

July 2008



**WILSON HP™  
MURATA  
WIEDEMANN®  
112 AND 114  
STYLE TOOLING**

**Your Choice for  
Speed and Precision**



**Strength. Performance. Innovation.**

# INCREASE PRODUCTIVITY WITH A WILSON HIGH PERFORMANCE™ MURATA WIEDEMANN® TOOLING SYSTEM.

**U**niquely designed to handle high speed punching, the Wilson High Performance™ tooling system for Murata Wiedemann® boosts punch press productivity. It not only withstands more punches per minute than traditional punch press tooling but its innovative holder design speeds adjustments, drastically reducing downtime and improving efficiency. The standard Wilson HP holder works with all 112 and 114 style punches for Murata Wiedemann machines.

## Engineered for Speed and Precision.

Wilson HP features full guiding and spring stripping for higher speed punching and increased punch life.

Each tooling is constructed from hardened tool steel to increase durability and scratch resistance.

A quick release steel stripper plate produces cleaner holes with less sheet distortion for greater precision.

## Fast Adjustments Reduce Downtime.

Wilson Tool's exclusive holder technology provides quick and easy push button adjustments that reduce downtime. Positive, in-machine adjustments can be made with a simple click-and-turn motion in .005" (0.13mm) increments for standard tooling. Wilson HP holders eliminate the need for shims and significantly increase adjustment accuracy.





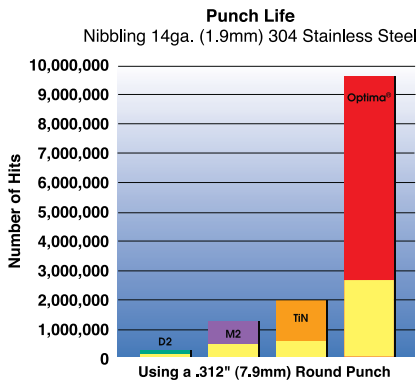
## Improve Wear Resistance with Optima®.

Every Wilson 112 and 114 style Tooling is available with Wilson's exclusive Optima® coating. Developed by Wilson engineers, Optima provides a surface hardness, wear resistance and lubricity unmatched by any other coated or uncoated turret punch press tooling. The result is a longer tool life, more hits between sharpenings, reduced galling, better performance and less downtime.

### Optima® coating provides:

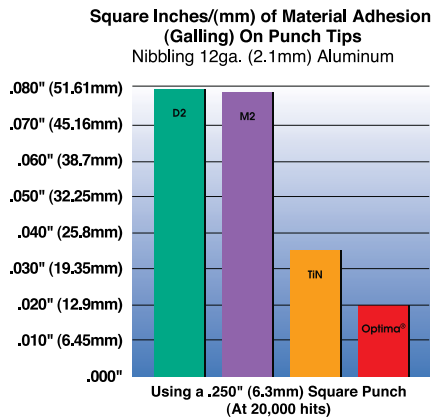
- Longer tool life
- Increased wear resistance
- More hits between sharpenings
- Reduced adhesion (galling)
- Reduced slug pulling
- Reduced corner breakdown
- Improved special tooling performance
- Lower overall tooling costs

### Punch Life

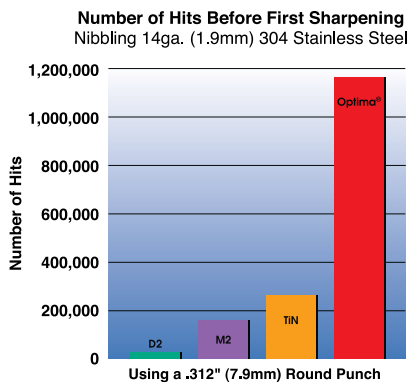


The yellow area indicates actual results achieved through three tool sharpenings of .010" (0.25mm) each. The complete graph indicates projected results with a total of .236" (6mm) removed for sharpening.

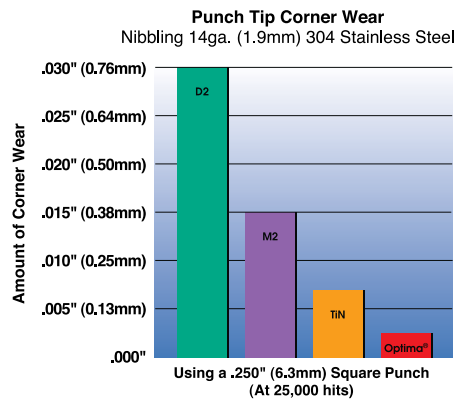
### Material Adhesion



### Number of Hits



### Tip Wear



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## FOR 112 & 114 STYLE TOOLING

DESCRIPTION	CAT. NO.	PRICE
XB Wilson HP™ 112 Style Guide Assembly	22517	
XB Wilson HP™ 114 Style Guide Assembly*	22500	
Wilson HP™ Stripper Plate - round	22509	
Thread Adapter 5/16-18 to 1/2-13	22535	
B Wilson HP™ 112 Style Guide Assembly	22514	
B Wilson HP™ 114 Style Guide Assembly*	22513	
Wilson HP™ Stripper Plate - round	22530	
Wilson HP™ Stripper Plate - shape	22531	
Thread Adapter 5/16-18 to 1/2-13	22535	
C Wilson HP™ 112 Style Guide Assembly	22591	
C Wilson HP™ 114 Style Guide Assembly	22592	
Wilson HP™ Stripper Plate - round	22607	
Wilson HP™ Stripper Plate - shape	22608	
D Wilson HP™ 112 Style Guide Assembly**	22613	
D-AI Wilson HP™ 112 Style Guide Assembly (3.375" O.D.)	22617	
D Wilson HP™ 114 Style Guide Assembly**	22616	
D-AI Wilson HP™ 114 Style Guide Assembly (3.375" O.D.)	22618	
D-AI Lifter Button Assembly (set of 4)	22596	
Wilson HP™ Stripper Plate - round	22638	
Wilson HP™ Stripper Plate - shape	22639	
EF Wilson HP™ 112 Style Guide Assembly	22536	
F-AI Wilson HP™ 112 Style Guide Assembly	22563	
EF Wilson HP™ 114 Style Guide Assembly	22537	
F-AI Wilson HP™ 114 Style Guide Assembly	22562	
Wilson HP™ Stripper Plate - round	22557	
Wilson HP™ Stripper Plate - shape	22558	
GHJ Wilson HP™ 114 Style Guide Assembly (5.937" O.D.)	22595	
Wilson HP™ Stripper Plate - round	22587	
Wilson HP™ Stripper Plate - shape	22588	

\* Uses thread adapter

\*\* Assembly can be converted to Auto-Index by adding catalog #22596

### Wilson HP™ Assemblies fit the following machines:

Centrum 3000, 3500  
 Magnum 2125, 5000  
 Vectrum 3046, 3056, 5058  
 Motorum 2044, 2048  
 Wiedematic 3050, 4560

### Accessories

Catalog #23533 (1/4" T-handle hex wrench)

Price:

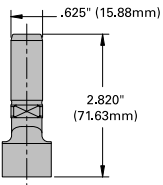
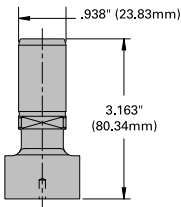
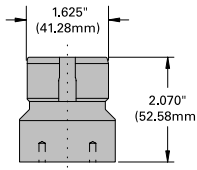
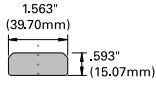
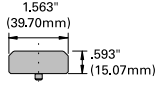
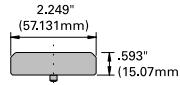
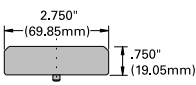
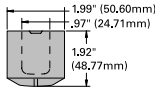
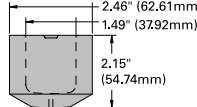
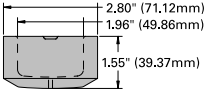
Used on: 114 XB thru GHJ Assembly  
 112 XB thru EF Assembly



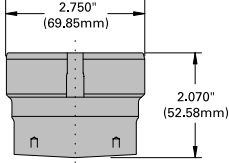
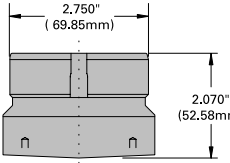
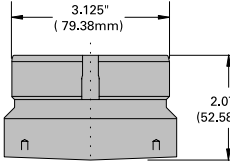
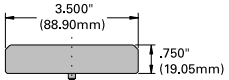
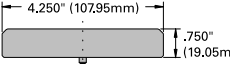
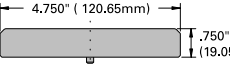
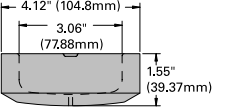
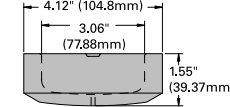
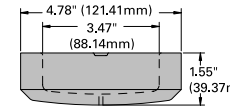
**Thread Adapter 5/16 to 1/2-13  
 Catalog #22535**

### Features and Benefits:

- ▼ Accepts standard 112/114 Wiedemann tooling.
- ▼ Push button length adjustment in .005 increments. (XB Assembly does not have the above feature)
- ▼ Punches are self-stripping and guided.
- ▼ Utilizes a steel stripper retention system (no tools required).

