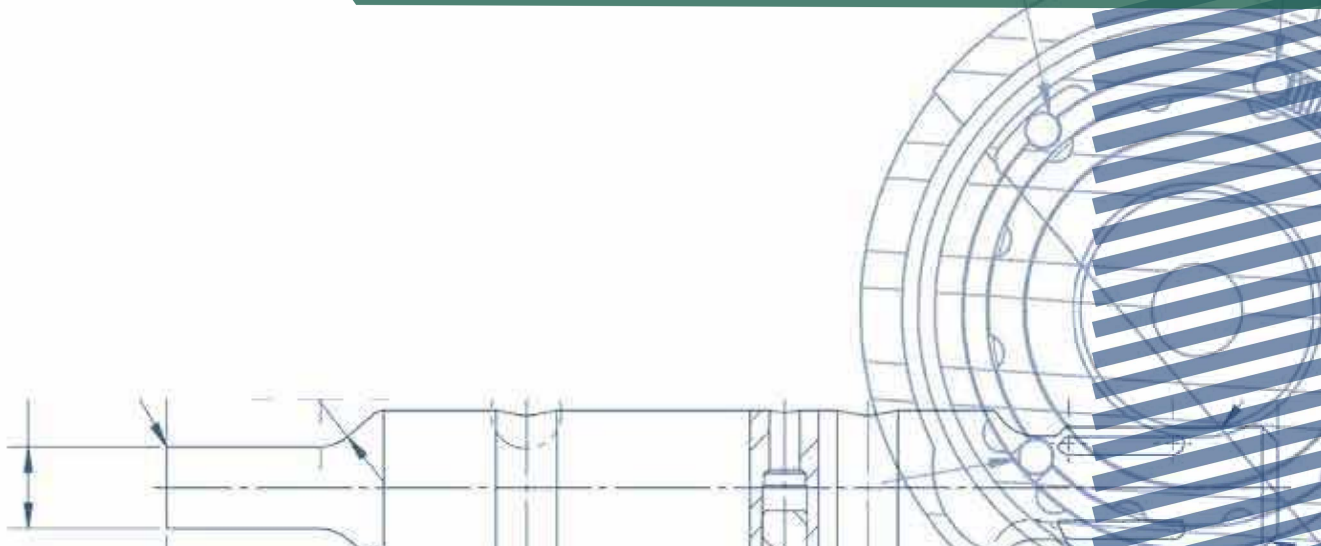


# FAB TOOLING

## THIN TURRET SOLUTIONS

*Standards, Specials and Accessories*



# EXP TECHNOLOGY

**Time-tested.** In 2011, Wilson Tool introduced the industry's first quick-change punch tip technology, making EXP the proven choice for your tooling needs. Since then, thousands of satisfied users have converted to EXP technology and continue to reap the savings and benefits of this efficient technology.

**Faster Tool Changes.** Loading EXP is as easy as inserting the punch tip into the punch holder, then turning the key to lock it in place. Switching from one punch to the next can be done in seconds, significantly reducing downtime.

**Longer-lasting Punches.** Every EXP punch is manufactured with Wilson's exclusive Ultima® premium tool steel to increase wear resistance. As a result, EXP punches have twice the tool life as most standard punches. With up to twice as long between regrinds, EXP punches made with Ultima tool steel substantially reduce downtime and tool replacement costs.

**Storage Savings.** A fraction of the size of standard punches, EXP punches give you the flexibility to stock more shapes, using less space for storage.

**Universal Design.** EXP punches offer greater flexibility because they fit into multiple styles of tooling, allowing you to enjoy the ease, speed and durability of EXP for all your punch tooling needs. EXP fits the following tool styles:



When you consider the lower punch price combined with faster setup, increased life between sharpening, and greater versatility, EXP clearly offers the lowest cost of ownership of any punch on the market today.

## FAB STYLE

# 6

- 6 HPX 1-1/4" Station
- 7 HP2 1-1/4" Station
- 8 HP 1-1/4" Station
- 9 HP 1-1/4" Station Heavy Duty
- 10 Basix 1-1/4" Station
- 11 Drop In 5/8" Station
- 12 Snap Apart 1/2" Station
- 13 Drop In 1/2" Station
- 14 Center Punch
- 16 HP 2" Station
- 18 HP 3-1/2" Station
- 20 HP Dura-Blade
- 22 HP Notcher Stripper Plate

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# 15

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- 25 Card Guide
- 26 Emboss
- 27 Extrusion
- 28 Hinge Tools
- 29 Progressive Rib
- 30 Rollover Tool
- 31 Bridge Lance and Form
- 32 EKO's
- 33 Half Shear | Rooftop Half Shear
- 34 Scratch Tool
- 35 Lance and Forms
- 36 Louvers
- 37 Progressive Louvers
- 38 Thread Form
- 39 Thread Loop
- 40 Cluster Tools
- 41 Letter Stamp
- 42 Multi-Scribe
- 43 Stamping
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*Prices and product availability are subject to change without notice.*

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# THE WILSON TOOL DIFFERENCE

## COMPANY OVERVIEW

From very humble beginnings in a small manufacturing facility in St. Paul, Minnesota, Wilson Tool has added manufacturing facilities and sales channels around the world to better serve our thousands of global customers. Throughout our International expansion, our mission has never wavered - we continue to offer products and services that help you be more successful. Every product you buy, every employee with whom you communicate, and every training event you attend, are designed to help customers just like you be more successful.

The products included in this catalog represent the results of over 50 years of helping customers resolve their most challenging fabrication issues. And don't be concerned if the challenge you are currently facing can't be resolved with a product included in this catalog. Give us a call and let us put our many decades of expertise to the test. We will work with you to find the best possible solution to whatever challenge you may be facing.

And, as always, if you are not happy with the final solution we provide, we will either find a way to help you succeed or we will refund your money.

From all of us at Wilson Tool, we thank you for the trust you have placed in us to provide products and services that are critical to your success. We look forward to your continued success as we move forward.

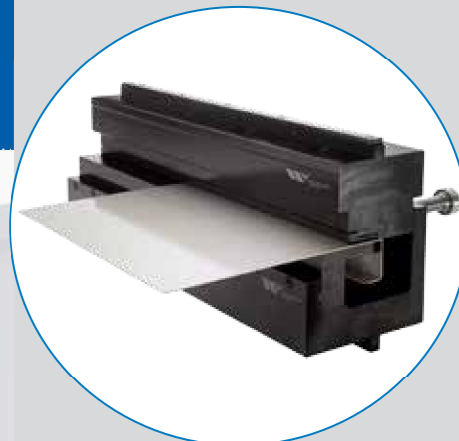
Sincerely,

**Brian Robinson**  
*Wilson Enterprises*

The Wilson Tool Punching Division **continues to drive the industry with new levels of quality, delivery service and innovation.**

From the early days of Series 80 tooling to Wilson Wheels to innovative EXP technology, our punching division has been the leading innovation driver in the industry. When combined with the most experienced customer support professionals in the industry, the solutions offered from Wilson Tool continue to raise the bar on performance and innovation. Thick turret, Trumpf, Salvagnini, or any other style of punch press you may be using, Wilson Tool offers the most complete line of tooling solutions available today.

## PUNCHING



## BENDING

Wilson Tool's Bending Division **delivers the most complete line of tooling and clamping solutions available anywhere. Period.**

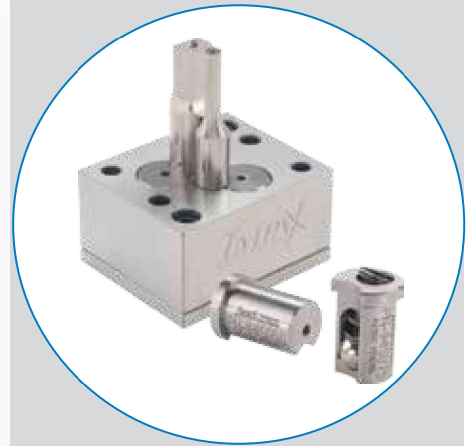
Whether you use American, European, or Wila/Trumpf style precision tooling or conventional style tooling, Wilson Tool has a solution for you. Our clamping options cover these styles as well. With hydraulic push button options, quick release mechanical options, or standard manual clamps, Wilson Tool has a clamping solution for any style of machine or budget. And our custom tooling manufacturing capabilities have quickly become the envy of the industry with innovative solutions for very complex bending challenges. And with manufacturing facilities located in the USA and Canada, our delivery times to North American fabricators are the fastest in the industry.

Wilson Tool's Stamping division (aka Impax Tooling Solutions) offers high quality punch and die components for the stamping industry.

Innovative products such as our Accu-Lock retainer inserts, and extensive coating options combined with our world-class customer service have enabled us to quickly grow into a world-class provider. With a direct sales force throughout North America, we deliver products straight from the factory to you, enabling the fastest deliveries in the industry.

Our custom tooling expertise is second to none with many customers coming to us for their most difficult stamping challenges.

## STAMPING

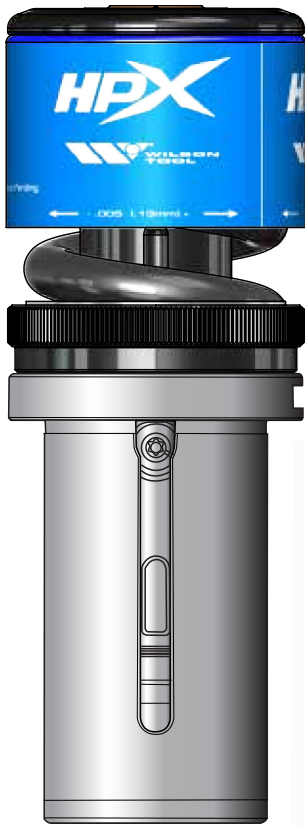


## ACCESSORIES

Whether you need tool sharpening grinders, tooling storage systems, or other types of related supplies, our accessory products offer a wide range of solutions to help you be more productive.

From small to large items, our accessories will help your shop be more organized and efficient.



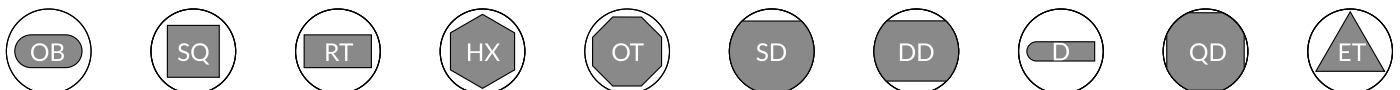


EXP PUNCH HOLDER



PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round	10661	
Shape	10660	
Optima® Coating		
EXP PUNCH HOLDER	CAT. NO.	PRICE
EXP Punch Holder only	10627	
SPRING PACK ASSEMBLY	CAT. NO.	PRICE
Spring Pack Assembly only	10659	
GUIDE	CAT. NO.	PRICE
Round	158	
Shape	195	
PUNCH	CAT. NO.	PRICE
EXP Round	13916	
EXP Shape	13917	
Optima® Coating		
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	454	
Round Standard	133	
Shape Slug Hugger® 2*	10373	
Shape Positive	162	
Shape Negative	244	
* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.		
DIE SHIM	CAT. NO.	PRICE
010 [0.25mm] single	2097	
.030 [0.76mm] single	2723	
.060 [1.5mm] single	2100	
010 [0.25mm] pack of 25	2209	
.030 [0.76mm] pack of 25	2724	
.060 [1.5mm] pack of 25	2173	
Additional charges may apply to non-standard features. See page 67		
REPLACEMENT PARTS	CAT. NO.	PRICE
O-Ring	466	
Key	10639	

STANDARD SHAPES

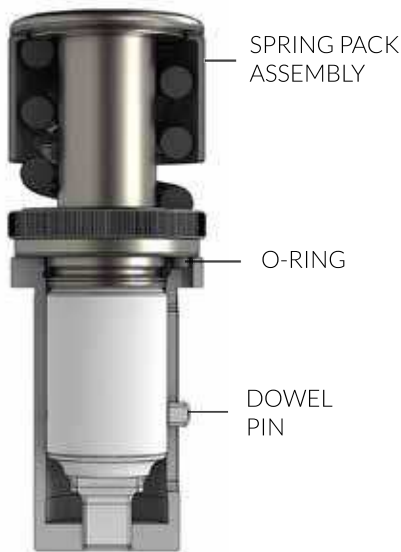
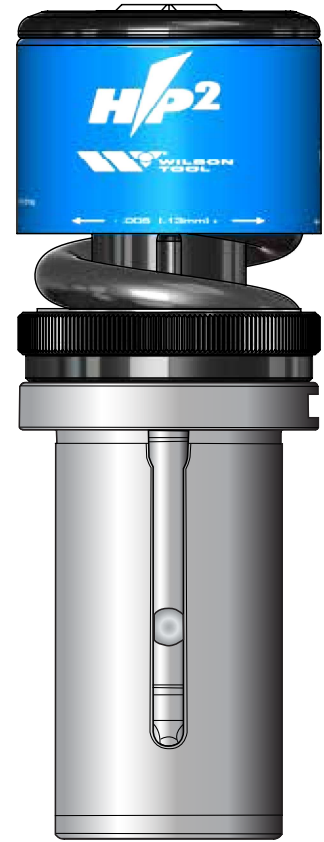


# HP2 1-1/4" STATION



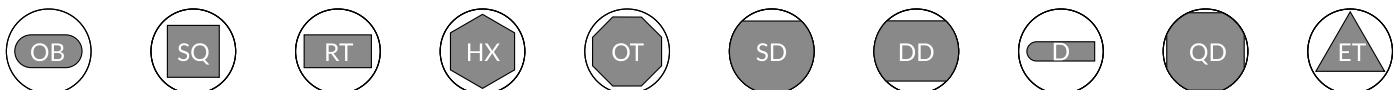
FAB STYLE

PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round	10662	
Shape	10663	
Optima® Coating		
SPRING PACK ASSEMBLY	CAT. NO.	PRICE
Spring Pack Assembly only	10649	
GUIDE	CAT. NO.	PRICE
Round	158	
Shape	159	
PUNCH	CAT. NO.	PRICE
** Pinned Round	10457	
Shape	161	
Optima® Coating		
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	454	
Round Standard	133	
Shape Slug Hugger® 2*	10373	
Shape Positive	162	
Shape Negative	244	
* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.		
DIE SHIM	CAT. NO.	PRICE
.010 [0.25mm] single	2097	
.030 [0.76mm] single	2723	
.060 [1.5mm] single	2100	
.010 [0.25mm] pack of 25	2209	
.030 [0.76mm] pack of 25	2724	
.060 [1.5mm] pack of 25	2173	
Additional charges may apply to non-standard features. See page 67		
REPLACEMENT PARTS	CAT. NO.	
O-Ring	466	
Dowel Pin	6015	



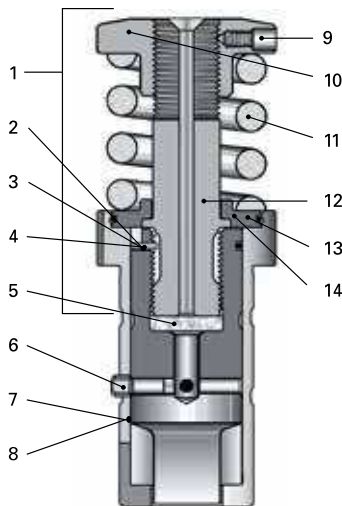
**NOTES**  
 \*\* HP2 assembly requires a pinned round punch. This is the replacement punch for Quick Adjust Assemblies.

## STANDARD SHAPES



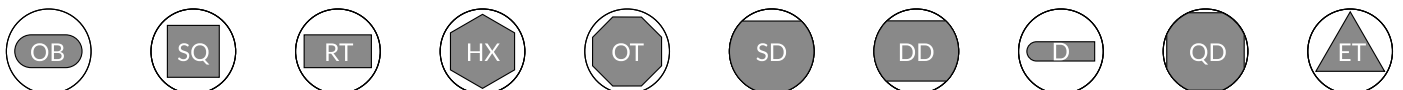


PUNCH AND GUIDE ASSEMBLY		CAT. NO.	PRICE
Round		10143	
Shape		10145	
Optima® Coating			
GUIDE		CAT. NO.	PRICE
Round		10144	
Shape		10139	
PUNCH		CAT. NO.	PRICE
Round		10137	
Shape		10136	
Optima® Coating			
DIE		CAT. NO.	PRICE
Round Slug Hugger®*		454	
Round Standard		133	
Shape Slug Hugger® 2*		10373	
Shape Positive		162	
Shape Negative		244	
* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.			
DIE SHIM		CAT. NO.	PRICE
010 [0.25mm]	single	2097	
.030 [0.76mm]	single	2723	
.060 [1.5mm]	single	2100	
010 [0.25mm]	pack of 25	2209	
.030 [0.76mm]	pack of 25	2724	
.060 [1.5mm]	pack of 25	2173	
Additional charges may apply to non-standard features. See page 67.			



REPLACEMENT PARTS		CAT. NO.
1	Driver Assembly	10156
2	Retaining Ring (Ball-lock design)	2803
3	Index Pin	6874
4	Ring Clip	10044
5	Felt Filter	10155
6	Dowel Pin (3/16 x .595) (Replacement Round Only)	6015
7	Guide - Round	10144
8	Guide - Shape/Fitted	10139
9	Socket Head Set Screw (Cone Pt M5-8 x 8mm)	6268
10	Adj. Punch Head	145
11	Spring	125
12	Driver	10141
13	O-Ring	6562
14	Spring Support with O-Ring	10142

### STANDARD SHAPES





# HP HEAVY DUTY 1-1/4" STATION

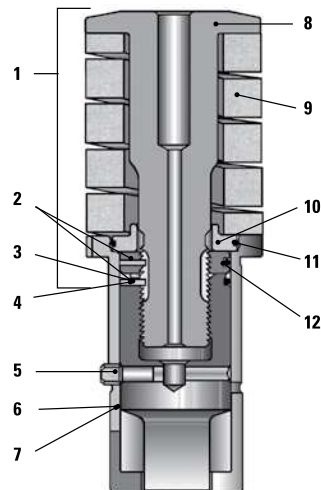


FAB STYLE

PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round	10039	
Shape	10040	
Optima® Coating		
GUIDE	CAT. NO.	PRICE
Round	10027	
Shape	10020	
PUNCH	CAT. NO.	PRICE
Round	10046	
Shape	10045	
Optima® Coating		
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	454	
Round Standard	133	
Shape Slug Hugger® 2*	10373	
Shape Positive	162	
Shape Negative	244	
* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.		
DIE SHIM	CAT. NO.	PRICE
010 [0.25mm] single	2097	
.030 [0.76mm] single	2723	
.060 [1.5mm] single	2100	
010 [0.25mm] pack of 25	2209	
.030 [0.76mm] pack of 25	2724	
.060 [1.5mm] pack of 25	2173	
Additional charges may apply to non-standard features. See page 67.		

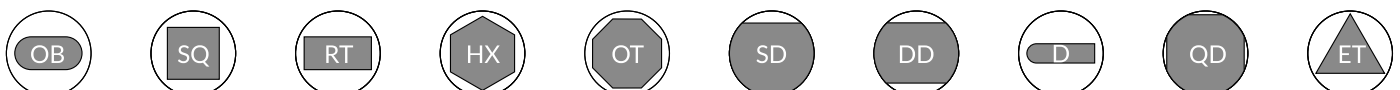


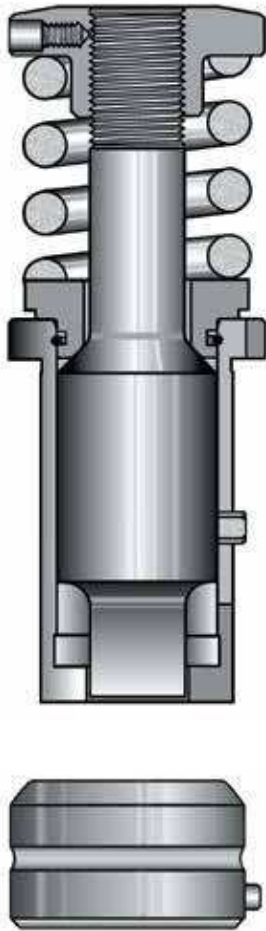
REPLACEMENT PARTS	CAT. NO.
1 Driver Assembly	10055
2 Ring Clip	10044
3 Retaining Ring (ball-lock design)	2803
4 Index Pin	6874
5 Dowel Pin (Replacement Round Only)	6015
6 Guide Round	10027
7 Guide - Shape/Fitted	10020
8 Driver	10042
9 Spring	30
10 Spring Support with O-Ring	10047
11 O-Ring	10035
12 Threaded Spring Retainer with Ring Clip	10043
13 Dowel Pin (3/16 x .345)	6431



MAX. MATERIAL THICKNESS	NOTES
.375" [9.5mm]	HP Heavy Duty: Spherical concave shear & Optima standard on 1" [25.4mm], 25mm, and 1.250" [31.75mm] diameters.
	Full size (1-1/4" body): Urethane spring assemblies available upon request.

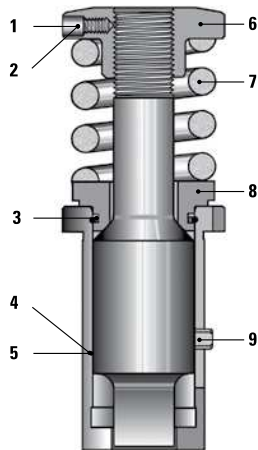
## STANDARD SHAPES





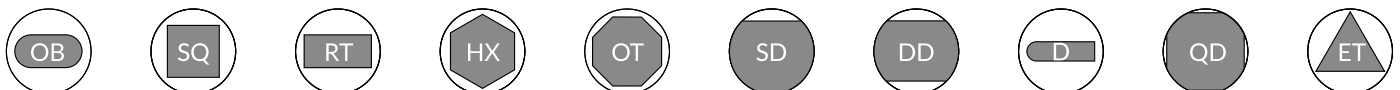
PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round	149	
Shape	164	
Optima® Coating		
GUIDE	CAT. NO.	PRICE
Round	147	
Shape	159	
Optima® Coating		
PUNCH	CAT. NO.	PRICE
Round	148	
Shape	161	
Optima® Coating		
PUNCH SHIM	CAT. NO.	PRICE
1-1/4" Single	152	
1-1/4" Pack of 25	98	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	454	
Round Standard	133	
Shape Slug Hugger® 2*	10373	
Shape Positive	162	
Shape Negative	244	
* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.		
DIE SHIM	CAT. NO.	PRICE
.010 [0.25mm] single	2097	
.030 [0.76mm] single	2723	
.060 [1.5mm] single	2100	
.010 [0.25mm] pack of 25	2209	
.030 [0.76mm] pack of 25	2724	
.060 [1.5mm] pack of 25	2173	

Additional charges may apply to non-standard features. See page 67.



