

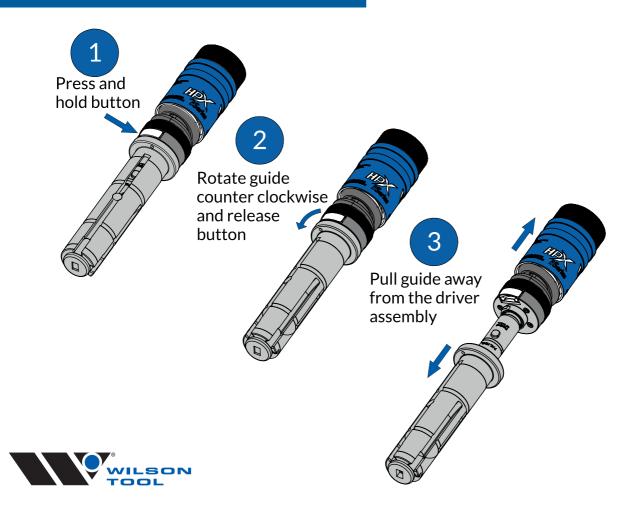
#### THE WILSON TOOL ISERIES

The Wilson Tool iSeries tooling is specially designed to be fully compatible with the AMADA® AITS® tool ID system. All key components will be laser marked with a data matrix code. This code contains a unique serial number for that component. This information is loaded into the machine control when scanned. The proper paperwork needed will accompany all products in their packaging. It will have a code with all the tool characteristics that will also be scanned and loaded into control.

The iSeries small station tooling is available in HPX and Metric HP2. Large station iSeries includes Metric HP and Standard as well as Wilson HP. These products have some added features to ensure they work seamlessly with the AITS and auto load system. The iSeries A and B station HPX & HP2 assemblies now have a push button guide release. This design allows the spring pack to be mechanically attached to the guide so there is no risk of it separating during loading.



#### **PUSH BUTTON GUIDE RELEASE**







- **HPX A Station**
- 10 **HPX B Station**
- **HP2 A Station** 12
- 14 **HP2 B Station**
- **Large Station Features** 16
- 18 **HPC** Station
- 20 **HPD** Station
- 22 **HP E Station**
- 24 Standard C Station
- 26 Standard D Station
- 28 Standard E Station

### **WILSON STYLE**

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- 30 Wilson HP C Station
- Wilson HP D Station 32
- 34 Wilson HP E Station

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38 HP DuraBlade® D Station 40 HP DuraBlade® E Station

# **EDUCATIONAL**

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- 47 Alignment Tools
- 47 Ball Riding / Brush Die
- 48 **Tool Storage**
- 48 **Shear Grinding Fixture**
- 49 Grinders
- 50 **Tool Maintenance**
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#### **COATINGS**

#### SLUG HUGGER®

Prices and product availability are subject to change without notice.

#### THE WILSON TOOL DIFFERENCE



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 todav.

#### **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. 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 HP 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.











# METRIC STYLE TOOLING SOLUTIONS

SMALL STATION ADVANTAGES	HPX	HP2
Compatible with Amada® AITS® System	•	•
Hardened guides for increased durability	•	•
Simple tool-less stripper change	•	•
Relieved strippers for extended guide life	•	•
Internal and external tool lubrication	•	•
Machine lubrication capability (ABS/WLS only, all HPX)	•	•
OEM compatible	•	•
Optima® coated punches available	•	•
Slug Hugger $^{\rm @}$ 2 — maximum slug retention	•	•
In machine adjustment for faster set ups	•	•
Easy click length adjustment $-$ no shims or tooling required	•	•
Maximum available grind life	•	•
Push button guide release	•	•
EXP quick change technology	•	
Made standard from Ultima® premium tool steel	•	
Accepts round or shaped punches in the same assembly	•	