	<b>A Station</b> Up to .500" (12.7mm)	<b>B Station</b> Up to 1.000" (25.4mm)	<b>C Station</b> 1.001 - 1.500" (25.4 - 38.1mm)	<b>D Station</b> 1.501 - 2.000" (38.1 - 50.8mm)
<b>PUNCHES</b>	Not Available	 <p>Cat. No. Round 20101 Shape 20102 Shape Punch 0°&amp;45° 20152 Optima™ -</p>	 <p>Cat. No. Round 20103 Shape 20104 Shape Punch 0°&amp;45° 20154 Optima™ -</p>	 <p>Cat. No. Round 20105 Shape 20106 Optima™ -</p>
<b>DIES</b>	 <p>Cat. No. Round Slug Hugger-2™* 20001 Round Standard 20000</p>	 <p>Cat. No. Round Slug Hugger-2™* 20001 Round Standard 20000 Shape Slug Hugger-2™* 20004 Shape Positive 20003 Shape Die Positive at 0°&amp;45° 20282 Shape Slug Hugger-2™* at 0°&amp;45° 20283</p>	 <p>Cat. No. Round Slug Hugger-2™* 20007 Round Standard 20006 Shape Slug Hugger-2™* 20010 Shape Positive 20009</p>	 <p>Cat. No. Round Slug Hugger-2™* 20013 Round Standard 20012 Shape Slug Hugger-2™* 20016 Shape Positive 20015</p>
<b>STRIPPERS</b>	Not Available	 <p>Cat. No. Standard ≤ 1/8" (3.2mm) RT 20303 20304</p>	 <p>Cat. No. Standard 20305</p>	 <p>Cat. No. Standard ≤ 1/8" (3.2mm) RT 20306 ≤ 1/2" (12.7mm) RT 20308 1" (25.4mm) SQ 20307</p>
<b>PUNCH SHIMS</b>	Not Available	<p><b>OD .59" (15mm)</b> <b>Thickness .060 (1.5mm)</b></p> <p>Cat. No. 25 per bag 20226</p>	<p><b>OD .90" (22.86mm)</b> <b>Thickness .060 (1.5mm)</b></p> <p>Cat. No. 25 per bag 20228</p>	<p><b>OD 1.59" (40.39mm)</b> <b>Thickness .060 (1.5mm)</b></p> <p>Cat. No. 5 per bag 20230</p>
<b>DIE SHIMS</b>	<p><b>OD 1.54" (39mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>Cat. No. 25 per bag 20202</p>	<p><b>OD 2.23" (56.6mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>Cat. No. 25 per bag 20204</p>	<p><b>OD 2.73" (69mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>Cat. No. 5 per bag 20206</p>	

\*Slug Hugger-2™ dies must be ordered punch size plus clearance, .098 (2.49mm) min. dia. on rounds, .060 (1.53mm) min. width on shapes, .006 (0.15mm) min. clearance. For 112 Style Tooling add ons, and other urethane stripper options, see page 6.

	<b>E Station</b> 2.001 - 2.500" (50.8 - 63.5mm)	<b>F Station</b> 2.501 - 3.125" (63.5 - 79.4mm)	<b>G Station</b> 3.126 - 3.500" (79.4 - 88.9mm)
<b>PUNCHES</b>	 <p>Cat. No. Round Shape Optima™ 20107 20108 —</p>	 <p>Cat. No. Round Shape Optima™ 20109 20110 —</p>	 <p>Cat. No. Round Shape Optima™ 20111 20112 —</p>
<b>DIES</b>	 <p>Cat. No. Round Slug Hugger-2™ Round Standard Shape Slug Hugger-2™ Shape Positive 20019 20018 20022 20021</p>	 <p>Cat. No. Round Slug Hugger-2™ Round Standard Shape Slug Hugger-2™ Shape Positive 20025 20024 20028 20027</p>	 <p>Cat. No. Round Slug Hugger-2™ Round Standard Shape Slug Hugger-2™ Shape Positive 20031 20030 20034 20033</p>
<b>STRIPPERS</b>	 <p>Cat. No. Standard ≤ 1/2" (12.7mm) RT 20310 20311</p>	 <p>Cat. No. Standard ≤ 1/2" (12.7mm) RT 2" (50.8mm) SQ 20312 20314 20313</p>	 <p>Cat. No. Standard ≤ 1/2" (12.7mm) RT 20315 20317</p>
<b>PUNCH SHIMS</b>	<p><b>OD 2.72" (69mm)</b> <b>Thickness .060 (1.5mm)</b></p> <p>5 per bag Cat. No. 20232</p>		<p><b>OD 3.09" (78.5mm)</b> <b>Thickness .060 (1.5mm)</b></p> <p>5 per bag Cat. No. 20234</p>
<b>DIE SHIMS</b>	<p><b>OD 3.480" (88.4mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>5 per bag Cat. No. 20208</p>	<p><b>OD 4.23" (107.4mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>5 per bag Cat. No. 20210</p>	<p><b>OD 4.73" (120.1mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>5 per bag Cat. No. 20212</p>

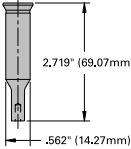
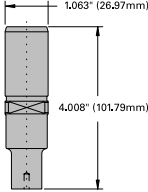
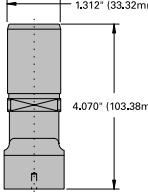
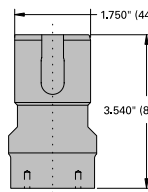
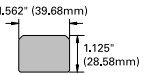
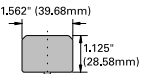
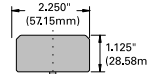
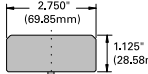
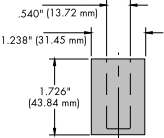
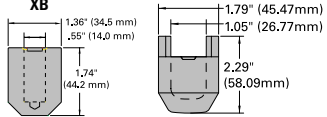
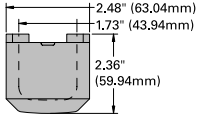
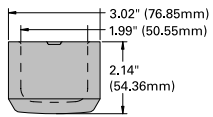
\*Slug Hugger-2™ dies must be ordered punch size plus clearance, .098 (2.49mm) min. dia. on rounds, .060 (1.53mm) min. width on shapes, .006 (0.15mm) min. clearance.

For 112 Style Tooling add ons, and other urethane stripper options, see page 6.

A, B, C Station Add Ons		
Add ons for Rounds		
<b>Small Diameter</b> .031 - .061 (0.79 - 1.55 mm) .062 - .092 (1.57 - 2.34 mm) <b>Clearance &lt; .004 (0.10mm)</b>	<b>Punch</b>	<b>Die</b> N/C
Add ons for Shapes		
<b>Small Widths</b> .031 - .039 (0.79 - 1.0mm) .040 - .092 (1.02 - 2.34mm)	<b>Punch</b>	<b>Die</b> N/C
<b>Small 'A' Dimension†</b> C < .750 (19.05mm) <b>Clearance &lt; .004 (0.10mm)</b>	<b>Punch</b>	<b>Die</b> N/C

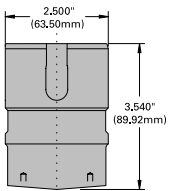
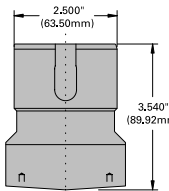
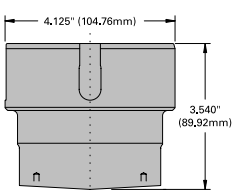
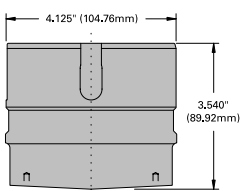
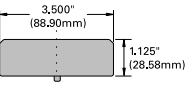
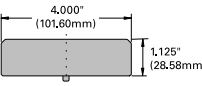
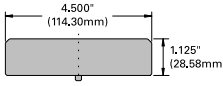
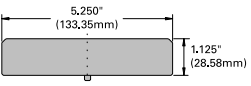
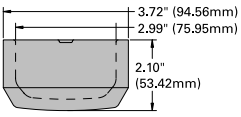
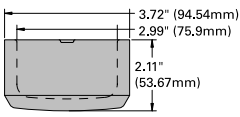
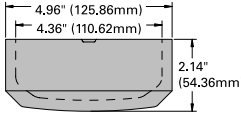
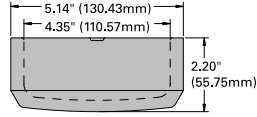
D Station Add Ons		
Add ons for Rounds		
<b>Small Diameter</b> < 1.250 (31.75mm) <b>Clearance &lt; .004 (0.10mm)</b>	<b>Punch</b>	<b>Die</b> N/C
Add ons for Shapes		
<b>Small Widths</b> .031 - .039 (0.79 - 1.0mm) .040 - .092 (1.02 - 2.34mm)	<b>Punch</b>	<b>Die</b>
<b>Small 'A' Dimension†</b> < 1.150 (29.21mm) 1.150 - 1.500 (29.21 - 38.1mm) <b>Clearance &lt; .004 (0.10mm)</b>	<b>Punch</b>	<b>Die</b> N/C N/C

E, F, G Station Add Ons			Radius or 45° Chamfer 4 Corners		Urethane Stripper Options		
Add ons for Rounds			Punches	Radius or Chamfer Size	Price	95 dA (natural)*	Heavy Duty
<b>Small Diameter</b> E, F < 1.900 (48.26mm) G < 3.024 (76.81mm) <b>Clearance &lt; .004 (0.10mm)</b>	<b>Punch</b>	<b>Die</b> N/C N/C		.001 - .062 (0.02 - 1.57mm)			90 dA (blue)
<b>Add ons for Shapes</b>			<b>Dies</b>	Any size		80 dA (green)*	Light Duty
<b>Small Widths</b> .031 - .039 (0.79 - 1.0mm) .040 - .092 (1.02 - 2.34mm)	<b>Punch</b>	<b>Die</b>	<b>Notes</b>			70 dA (yellow)*	Very Light Duty
<b>Small 'A' Dimension†</b> E, F < 1.750 (44.45mm) G < 2.750 (69.85mm) <b>Clearance &lt; .004 (0.10mm)</b>	<b>Punch</b>	<b>Die</b> N/C N/C	<ul style="list-style-type: none"> <li>Additional charges apply to round or shape punch for extra straight before radius, extra back taper, or no back taper.</li> <li>† 'A' Dimension = longest distance across shape.</li> </ul>			<b>Custom Molded*</b>	
						*Contact our sales desk for price and delivery.	