REPLACEMENT PARTS	CAT. NO.
1 Socket Head Set Screw (Cone Pt M5-.8 x 8mm)	6268
2 Socket Head Set Screw (Cone Pt 10-32 x 1/4)	6072
3 O-Ring	466
4 Guide - Round	147
5 Guide - Shape/Fitted	159
6 Adj. Punch Head	145
7 Spring	125
8 Guide Collar with O-Ring	146
9 Dowel Pin (3/16 x .595) (Replacement Round Only)	6015

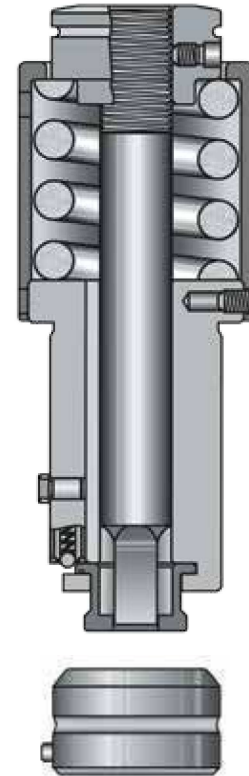
### STANDARD SHAPES



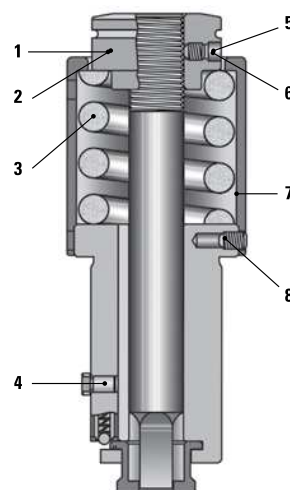
# DROP IN 5/8" STATION



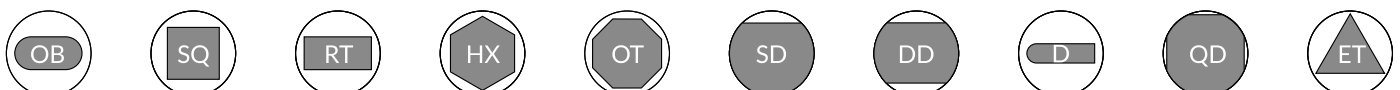
GUIDE ASSEMBLY	CAT. NO.	PRICE
Guide Assembly w/.625 [15.88mm] dia. Closed Round Stripper Plate	476	
PUNCH	CAT. NO.	PRICE
Round	445	
Shape	446	
Optima® Coating		
STRIPPER	CAT. NO.	PRICE
Round	478	
Shape	479	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	454	
Round Standard	133	
Shape Slug Hugger® 2*	10373	
Shape Positive	162	
Shape Negative	244	
* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.		
FIT TO STRIPPIT HOLDER	CAT. NO.	PRICE
Punch Head - New Style for Wilson and Strippit	475	
Punch Head - Old Style	444	
Stripper - Round	474	
Stripper - Shape	473	
DIE SHIM	CAT. NO.	PRICE
.010 [0.25mm] single	2097	
.030 [0.76mm] single	2723	
.060 [1.5mm] single	2100	
.010 [0.25mm] pack of 25	2209	
.030 [0.76mm] pack of 25	2724	
.060 [1.5mm] pack of 25	2173	
Additional charges may apply to non-standard features. See page 67.		



REPLACEMENT PARTS	CAT. NO..
1 Adj. Punch Head	475
2 Adj. Punch Head -Old Style (not shown)	444
3 Spring	125
4 Dowel Pin (3/16 x .375) (Replacement Round only)	2150
5 Socket Head Set Screw (Cone Pt M5-8 x 8mm)	6268
6 Socket Head Set Screw (Cone Pt 10-32 x 1/4)	6072
7 Spring Canister	453
8 Socket Set Screw (M5 x 8mm)	6372



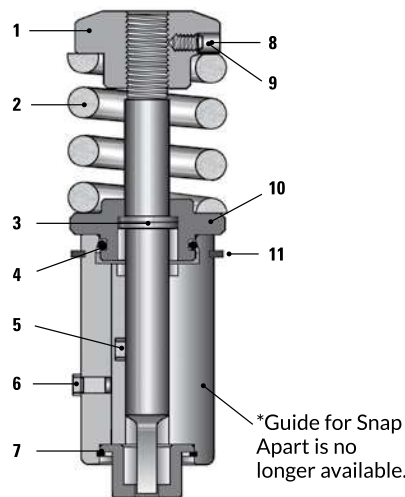
## STANDARD SHAPES





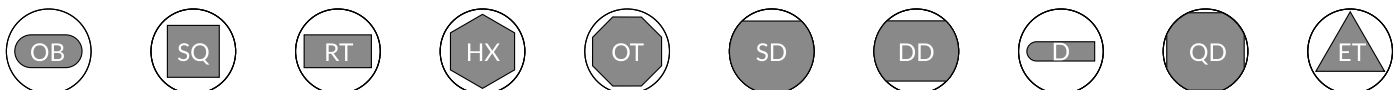
PUNCH		CAT. NO.	PRICE
Round		195	
Shape		333	
Optima® Coating			
STRIPPER		CAT. NO.	PRICE
Round		478	
Shape		337	
DIE		CAT. NO.	PRICE
Round Slug Hugger®*		454	
Round Standard		133	
Shape Slug Hugger® 2*		10373	
Shape Positive		162	
Shape Negative		244	
* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.			
DIE SHIM		CAT. NO.	PRICE
010 [0.25mm]	single	2097	
.030 [0.76mm]	single	2723	
.060 [1.5mm]	single	2100	
010 [0.25mm]	pack of 25	2209	
.030 [0.76mm]	pack of 25	2724	
.060 [1.5mm]	pack of 25	2173	
Additional charges may apply to non-standard features. See page 67.			

Replacement punch, dies and strippers only.



REPLACEMENT PARTS		CAT. NO.
1	(1) Adj Punch Head	101
2	(2) Spring	125
3	(3) Retaining Ring	107
4	(4) O-Ring	109
5	(5) Dowel Pin (3/16 x .500) (Replacement Round only)	2131
6	(6) Dowel Pin (3/16 x .375) (Replacement Round only)	2150
7	(7) Retaining Ring	108
8	(8) Socket Head Set Screw (Cone Pt M5-.8 x 8mm)	6268
9	(9) Socket Head Set Screw (Cone Pt 10-32 x 1/4)	6072
10	(10) Spring Support With O-Ring	103
11	(11) Support Ring	362

### STANDARD SHAPES

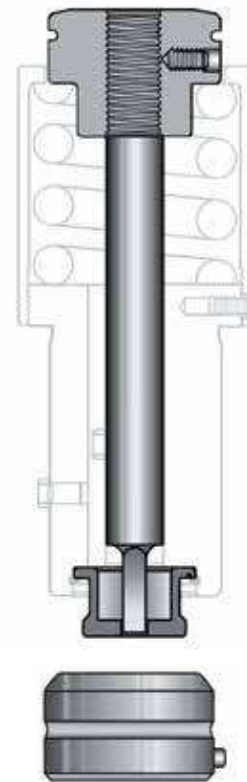


# DROP IN 1/2" STATION



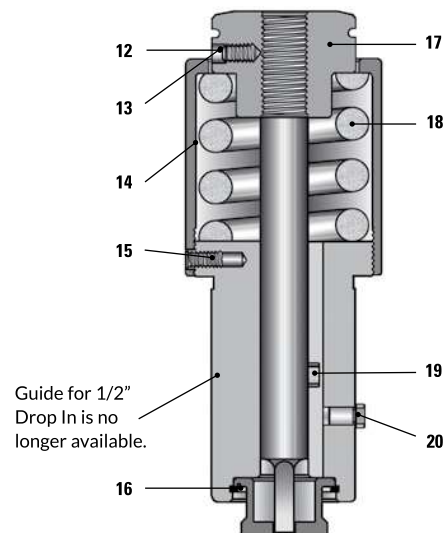
FAB STYLE

PUNCH	CAT. NO.	PRICE
Round	451	
Shape	450	
Optima® Coating		
STRIPPER	CAT. NO.	PRICE
Round	478	
Shape	337	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	454	
Round Standard	133	
Shape Slug Hugger® 2*	10373	
Shape Positive	162	
Shape Negative	244	
* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.		
FIT TO STRIPPIT HOLDER	CAT. NO.	PRICE
Punch Head - New Style for Wilson and Strippit	448	
Stripper - Round	474	
Stripper - Shape	473	
DIE SHIM	CAT. NO.	PRICE
010 [0.25mm] single	2097	
.030 [0.76mm] single	2723	
.060 [1.5mm] single	2100	
010 [0.25mm] pack of 25	2209	
.030 [0.76mm] pack of 25	2724	
.060 [1.5mm] pack of 25	2173	
Additional charges may apply to non-standard features. See page 67.		

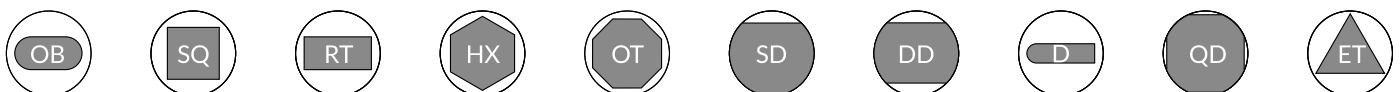


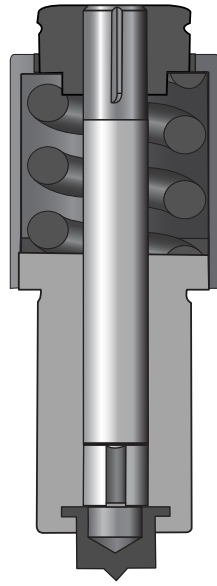
Replacement punch, dies and strippers only.

REPLACEMENT PARTS	CAT. NO.
12 (1) Socket Head Set Screw (Cone Pt M5-8 x 8mm)	6268
13 (2) Socket Head Set Screw (Cone Pt 10-32 x 1/4)	6072
14 (3) Spring Canister (Cone Pt 10-32 x 1/4)	453
15 (4) Socket Set Screw (M5 x 8mm)	6372
16 (6) Retaining Ring	108
17 (7) Adj. Punch Head	448
18 (8) Spring	125
19 (9) Dowel Pin (3/16 x .500) (Replacement Round only)	2131
20 (10) Dowel Pin (3/16 x .375) (Replacement Round only)	2150



## STANDARD SHAPES





**FORM DOWN**



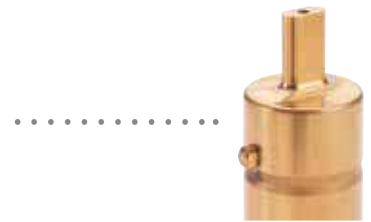
**FORM UP**

FORM DOWN	CAT. NO.	PRICE
Complete Form Down Assembly - die included	10677	
Replacement Center Punch Tip	400	
5/8" Replacement Punch Body	10666	
Blank Die	498	
Light Spring Kit	10668	
FORM UP	CAT. NO.	PRICE
Complete Form Up Assembly - upper and lower	10214	
Upper Punch Assembly	10214	
Lower Die Assembly	10214	
Replacement Die Insert .375" [9.53mm]	10214	

# WILSON TOOL OFFERS UNIQUE COATINGS TO INCREASE THE LIFE OF YOUR PUNCHES

## Wear-Beater™

Wilson Tool's exclusive Wear-Beater coating is a titanium nitride (TiN) coating that helps reduce galling and extends punch life in certain applications.



## Optima®

Developed by Wilson Tool engineers in our state-of-the-art coating facility, our revolutionary Optima coating provides significantly longer tool life, more hits between sharpenings, reduced galling, better performance and less downtime. With a surface hardness of 95 Rockwell C, Optima far exceeds the hardness levels that can be achieved with conventional tool steels. It resists galling in stainless and galvanized steel and is unaffected by sharpening. Optima coating will outlast untreated tools by as much as 5-7 times.



## Nitrex®

Our exclusive Nitrex high endurance surface enhancement increases punch press tooling life by several times that of ordinary tooling. Wilson Tool's patented process provides a surface hardness of HRC-70, increasing long-term durability. Nitrex is also very effective in reducing punch wear and galling when piercing galvanized materials.



## Slip-Max™

Available only from Wilson Tool, our Slip-Max coating has proven effective in some very tough punching and forming applications. The combination of its hardness and lubricity greatly increases punch life and reduces galling when piercing aluminum. Slip-Max is also very effective in resolving even the most challenging stripping problems with punching or forming stainless steel and aluminum.



COATING RECOMMENDATION BY APPLICATION	WEAR-BEATER	OPTIMA	NITREX	SLIP-MAX
Punch wear piercing varied materials	●	★		
Punch or die wear piercing stainless steel	●	★		
Punch wear piercing galvanized	●	▲	★	
Punch or die wear piercing aluminum	●		▲	★
Galling on punch in stainless steel	●	▲		
Galling on punch in galvanized	●	▲	★	
Galling on punch in aluminum	●		▲	★
Stripping problems when forming in stainless steel	●		▲	★
Stripping problems when forming in aluminum	●			★
Stripping problems when piercing in stainless steel	●	★		
Stripping problems when piercing in aluminum	●		▲	★
	● GOOD	▲ BETTER	★ BEST	



GUIDE ASSEMBLY	CAT. NO.	PRICE
Guide Assembly	10530	
PUNCH	CAT. NO.	PRICE
Round	10568	
Shape	10567	
Optima® Coating		
STIPPER	CAT. NO.	PRICE
Round	10534	
Shape	10535	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	10545	
Round Standard	10544	
Shape Slug Hugger® 2*	10548	
Shape Positive	10546	
Shape Negative	10547	
* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.		
DIE SHIM	CAT. NO.	PRICE
010 [0.25mm] single	2089	
.030 [0.76mm] single	2092	
.060 [1.5mm] single	2725	
010 [0.25mm] pack of 5	2726	
.030 [0.76mm] pack of 5	2210	
.060 [1.5mm] pack of 5	2174	
Additional charges may apply to non-standard features. See page 67.		

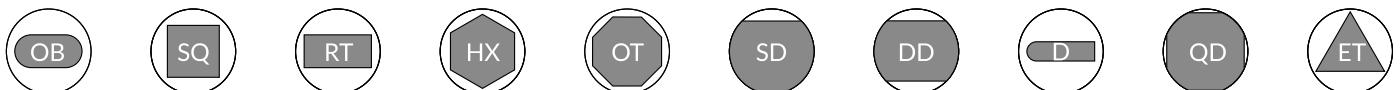
### NOTES

HP Guide Assemblies are keyed for shapes at 0°, 45°, 90°, 180°, 225°, 270°.

All punches will be shipped with no shear unless specified.

Square dies are keyed for shape at 0° and 45°, all other shaped dies are keyed for shape at 0° and 90°.

### STANDARD SHAPES



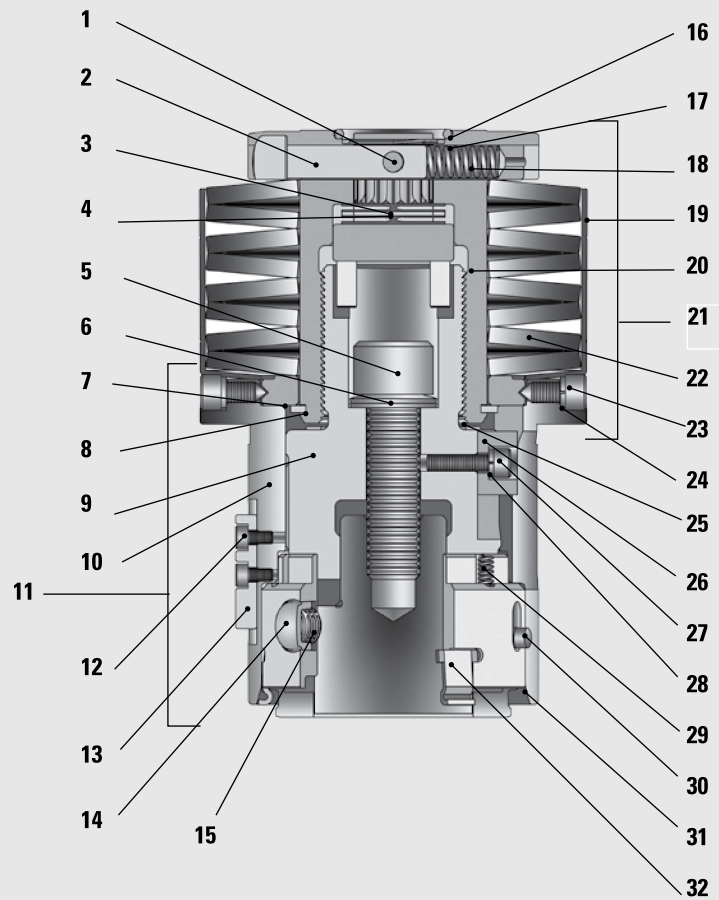


# HP 2" STATION REPLACEMENT PARTS



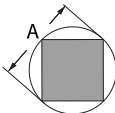
FAB STYLE

REPLACEMENT PARTS		CAT. NO.
1	Adj. Locking Ball	972420
2	Adj. Push Button	10539
3	Wave Spring	971692
4	Adj. Shaft	10576
5	Socket Head Cap Screw	971391
6	Disc Spring (2 required)	971690
7	Spring Support	5748
8	Retaining Ring	972571
9	Punch Holder	10541
10	Guide	10536
11	Guide Unit Assembly	10531
12	Socket Head Cap Screw (M3 x 6mm) (2 required)	972395
13	Guide Key	10445
14	Locking Button (2 required)	5519
15	Wave Spring (2 required)	8155
16	O-Ring	972430
17	Retaining Ring	972441
18	Spring	972396
19	Spring Cover	10537
20	Punch Driver	10578
21	Punch Driver Assembly	10574
22	Disc Spring (8 required)	10543
23	Socket Head Cap Screw (Spl M5 x .8 Cone Pt) (2 required)	5197
24	Lock Washer (2 required)	2112
25	Anti-Lock Shim	5412
26	Punch Holder Key	10448
27	Socket Head Cap Screw (M4 x 16mm)	970433
28	High Collar Lockwasher	2117
29	Spring (6 required)	971694
30	Special Pin (2 required)	5522
31	Guide Stripper Ring	10538
32	Stripper Clip (3 required)	5521

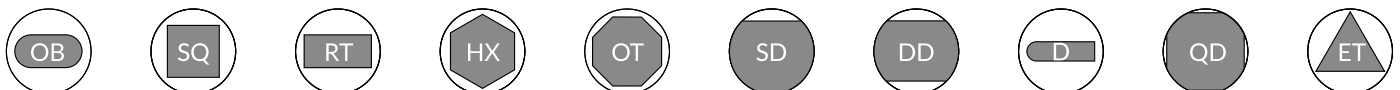




GUIDE ASSEMBLY		CAT. NO.	PRICE
Guide Assembly		10436	
PUNCH		CAT. NO.	PRICE
Round	1.250-1.562 [31.75-39.67] Dia.	181	
Round	1.563-1.250 [39.70-57.15] Dia.**	183	
Round	12.251-2.875 [57.17-73.03] Dia.**	184	
Round	2.876-3.500 [73.05-88.90] Dia.**	185	
Punch Retainer		182	
Shape	1.250-1.500 [31.75-38.10] Dia.	188	
Shape	1.501-2.500 [38.12-63.50] Dia.	189	
Shape	2.501-3.500 [63.52-88.90] Dia.	190	
Optima® Coating			
STRIPPER		CAT. NO.	PRICE
Round		186	
Shape		192	
DIE		CAT. NO.	PRICE
Round Slug Hugger®*		459	
Round Standard		187	
Shape Slug Hugger® 2*		10381	
Shape Positive		212	
Shape Negative		251	
Shape Slug Hugger®*	Heavy Duty	461	
Shape Slug Hugger® 2*	Heavy Duty	10382	
Shape Positive	Heavy Duty	213	
Shape Negative	Heavy Duty	252	
* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.			
DIE SHIM		CAT. NO.	PRICE
010 [0.25mm]	single	2081	
.030 [0.76mm]	single	2727	
.060 [1.5mm]	single	2084	
010 [0.25mm]	pack of 5	2211	
.030 [0.76mm]	pack of 5	2728	
.060 [1.5mm]	pack of 2	2175	
Additional charges may apply to non-standard features. See page 67.			

A DIMENSION	NOTES
A dimension = longest distance across shape.	HP Guide Assemblies are keyed for shapes at 0°, 45°, 90°, 180°, 225°, 270°.
	1/32" [.079mm] Rooftop shear is given to all punches with 'A' dimension greater than 2.000 [50.8] and width greater than .250 [6.35mm] at no extra charge. All punches .250 [6.35mm] and under in width will be shipped with no shear unless specified.
	Square dies are keyed for shape at 0° and 45°, all other shaped dies are keyed for shape at 0° and 90°.
	** Punch retainer required.

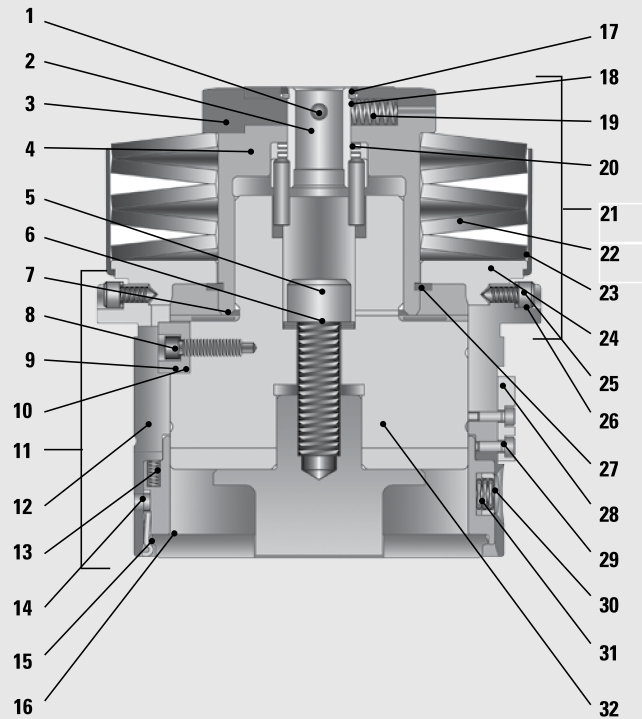
### STANDARD SHAPES



# HP 3-1/2" STATION REPLACEMENT PARTS



FAB STYLE



REPLACEMENT PARTS	CAT. NO.
1 Adj. Locking Ball	972420
2 Adj. Shaft	10576
3 Adj. Push Button	10539
4 Punch Driver	10577
5 Socket Head Cap Screw (1/2 - 13 x 1-1/2)	6606
6 Disc Spring (2 required)	971690
7 Anti-Lock Shim	5413
8 Socket Head Cap Screw (M4 x 16mm)	970433
9 Lockwasher	2117
10 Punch Holder Key	10448
11 Guide Unit Assembly	10443
12 Guide	10444
13 Spring (6 required)	971694
14 Special Pin (2 required)	5522
15 Stripper Clip (3 required)	5521
16 Guide Stripper Ring	10446
17 O-Ring	972430
18 Retaining Ring	972441
19 Spring	972396
20 Wave Spring	971692
21 Punch Driver Assembly	10571
22 Disc Spring (5 required)	10440
23 Spring Cover	10460
24 Spring Support	5738
25 Socket Head Cap Screw (Spl M5 x .8 Cone Pt) (2 required)	5197
26 Lockwasher (2 required)	2112
27 Retaining Ring	5747
28 Guide Key	10445
29 Socket Head Cap Screw (M3 x 8mm) (2 required)	971321
30 Locking Button (2 required)	5519
31 Wave Spring (2 required)	8155
32 Punch Holder	10447



GUIDE ASSEMBLY		CAT. NO.	PRICE
Guide Assembly		10516	
PUNCH		CAT. NO.	PRICE
Blade		10520	
Optima® Coating			
STRIPPER		CAT. NO.	PRICE
Shape		367	
DIE		CAT. NO.	PRICE
Shape Slug Hugger® 2*		10381	
Shape Positive		212	
Shape Negative		251	
Shape Slug Hugger® 2* Heavy Duty		10382	
Shape Positive Heavy Duty		213	
Shape Negative Heavy Duty		252	
* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.			
DIE SHIM		CAT. NO.	PRICE
010 [0.25mm]	single	2081	
.030 [0.76mm]	single	2727	
.060 [1.5mm]	single	2084	
010 [0.25mm]	pack of 5	2211	
.030 [0.76mm]	pack of 5	2728	
.060 [1.5mm]	pack of 2	2175	
Additional charges may apply to non-standard features. See page 67.			