PUNCH AND GUIDE **ASSEMBLY** 



GUIDE



**EXP PUNCH** 



STRIPPER



DIE



SHIM

PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round	14026i	
Shape	14012i	
Optima® Coating		
SPRING PACK ASSEMBLY	CAT. NO.	PRICE
Spring Pack Assembly only	14366i	
GUIDE	CAT. NO.	PRICE
Round	14076i	
Shape 0°	14077i	
Shape 0°& 45°	14079i	
Shape 0° & 90°	14078i	
PUNCH	CAT. NO.	PRICE
Round	13904i	
Shape	13905i	
Optima® Coating		
STRIPPER	CAT. NO.	PRICE
Round ABS	13045i	
Shape ABS	13152i	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	2192i	
Round Standard	1808i	
Shape Slug Hugger® 2*	12959i	
Shape Positive	1817i	
Shape Negative	1818i	
* Slug Hugger dies must be ordered punch si Size restrictions apply.	ze plus clearanc	e.

BUNGULAND CHIDE ACCEMBLY CATING BRICE

DIE SHIM		CAT. NO.	PRICE
.010 [0.25mm]	single	2101	
.030 [0.76mm]	single	2721	
.060 [1.5mm]	single	2104	
.010 [0.25mm]	pack of 25	2208	
.030 [0.76mm]	pack of 25	2722	
.060 [1.5mm]	pack of 25	2172	
	and the second second	 	

Additional charges may apply to non-standard features. See page 56.



See this tool in action on the Wilson Tool YouTube Channel

DESCRIPTION	A DIMENSION	MAX MATERIAL THICKNESS	NOTES
HPX tooling is Wilson Tool's 'Best' product. It is loaded with all the great features of the HP2 plus the EXP quick change punch system with Ultima® tool steel.	.500" [12.7mm]	.150" [3.81mm]	Compatible with ABS and non-ABS machines. Ultima tool steel is standard in EXP punches. Dies are available in Ultima tool steel upon request.