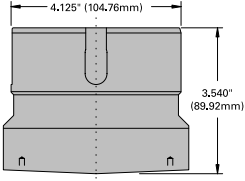
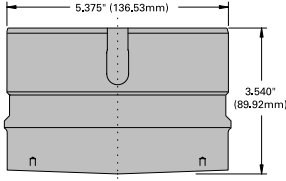
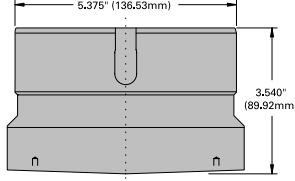
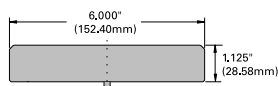
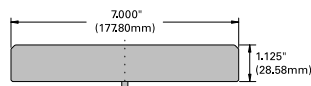
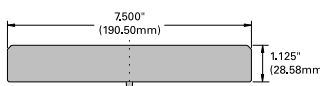
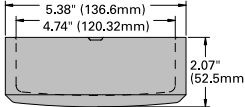

	<b>A Station</b> Up to .500" (12.7mm)	<b>B Station</b> Up to 1.000" (25.4mm)	<b>C Station</b> 1.001 - 1.500" (25.4 - 38.1mm)	<b>D Station</b> 1.501 - 2.000" (38.1 - 50.8mm)
<b>PUNCHES</b>	 <p>Cat. No. <b>20113</b></p>	 <p>Cat. No. <b>20115</b> <b>20116</b> <b>20165</b> <b>20166</b></p>	 <p>Cat. No. <b>20117</b> <b>20118</b> <b>20168</b></p>	 <p>Cat. No. <b>20119</b> <b>20120</b></p>
<b>DIES</b>	 <p>Cat. No. <b>20037</b> <b>20036</b></p>	 <p>Cat. No. <b>20037</b> <b>20036</b> <b>20040</b> <b>20039</b> <b>20291</b> <b>20292</b></p>	 <p>Cat. No. <b>20043</b> <b>20042</b> <b>20046</b> <b>20045</b></p>	 <p>Cat. No. <b>20049</b> <b>20048</b> <b>20052</b> <b>20051</b></p>
<b>STRIPPERS</b>	 <p>Cat. No. <b>20401</b> <b>20402</b></p>	 <p>Cat. No. <b>20400</b> <b>20403</b> <b>20404</b></p>	 <p>Cat. No. <b>20405</b></p>	 <p>Cat. No. <b>20406</b> <b>20408</b> <b>20407</b></p>
<b>PUNCH SHIMS</b>	<p><b>OD 1.03" (26.2mm)</b> <b>Thickness .060 (1.5mm)</b></p> <p>25 per bag Cat. No. <b>20236</b></p>		<p><b>OD 1.28" (32.5mm)</b> <b>Thickness .060 (1.5mm)</b></p> <p>25 per bag Cat. No. <b>20238</b></p>	
<b>DIE SHIMS</b>	<p><b>OD 1.54" (39mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>25 per bag Cat. No. <b>20202</b></p>		<p><b>OD 2.23" (56.6mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>25 per bag Cat. No. <b>20204</b></p>	
	<p><b>OD 1.72" (43.7mm)</b> <b>Thickness .060 (1.5mm)</b></p> <p>5 per bag Cat. No. <b>20240</b></p>		<p><b>OD 2.73" (69mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>5 per bag Cat. No. <b>20206</b></p>	

\*Slug Hugger-2™ dies must be ordered punch size plus clearance, .098 (2.49mm) min. dia. on rounds, .060 (1.53mm) min. width on shapes, .006 (0.15mm) min. clearance. For 114 Style Tooling add ons, and other urethane stripper options, see page 10.



	<b>E Station</b> 2.001 - 2.500" (50.8 - 63.5mm)	<b>F Station</b> 2.501 - 3.000" (63.5 - 76.2mm)	<b>G Station</b> 3.001 - 3.500" (76.2 - 88.9mm)	<b>H Station</b> 3.501 - 4.125" (88.9 - 104.8mm)
<b>PUNCHES</b>	 <p>Cat. No. 20121 20122 —</p>	 <p>Cat. No. 20123 20124 —</p>	 <p>Cat. No. 20125 20126 —</p>	 <p>Cat. No. 20127 20128 —</p>
<b>DIES</b>	 <p>Cat. No. 20055 20054 20058 20057</p>	 <p>Cat. No. 20061 20060 20064 20063</p>	 <p>Cat. No. 20067 20066 20070 20069</p>	 <p>Cat. No. 20073 20072 20076 20075</p>
<b>STRIPPERS</b>	 <p>Cat. No. 20410 20411</p>	 <p>Cat. No. 20412 20414 20413</p>	 <p>Cat. No. 20415 20417 20416</p>	 <p>Cat. No. 20418 20419</p>
<b>PUNCH SHIMS</b>	<p><b>OD 2.47" (62.7mm)</b> <b>Thickness .060 (1.5mm)</b></p> <p>5 per bag Cat. No. 20242</p>		<p><b>OD 4.09" (103.9mm)</b> <b>Thickness .060 (1.5mm)</b></p> <p>5 per bag Cat. No. 20244</p>	
<b>DIE SHIMS</b>	<p><b>OD 3.48" (88.4mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>5 per bag Cat. No. 20208</p>	<p><b>OD 3.98" (101.1mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>5 per bag Cat. No. 20214</p>	<p><b>OD 4.48" (113.8mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>5 per bag Cat. No. 20216</p>	<p><b>OD 5.23" (132.8mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>5 per bag Cat. No. 20218</p>

\*Slug Hugger-2™ dies must be ordered punch size plus clearance, .098 (2.49mm) min. dia. on rounds, .060 (1.53mm) min. width on shapes, .006 (0.15mm) min. clearance. For 114 Style Tooling add ons, and other urethane stripper options, see page 10.

	<b>J Station</b> 4.126 - 4.750" (104.8 - 120.65mm)	<b>K Station</b> 4.751 - 5.500" (120.65 - 139.7mm)	<b>L Station</b> 5.501 - 6.000" (139.7 - 152.4mm)
<b>PUNCHES</b>	 <p>Cat. No. Round Shape 20129 Optima™ 20130</p>	 <p>Cat. No. Round Shape 20131 Optima™ 20132</p>	 <p>Cat. No. Round Shape 20133 Optima™ 20134</p>
<b>DIES</b>	 <p>Cat. No. Round Slug Hugger-2™ 20079 Round Standard 20078 Shape Slug Hugger-2™ 20082 Shape Positive 20081</p>	 <p>Cat. No. Round Slug Hugger-2™ 20085 Round Standard 20084 Shape Slug Hugger-2™ 20088 Shape Positive 20087</p>	 <p>Cat. No. Round Slug Hugger-2™ 20091 Round Standard 20090 Shape Slug Hugger-2™ 20094 Shape Positive 20093</p>
<b>STRIPPERS</b>	 <p>Cat. No. Standard 20420 ≤1/2" (12.7mm) RT 20421</p>	 <p>Cat. No. Standard 20422 ≤1/2" (12.7mm) RT (Magnum Machine) 20424 20423</p>	<b>Not Available</b>
<b>PUNCH SHIMS</b>	<p><b>OD 4.09" (103.9mm)</b> <b>Thickness .060 (1.5mm)</b></p> <p>Cat. No. 5 per bag 20244</p>	<p><b>OD 5.34" (135.6mm)</b> <b>Thickness .060 (1.5mm)</b></p> <p>Cat. No. 5 per bag 20246</p>	
<b>DIE SHIMS</b>	<p><b>OD 5.98" (151.9mm)</b> <b>Thickness .031 (0.79mm)</b></p> <p>Cat. No. 5 per bag 20220</p>	<p><b>OD 6.98" (177.3mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>Cat. No. 5 per bag 20222</p>	<p><b>OD 7.48" (190mm)</b> <b>Thickness .030 (0.75mm)</b></p> <p>Cat. No. 5 per bag 20224</p>

\*Slug Hugger-2™ dies must be ordered punch size plus clearance, .098 (2.49mm) min. dia. on rounds, .060 (1.53mm) min. width on shapes, .006 (0.15mm) min. clearance.

For 114 Style Tooling add ons, and other urethane stripper options, see page 10.