## NOTES

HP Dura-Blade® Guide Assemblies are keyed for shapes at 0°, 45°, 90°.

Maximum width for blade insert is .750 [19.05mm].

Maximum 'A' dimension = 3.500"  
'A' dimension = longest distance across shape.

## STANDARD SHAPES

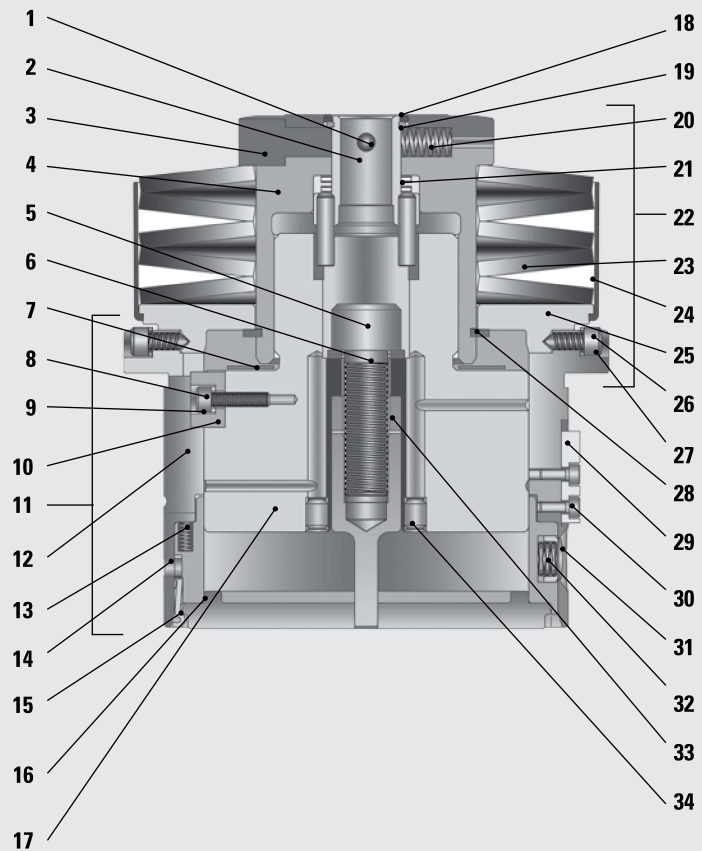


# HP DURA-BLADE® REPLACEMENT PARTS



FAB STYLE

REPLACEMENT PARTS	CAT. NO.
1 Adj. Locking Ball	972420
2 Adj. Shaft	10576
3 Adj. Push Button	10539
4 Punch Driver	10577
5 Socket Head Cap Screw (1/2 - 13 x 1-1/2)	6605
6 Disc Spring (2 required)	971690
7 Anti-Lock Shim	5413
8 Socket Head Cap Screw (M4 x 16mm)	970433
9 Lockwasher	2117
10 Punch Holder Key	10448
11 Guide Unit Assembly	10518
12 Guide	10519
13 Spring (6 required)	971694
14 Special Pin (2 required)	5522
15 Stripper Clip (3 required)	5521
16 Guide Stripper Ring	10446
17 Punch Holder	10517
18 O-Ring	972430
19 Retaining Ring	972441
20 Spring	972396
21 Wave Spring	971692
22 Punch Driver Assembly	10573
23 Disc Spring (5 required)	10440
24 Spring Cover	10511
25 Spring Support	5738
26 Socket Head Cap Screw (Spl M5 x .8 Cone Pt) (2 required)	5197
27 Lockwasher (2 required)	2112
28 Retaining Ring	5747
29 Guide Key	10445
30 Socket Head Cap Screw (M3 x 8mm) (2 required)	971321
31 Locking Button (2 required)	5519
32 Wave Spring (2 required)	8155
33 Bushing	5631
34 Set Screw (M6 x 8mm Lg SSS w/ Nylock) (2 required)	6298



## 3-1/2" Station Notcher

(For Series 80° Plus and Series 90° Guide Assemblies)

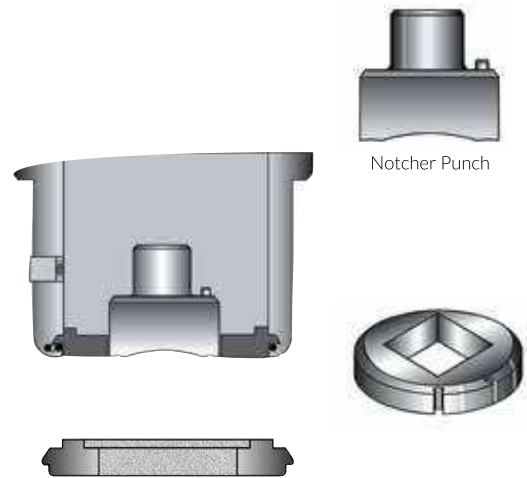
PUNCH	CAT. NO.	PRICE
2" [50.8mm] or 50mm square	449	
STRIPPER PLATE	CAT. NO.	PRICE
Notcher Stripper Plate	367	
DIE	CAT. NO.	PRICE
Shape Slug Hugger® 2*	10381	
Shape Positive	212	
Shape Negative	251	

\* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.

Square dies are keyed for shape at 0° and 45.

Optima® standard on all Notcher punches.

Includes 1/16" [1.6mm] dbl. concave shear. apply.



## Universal Notcher Station

(For Stripit® Universal Notch Guide Assemblies)

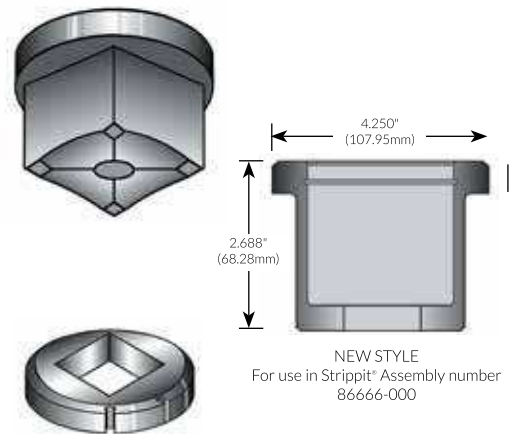
PUNCH	CAT. NO.	PRICE
Round	238	
Standard Square	215	
1.000" [25.4mm]		
1.500" [38.10mm]		
2.000" [50.80mm]		
50mm square		
Non-standard Square	239	
STRIPPING GUIDE	CAT. NO.	PRICE
Round	278	
Shape	279	
DIE	CAT. NO.	PRICE
Round Slug Hugger® 2*	10597	
Round Standard	187	
Shape Slug Hugger® 2*	10381	
Shape Positive	212	
Shape Negative	251	

\* Slug Hugger dies must be ordered punch size plus clearance. Size restrictions apply.

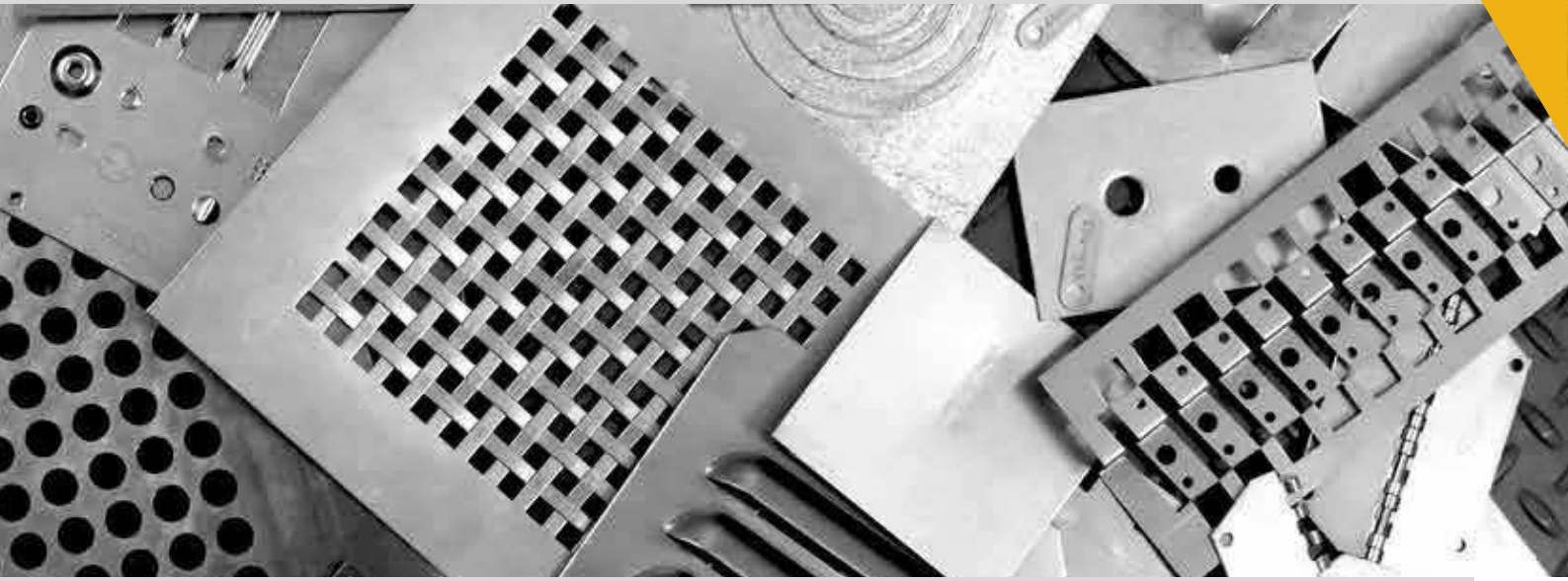
Additional charges flat punch.

All square dies are keyed for shape at 0° and 4).

Optima® standard on all Universal Notcher punches.



## SPECIALS



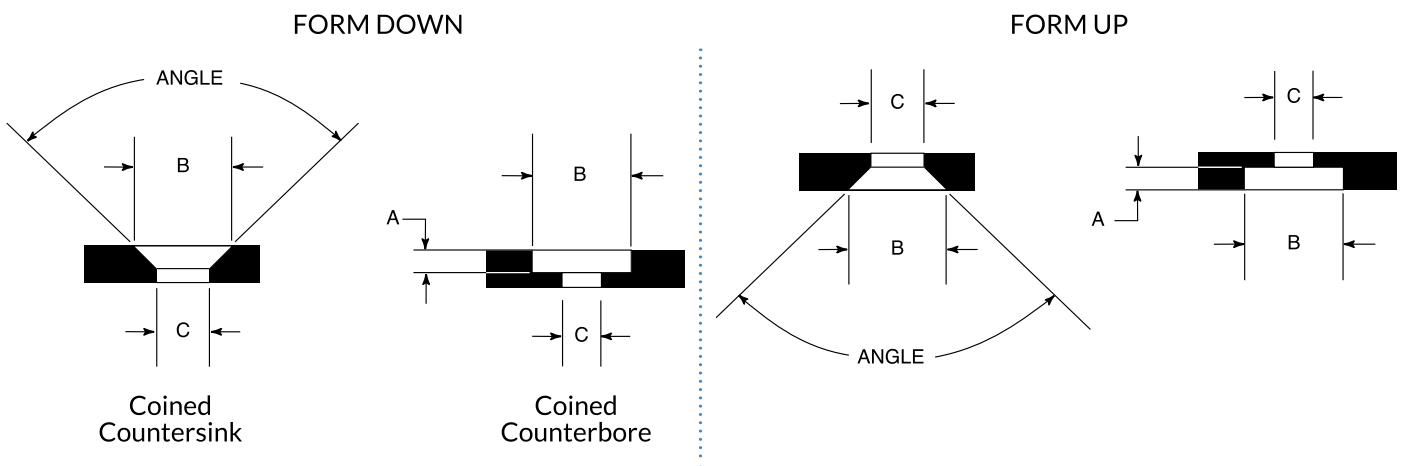
Incorporating forming applications into your fabrication can add value to your processes while reducing cost by boosting efficiencies and eliminating secondary operations.

No matter how unique your requirement, Wilson Tool works with you to design and manufacture punch press tooling that meet the needs of your most demanding application. Our highly skilled engineers and toolmakers combine unmatched experience with specialized manufacturing systems to produce products that meet the challenges of your most demanding applications.

Wilson forming tools are manufactured with high grade materials to maximize tool life and machine up time. They are engineered with features like positive stopping to ensure you consistently get a form to your specifications on every hit. And when working with challenging material Wilson offers solutions like coatings to improve stripping and reduce sheet marking. Each special tool is tested using our in-house punch presses, and a sample is included with every forming special tool we ship. Wilson special tools are manufactured to our superior quality standards and tolerances and with the shortest lead times available.

### **YOU NEED BETTER SOLUTIONS, FASTER!**

Wilson approaches every special tooling request with a “never say no” attitude. And with the fastest lead times in the industry, your special tooling will arrive when you need it.



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

APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>Coining tools are used for forming countersinks and counter bores for screws or to deburr the edge of a hole.</p>	<ul style="list-style-type: none"> <li>• Coining on the punch press eliminates costs and time when compared to a secondary operation of machining countersinks.</li> <li>• Interchangeable inserts for form down countersinks allow you to easily change coin sizes and reduce tooling costs.</li> <li>• Form up coin dies are self-stripping.</li> <li>• Multiple coating options available to aid in stripping</li> </ul>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• Angle, coin diameter (B), thru-hole size with or without pilot (C).</li> <li>• Form-up or form-down</li> </ul>





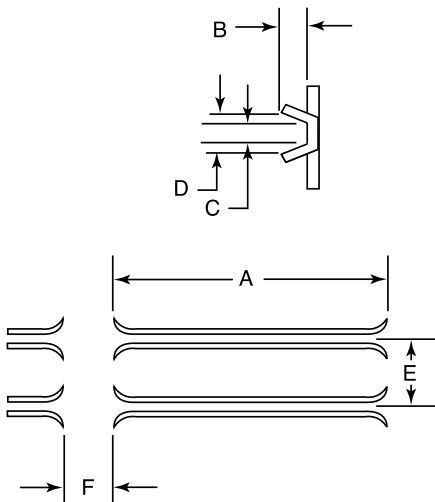
Standard



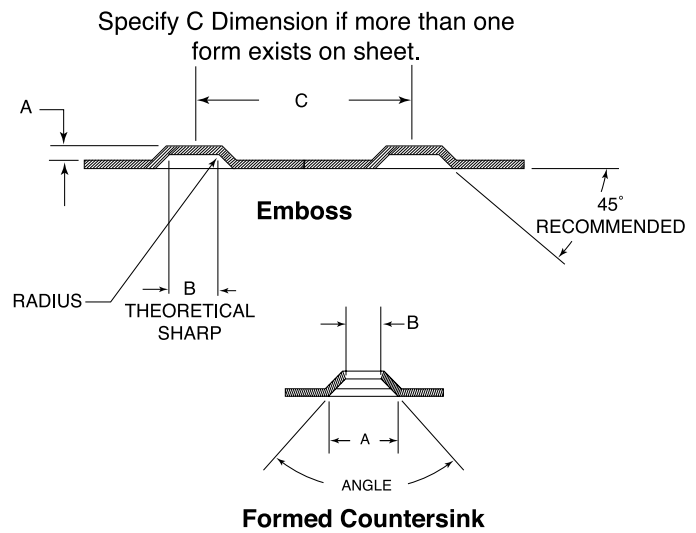
Wrap Around



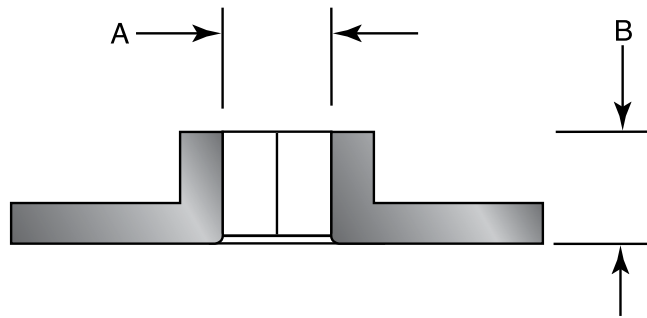
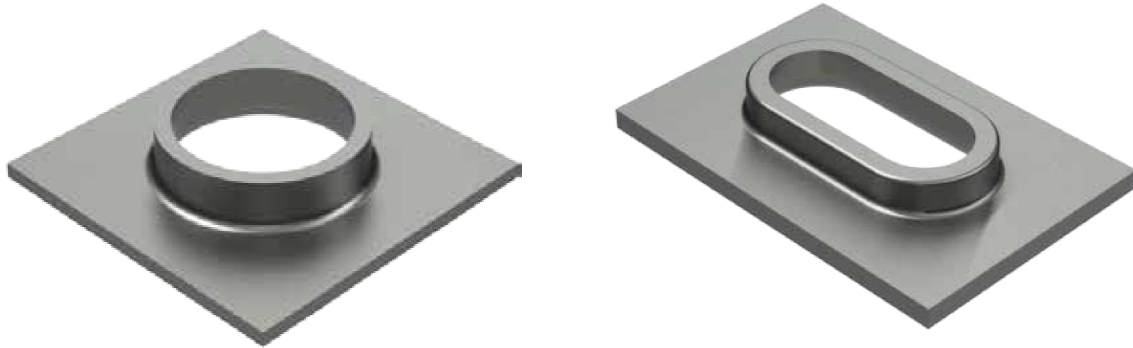
Closed End



APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>A card guide is used for retaining printed circuit boards that require standard lead-in or special lead-in shapes.</p> <p>Wilson Tool will estimate the web of material to be formed on all card guides and the pre-punch shape and size on special lead-in card guides.</p>	<ul style="list-style-type: none"> <li>• The replaceable insert design allows for lower costs and conversion to different size card guides.</li> <li>• Fast and simple length adjustment</li> <li>• Special lead-ins are available</li> <li>• Built in stripping for best results</li> <li>• Multiple coating options available to aid in stripping</li> </ul>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• Dimensional drawing or electronic file - center-to-center location and narrowest pre-punch.</li> <li>• Pre-punch shape rectangle, obround, or rectangle with radius corners.</li> </ul>



APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>Embosses, dimples and forming tools are typically used to create stand-offs, spacers, countersinks, locks for nuts.</p> <p>Logo embosses and other special shapes can be manufactured easily when an electronic file is provided.</p>	<ul style="list-style-type: none"> <li>• All tools are made to achieve a consistent high quality form.</li> <li>• Form up designs are self-stripping.</li> <li>• 1-1/4" station embosses are full body designs to give maximum bearing area to sheet.</li> <li>• Large station tools are a punch, stripper, and die design that will fit your existing holder assembly.</li> <li>• Multiple coating options available to aid in stripping.</li> </ul>	<ul style="list-style-type: none"> <li>• Material thickness and type</li> <li>• Machine model</li> <li>• Dimensional drawing or electronic file</li> <li>• Form-up or form-down</li> <li>• Style of large station guide assembly</li> </ul>



APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>Extrusions are used in a broad spectrum of applications:</p> <ul style="list-style-type: none"> <li>• Self-tapping screws</li> <li>• Cooling tube holders</li> <li>• Air flow applications</li> <li>• Tread plates</li> </ul>	<ul style="list-style-type: none"> <li>• 1-1/4" station extrusions are an insert style for fast and economical replacement.</li> <li>• Form-down extrusions are designed to be self-stripping, providing consistent and trouble-free operation.</li> <li>• The large station universal holder provides cost savings and flexibility. Purchase only a punch tip, ejector and die assembly to change size.</li> <li>• Multiple coating options available to aid in stripping.</li> </ul>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• I.D. and height or screw size and type</li> <li>• Tolerance of I.D.</li> <li>• Form-up or form-down</li> <li>• Specify center-to-center if more than one extrusion exists on the sheet</li> </ul>



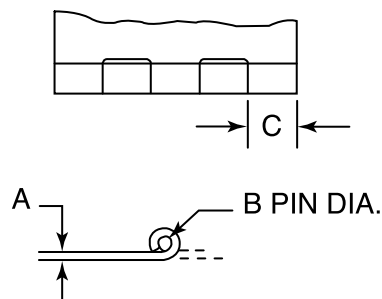
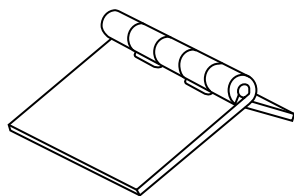
Offset Fully Curled Hinge



Standard Fully Curled Hinge



One-Hit Half Knuckle Hinge

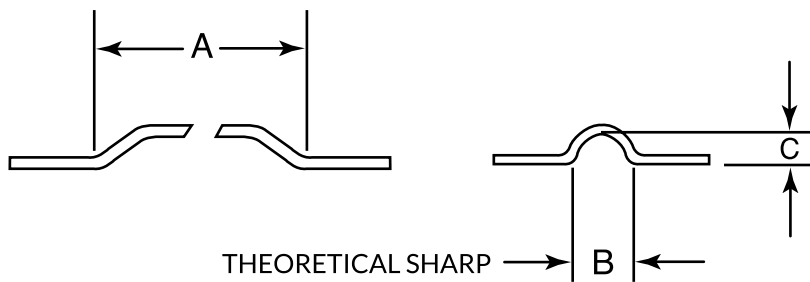
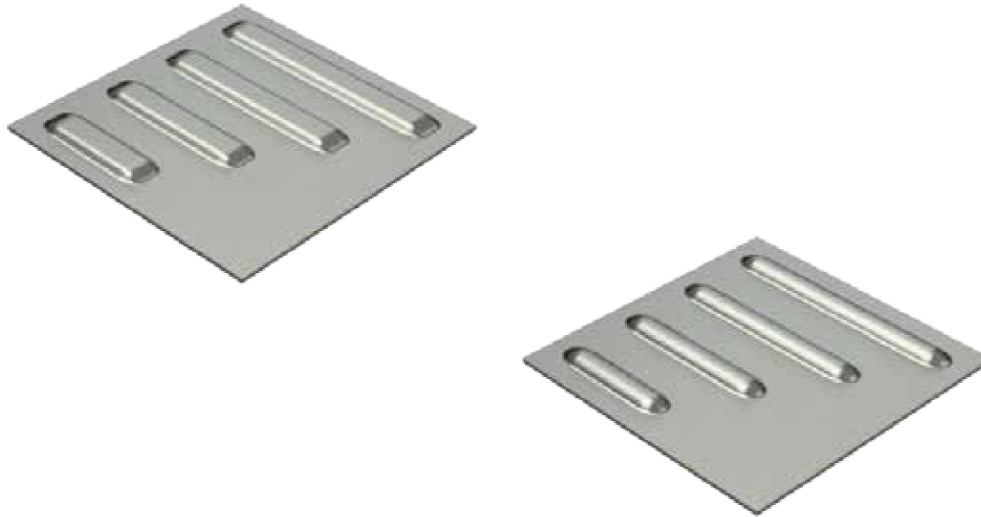