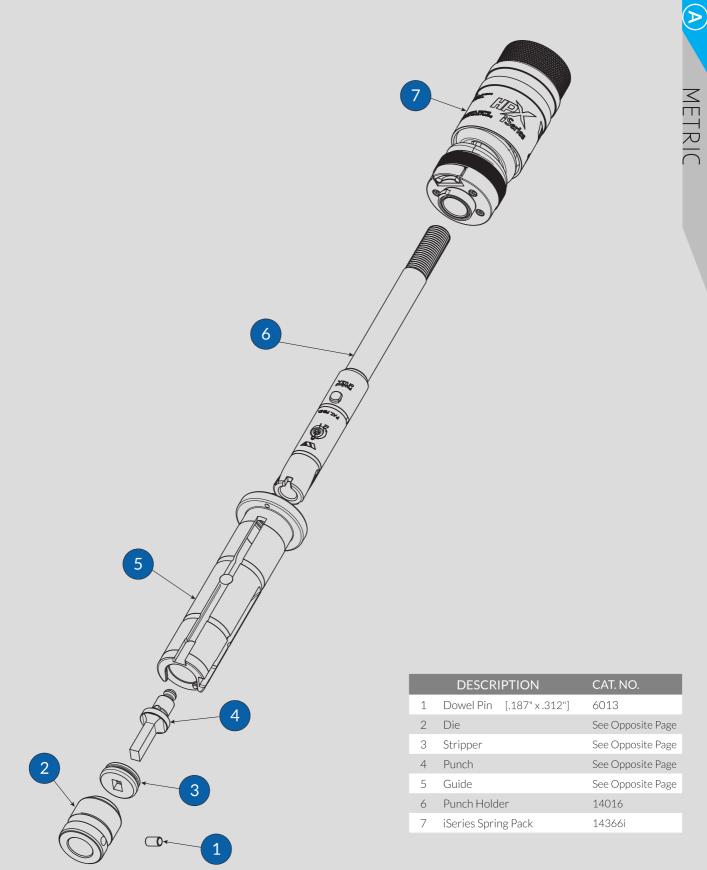










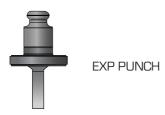






#### PUNCH AND GUIDE **ASSEMBLY**







**STRIPPER** 



SHIM

PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round	14029i	
Shape	14018i	
Optima® Coating		
SPRING PACK ASSEMBLY	CAT. NO.	PRICE
Spring Pack Assembly only	14367i	
GUIDE	CAT. NO.	PRICE
Round	14084i	
Shape 0°	14085i	
Shape 0°&45°	14087i	
Shape 0° & 90°	14086i	
PUNCH	CAT. NO.	PRICE
Round	13916i	
Shape	13917i	
Optima® Coating		
STRIPPER	CAT. NO.	PRICE
Round ABS	2433i	
Shape ABS	2432i	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	2194i	
Round Standard	2021i	
Shape Slug Hugger® 2*	12961i	
Shape Positive	2025i	
Shape Negative	2026i	
* Slug Hugger dies must be ordered punch size Size restrictions apply.	e plus clearance.	

DIE SHIM		CAT. 1	NO. PRIC	Œ
.010 [0.25mm]	single	209	7	
.030 [0.76mm]	single	272	:3	
.060 [1.5mm]	single	210	Ю	
.010 [0.25mm]	pack of 25	220	19	
.030 [0.76mm]	pack of 25	272	4	
.060 [1.5mm]	pack of 25	217	'3	

Additional charges may apply to non-standard features. See page 56.



See this tool in action on the Wilson Tool YouTube Channel

DESCRIPTION	A DIMENSION	MAX MATERIAL THICKNESS	NOTES
HPX tooling is Wilson Tool's 'Best' product. It is loaded with all the great features of the HP2 plus the EXP quick change punch system with Ultima® tool steel.	1.250" [31.8mm]	.250" [6.35mm]	Compatible with ABS and non-ABS machines. Ultima tool steel is standard in EXP punches. Dies are available in Ultima tool steel upon request.