A, B, C Station Add Ons		
Add ons for Rounds		
<b>Small Diameter</b> .031 - .061 (0.79 - 1.55 mm) .062 - .092 (1.57 - 2.34 mm) <b>Clearance</b> < .004 (0.10mm)	<b>Punch</b>	<b>Die</b> N/C
Add ons for Shapes		
<b>Small Widths</b> .031 - .039 (0.79 - 1.0mm) .040 - .092 (1.02 - 2.34mm)	<b>Punch</b>	<b>Die</b> N/C
<b>Small 'A' Dimension'</b> C < .750 (19.05mm) <b>Clearance</b> < .004 (0.10mm)	<b>Punch</b>	<b>Die</b> N/C

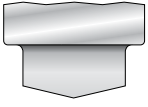
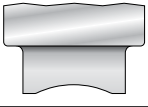
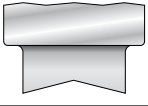
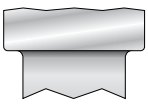
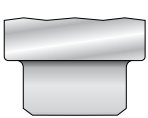
D Station Add Ons		
Add ons for Rounds		
<b>Small Diameter</b> < 1.250 (31.75mm) <b>Clearance</b> < .004 (0.10mm)	<b>Punch</b>	<b>Die</b> N/C
Add ons for Shapes		
<b>Small Widths</b> .031 - .039 (0.79 - 1.0mm) .040 - .092 (1.02 - 2.34mm)	<b>Punch</b>	<b>Die</b>
<b>Small 'A' Dimension'</b> < 1.150 (29.21mm) 1.150 - 1.500 (29.21 - 38.1mm) <b>Clearance</b> < .004 (0.10mm)	<b>Punch</b>	<b>Die</b> N/C N/C

E, F, G Station Add Ons		
Add ons for Rounds		
<b>Small Diameter</b> E, F < 1.900 (48.26mm) G < 3.024 (76.81mm) <b>Clearance</b> < .004 (0.10mm)	<b>Punch</b>	<b>Die</b> N/C N/C
Add ons for Shapes		
<b>Small Widths</b> .031 - .039 (0.79 - 1.0mm) .040 - .092 (1.02 - 2.34mm)	<b>Punch</b>	<b>Die</b>
<b>Small 'A' Dimension'</b> E, F < 1.750 (44.45mm) G < 2.750 (69.85mm) <b>Clearance</b> < .004 (0.10mm)	<b>Punch</b>	<b>Die</b> N/C N/C

H, J Station Add Ons		
Add ons for Rounds		
<b>Small Diameter</b> < 3.400 (88.9mm) <b>Clearance</b> < .004 (0.10mm)	<b>Punch</b>	<b>Die</b> N/C
Add ons for Shapes		
<b>Small Widths</b> .031 - .039 (0.79 - 1.0mm) .040 - .092 (1.02 - 2.34mm)	<b>Punch</b>	<b>Die</b>
<b>Small 'A' Dimension'</b> < 3.250 (82.55mm) <b>Clearance</b> < .004 (0.10mm)	<b>Punch</b>	<b>Die</b> N/C

K, L Station Add Ons			Radius or 45° Chamfer 4 Corners		Urethane Stripper Options			
Add ons for Rounds			Punches	Radius or Chamfer Size	Price	95 dA (natural)*	Heavy Duty	
<b>Small Diameter</b> < 4.650 (120.65mm) <b>Clearance</b> < .004 (0.10mm)	<b>Punch</b>	<b>Die</b> N/C		.001 - .062 (0.02 - 1.57mm) .063 - .250 (1.58 - 6.35mm) Greater than .250 (6.35mm)			90 dA (blue)	Standard
Add ons for Shapes			Dies	Any size		80 dA (green)*	Light Duty	
<b>Small Widths</b> .031 - .039 (0.79 - 1.0mm) .040 - .092 (1.02 - 2.34mm)	<b>Punch</b>	<b>Die</b>	Notes					
<b>Small 'A' Dimension'</b> < 4.500 (114.3mm) <b>Clearance</b> < .004 (0.10mm)	<b>Punch</b>	<b>Die</b> N/C	<ul style="list-style-type: none"> <li>Additional charges apply to round or shape punch for extra straight before radius, extra back taper, or no back taper.</li> <li>† 'A' Dimension = longest distance across shape.</li> </ul>					
					70 dA (yellow)*			Very Light Duty
					Custom Molded*			
					*Contact our sales desk for price and delivery.			

# SHEAR OPTIONS

Type of Shear	Benefit	Limitation
 <p style="text-align: center;"><b>Rooftop</b></p>	Best shear for punching at maximum tonnages.	When nibbling, bite must be 75% of punch dimension or excessive side loading will result.
 <p style="text-align: center;"><b>Concave or Double Concave</b></p>	Best shear for nibbling because it inverts stresses.	The punch is less resistant to breakage when punching at high tonnages because of inverted stresses.
 <p style="text-align: center;"><b>Inverted Rooftop</b></p>	Also good shear for nibbling because it inverts stresses.	More susceptible to breakage because of a sharp focal point for stresses—use great care.
 <p style="text-align: center;"><b>Double Valley Shear</b></p>	Best shear for nibbling when shape is long and narrow.	The punch is less resistant to breakage when punching at high tonnages because of inverted stresses.
 <p style="text-align: center;"><b>JK Shear</b></p>	A special punch tip 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 <sup>†</sup> .

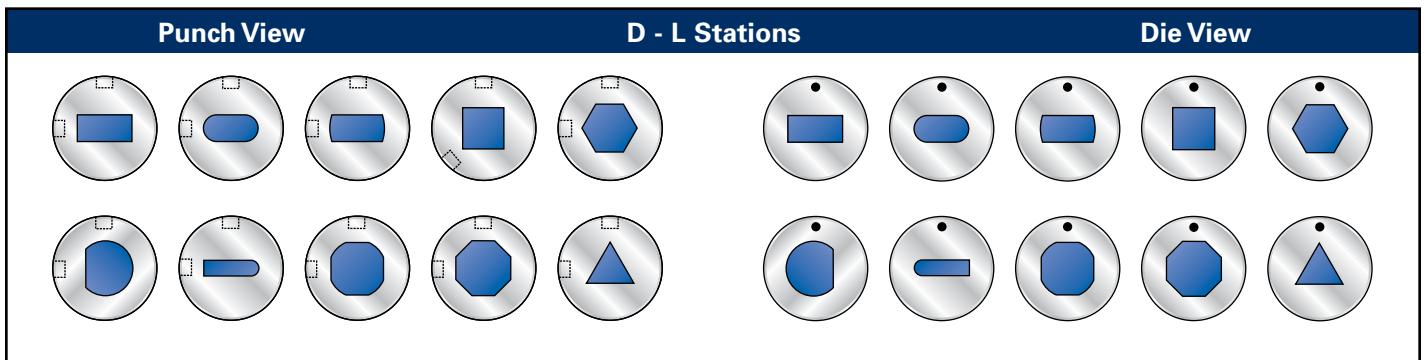
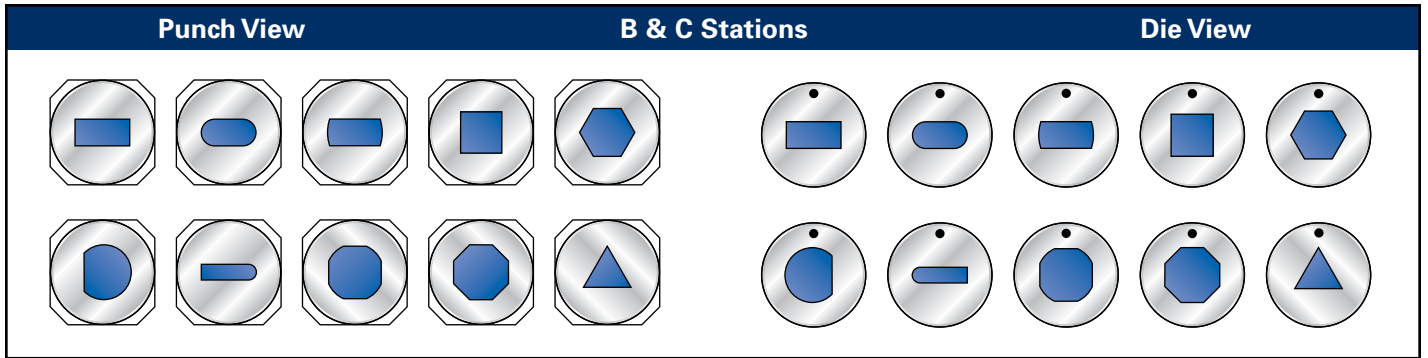
Special Shears					
Station	'A' Dimensions <sup>†</sup>	Inverted Rooftop Or Single Concave		Double Valley Or Double Concave	
		112	114	112	114
		.062" (1.6mm) Shear	.093 (2.4mm) Shear	.062 (1.6mm) Shear	.093 (2.4mm) Shear
<b>B, C</b>	Within 1.500" (38.1mm)				N/A
<b>D, E, F</b>	Within 3.125" (79.4mm)				
<b>G, H, J</b>	Within 4.750" (120.6mm)				
<b>K, L</b>	Within 6.000" (152.4mm)	N/A		N/A	

.062"/1.6mm (112 Style) and .093"/2.4mm (114 Style) rooftop shear is given to all punches with 'A' dimension<sup>†</sup> greater than 2.000" (50.8mm) 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.

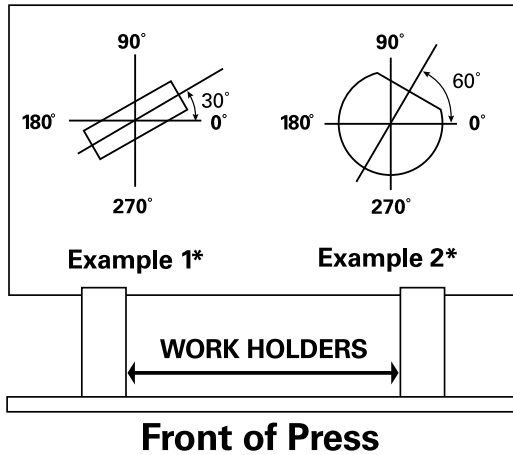
<sup>†</sup> 'A' Dimension = Longest dimension across shape.

NOTE: In some instances, inverted rooftop is substituted for single and double concave shears.