APPLICATION	ADVANTAGES	INFORMATION NEEDED
Integrating a formed a hinge on the edge of the sheet in your turret machine eliminates the need for costly hardware and a secondary operation to weld or fasten them.	<ul style="list-style-type: none"> <li>Wilson Tool's one-hit hinge tool is achieved with 1 set of tools.</li> <li>Standard hinge is achieved with 2 sets of tools.</li> <li>Offset hinge requires 3 sets of tools.</li> </ul>	<ul style="list-style-type: none"> <li>Machine model</li> <li>Material thickness (A) and type</li> <li>Dimensional drawing or electronic file - inside diameter or pin size (B)</li> <li>Knuckle size (C)</li> </ul>

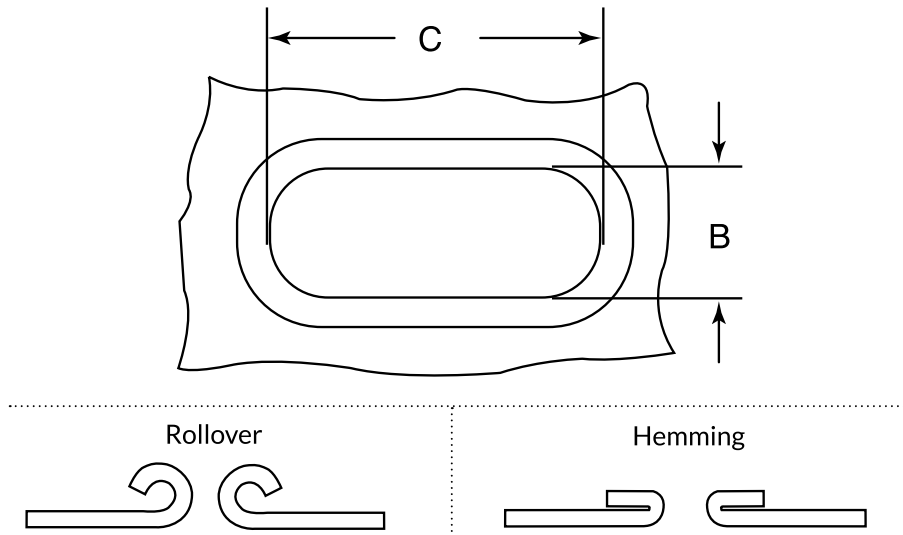


See this tool in action on the Wilson Tool YouTube Channel

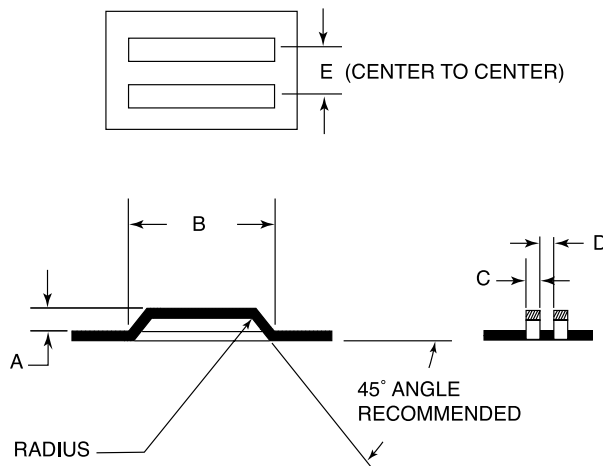
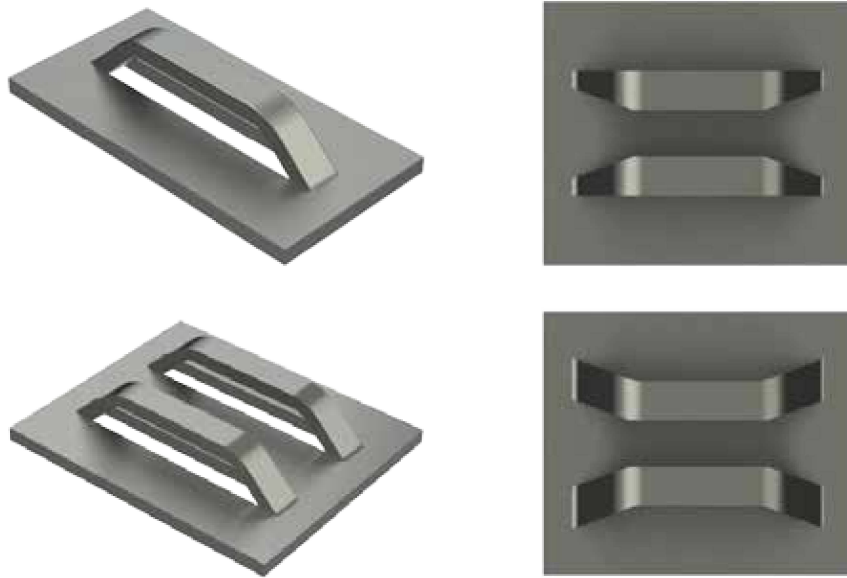
# PROGRESSIVE RIB



APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>A progressive rib produces quality stiffening ribs, programmable to any length.</p> <p>Rounded or flat top ribs are available. For best results, inside radius should be equal to or greater than the height.</p> <p>Run in nibbling mode recommended (incremental moves should be equal to the material thickness or less).</p>	<p>The large station universal holder provides fast and easy length adjustments, cost savings and flexibility:</p> <ul style="list-style-type: none"> <li>• Purchase a punch tip and die to change size</li> <li>• The same upper holder can be used for electrical knockouts, extrusions, and lance and forms.</li> </ul> <p>When changing material thicknesses, only one component is required.</p>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• Dimensional drawing or electronic file</li> <li>• Specify center-to-center if more than one form exists on the sheet</li> </ul>

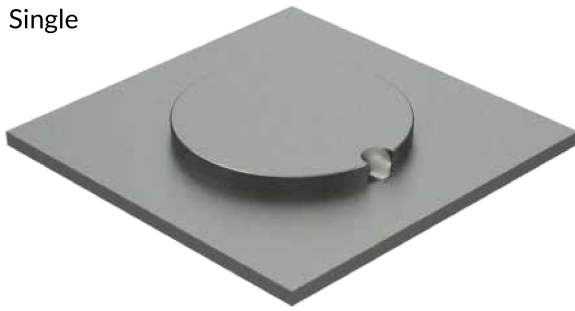


APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>Rollover and hemming tools can be used in many applications such as hand holds, wire feeds and grommets.</p> <ul style="list-style-type: none"> <li>Rollover is achieved in three operations:                             <ol style="list-style-type: none"> <li>1. Pre-punch (developed by Wilson Tool free of charge)</li> <li>2. Form-up extrusion</li> <li>3. Rollover</li> </ol> </li> <li>Hemming is achieved in three operations:                             <ol style="list-style-type: none"> <li>1. Pre-punch (developed by Wilson Tool free of charge)</li> <li>2. Form-up extrusion</li> <li>3. Flare &amp; Flatten.</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Reduces costly secondary operations and handling.</li> <li>Designed and manufactured to produce consistent results.</li> <li>Multiple coating options available to extend tool life.</li> </ul>	<ul style="list-style-type: none"> <li>Machine model</li> <li>Material thickness and type</li> <li>Diameter or length and width of opening (C, B)</li> <li>Tolerance of opening</li> <li>What type of application (hand hold, wire feed, etc.)</li> <li>Style of guide assembly</li> </ul>

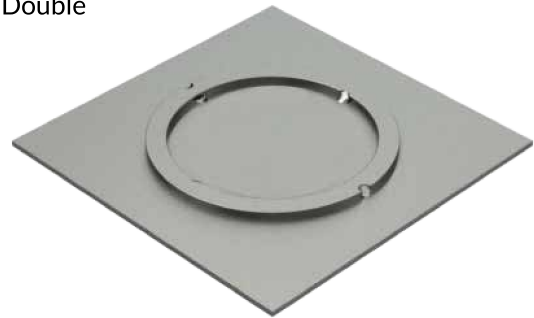


APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>Bridge style lance and forms can be used for shear stops, locators, card guides, dividers, ventilation and wire tie downs.</p>	<p>The Wilson design creates a positive form ensuring a high quality, consistent part.                      Small and large station holders provide both cost savings and flexibility:</p> <ul style="list-style-type: none"> <li>• Purchase only a punch tip, ejector and die assembly to change size.</li> <li>• Use the same upper holder for other applications.</li> </ul> <p>Special lead-ins available.                      Form-down bridges are made self-stripping.                      Multiple coating options available to aid in stripping.</p>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• Dimensional drawing or electronic file for relief</li> <li>• Top, side and end views</li> <li>• Form-up or form-down</li> </ul>

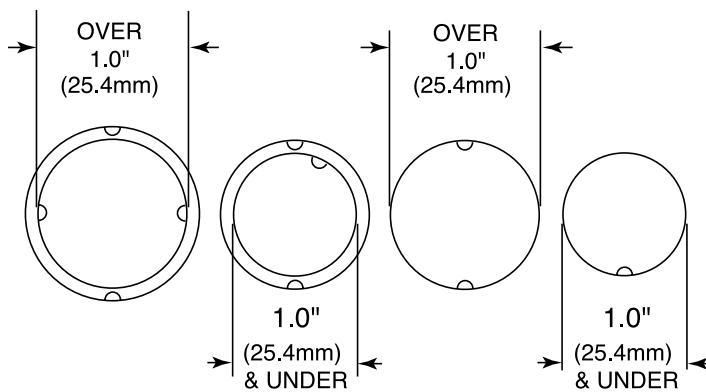
Single



Double



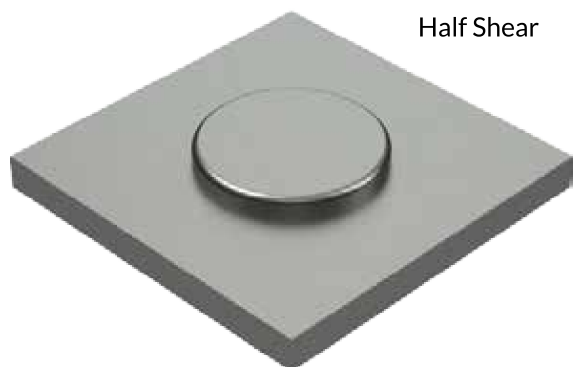
Standard Wilson Tool Tab Location



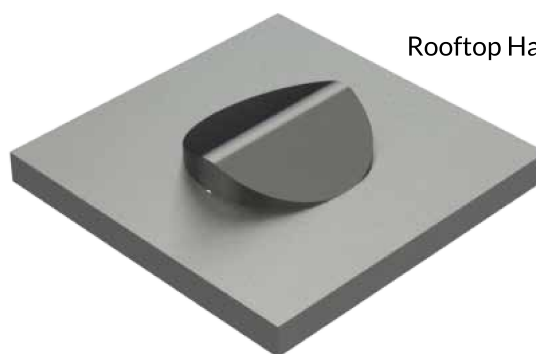
APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>Electrical knockouts (EKOs) are used to create connection points for cable pathways. Available for:</p> <ul style="list-style-type: none"> <li>• Single</li> <li>• Double (concentric or tangential)</li> <li>• Standard and special shapes</li> </ul> <p>Single or multiple tools can be used to produce the desired number of EKOs for your requirements.</p>	<p>Wilson Tool's EKO design has full stripping in both upper and lower units, which produce good quality, reliable knockouts every time. The universal holder provides both cost savings and flexibility.</p> <ul style="list-style-type: none"> <li>• Purchase only a punch tip, ejector and die assembly to change size.</li> <li>• Use the same upper holder for other applications.</li> </ul> <p>Multiple coating options available for extending tool life.</p>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness, type or range</li> <li>• Actual diameter</li> <li>• Specify center-to-center if more than one knockout exists on the sheet.</li> <li>• Form-up or form-down</li> </ul>



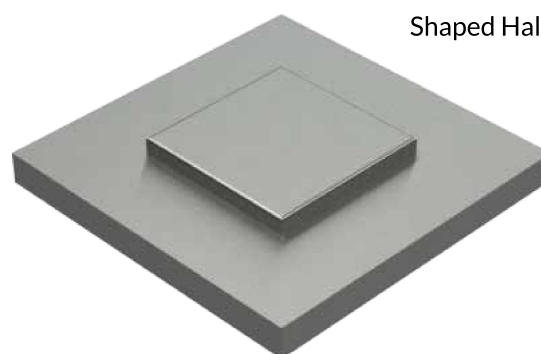
# HALF SHEAR / ROOFTOP HALF SHEAR



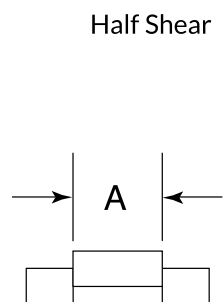
Half Shear



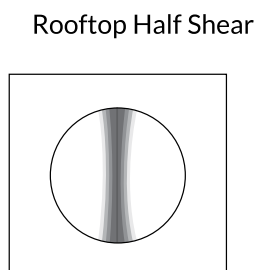
Rooftop Half Shear



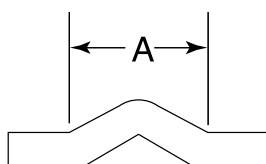
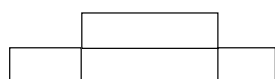
Shaped Half Shear



Half Shear



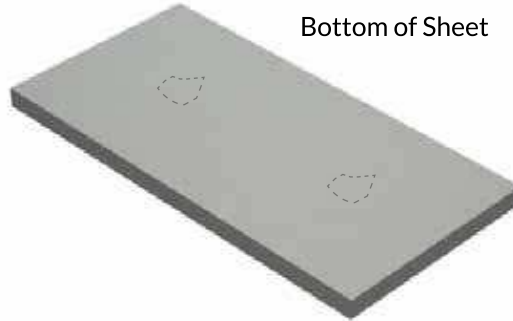
Rooftop Half Shear



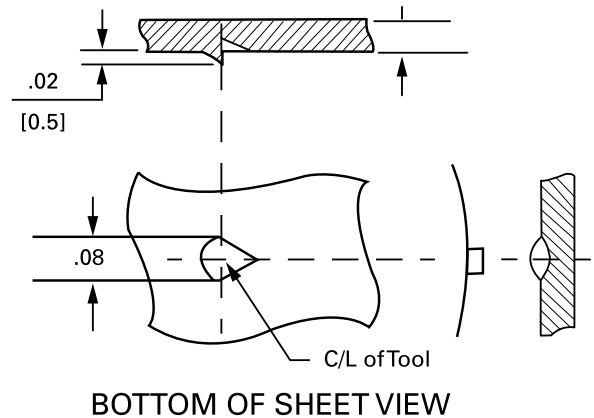
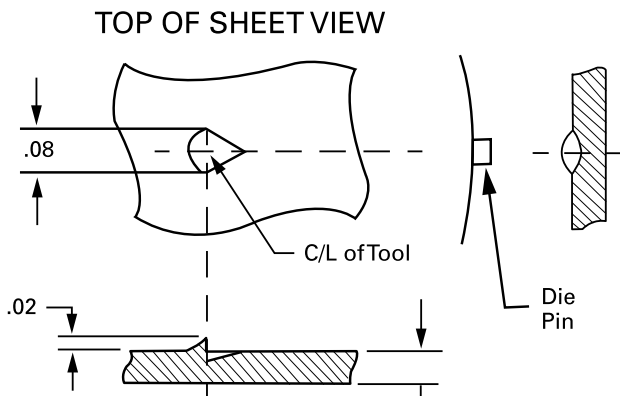
APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>The half shear is an easy-to-use tool that allows you to put in shear buttons and spot welding locators to the accuracy of your punch press.</p> <p>Round half shears make excellent locators for angular shearing.</p> <p>Rooftop half shears have approximately a 3 gauge material thickness range.</p>	<p>Form-up half shears are available in stock sizes.</p> <p>B station form-up half shears have replaceable inserts up to .375" (9.53mm) diameter in lower unit.</p> <p>Rooftop half shears give you greater height protrusion compared to a standard half-shear when using thinner material.</p> <p>Half shears can be used on a .125" (3.17 mm) range of material.</p>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type (or range)</li> <li>• Diameter or shape (on top of sheet)</li> <li>• Specify center-to-center if more than one exists on the sheet.</li> <li>• Form-up or form-down</li> </ul>



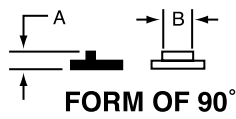
Top of Sheet



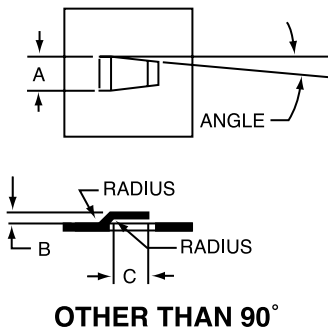
Bottom of Sheet



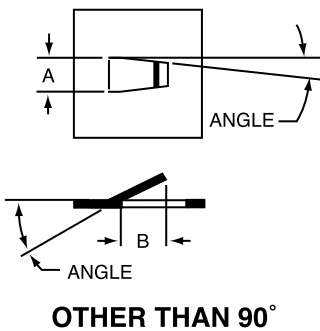
APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>The scratch form can be used for spot welding locators, locators for angular shearing and shear stops.</p> <p>Height of the stop is .020 [.5mm] - .030 [.8mm].</p> <p>Tool is designed with relief for .500" [12.7mm] centers.</p>	<p>Punches a range of material from .036" [.91mm] to .125" [3.18mm]</p>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• Specify top or bottom of the sheet scratch</li> </ul>



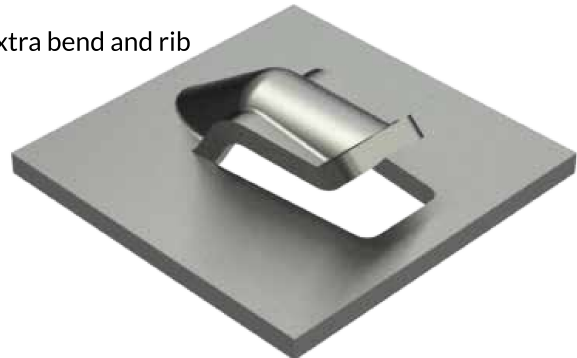
90° Form



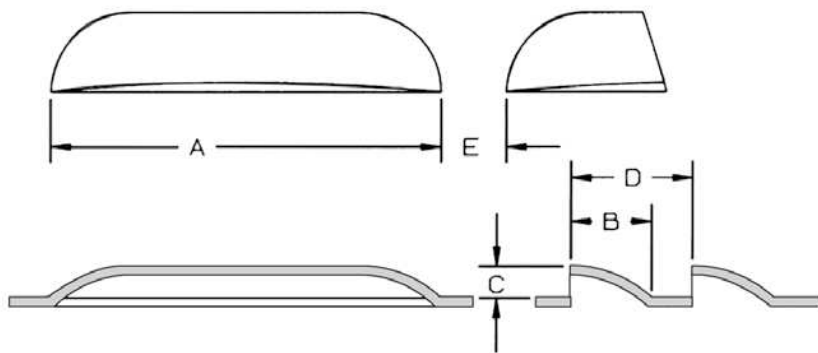
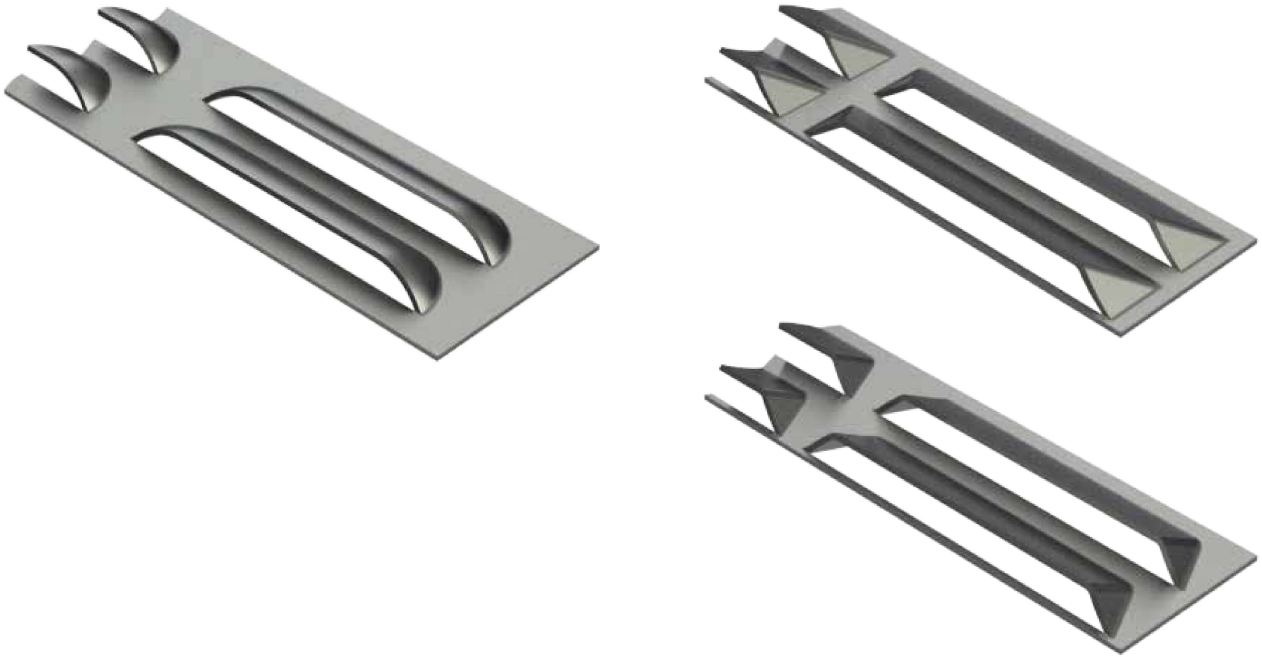
With extra bend



With extra bend and rib

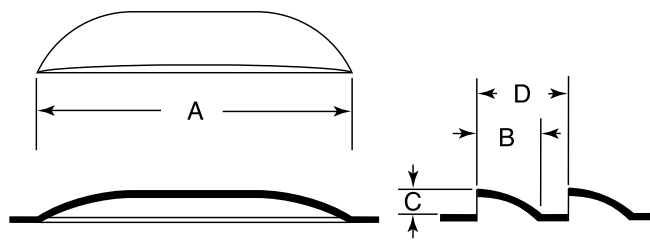


APPLICATION	ADVANTAGES	INFORMATION NEEDED
Lance and forms are used for a variety of applications, including: Air flow Decoration Location markers Shear tabs Wire harnesses Clip attachments.	High-quality lance and forms are assured with Wilson's positive form and self-stripping design. Lance and form other than 90° holder provides both cost savings and flexibility; <ul style="list-style-type: none"> <li>• Purchase only a punch tip, ejector and die assembly to change size;</li> <li>• Use the same upper holder for other applications.</li> </ul> Multiple coating options available to extend tool life.	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• Dimensional drawing or electronic file and pattern if relief is required.</li> <li>• Style of large station guide assembly - for lance and forms of 90° only (e.g. series 80/90, Old Style, etc.)</li> <li>• A taper of 5° per side should be added (if possible) to aid in stripping large station lance and forms.</li> <li>• Form-up or Form-down</li> </ul>