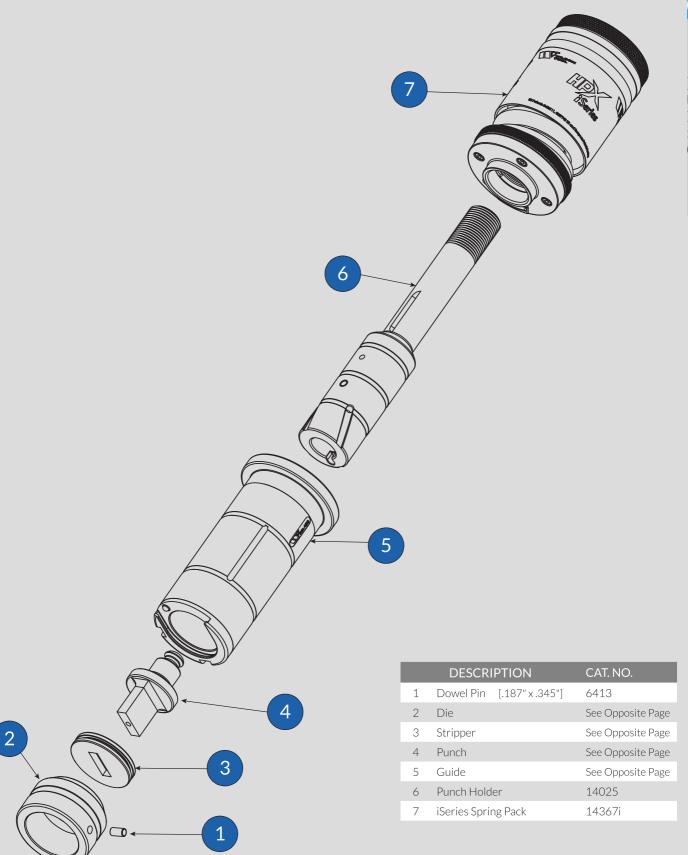




















**PUNCH** AND **GUIDE ASSEMBLY** 





DIE SHIM		CAT. NO.	PRICE
.010 [0.25mm]	single	2101	
.030 [0.76mm]	single	2721	
.060 [1.5mm]	single	2104	
.010 [0.25mm]	pack of 25	2208	
.030 [0.76mm]	pack of 25	2722	
.060 [1.5mm]	pack of 25	2172	
Additional charge	se may apply to	non-standard	fasturas

See page 56.

DESCRIPTION	A DIMENSION	MAX MATERIAL THICKNESS	NOTES
HP2 is Wilson Tool's 'Better' product. It offers a great value with standard features like easy click length adjustment, high grade tool steel, ABS/WLS compatible.	.500" [12.7mm]	.150" [3.81mm]	**HP2 assemblies require a pinned round punch. Dies are available in Ultima® tool steel upon request.











DIE

SHIM



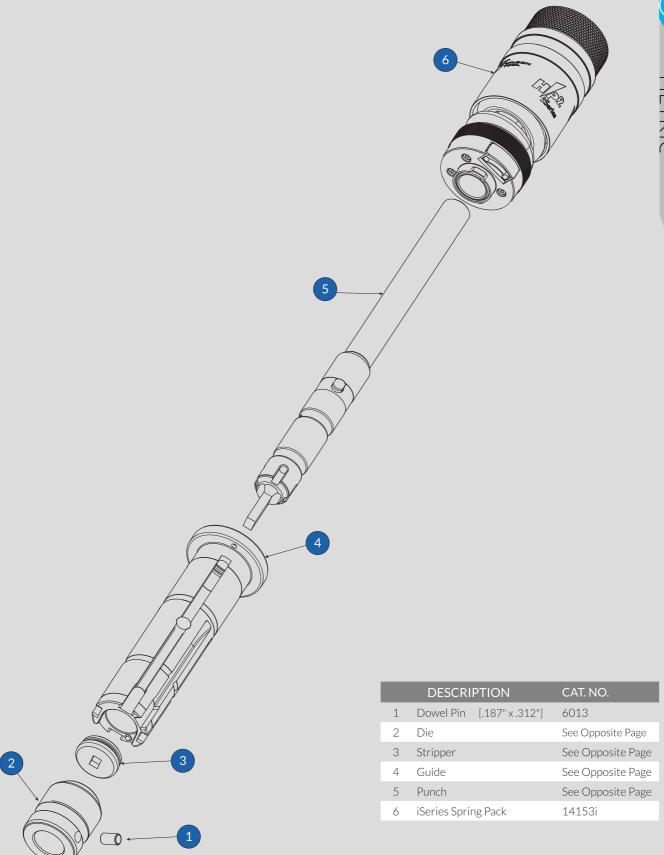












DUNCH AND CHIDE





**PUNCH** AND **GUIDE ASSEMBLY** 



PUNCH





STRIPPER

DIE

SHIM

ASSEMBLY	CAT. NO.	PRICE
Round	14058i	
Shape	14059i	
Optima® Coating		
SPRING PACK ASSEMBLY	CAT. NO.	PRICE
Spring Pack Assembly	14172i	
PUNCH	CAT. NO.	PRICE
Round ABS, pinned **	13871i	
Shape ABS	13872i	
Optima® Coating		
GUIDE	CAT. NO.	PRICE
Round	14084i	
Shape 0°	14085i	
Shape 0°&45°	14087i	
Shape 0°& 90°	14086i	
STRIPPER	CAT. NO.	PRICE
Round ABS	2433i	
Shape ABS	2432i	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	2194i	
Round Standard	2021i	
Shape Slug Hugger® 2*	12961i	
Shape Positive	2025i	
Shape Negative	2026i	
* Slug Hugger dies must be ordere	ed punch size p	lus

clearance. Size resi	trictions 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 charge	se may apply te	non standar	d footures

Additional charges may apply to non-standard features. See page 56.