JK Shear	
Shape	Add On Price
Round	
Rectangle, Square, Hexagon, Single "D", Double "D"	
Obround	

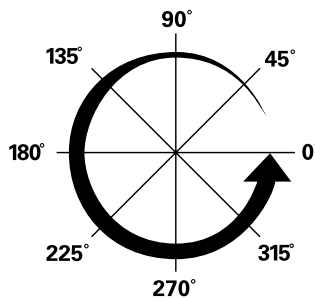


**Examples of angle settings:**



**Note:** Please refer to non-standard key locations by the following method:

- Example 1 "Shape at 30°"
- Example 2 "Shape at 60°"



**Note:** No additional charge on B & C stations for shape at 45 degree increments

Shape at single angle only at 15° Increments for 112 and 114		
Station	Punches	Dies
BC		
D		
EF		
GHJ		
KL		

Shape at single angle only at other than 15° Increments for 112 and 114		
Station	Punches	Dies
BC		
D		
EF		
GHJ		
KL		

Standard keying, plus extra keys for shapes at 45° increments for 112 and 114			
Station	Punches		Dies
	Available Options	Add On Price	Add On Price
BC	45° Only		
D	45° Increments		
EF	45° Increments		
GHJ	45° Increments		
KL	45° Increments		

Standard keying, plus extra pins or keys for shapes at other than 45° increments for 112 and 114		
Station	Punches	Dies
BC	Not Available	Not Available
D	Not Available	Not Available
EF		
GHJ		
KL		

**FEATURES AND BENEFITS*****Fast, Flexible and Accurate Wilson HP™ Special Tooling***

*In addition to the unique Wilson HP holder technology that allows fast, "click-and-turn" in-machine adjustment, Wilson HP Special Tooling offers:*

- ▼ Positive, push-button adjustment in .002" (0.05mm) increments for improved accuracy without the use of shims, without tools and without removal from the machine
- ▼ Larger maximum "A" dimension than other forming punches which allows larger-sized forming tools to be used in the XB-L stations of Murata Wiedemann punch presses for faster, easier and more efficient punching
- ▼ The shortest lead-times and fastest deliveries in the industry
- ▼ An extensive selection of Special Forming Tools including:
  - Embosses
  - Extrusions
  - Half Shears
  - EKO's
  - Coining Tools
  - Lance and Forms
  - Progressive Ribs
  - Louvers
  - Bridges
  - Letter Stamps
  - Hinges
  - Thread Forms
  - Card Guides

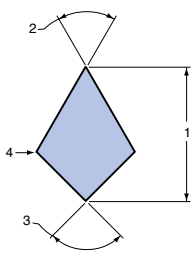


*For a special forming tool that is not on this list, contact our Sales Desk.*

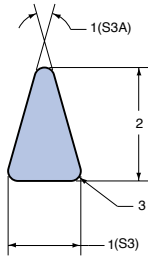
# SPECIAL SHAPES

## GROUP "A"

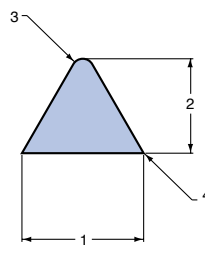
Note: Special Considerations May Alter Price and Lead Time



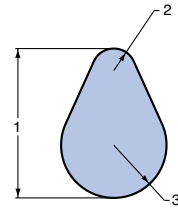
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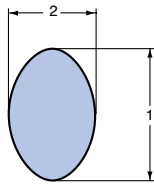
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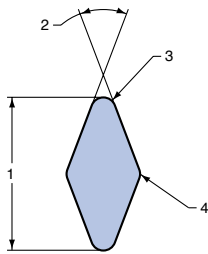
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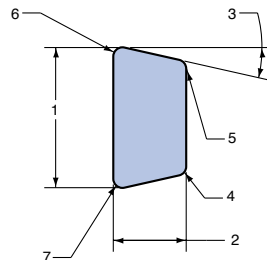
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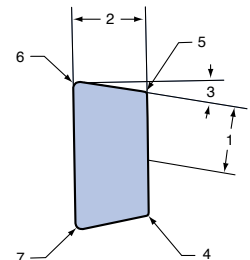
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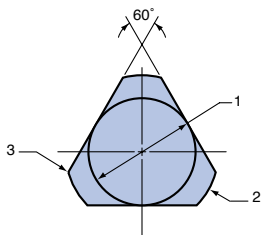
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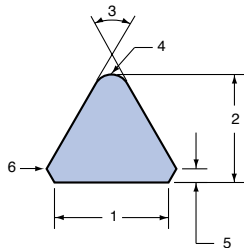
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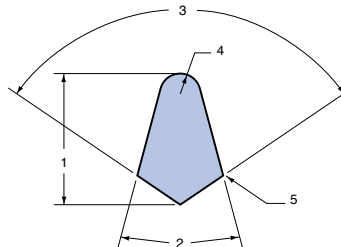
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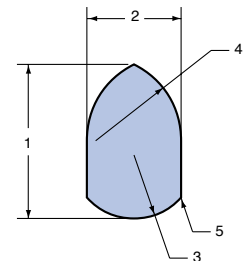
S50



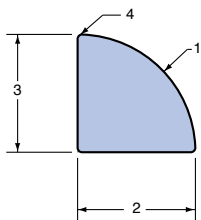
S51



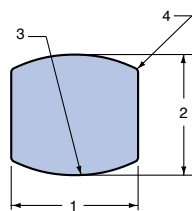
S59



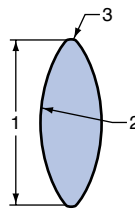
S65



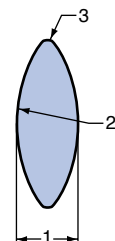
S69



S81



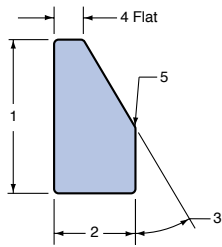
S95L



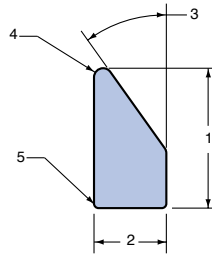
S95W



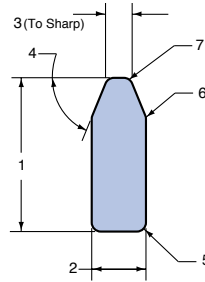
## GROUP "A"



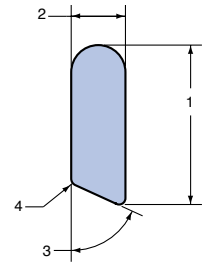
S97



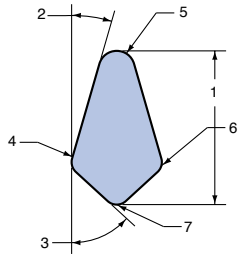
S100



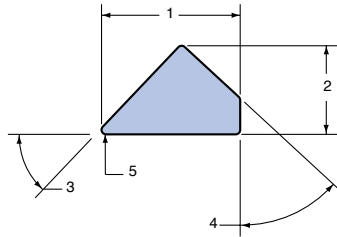
S102



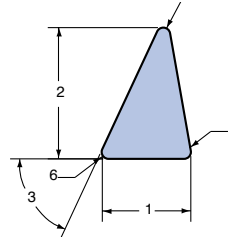
S103



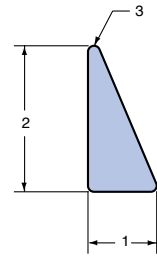
S105



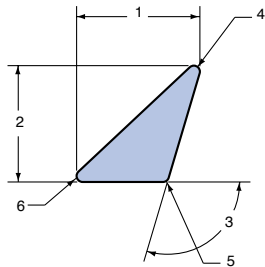
S106



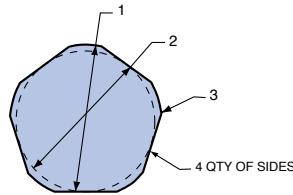
S108



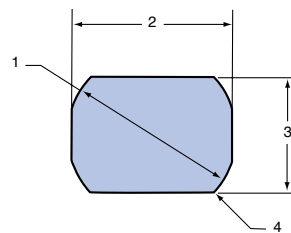
S109



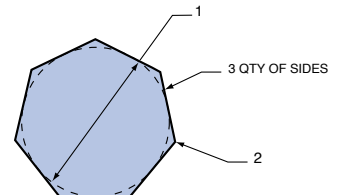
S110



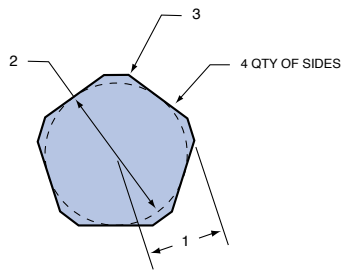
S121



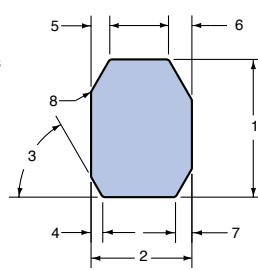
S122



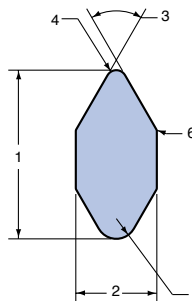
S123



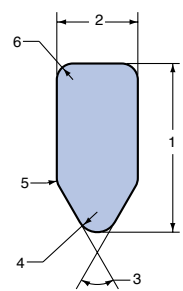
S124



S161



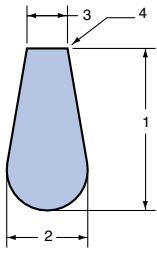
S162



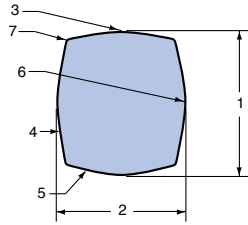
S163

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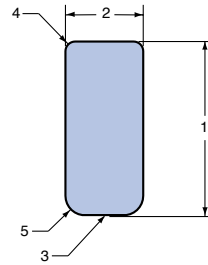
## GROUP "A"