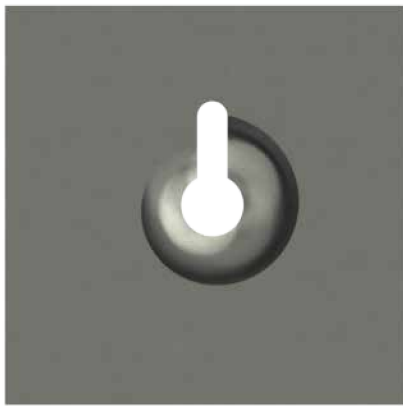
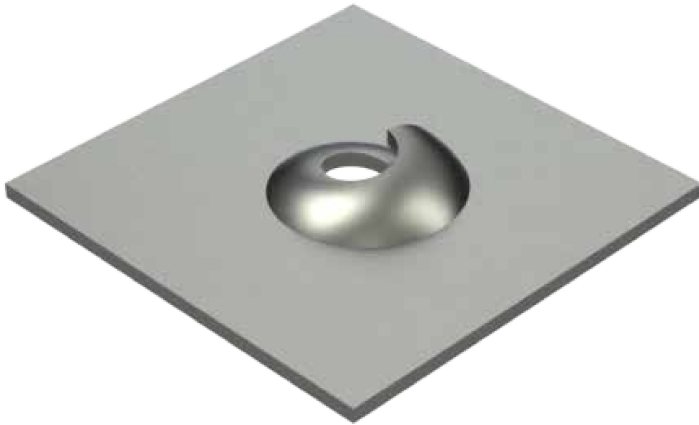
APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>Louvers are used in a variety of industry applications that require airflow; electrical enclosures, HVAC, and food service equipment.</p> <p>Single hit louvers can be placed back to back (no web between louvers.)</p>	<p>Lower costs with replaceable inserts that can be converted to different size louvers. Stock sizes available. The large station universal holders provide both cost savings and flexibility:</p> <ul style="list-style-type: none"> <li>• Purchase only pocket, cutting, and forming inserts to change size.</li> <li>• Use the upper holder for other applications</li> </ul> <p>Keying at 0°, 90°, 180°, and 270° is standard Multiple coating options available to extend tool life.</p>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• Dimensional drawing or electronic file</li> </ul>

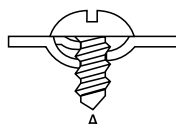
# PROGRESSIVE LOUVERS






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

APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>Progressive louvers are used in a variety of industry applications that require airflow; Electrical enclosures, HVAC, and food service equipment.</p> <p>The progressive design produces various length louvers to give flexibility using one tool.</p> <p>Run in nibbling mode (recommended incremental moves equal to the material thickness or less).</p> <p>A Do's and Don'ts information sheet is provided for ease of programming.</p>	<p>Lower costs with replaceable inserts that can be converted to different size louvers. Stock sizes available.</p> <p>The large station universal holders provide both cost savings and flexibility:</p> <ul style="list-style-type: none"> <li>• Purchase only pocket, cutting, and forming inserts to change size.</li> <li>• Purchase only pocket insert when changing material</li> </ul> <p>Use the upper holder for other applications. Keying at 0°, 90°, 180°, and 270° is standard. Multiple coating options available to extend tool life.</p>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• B, C and D dimensions.</li> </ul>



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

 B	 AB	6-20
		8-18
		10-16
		12-14
		1/4-14
		5/16-12

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

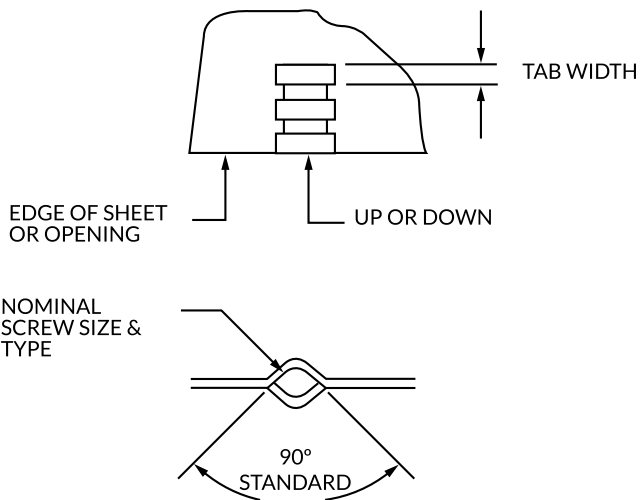
### THREAD FORM DATA CHART

Maximum Material Thickness  
with Coining

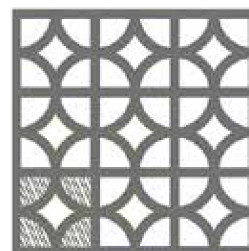
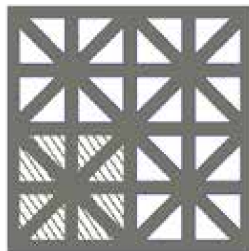
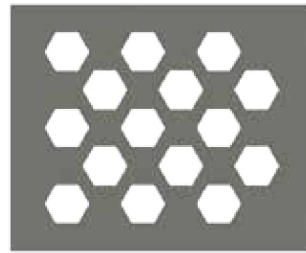
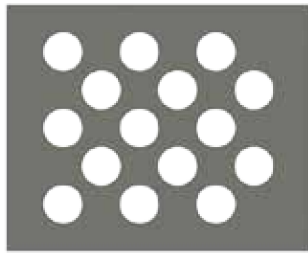
Thread Size	Inches	MM
6-15	.120	3.05
6-18	TBD	TBD
6-20	.100	2.54
6-32	.048	1.22
7-16	.094	2.39
8-15	.120	3.05
8-18	.094	2.39
8-32	.038	0.97
10-12	.125	3.18
10-16	.100	2.54
10-24	.067	1.70
10-32	.050	1.27
12-11	.120	3.05
12-14	.120	3.05
12-24	.068	1.73
14-10	.140	3.56
20-9	.125	3.18
1/4-14	.120	3.05
1/4-20	.094	2.39
5/16-12	.120	3.05
5/16-18	.094	2.39
3/16-24	.067	1.70
3/8-16	.079	2.01
1/2-13	.114	2.90
M2.9 x 1.1	.080	2.03
3.5 x 1.3	.100	2.54
3.9 x 1.4	.098	2.49
M4 x 0.7	.062	1.57
M4.2 x 1.4	.074	1.88
4.2 x 1.6	.094	2.39
4.8 x 1.6	.094	2.39
4.8 x 1.8	.100	2.54
M5 x 0.8	.050	1.27
5.5 x 1.8	.120	3.05
M6 x 1.0	.065	1.65
6.3 x 1.8	.120	3.05
M8 x 1.25	.074	1.88
8.0 x 2.1	.120	3.05
M10 x 1.5	.085	2.16
M12 x 1.75	.104	2.64

APPLICATION	ADVANTAGES	INFORMATION NEEDED
A thread form is a great solution for eliminating secondary operations and supplemental hardware where a threaded hole is required.	<ul style="list-style-type: none"> <li>Reduces costly hardware and assembly time.</li> <li>Coining is included in the design of the tool when material exceeds the recommended thickness up to 2 times.</li> <li>Pre-punch information is provided.</li> <li>Multiple coating options available to extend tool life.</li> </ul>	<ul style="list-style-type: none"> <li>Machine model</li> <li>Material thickness and type</li> <li>Thread size and type</li> </ul>

# THREAD LOOP



APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>A thread loop is a great solution for eliminating secondary operations and supplemental hardware when a threaded hole is required.</p>	<p>The Wilson design gives a positive form, which ensures a high quality part.</p> <p>Reduces costly hardware and assembly time.</p> <p>Multiple coating options available to extend tool life.</p>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• Number of thread loop tabs</li> <li>• Width of tab</li> <li>• Direction of first tab</li> <li>• Diameter of opening or screw size and type</li> <li>• Dimensional drawing or electronic file</li> </ul>



APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>The cluster tool is the most cost effective method to manufacture perforated patterns and is commonly used for air ventilation, drains and filters.</p> <p>Cluster piercing is ideal for applications where tight tolerance is required on the hole pattern.</p>	<ul style="list-style-type: none"> <li>• Creates maximum number of holes with minimal hits.</li> <li>• Saves on machine punching time and costly tool maintenance.</li> <li>• Available in any hole size, shape or pattern.</li> <li>• Holds tight tolerance from hole to hole.</li> <li>• Punch available as solid or replaceable insert style.</li> <li>• Wilson Tool's back bending feature on dies can help reduce sheet distortion.</li> <li>• Multiple coating options available to extend tool life.</li> <li>• Slug Hugger® 2 recommended to eliminate slug pulling.</li> </ul>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material type, thickness or range</li> <li>• Number of holes in clusters</li> <li>• Straight or staggered pattern</li> <li>• Center-to-center dimensions</li> <li>• Replaceable or solid design</li> <li>• Style of large station guide assembly</li> </ul>



# LETTER STAMP



FORM-UP

FORM-DOWN

## FORM-UP

MAXIMUM CHARACTERS PER ROW  
FOR SINGLE & DOUBLE ROW STAMP

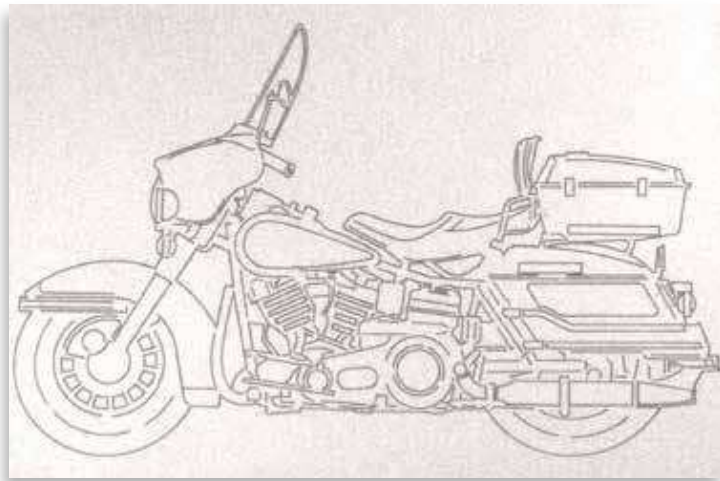
SIZE	1-1/4" STATION		2" STATION		3-1/2" STATION	
	SINGLE	DOUBLE	SINGLE	DOUBLE	SINGLE	DOUBLE
1/16" [1.57mm]	20	20	31	31	53	53
3/32" [2.36mm]	14	14	20	20	35	35
1/8" [3.17mm]	10	10	15	15	26	26
3/16" [4.75mm]	7	N/A	9	9	17	17
1/4" [6.35mm]	5	N/A	7	7	13	13
3/8" [9.52mm]	3	N/A	N/A	N/A	8	N/A

## FORM-DOWN

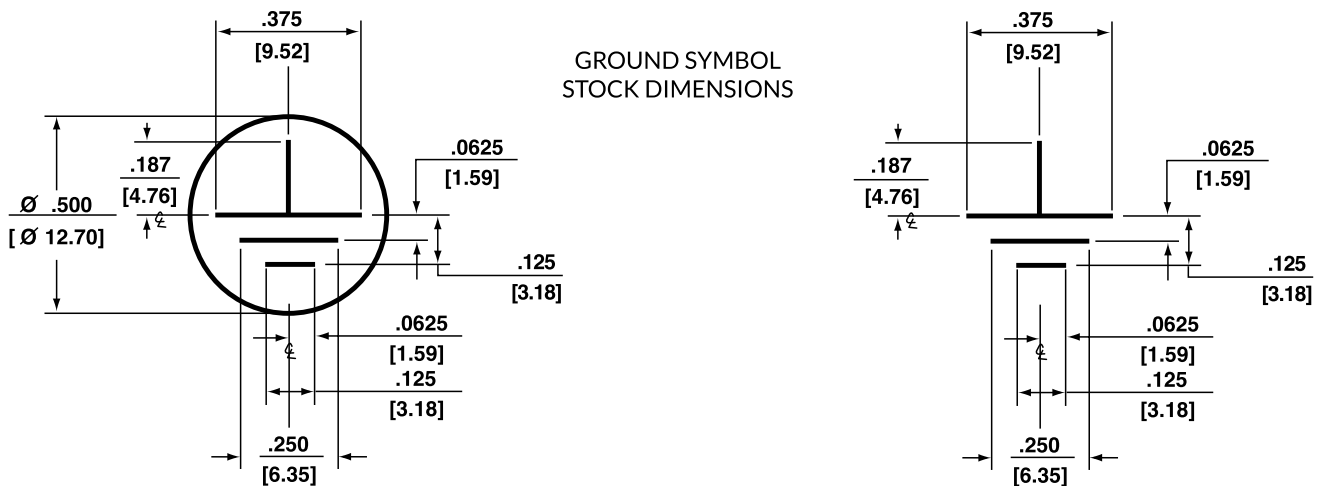
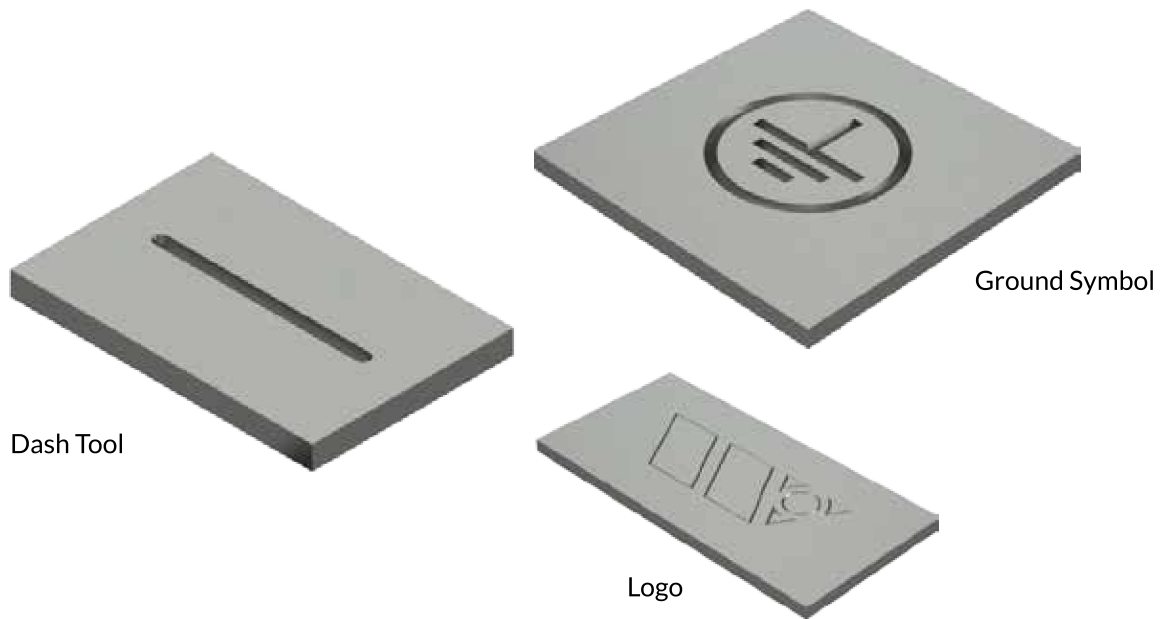
MAXIMUM CHARACTERS PER ROW  
FOR SINGLE & DOUBLE ROW STAMP

SIZE	1-1/4" STATION		3-1/2" STATION		5" STATION	
	SINGLE	DOUBLE	SINGLE	DOUBLE	SINGLE	DOUBLE
1/16" [1.57mm]	16	16	48	48	72	72
3/32" [2.36mm]	10	10	32	32	48	48
1/8" [3.17mm]	8	8	24	24	36	36
3/16" [4.75mm]	5	5	16	16	24	24
1/4" [6.35mm]	4	N/A	12	12	18	18
3/8" [9.52mm]	2	N/A	8	8	12	12

APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>A letter stamp is a perfect solution for permanently marking and displaying company names, serial numbers, or part numbers.</p> <p>Replaceable punch tip design allows for versatility as well as quick and easy change out.</p>	<p>Stock sizes available in single and double row.</p> <p>Reduces the number of tools needed to mark parts.</p> <p>Eliminates secondary stamping operations.</p> <p>Adjustable for .125" (3.18mm) material range.</p> <p>Interchangeable punch tip design provides cost savings and flexibility to easily change character size by purchasing only a punch tip and characters.</p> <p>Form-up letter stamp tools are made self-stripping.</p>	<ul style="list-style-type: none"> <li>Machine model</li> <li>Material thickness and type</li> <li>Size character, number of rows, number of characters per row</li> <li>Form-up or form-down</li> <li>Style of large station guide assembly</li> </ul>



APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>Wilson Multi-Scribe is ideal for both sheet scribing and dot-matrix marking on a wide range of materials.</p> <ul style="list-style-type: none"> <li>• Unique designs and logos can be achieved just by programming.</li> <li>• Hydraulic rams produce both "scribe" and "dot-matrix" sheet marking.</li> <li>• Mechanical rams produce "dot-matrix" sheet marking</li> <li>• Works on a wide range of materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Can achieve variable scribe depth</li> <li>• Design allows for consistent mark depth</li> <li>• Long lasting diamond tip</li> <li>• Won't deform the material or mark the underside of the sheet.</li> <li>• Sold as a kit which includes:                             <ul style="list-style-type: none"> <li>• Punch &amp; die assembly</li> <li>• Red medium spring, yellow light spring</li> <li>• Green heavy spring</li> <li>• 120° and 150° diamond insert</li> <li>• 90° carbide insert</li> <li>• 3mm hex wrench</li> </ul> </li> <li>• Wilson Multi-Scribe tool comes assembled with 120° diamond and red medium spring.</li> </ul>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> </ul>



APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>Stamping the top or bottom of the sheet is the perfect solution for permanently displaying company names, serial numbers, symbols, and product or company logos.</p> <p>Ground symbols, widely used in the electrical industry are available in stock sizes, form-down or form-up. Dash tools can be used to “V” notch the sheet to aid in bending, create numbers and letters, and location marks on a sheet. Dash tools are available in form-down or form-up, in various lengths and can be run progressively.</p>	<p>All form-up tools are designed self-stripping to prevent sheet marking and tool wear. Logo stamps and other special stamps can be manufactured easily when an electronic file is provided.</p> <p>When used in the auto index station, dash tools can be used to create numbers and letters. Adjustable for .125” [3.18mm] material range.</p>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• Length of dash</li> <li>• Size of ground symbol (stock or non-stock)</li> <li>• Electronic file for logos</li> <li>• Form-up or form-down</li> <li>• Style of large station guide assembly</li> </ul>



APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>Zip-Tech lance is achieved in three operations:</p> <ol style="list-style-type: none"> <li>1. Pre-punch - round hole</li> <li>2. Pre-punch - T-shape hole</li> <li>3. Zip-Tech Lance and Form</li> </ol>	<p>Fabricates snaps to join metal parts together.</p> <p>Different types of materials of the same thickness can be joined together.</p> <p>Eliminate time consuming and labor intensive welding and grinding operations, spot welding or other fastening methods.</p>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• Auto index stations available</li> </ul>



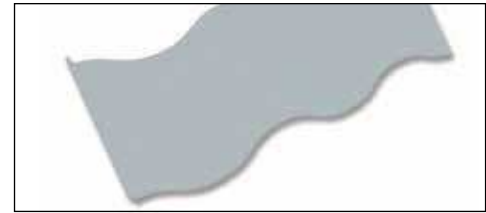
ROLLING FLARE



ROLLING RIB



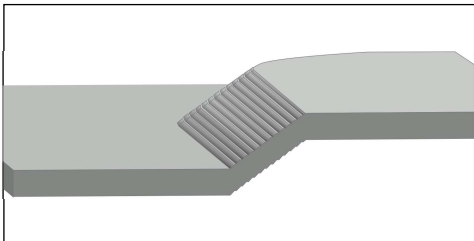
ROLLING OFFSET



ROLLING SHEAR



ROLLING PINCHER



ROLLING FORGE



APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>The Wilson Wheel family of products offers you flexible, high speed production of slits, ribs and offsets on a wide range of materials with virtually no burrs or nibble marks. Create curves, arcs and circles with your auto index station.</p>	<ul style="list-style-type: none"> <li>• High speed - equal to programmed table travel speed.</li> <li>• Virtually no burrs or nibble marks on sheet.</li> <li>• Eliminate scrap with rolling shear and pincher.</li> <li>• Replacement forming wheels available.</li> <li>• Available in form-up or form-down.</li> <li>• Works on a wide range of material.</li> <li>• Wheel tools can start or end anywhere on the sheet.</li> <li>• Stock sizes available for fast delivery.</li> </ul>	<ul style="list-style-type: none"> <li>• Machine model</li> <li>• Material thickness and type</li> <li>• Define fabrication needs</li> </ul>



See this tool in action on the Wilson Tool YouTube Channel



APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>Light Spring Packs help reduce sheet and form distortion as well as sheet marking in forming and piercing operations.</p>	<ul style="list-style-type: none"> <li>• Fast and easy assembly and disassembly with Series 80®, Series 80 Plus®, Series 90® and High Performance® (HP).</li> <li>• Simply spin off the existing spring unit and spin on the partial light spring unit.</li> <li>• Sold in partial or complete spring units.</li> <li>• Assembly instructions included.</li> </ul>	<ul style="list-style-type: none"> <li>• Type of holder</li> </ul>

# E-Z SET PUNCH HEAD



SPECIALS



APPLICATION	ADVANTAGES	INFORMATION NEEDED
<p>The E-Z Set™ punch head provides quick turn-of-the-wrist adjustment. A simple lift and turn of the adjustable head is all that is required. You can achieve just the right mark or form when using the E-Z Set™ punch head on A or B station stamping and forming tools.</p>	<ul style="list-style-type: none"> <li>• Precise adjustment: Each adjustment click provides a .0035" (0.09 mm) incremental change in the tool length.</li> <li>• The maximum adjustment is approximately .125" [3.18 mm].</li> <li>• Fine length adjustments can now be made without removing the tool from the turret, thus reducing machine down time.</li> <li>• You will see instant payback based on reduced machine down time.</li> </ul>	<ul style="list-style-type: none"> <li>• Type of holder - imperial or metric</li> <li>• Style of guide assembly</li> </ul>

## The Slug Pulling Solution

For a guaranteed solution to slug pulling problems that will maximize your press time and improve your productivity turn to Wilson Tool, the leading provider of tooling solutions for the punching industry. Manufacturers simply cannot afford to have their presses down for any amount of time. At Wilson Tool, our desire to provide innovative tooling solutions for our customers has led us to develop the Slug Hugger® 2 die design to help eliminate the very costly problem of slug pulling.