DESCRIPTION	A DIMENSION	MAX MATERIAL THICKNESS	NOTES
HP2 is Wilson Tool's 'Better' product. It offers a great value with standard features like easy click length adjustment, high grade tool steel, ABS/WLS compatible.	1.250" [31.75mm]	.250" [6.35mm]	**HP2 assemblies require a pinned round punch. Dies are available in Ultima® tool steel upon request.











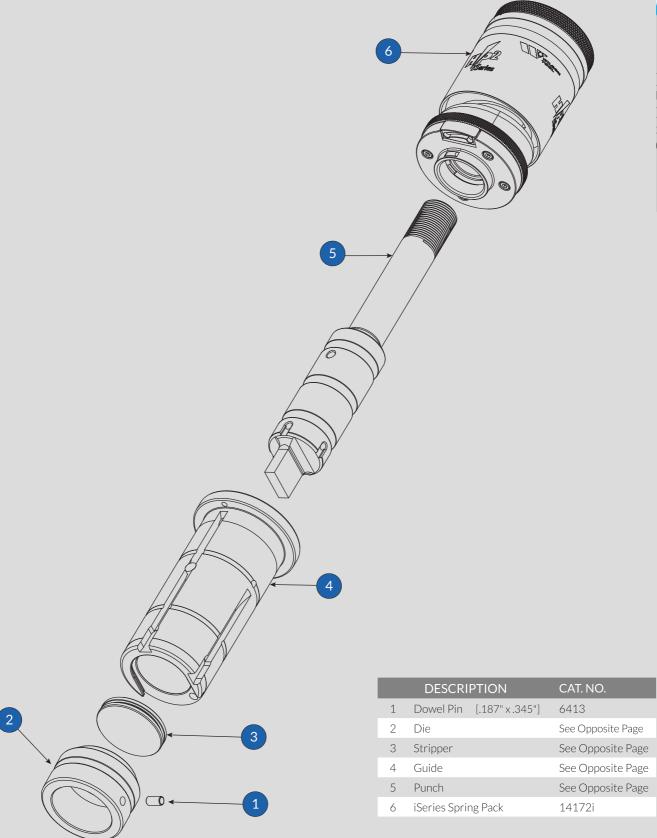




















#### METRIC STYLE TOOLING SOLUTIONS

LARGE STATION ADVANTAGES	HP	STANDARD
Compatible with Amada® AITS® System	•	•
Up to 50% more bearing surface to reduce side loading	•	•
Internal and external lubrication	•	•
External keyways at 0°, 90° and 225°	•	•
OEM compatible	•	•
Punches made from premium hardened tool steel	•	•
Optima® coated punches available	•	•
Relieved strippers for maximum grind life	•	•
Made from hardened tool steel for increased durability	•	•
Optima® coated keys for superior wear resistance	•	•
ABS machine lubrication capability	•	•
Fast and simple push button length adjustment	•	•
Push button lock release for quick stripper plate removal	•	







PUNCH



STRIPPER



DIE

SHIM

PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round Assembly	14270i	
Shape Assembly	14264i	
PUNCH	CAT. NO.	PRICE
Round ABS M14 Thread	13614i	
Shape ABS M14 Thread	13615i	
Optima® Coating		
STRIPPER	CAT. NO.	PRICE
Round ABS	5150i	
Shape ABS	5151i	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	2196i	
Round Standard	1850i	
Shape Slug Hugger® 2*	12964i	
Shape Positive	1855i	
Shape Negative	1856i	
* Clus I lugger dies moust be ander	وريام وسنو مام مريم ام	

\* 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	2725	
.060 [1.5mm]	single	2092	
.010 [0.25mm]	pack of 10	2210	
.030 [0.76mm]	pack of 10	2726	
.060 [1.5mm]	pack of 10	2174	

Additional charges may apply to non-standard features. See page 56.