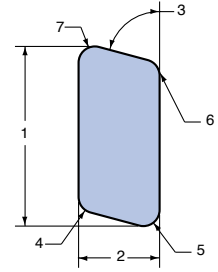
S164



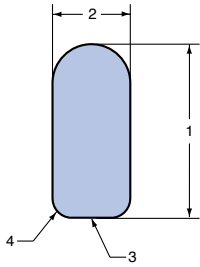
S165



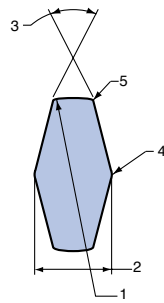
S166



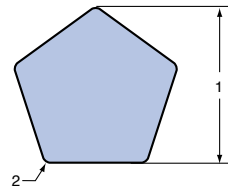
S167



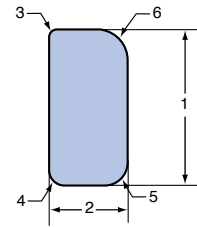
S170



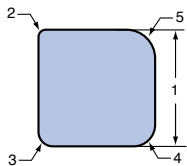
S181



PN

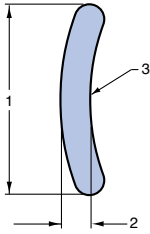


RTF

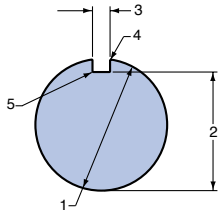


SQF

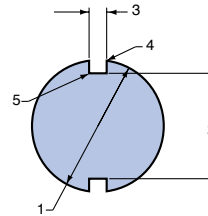
## GROUP "B"



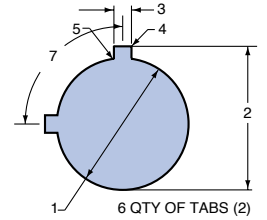
S6



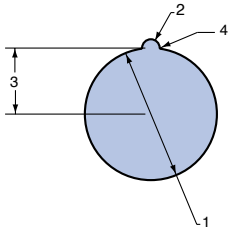
S10



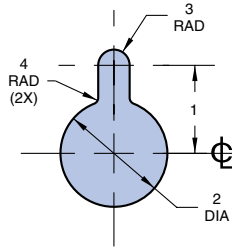
S11



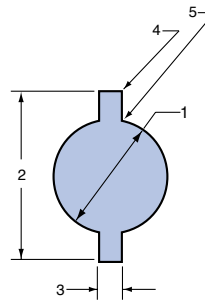
S12



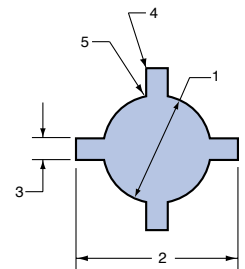
S13



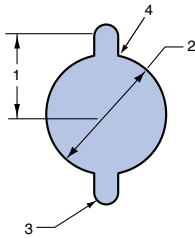
S14



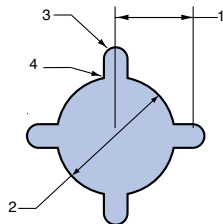
S15



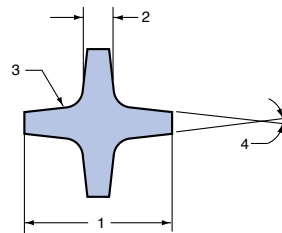
S16



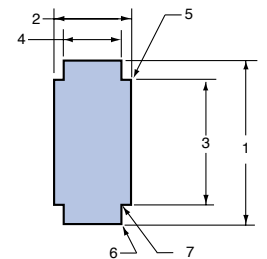
S17



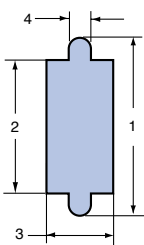
S18



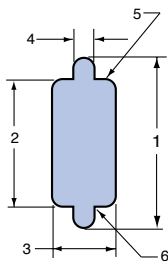
S19



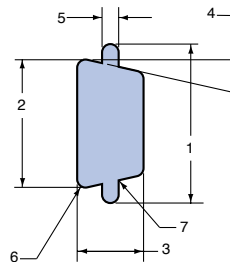
S20



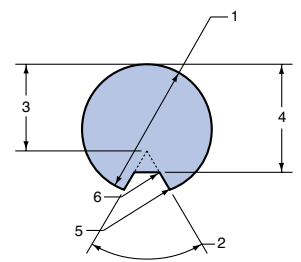
S21



S22



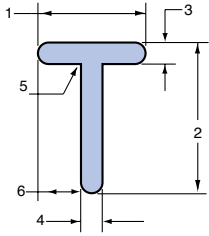
S24



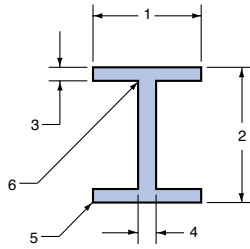
S30

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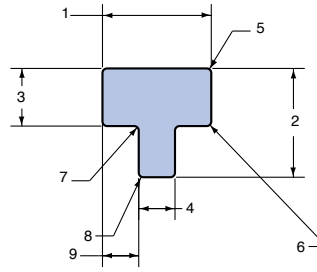
## GROUP "B"



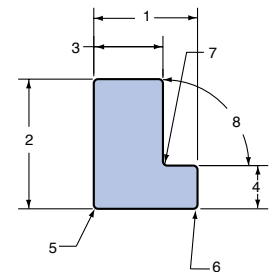
S31



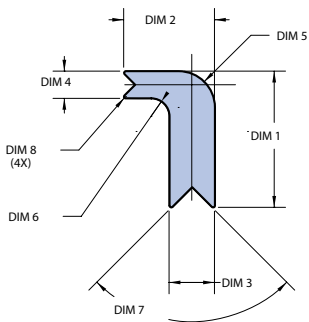
S33



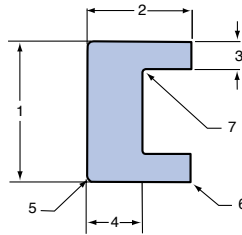
S35



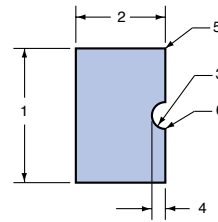
S36



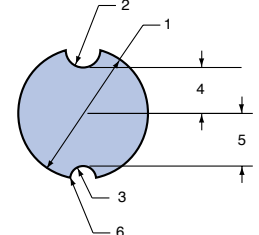
S37



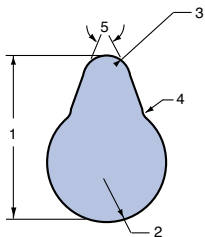
S40



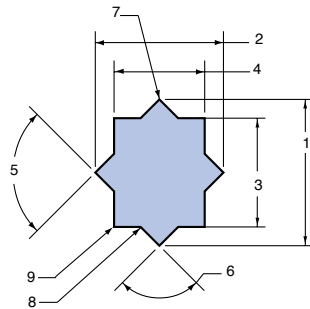
S41



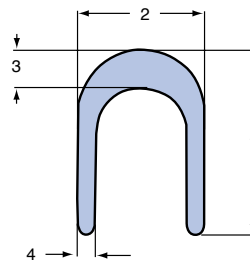
S42



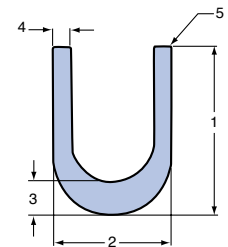
S43



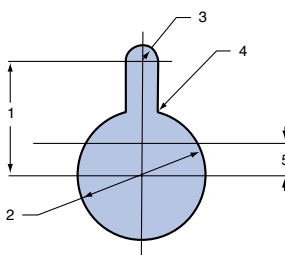
S46



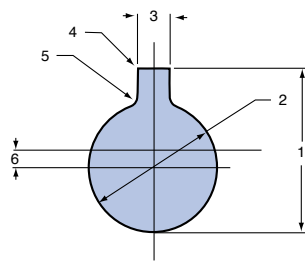
S54



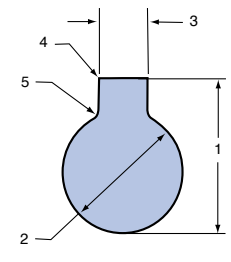
S55



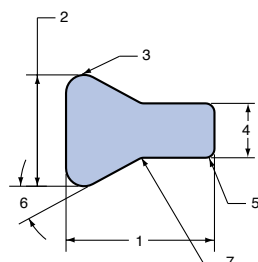
S56



S57

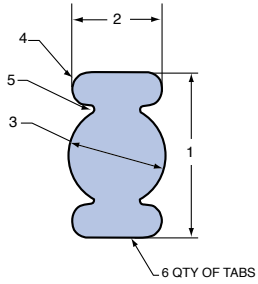


S58

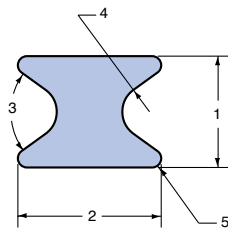


S60

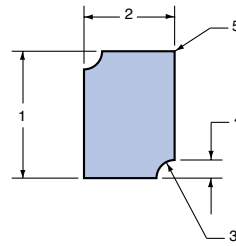
## GROUP "B"