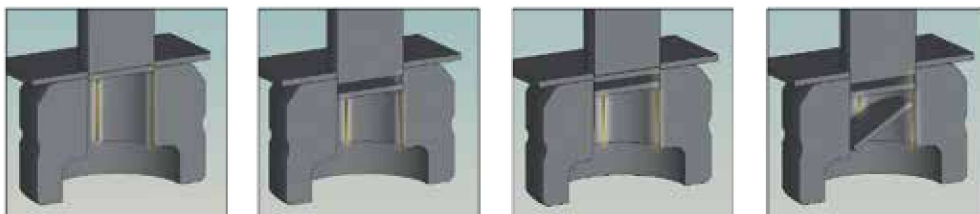
The Slug Hugger® 2 design works on most material types and thicknesses including aluminum and stainless steel. Slug Hugger® 2 dies help eliminate scrapped parts, costly downtime, and possible press and tooling damage due to slug pulling.

At Wilson Tool, our Slug Hugger® 2 dies include a performance guarantee. Our unique design helps eliminate unnecessary back-pressure on small punch tips by preventing packed slugs.



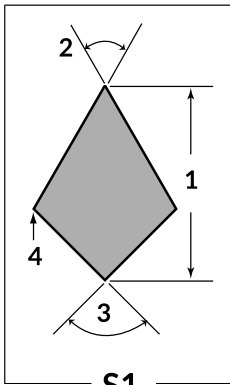
### How Does it Work?

The Slug Hugger® 2 design grabs the slug just below the cutting surface of the die and retains the slug during the stripping process. “Precision Nips” extend the entire height of the die, helping to guide the slugs through the relief. This design doesn’t leave any marks or burrs on the finished part. The Slug Hugger® 2 “nips” hold the slugs in the die and drags it through the relief when the next hit takes place. This feature allows for less galling and slug packing when punching materials such as aluminum and galvanized steel. In addition, the effectiveness of the Slug Hugger® 2 will not be compromised when the tool is sharpened.

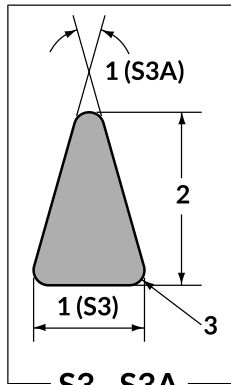




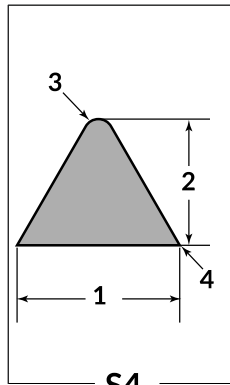
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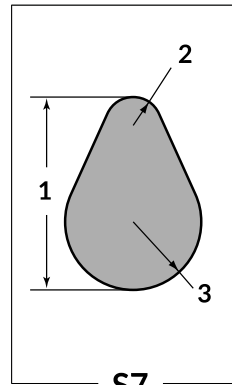
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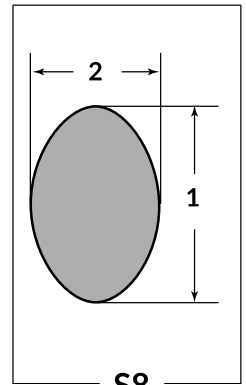
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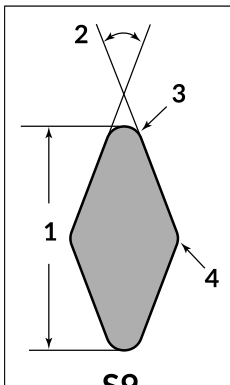
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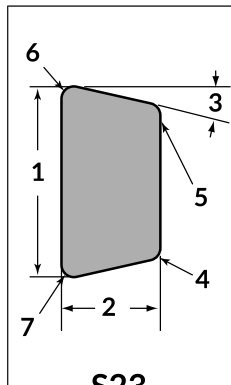
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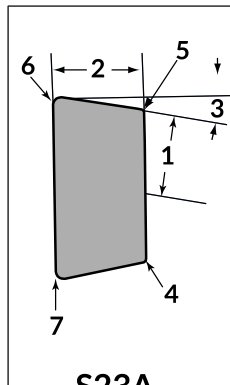
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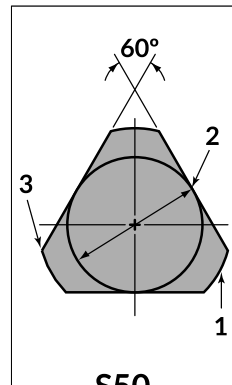
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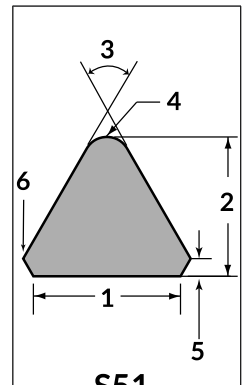
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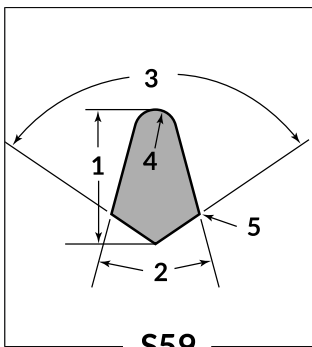
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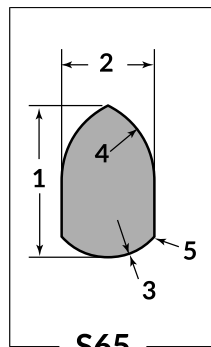
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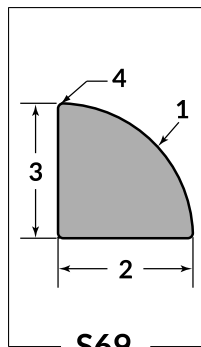
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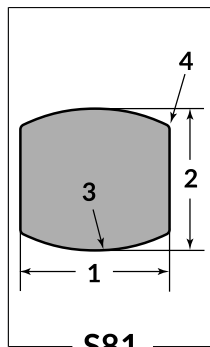
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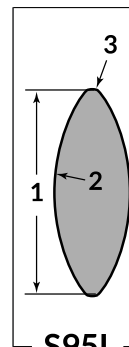
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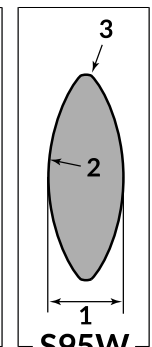
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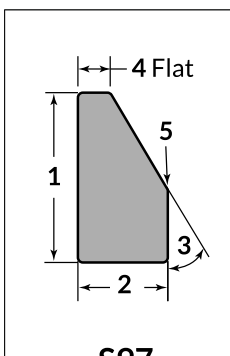
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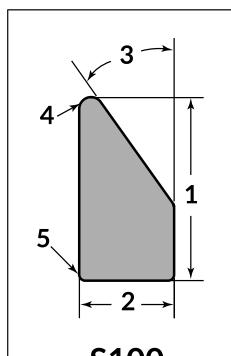
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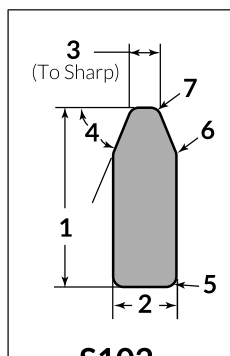
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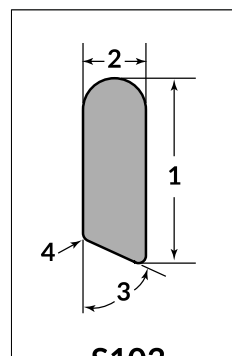
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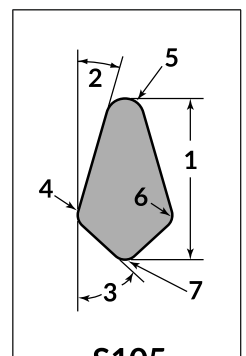
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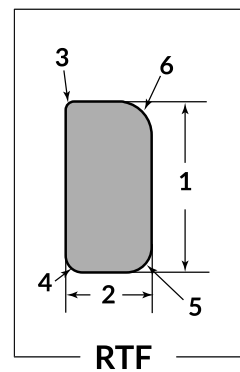
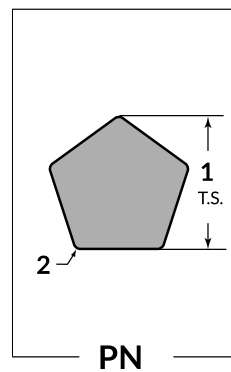
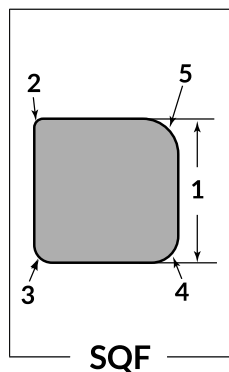
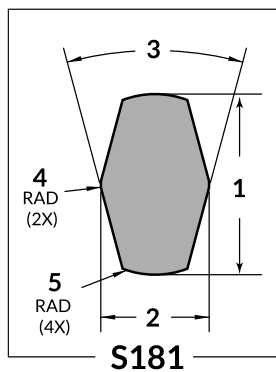
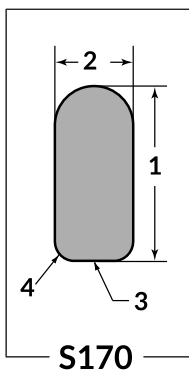
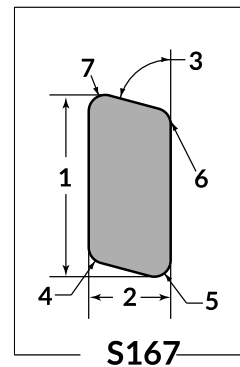
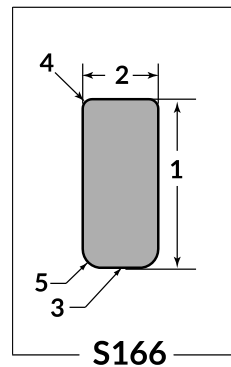
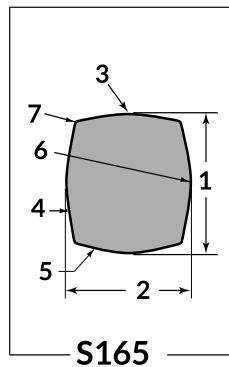
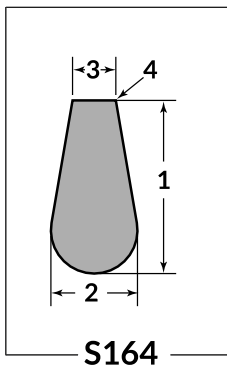
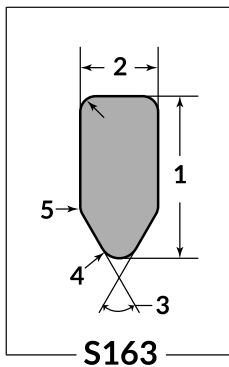
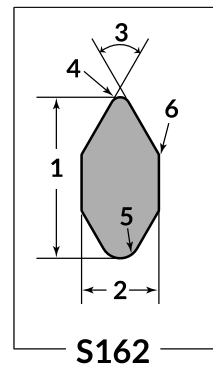
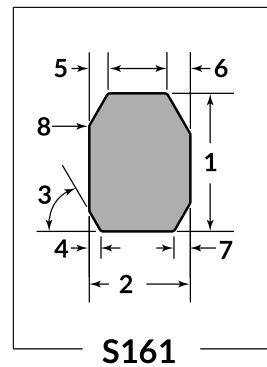
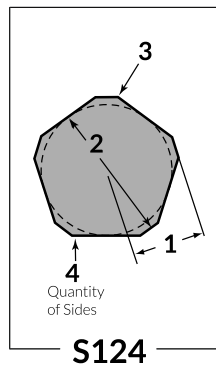
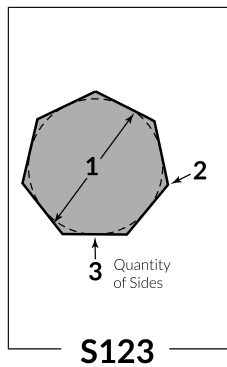
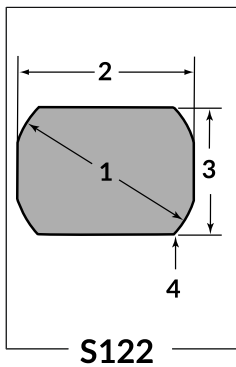
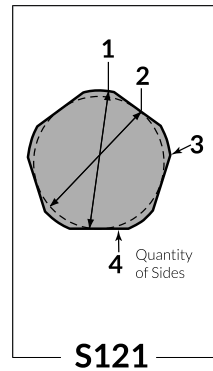
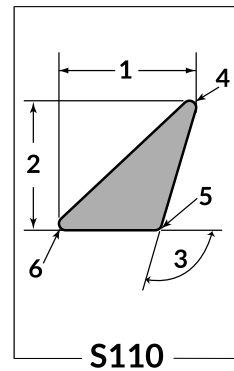
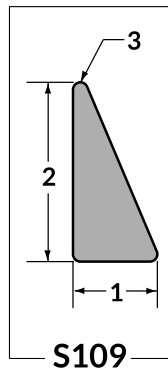
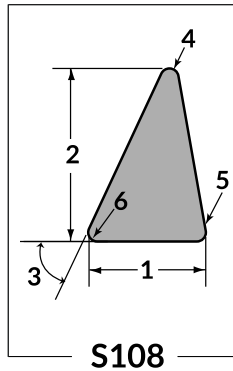
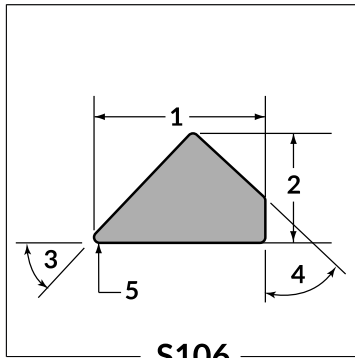
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S105

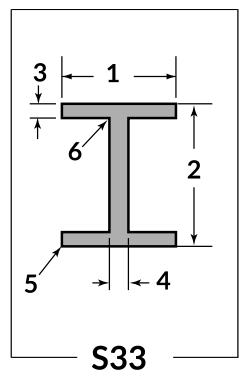
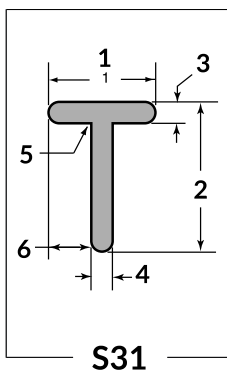
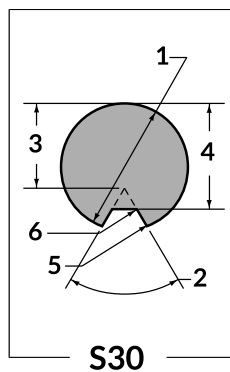
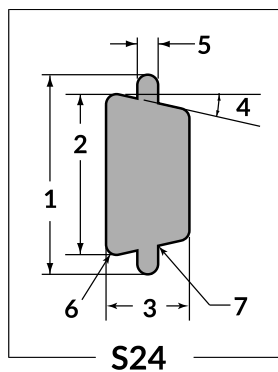
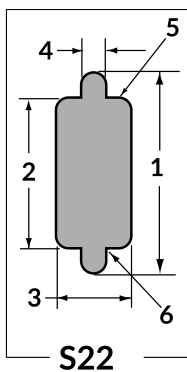
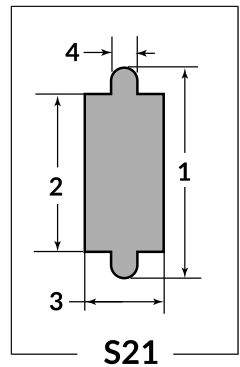
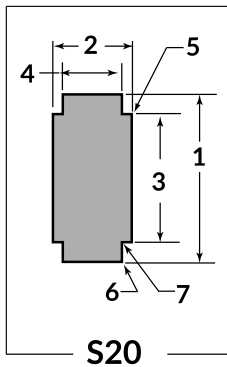
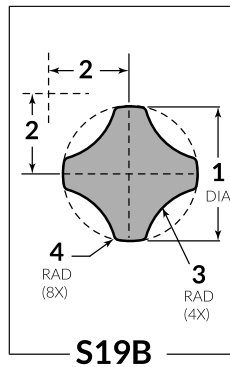
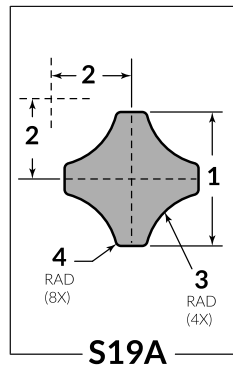
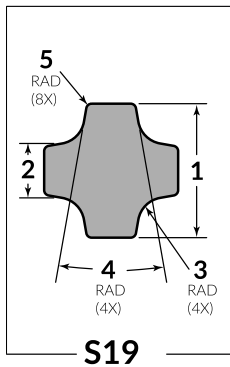
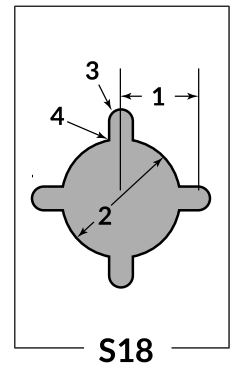
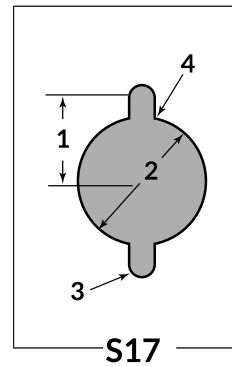
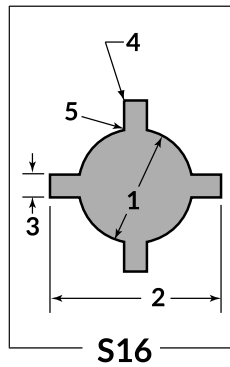
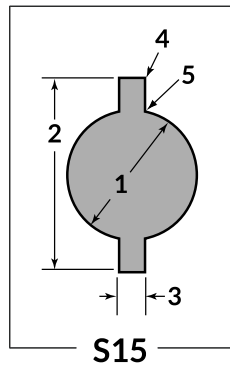
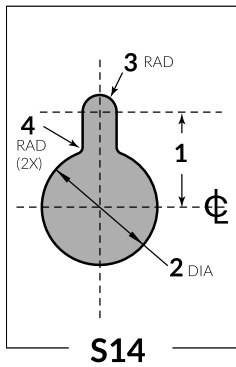
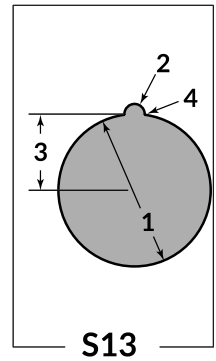
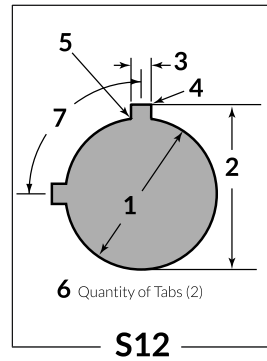
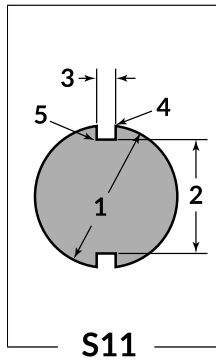
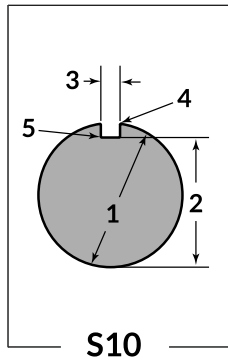
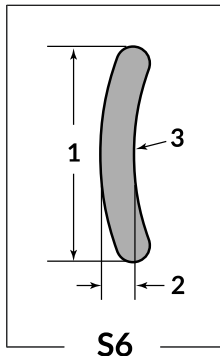
NOTE: Special considerations may alter price and lead time.

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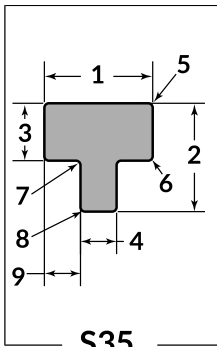
NOTE: Special considerations may alter price and lead time.

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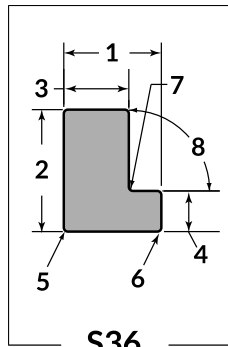


NOTE: Special considerations may alter price and lead time.

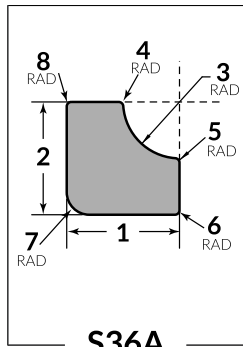
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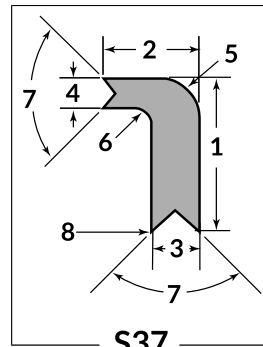
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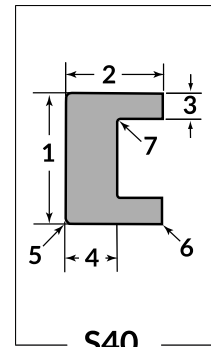
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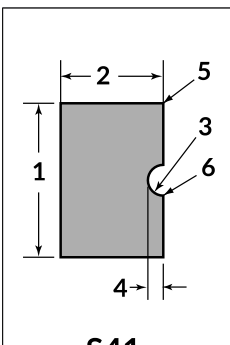
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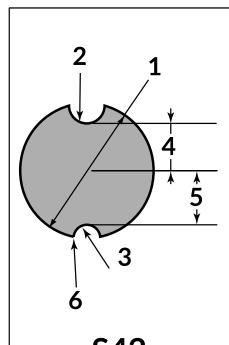
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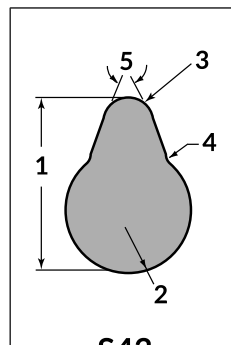
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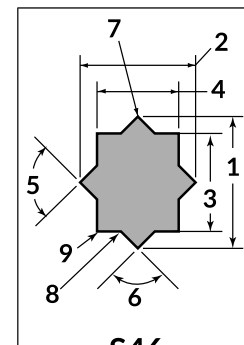
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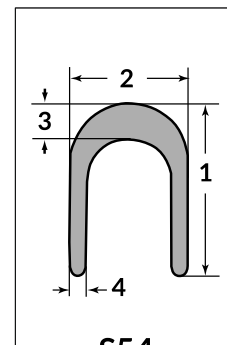
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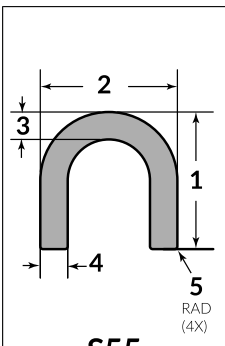
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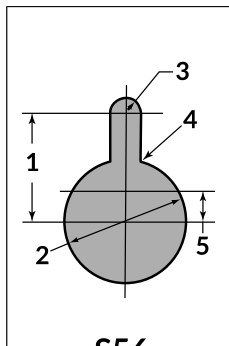
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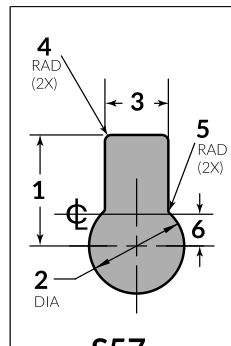
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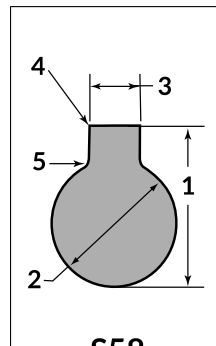
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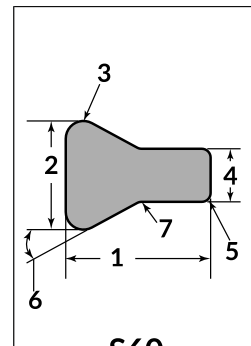
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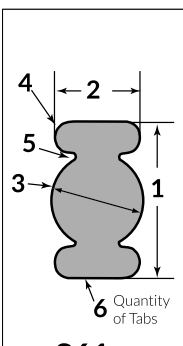
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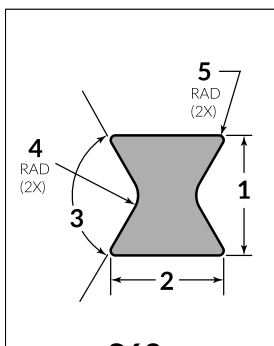
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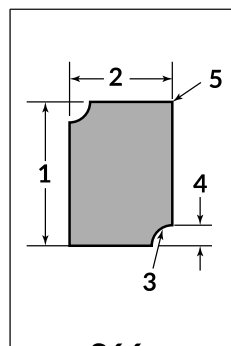
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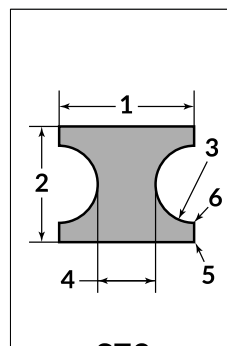
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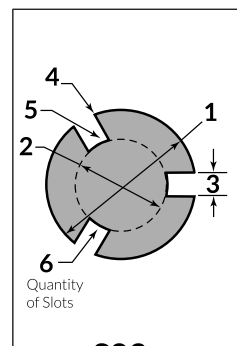
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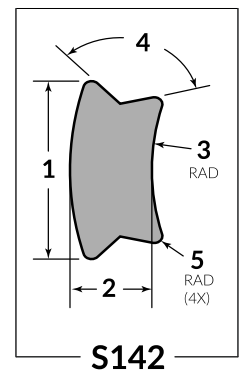
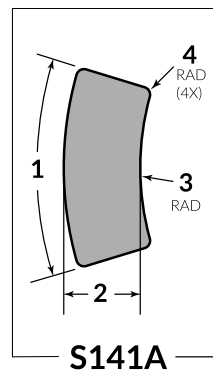
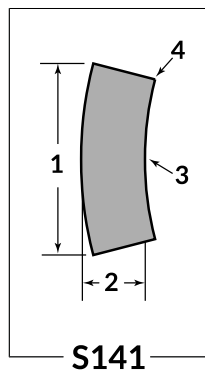
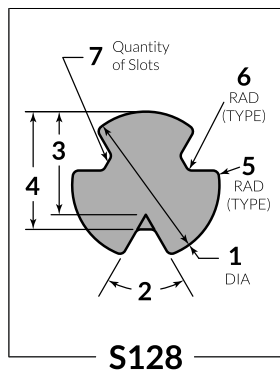
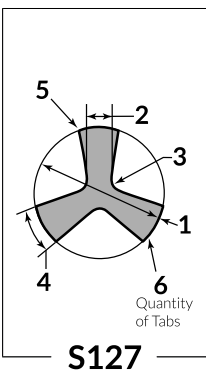
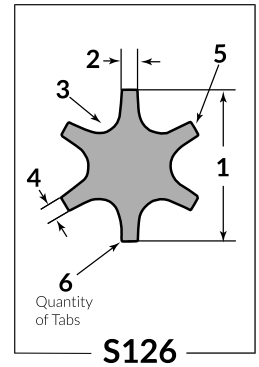
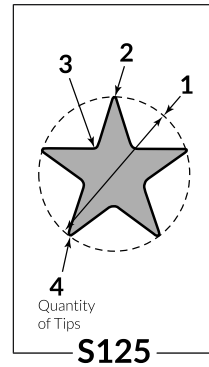
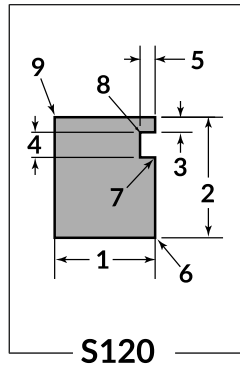
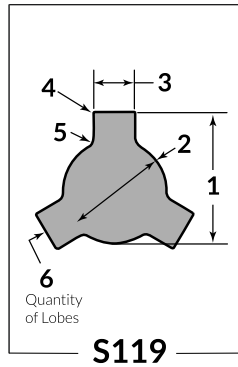
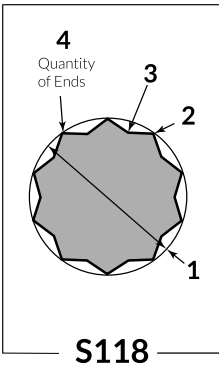
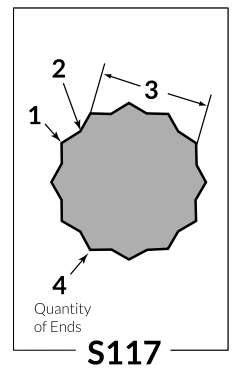
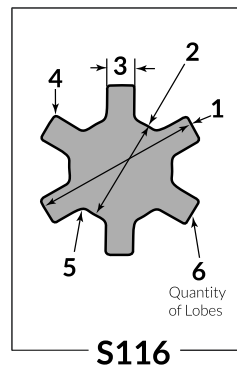
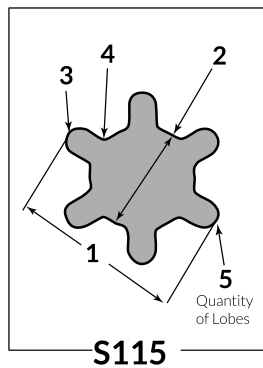
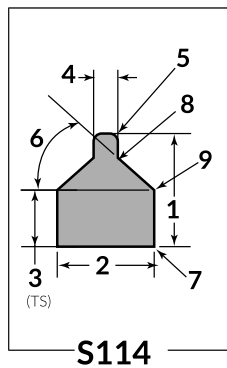
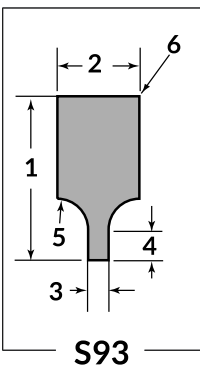
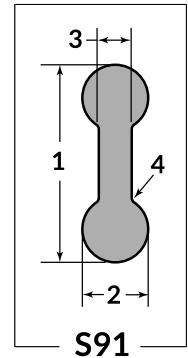
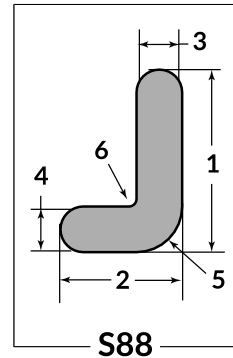
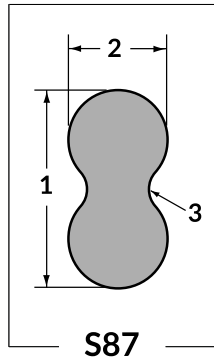
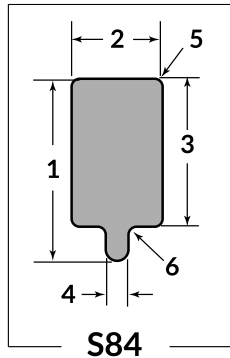
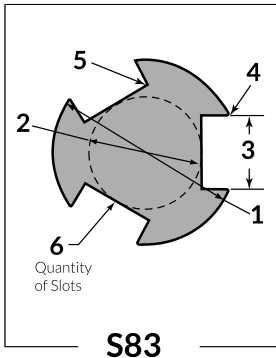
S79



S82

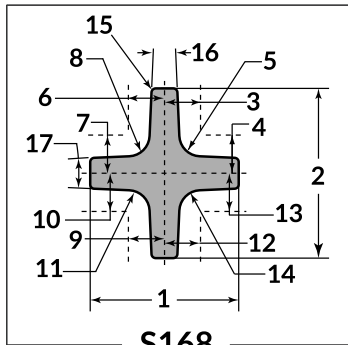
NOTE: Special considerations may alter price and lead time.

GROUP 'B'

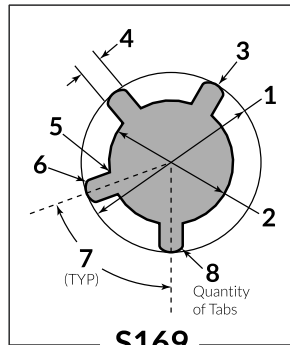


NOTE: Special considerations may alter price and lead time.

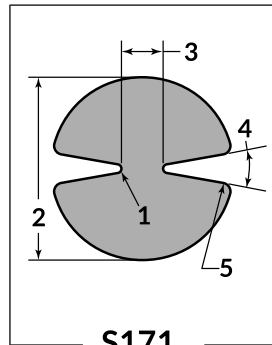
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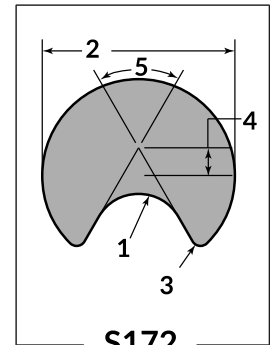
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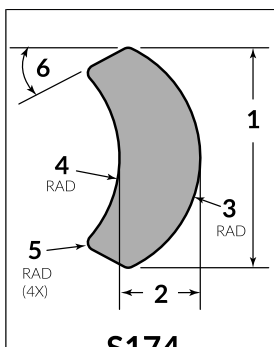
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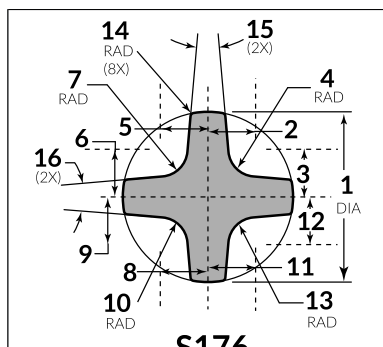
**S171**



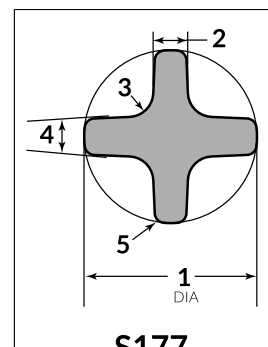
**S172**



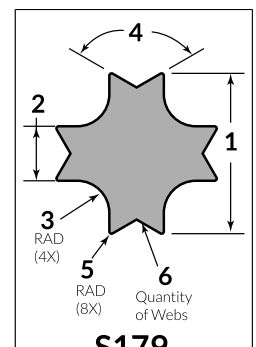
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**S176**



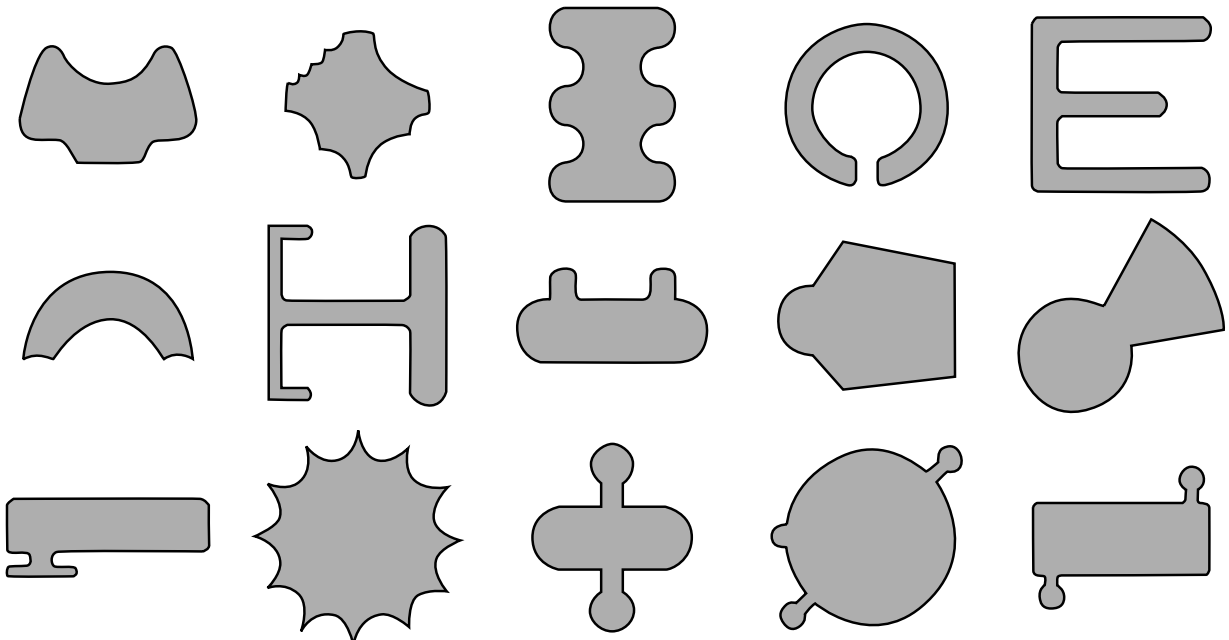
**S177**



**S179**

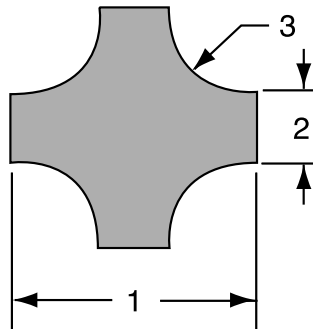
NOTE: Special considerations may alter price and lead time.

## GROUP 'C'



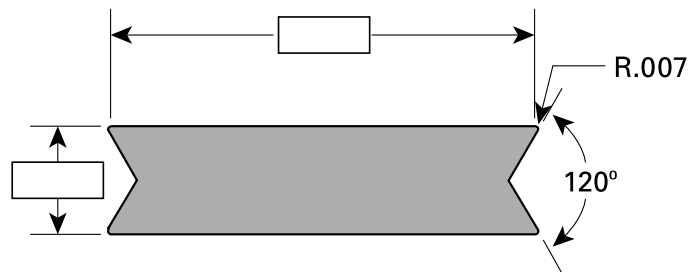
Any complex 2D shape ordered with a DXF file will be priced as a "B" Group. Electronic file will be validated at the time of ordering.

### 4-WAY RADIUS TOOLS - STANDARD SIZES



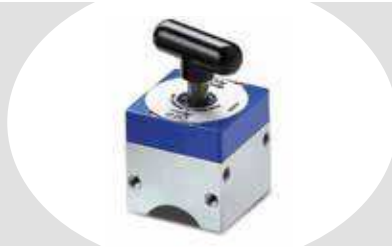
RADIUS INCHES/MM	DIM. 1 INCHES/MM	DIM. 2 INCHES/MM	DIM. 3 INCHES/MM
.062 [1.58]	.500 [1.58]	.250 [6.35]	.062 [1.58]
.094 [2.39]	.625 [2.39]	.250 [6.35]	.094 [2.39]
.125 [3.18]	.625 [3.18]	.250 [6.35]	.125 [3.18]
.156 [3.96]	.750 [3.96]	.250 [6.35]	.156 [3.96]
.188 [4.78]	.750 [4.78]	.250 [6.35]	.188 [4.78]
.250 [6.35]	.875 [6.35]	.250 [6.35]	.250 [6.35]
.312 [7.93]	1.000 [7.93]	.250 [6.35]	.312 [7.93]
.375 [9.53]	1.125 [9.53]	.250 [6.35]	.375 [9.53]
.500 [12.7]	1.250 [12.7]	.250 [6.35]	.500 [12.7]

### INVERTED DIAMOND



## MAGNET SQUARE

Press Brake Compatible  
 .....  
 Punch Press Compatible



ON/OFF work holding magnet  
 150 lb [70 kg] of hold force.  
 Size: [30MM] Square

.....  
 Cat. No. 974150

## EXP PUNCH REMOVAL KEY

Press Brake Compatible  
 .....  
 Punch Press Compatible



This wrench is designed for  
 use with EXP punches.

.....  
 Cat. No. 6989

## OIL STONE

Press Brake Compatible  
 .....  
 Punch Press Compatible



3 sqare aluminum oxide  
 sharpening stone.

.....  
 Cat. No. 6060

## DIAMOND FILE

Press Brake Compatible  
 .....  
 Punch Press Compatible



Industrial file plated with finely  
 selected diamond powder. Can be  
 used on hardened tool steel.

.....  
 Cat. No. 6059

## T-HANDLE EXTRACTOR

Press Brake Compatible  
 .....  
 Punch Press Compatible



Used for large station guide  
 assemblies.

.....  
 Cat. No. 6483

## SAE HEX KEY WRENCH SET

Press Brake Compatible  
 .....  
 Punch Press Compatible



Imperial 13 piece set. Contains  
 .050", 1/16", 5/64", 3/32", 7/64",  
 1/8", 9/64", 5/32", 3/16", 7/32", 1/4",  
 5/16" and 3/8".

.....  
 Cat. No. 6057



Metric 9 piece long arm set.  
Contains 1.5x77, 2x83, 2.5x90,  
3x98, 4x106, 5x118, 6x137,  
8x156, and 10x170mm.

Cat. No. 6105



## METRIC HEX KEY WRENCH SET

Press Brake Compatible  
Punch Press Compatible

Polyurethane dead-blow hammer.  
Steel pellets inside hammer head  
impact a split second after the  
hammer face, reducing rebound.

Cat. No. 6106



## SOFT FACE HAMMER

Press Brake Compatible  
Punch Press Compatible

Retaining ring pliers for changing  
Old Style B Station Thick Turret  
strippers and Old Style 5/8" Drop-  
In strippers.

Cat. No. 6056



## TRU-ARC PLIERS

Press Brake Compatible  
Punch Press Compatible

Adjustable 'c' hook wrench for  
removing B Station Thick Turret  
and 1/4" Station Thin Turret/Stripit  
punch heads.

Cat. No. 6058



## SPANNER WRENCH

Press Brake Compatible  
Punch Press Compatible

### TOOL KIT

- (1) Tool Box,
- (1) Oil Stone,
- (1) Diamond File,
- (1) Tru-Arc Pliers,
- (1) Spanner Wrench,
- (1) Punch Lubricant,
- (1) Soft Face Hammer,
- (1) Metric Hex Key Wrench Set,
- (1) Hex Key Wrench Set  
(English),
- (1) Assortment of 4-sizes of  
square urethane ejectors.

Cat. No. 6091



## TOOL KIT

Press Brake Compatible  
Punch Press Compatible

## DIGITAL ANGLE CUBE

Press Brake Compatible  
.....  
Punch Press Compatible



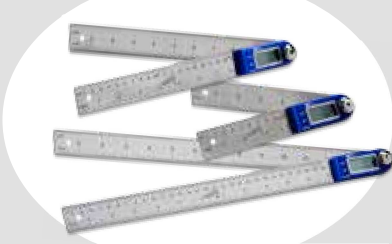
The compact size of the Digital Cube allows you to quickly read bend angles of work material.

- Real time display of angle comparison.
- Magnets on three sides
- Self rotating display for 180° readings.

.....  
Cat. No. 974119

## DIGITAL PROTRACTOR SET

Press Brake Compatible  
.....  
Punch Press Compatible



Lightweight, easy-to-use, highly accurate protractors measure angles from 0° to 360°.

- Accuracy: +/- .01 degrees.
  - Set angles in .05 degree increments
  - Front locking lever to hold the arm position.
- A hold function and reverse reading capability.

.....  
Cat. No. 980065

## DIGITAL THICKNESS GAUGE

Press Brake Compatible  
.....  
Punch Press Compatible



- Compact size with spring loaded jaw mechanism
- Accuracy to 0.002"
- Readings in millimeters, inches and fractions

.....  
Cat. No. 974117

## DIGITAL EASY READ CALIPER

Press Brake Compatible  
.....  
Punch Press Compatible

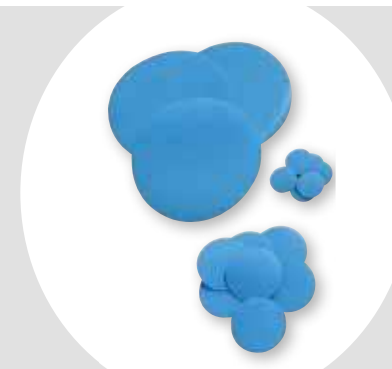


- Large digital readout [0.875" x 2.375"]
- Measuring range 0 - 6"
- Accuracy to 0.001"

.....  
Cat. No. 974118

## ZIP-MAR ADHESIVE DISCS™

Press Brake Compatible  
.....  
Punch Press Compatible



Zip Mar™ reduces the costly marring of material by the stripper. The disk is applied to the bottom of a standard stripping guide or stripper plate. A hole is then cut with a sharp knife to reveal the existing hole in the stripper.

Station	QUANTITY	CAT. NO.
1/2", 5/8"	Pack of 10	6082
1-1/4"	Pack of 10	6084
3-1/2"	Pack of 10	6086
Sheet	6" x 12" [15.2 x 30.5 cm]	6108

DESCRIPTION	CAT. NO.
1-1/4" Upper Unit	494
1-1/4" Lower Unit	495
2" Upper Unit	S190
2" Lower Unit	1841
3-1/2" Upper Unit	496
3-1/2" Lower Unit	497



## ALIGNMENT TOOLS

Press Brake Compatible  
Punch Press Compatible

DESCRIPTION	CAT. NO.
3-1/2" Station Alignment Fixture	24161

Bench mounted aid for assembling and maintaining 3-1/2" Strippit® style guide assemblies.



## ASSEMBLY FIXTURE

Press Brake Compatible  
Punch Press Compatible

A **ball riding die** consists of a spring loaded ball designed to help eliminate sheet hang-up from material running into a higher die, sheet deformation from punching next to dies of different heights and damage to die inserts when the die cap receives uneven loading.

STATION SIZE	BALL RIDING CAT. NO.	BRUSH CAT. NO.
[1-1/4"]	10685	2761



## BALL RIDING AND BRUSH DIE

Press Brake Compatible  
Punch Press Compatible

**Brush dies** are primarily used in applications where any marking that might be caused by ball riding dies is not acceptable.