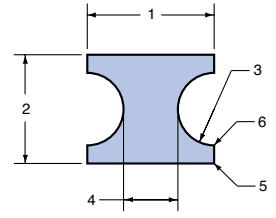
S61



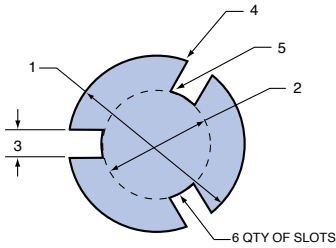
S62



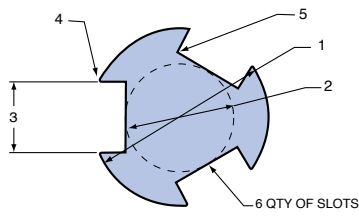
S66



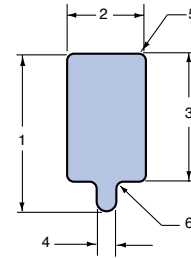
S79



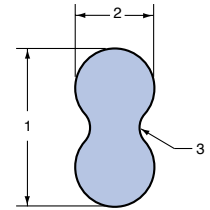
S82



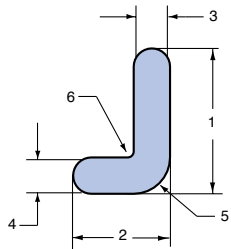
S83



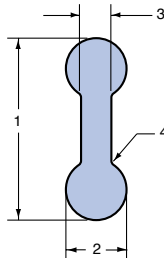
S84



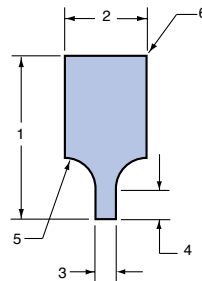
S87



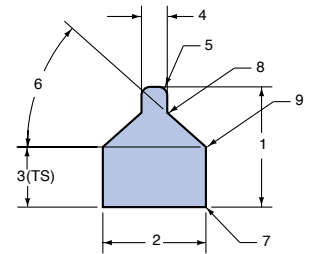
S88



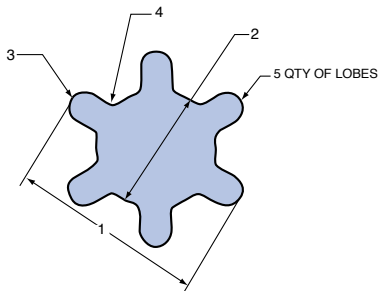
S91



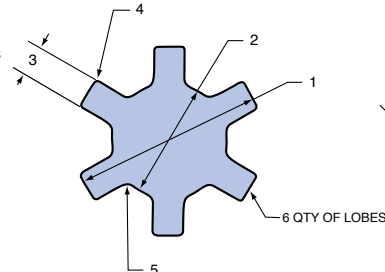
S93



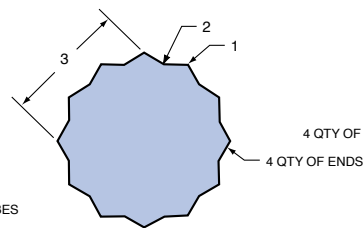
S114



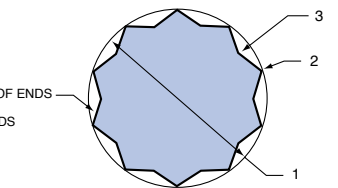
S115



S116



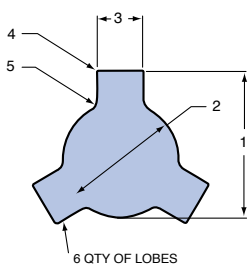
S117



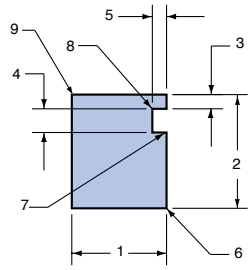
S118

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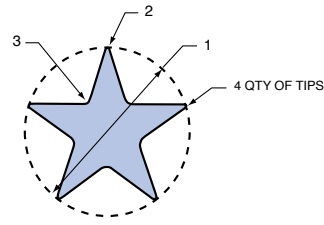
## GROUP "B"



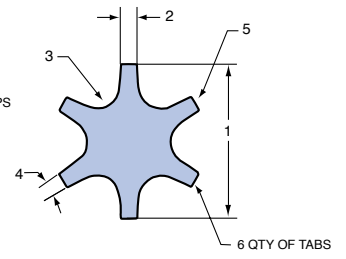
S119



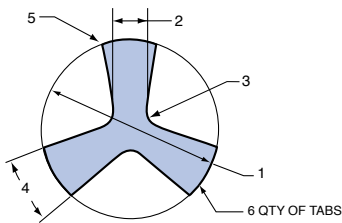
S120



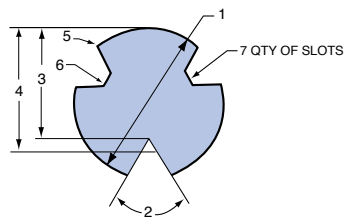
S125



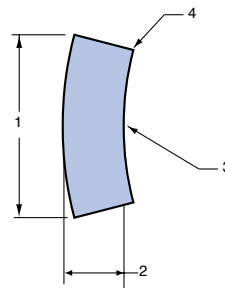
S126



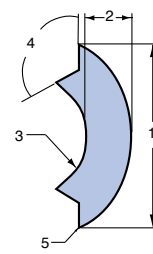
S127



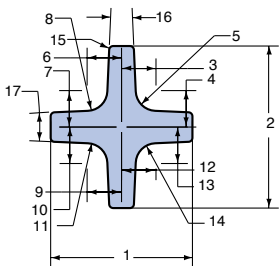
S128



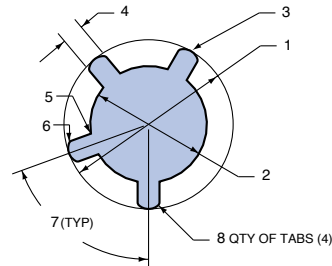
S141



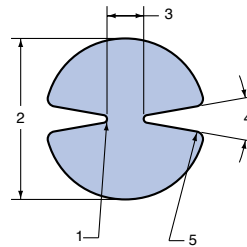
S142



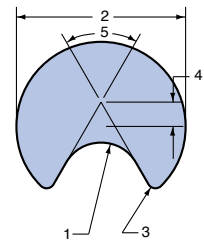
S168



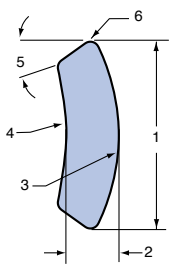
S169



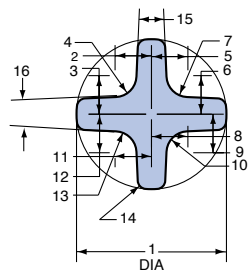
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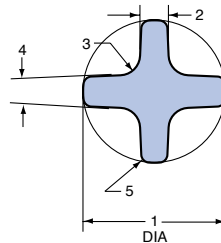
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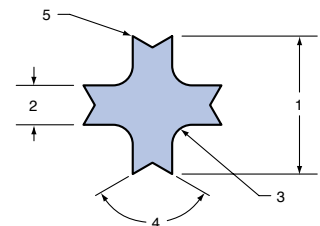
S174



S176

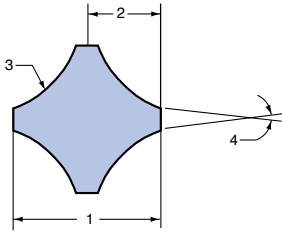


S177

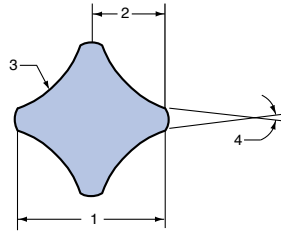


S179

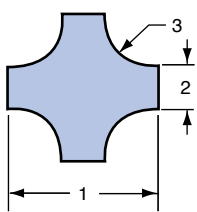
## GROUP "B"