THINTURRET 3- 1/2" to accept 1-1/4" STATION TOOLING	
DESCRIPTION	CAT. NO.
Punch Assembly for Fab Station	10059
Die Adapter	10096

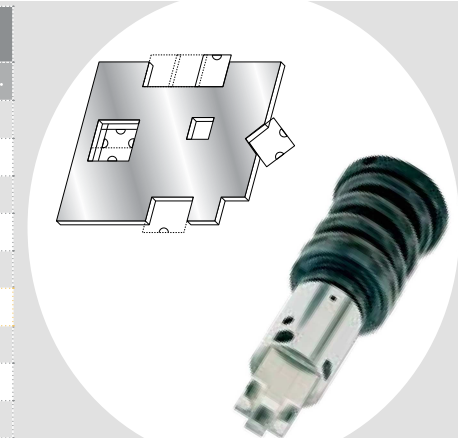
\* Keyed 4 ways for use in all machines



## ADAPTER

Press Brake Compatible  
Punch Press Compatible

SQUARE SHEARPROOF FAB 7/8" [22.2mm]	
DESCRIPTION	CAT. NO.
Punch and Guide Assembly	223
Punch only	228
Adjustable Punch Head	145
Spring	125
Guide Collar w/"O" Ring	146
Guide (Slip Fit Shaped)	231
Die (Positive)	162
Die (Slug Hugger® 2)	10073
Punch Shims (single)	152



## ADAPTER

Press Brake Compatible  
Punch Press Compatible

## TOOL STORAGE CABINET

### 9 DRAWER ARRANGEMENT & CAPACITY:

#### 6 drawers for '1-1/4" station tooling:

- 18 punch & guide assemblies (per drawer)
- 36 dies & 18 additional punches (per drawer)

#### 2 drawers for 3-1/2" station tooling:

- 16 sets of 3-1/2" station tooling per drawer

#### 1 drawer for (9 compartments) for Guide Assemblies:

- 5" station tooling or miscellaneous tooling

#### 1 drawer (9 compartments)

- 'E' or 'F' large station guide assemblies

Includes lock with two keys and forklift-ready base.

#### Overall Dimensions:

42" high x 28" wide x 29" deep

107 cm high x 71 cm wide x 74 cm deep



CABINET	CAT. NO
Thin Turret	974198
OPTIONS	CAT. NO
Plastic Drawer Liners	90002
Mobile Base	90003
Maple Top	90004
Cart Handle (1)	90005
Ribbed Rubber Mat	90006

#### Note:

Actual color and drawer arrangement will vary slightly from photo.

## SHEAR GRINDING FIXTURE

- Easy to adjust angle setting for shear grinding.
- Can be used with your existing surface grinder.
- Easy to use instruction sheet with grinding tips.



### STD & HP FIXTURE & COMPONENTS

DESCRIPTION	CAT. NO.
Shear Grinding Fixture	6034
EXP Sharpening Adapter	6990
1/2" Tooling Sleeve Adapter	6043
1-1/4" Tooling Punch and Die Holder	6042
1-1/4" to 1/2" Die Adapter	6088
'Old Style' 2", 3-1/2" & 4-1/2" Tooling Punch Holder -for Standard Thick	6039
HP Thick 2", 3-1/2" & 4-1/2" Tooling Punch Holder	6040
Dura-Blade Grinding Fixture	6932
Pointer [Replacement]	6035
Degree Scale [Replacement]	6036
STD & HP MULTI-TOOL® PUNCH & DIE HOLDERS	
DESCRIPTION	CAT. NO.
8 Station Punch & Die Holder	6812
8mm Punch & Die Holder	6156
16mm Punch & Die Holder	6157
24mm Punch & Die Holder	6158

## PUNCH AND DIE GRINDER

This fully enclosed punch and die grinder includes an integral mist collection unit and provides full containment of the grinding area vs. the standard open air containment shrouding.

- 5 hp spindle motor with CBN grinding wheel.
- Dual coolant application. Coolant is supplied both externally and through the spindle for maximum heat removal while grinding.
- Regrind punches up to 10° angle.
- Simple fixturing design. Allows for quick, easy loading and unloading of parts
- Heavy-duty three-jaw chuck standard with auxiliary magnetic chuck.
- Small footprint. At 40" x 48" [101 x 122 cm]



DESCRIPTION	CAT. NO.
230 V 3 Phase 30 Amp Grinder	6854
230 V 3 Phase 30 Amp Grinder - Enclosed	6938
460 V 3 Phase 20 Amp Grinder	6855
460 V 3 Phase 20 Amp Grinder - Enclosed	6939
1/2 Gallon Coolant Mix	6856
5 Gallon Coolant Mix	6857
Coolant Filter Pack [50 Sheets]	6858
6" Replacement CBN Wheel	6859
Production Coolant Filtration System	6860
Replacement Filter Roll for Filtration System	6861
Magnetic Chuck with Mounting Ring	6998

## MINI PUNCH AND DIE GRINDER

An efficient and economical solution for sharpening turret and punch press tooling.

- Rigid z-axis column with dovetail ways.
- Cast iron base.
- Accepts 6" diameter grinding wheel.
- Recirculating coolant system with paper filter media.
- Standard 3 jaw chuck workholding fixture.
- Optional fixturing for angled tool sharpening.
- 1.5 horsepower 3600 RPM grinding spindle motor.
- Heavy-duty three-jaw chuck standard with auxiliary magnetic chuck.
- Small footprint. At 33" x 17" x 60"
- Weight 800 lbs.



DESCRIPTION	CAT. NO.
DCM Mini PDG Grinder	6950
1/2 Gallon Coolant Mix	6856
5 Gallon Coolant Mix	6857
Coolant Filter Pack [50 Sheets]	6858
6" Replacement CBN Wheel	6859
DCM MIni Shear Grind Sine Plate	6951
Magnetic Chuck	6952

## NYLON VICE JAWS

Press Brake Compatible

Punch Press Compatible



Used to aid in the assembly and maintenance of Thin and Thick Turret style punch assemblies.

Cat. No. 24001

## RUBBERIZED ABRASIVE WHEEL

Press Brake Compatible

Punch Press Compatible



- For removing galling
- Measuring range 0 - 6"
- Accuracy to 0.001"

Cat. No. 8050

## PUNCH LUBRICANT

Press Brake Compatible

Punch Press Compatible



An extreme-pressure, solid lubricant that is used for metalworking and protecting against corrosion. Multi-purpose, low friction and heavy duty.

Cat. No. 6055

## SHEET LUBRICANT

Press Brake Compatible

Punch Press Compatible



Xcel 1 Liter Spray Bottle  
Cat. No. 24315

Xcel 5 Liter Concentrate  
Cat. No. 24316

## CUT-MAX 570

Press Brake Compatible

Punch Press Compatible



Cutting oil allows for faster cutting of difficult alloys while providing an excellent finish and extends tool life. Sample size bottle.

Cat. No. 6941

## SURE SHOT SPRAYER

Press Brake Compatible

Punch Press Compatible



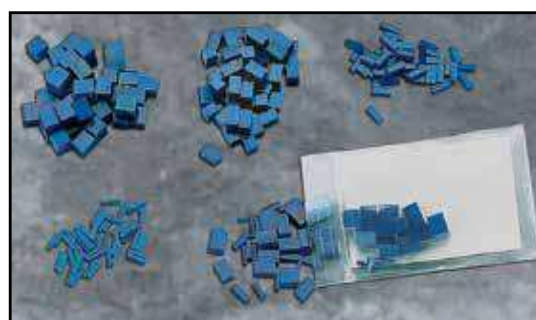
1 Quart [.95Liter] capacity enamel steel sprayer with adjustable plastic nozzle.

Cat. No. 6120

# DIE SHIMS, SLUG EJECTORS, TURRET BUSHINGS



DIE SHIMS			
STATION	QUANTITY	THICKNESS	CAT. NO.
1-1/4"	1		2097
1-1/4"	25/pkg	.010" [0.25mm]	2209
3-1/2"	1		2081
3-1/2"	5/pkg		2211
1-1/4"	1		2723
1-1/4"	25/pkg	.030" [0.76mm]	2724
3-1/2"	1		2727
3-1/2"	5/pkg		2728
1-1/4"	1		2100
1-1/4"	25/pkg	.060" [1.5mm]	2173
3-1/2"	1		2084
3-1/2"	5/pkg		2175

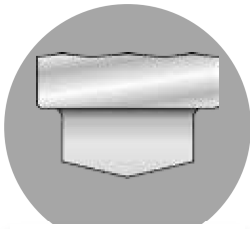


PUNCH SHIMS			
STATION	QUANTITY	THICKNESS	CAT. NO.
1/2"	1		100
1/2"	25/pkg	.060" [1.5mm]	99
1-1/4"	1		152
1-1/4"	25/pkg		98

SLUG EJECTORS	Square Urethane	
Hole Diameter in Punch	QTY.	CAT. NO.
1/8" [3.2mm]	50	6116
3/16" [4.8mm]	50	6117
3/8" [9.5mm]	50	6118
1/2" [12.7mm]	50	6119
Assortment	50	6410

TURRET BUSHINGS			
STATION	MACHINE MODELS	KEYING	CAT. NO.
<b>1-1/4"</b> 2.437" [61.9mm] Flange O.D.	For use in any SAF that utilizes Strippit® 1-1/4" Tool Holder Assembly #62532-000 or #62515-000, as well as the following: T-SAF-30, FC75/30, FC750, FC1000 (I & II), FC1250 and Cap 1000	0° - 90° (Standard)	15
		0° - 90° - 180° & 270°	490
		0° - 45° - 180° & 315°	491
		0° - 135° - 225° & 270°	492
<b>1-1/4"</b> 2.375" [60.3mm] Flange O.D.	FC1000 III & 33 STN. 1250, FC1000R	0° - 90° (Standard)	
		0° - 90° - 180° & 270°	
		0° - 45° - 180° & 315°	471
		0° - 135° - 225° & 270°	
	Multiple Keyways		
<b>3-1/2"</b>	FM-30-30	1 Keyway	280
<b>3-1/2"</b>	For use in any SAF that utilizes Strippit® 3-1/2" Tool Holder Assembly #62530-000 or #93023-100, 200, as well as the following: T-SAF-30, FC75/30, FC750, FC1000 (I, II & III), FC1250 and Cap 1000, all XT & "S" Series machines.	1 Keyway	277





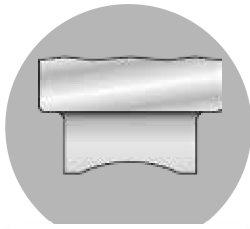
ROOFTOP



Best shear for punching at maximum tonnages.



When nibbling, bite must be 75% of punch dimension or excessive side loading will result.



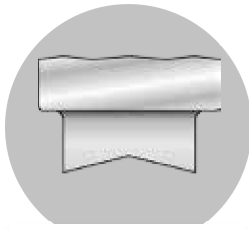
CONCAVE OR DOUBLE CONCAVE



Best shear for nibbling because it inverts stresses.



Less resistant to breakage when punching at high tonnages because of inverted stresses.



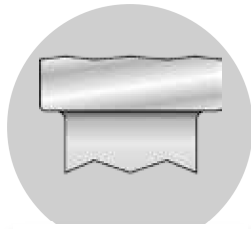
INVERTED ROOFTOP



Good shear for nibbling because it inverts stresses.



More susceptible to breakage because of a sharp focal point for stresses—use great care.



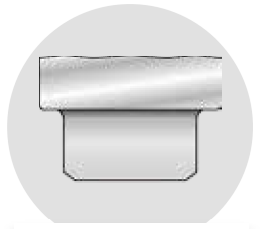
DOUBLE VALLEY



Best shear for nibbling when shape is long and narrow.



Less resistant to breakage when punching at high tonnages because of inverted stresses.



JK SHEAR



A special shear that allows you to punch high strength materials with a reduced risk of breakage.



Can only be used on punches up to 1.000" (25.4mm) diameter or 'A' dimension.

## SPECIAL SHEARS

STATION	'A' Dimension	Inverted Rooftop Single Concave		Double Valley Double Concave	
		1/16" [1.6mm]	1/8" [3.2mm]	1/16" [1.6mm]	1/8" [3.2mm]
1-1/4" (B)	Within 1.250" [31.75mm]				
2" (C)	Within 2.000" [50.8mm]				
3-1/2" (D)	Within 3.500" [88.9mm]				

## JK SHEAR

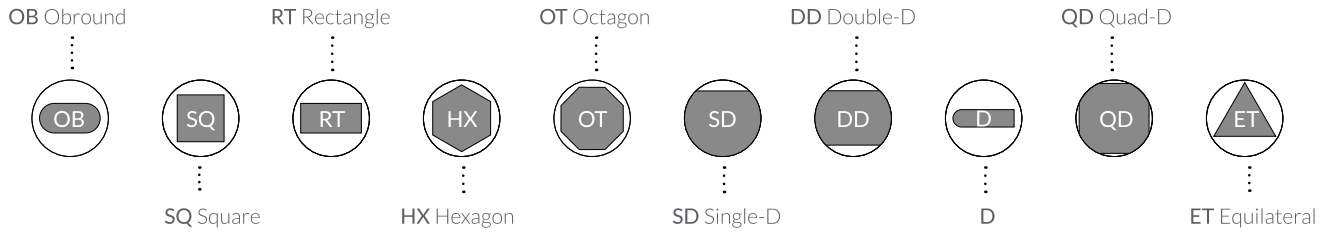
SHAPE	ADD ON PRICE
Round	
Rectangle, Square, Hexagon, Single 'D', Double 'D'	
OB Round	

SPECIAL SHEAR DETAILS	'A' DIMENSION	EXCEPTION
<p>1/32" (1.6mm) rooftop shear is given to all punches with 'A' dimension† greater than 2.000" (50.8mm) and width greater than .250" (6.35mm) at no extra charge.</p> <p>All punches .250" (6.35mm) and under in width will be shipped with no shear unless specified.</p>		<p>In some instances, inverted rooftop is substituted for single and double concave shears.</p>

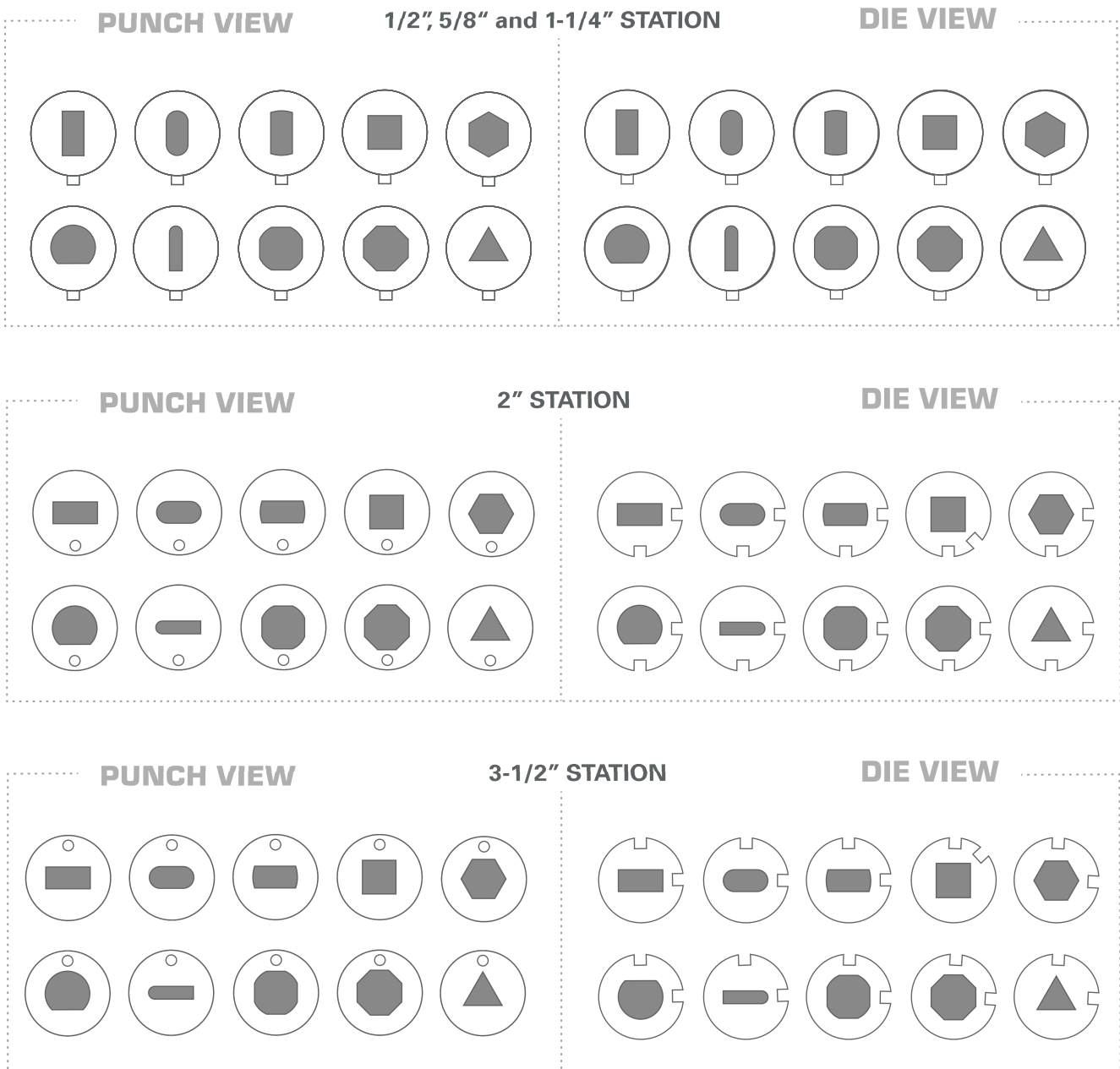
JK SHEAR DETAILS
<p>If specified: 1/8" (3.2mm) maximum rooftop shear can be given at N/C for any round or shape in 2"(C), 3-1/2"(D), 4-1/2"(E) or 6"(F) stations.</p> <p>For rooftop shear on any round or shape in 1/2"(A) or 1-1/4"(B) stations, add \$18.00.</p>



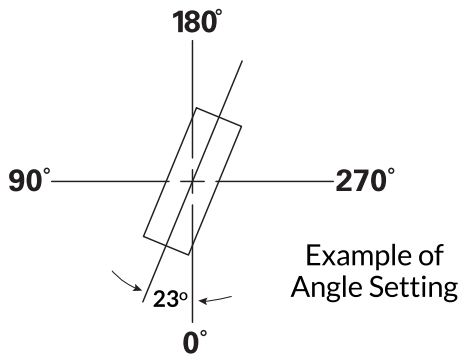
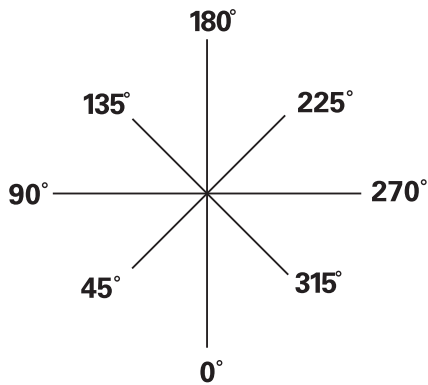
## STANDARD SHAPES



## STANDARD KEYING LOCATIONS



Wilson Tool Keying Diagram



**SHAPE at single angles other than standard**

Station	Punch	Die	Guide or Stripper
1/2", 5/8"			
1-1/4"			Not Applicable
2"			Not Applicable
3-1/2"			Not Applicable

No additional charge on 1-1/4" station for shape at 45° increments)

**STANDARD keying, plus extra pins or keys for shapes at 45° increments**

Station	PUNCH	DIE	Guide or Stripper
1/2", 5/8"	Not Available	Not Available	Not Available
1-1/4"	Not Available	Not Available	Not Available
2"	/ pin	/ key	Not Available
3-1/2"	/ pin	/ key	Not Available

**STANDARD keying, plus extra pins or keys for shapes at 45° increments**

Station	PUNCH		DIE		Guide or Stripper
	Available Options	Add On Price	Available Options	Add On Price	
1-1/4"	0° & 45°		0° & 45°		Closed round guide or 2 fitted guides required
1-1/4"	0° & 180°		0° & 180°		
2"	45° increments	/ pin	45° increments	/ key	Not Applicable
3-1/2"	45° increments	/ pin	45° increments	/ key	Not Applicable

**Die Clearance Selection Information**

Material	Total Clearance		
	Minimum	Best	Maximum
Copper, 1/2 Hard	8%	12%	16%
Brass, 1/2 Hard	6%	11%	16%
Mild Steel	10%	15%	20%
Steel 0.50C	12%	18%	24%
Aluminum, Soft	5%	10%	15%
Stainless Steel	15%	20%	25%

% x Material Thickness = Total Clearance

# NON-STANDARD FEATURES ADD ON CHARGES



REFERENCE

1-1/4" STATION			
Add on for ROUNDS			
Small Diameter	PUNCH	DIE	STRIPPER
.031 - .061" [0.79 - 1.56mm]			
.062 - .092" [1.57 - 2.34mm]			
.093 - .249" [2.35 - 6.32mm]			
Clearance < .004" [.10mm]			
Add on for SHAPES			
Small Width	PUNCH	DIE	STRIPPER
.031 - .039" [0.79 - 1.0mm]			
.040 - .092" [1.01 - 2.34mm]			
'A' Dim < .437" [11.10mm]			
Clearance < .004" [0.10mm]			

2" STATION			
Add on for ROUNDS			
Small Diameter	PUNCH	DIE	STRIPPER
<1.000" [25.4mm]			
Clearance < .004" [.10mm]			
Add on for SHAPES			
Small Width	PUNCH	DIE	STRIPPER
.031 - .039" [0.79 - 1.0mm]			
.040 - .092" [1.01 - 2.34mm]			
'A' Dim < 1.150" [29.21mm]			
1.150-1.249 [29.21-31.72mm]			
Clearance < .004" [0.10mm]			

3-1/2" STATION			
Add on for ROUNDS			
Small Diameter	PUNCH	DIE	STRIPPER
<1.000" [25.4mm]			
Clearance < .004" [.10mm]			
Add on for SHAPES			
Small Width	PUNCH	DIE	STRIPPER
.031 - .039" [0.79 - 1.0mm]			
.040 - .092" [1.01 - 2.34mm]			
'A' Dim < 1.150" [29.21mm]			
Clearance < .004" [0.10mm]			

RADIUS OR 45° CHAMFER 4 CORNERS	
RADIUS OR CHAMFER SIZE	PRICE
.001 - .062" [0.02 - 1.57mm]	
Punch .063 - .250" [1.58 - 6.35mm]	
> .250" [6.35mm]	
RADIUS OR CHAMFER SIZE	PRICE
Die Any Size	

MAX 'A' DIMENSION	NOTES
	Add to round or shape punch for : <ul style="list-style-type: none"> <li>• Extra straight before radius</li> <li>• Extra back taper</li> <li>• No back taper</li> </ul>

# WILSON TOOL INTERNATIONAL

## WORLD HEADQUARTERS

### Wilson Tool International - United States

Tel (Free): 800-328-9646 | Tel: 651-286-6001  
Fax (Free): 800-222-0002 | Fax: 651-286-5959  
Email: sales@wilsonstool.com

## NORTH AMERICA

### Wilson Tool - Canada

Punching and Stamping Division  
Tel: 800-268-5573 | Fax: 800-668-9314  
Email: punching@wilsonstoolcanada.com

### Wilson Tool - Canada

Press Brake Division  
Tel: 800-268-4180 | Fax: 905-840-1032  
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