S19A



S19B

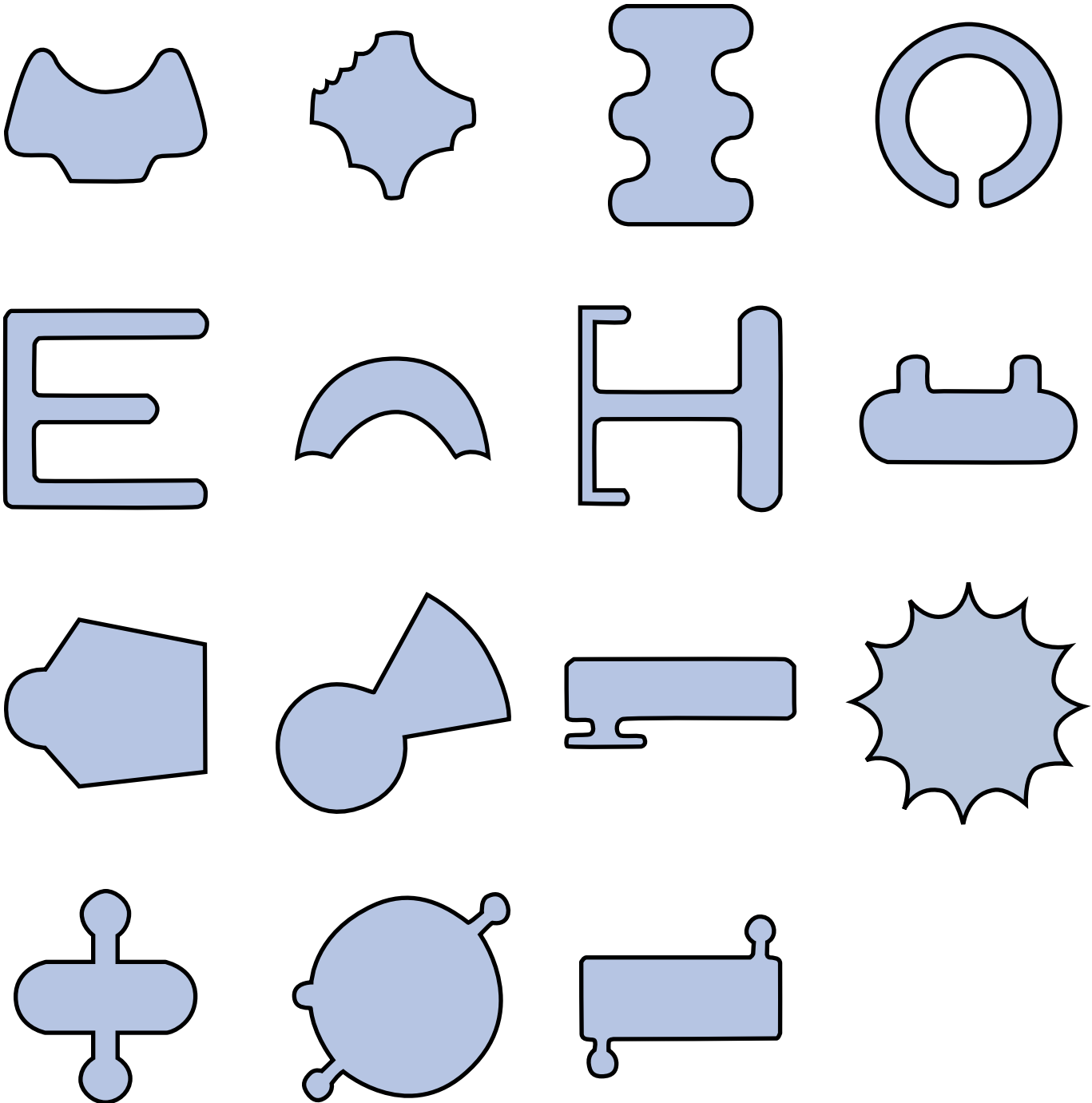


### 4-Way Radius Tools - Standard Sizes

RADIUS	DIM. 1		DIM. 2		DIM. 3	
.062 (1.58mm)	.500	(12.70mm)	.250	(6.35mm)	.062	(1.58mm)
.094 (2.39mm)	.625	(15.88mm)	.250	(6.35mm)	.094	(2.39mm)
.125 (3.18mm)	.625	(15.88mm)	.250	(6.35mm)	.125	(3.18mm)
.156 (3.96mm)	.750	(19.05mm)	.250	(6.35mm)	.156	(3.96mm)
.188 (4.78mm)	.750	(19.05mm)	.250	(6.35mm)	.188	(4.78mm)
.250 (6.35mm)	.875	(22.23mm)	.250	(6.35mm)	.250	(6.35mm)
.312 (7.93mm)	1.000	(25.40mm)	.250	(6.35mm)	.312	(7.93mm)
.375 (9.53mm)	1.125	(28.58mm)	.250	(6.35mm)	.375	(9.53mm)
.500 (12.7mm)	1.250	(31.75mm)	.250	(6.35mm)	.500	(12.7mm)

# SPECIAL SHAPES

## GROUP "C"





## FOR F (I/T) STATION ONLY



**Punch & Die Adapter Set**  
 CAT. NO. 21064  
 (wheel tools not included)

Wheel tools shown with punch and die adapter set

Wilson Wheel® Rolling Rib
<b>DESCRIPTION</b>
Punch & Die Assembly for .093" (2.4mm) radius
Punch & Die Assembly for .125" (3.2mm) radius
Punch & Die Assembly for greater than .125" (3.2mm) radius
<b>Replacement Wheel Assemblies</b>
Pocket Wheel Assembly for .093" (2.4mm) radius
Forming Wheel Assembly for .093" (2.4mm) radius
Pocket Wheel Assembly for .125" (3.2mm) radius
Forming Wheel Assembly for .125" (3.2mm) radius
Pocket Wheel Assembly for greater than .125" (3.2mm) radius
Forming Wheel Assembly for greater than .125" (3.2mm) radius
Wilson Wheel® Rolling Offset
<b>DESCRIPTION</b>
Punch & Die Assembly for .062" (1.5mm) max offset
Punch & Die Assembly for .125" (3.2mm) max offset
Punch & Die Assembly for .187" (4.8mm) max offset
<b>Replacement Wheel Assemblies</b>
Upper Wheel Assembly for .062" (1.5mm) max offset
Lower Wheel Assembly for .062" (1.5mm) max offset
Upper Wheel Assembly for .125" (3.2mm) max offset
Lower Wheel Assembly for .125" (3.2mm) max offset
Upper Wheel Assembly for .187" (4.8mm) max offset
Lower Wheel Assembly for .187" (4.8mm) max offset
Wilson Wheel® Rolling Pincher
<b>DESCRIPTION</b>
Punch & Die Assembly
<b>Replacement Wheel Assemblies</b>
Upper Wheel Assembly
Lower Wheel Assembly
Wilson Wheel® Rolling Shear
<b>DESCRIPTION</b>
Punch & Die Assembly for .064" (1.6mm) max material
Punch & Die Assembly for greater than .064" (1.6mm) material
<b>Replacement Wheel Assemblies</b>
Wheel Assembly for .064" (1.6mm) max material
Wheel Assembly for greater than .064" (1.6mm) material



Metric Hex Key Wrench Set  
CAT. NO. 06105



SAE Hex Key Wrench Set  
CAT. NO. 06057



Soft Face Hammer  
CAT. NO. 06106



Oil Stone  
CAT. NO. 06060



Diamond File  
CAT. NO. 06059

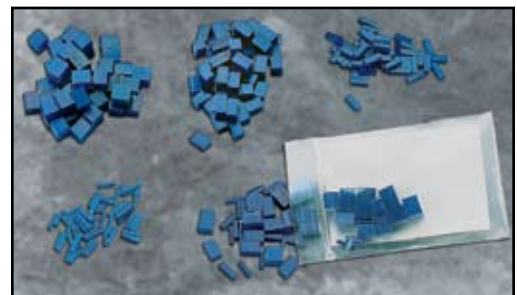


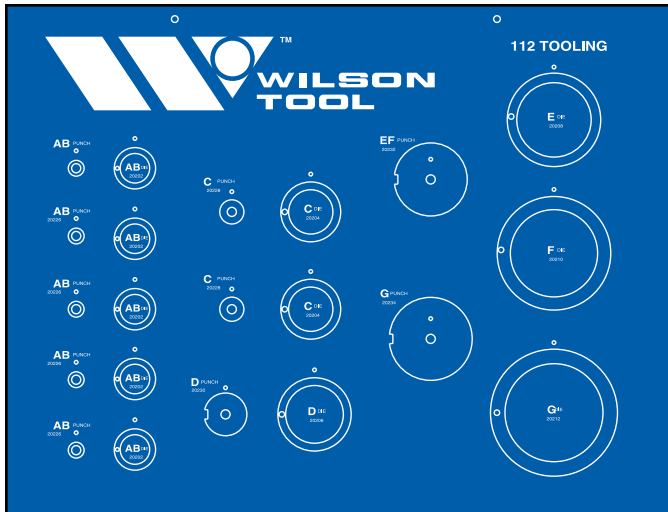
Sure Shot Sprayer  
1-QT (.95 liter) capacity  
CAT. NO. 06120

## Slug Ejectors

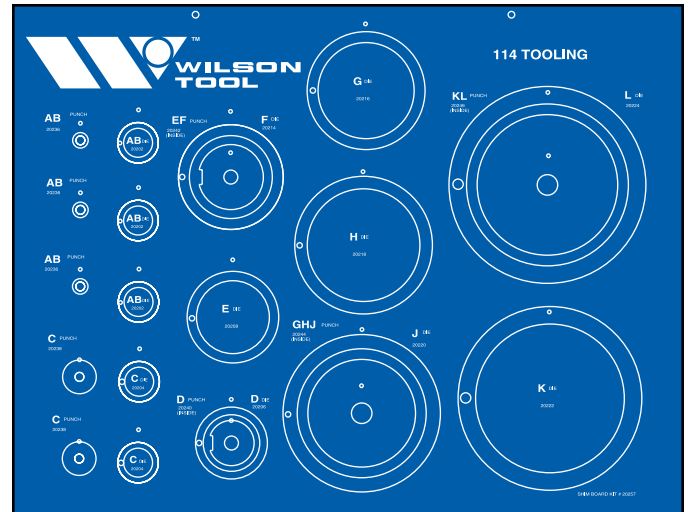
### Square Urethane

HOLE DIA. IN PUNCH	QTY.	CAT. NO.	PRICE
1/8" (3.2mm)	50	06116	
3/16" (4.8mm)	50	06117	
3/8" (9.5mm)	50	06118	
1/2" (12.7mm)	50	06119	
Assortment	50	06410	





Shim board and hook package for 112 Style Tooling\*  
CAT. NO. 20256



Shim board and hook package for 114 Style Tooling\*  
CAT. NO. 20257

\*Shims not included

## TERMS OF SALE

### ORDER

Minimum order is \$50.00.

### CREDIT REQUIREMENTS

All orders are subject to approval by our Credit Department. If you are a new account, please furnish us with your tax exempt status, a bank reference, three current supplier references and/or your current D&B rating with your first order. A credit limit will be imposed on new accounts until credit has been established.

### PAYMENT TERMS

Terms are net 10 days. Catalog prices are subject to change without notice.

### FREIGHT

Orders are shipped F.O.B. from our manufacturing facility. (International Shipments are Incoterms: Ex Works).

### ORDER CANCELLATION

In the event an order is cancelled, an additional charge will be assessed to cover the cost of labor and material.

### RETURNED MATERIAL

A handling/restocking fee will be applied to all standard products returned for credit. A return authorization number and shipping instructions must be obtained in advance before an item can be returned.

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