DESCRIPTION	MAX A DIMENSION	MAX MATERIAL THICKNESS	NOTES
HP has a push button release for quick stripper plate removal. Guide assemblies are keyed for shapes at 0°, 90° and 225°.	2.000" [50.8mm]	.250" [6.35mm]	All punches shipped with no shear unless specified.  Dies are available in Ultima® tool steel upon request.

















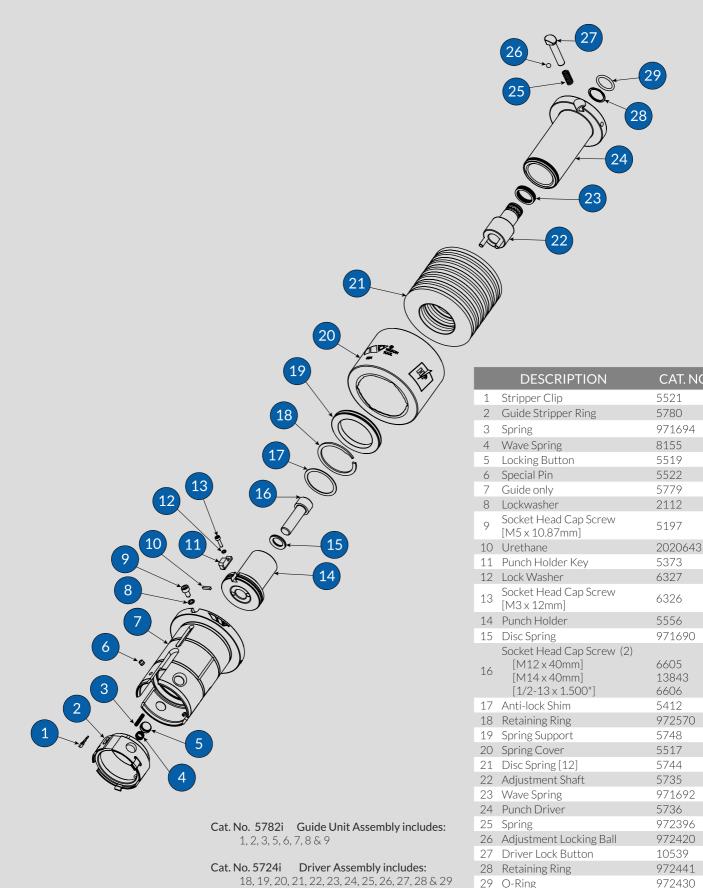






METRIC

CAT. NO.



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PUNCH



**STRIPPER** 



DIE

SHIM

PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round Assembly	14272i	
Shape Assembly	14266i	
PUNCH	CAT. NO.	PRICE
Round ABS M14 Thread	13616i	
Shape ABS M14 Thread	13617i	
Optima® Coating		
STRIPPER	CAT. NO.	PRICE
Round ABS	5152i	
Shape ABS	5153i	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	2198i	
Round Standard	1865i	
Shape Slug Hugger® 2*	12965i	
Shape Positive	1870i	
Shape Negative	1871i	
* Slug Hugger dies must be orde	ered punch size plus	clearance.

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 5	2175	

Additional charges may apply to non-standard features. See page 56.

Size restrictions apply.

DESCRIPTION	MAX A DIMENSION	MAX MATERIAL THICKNESS	NOTES
HP has a push button release for quick stripper plate removal. Guide assemblies are keyed for shapes at 0°, 90° and 225°.	3.500" [88.9mm]	.250" [6.35mm]	.062" [1.6mm] rooftop shear is given to all punches with 'A' dimension > 2.000" [50.8mm] and width > .250" [6.35mm].  Dies available in Ultima® tool steel upon request.















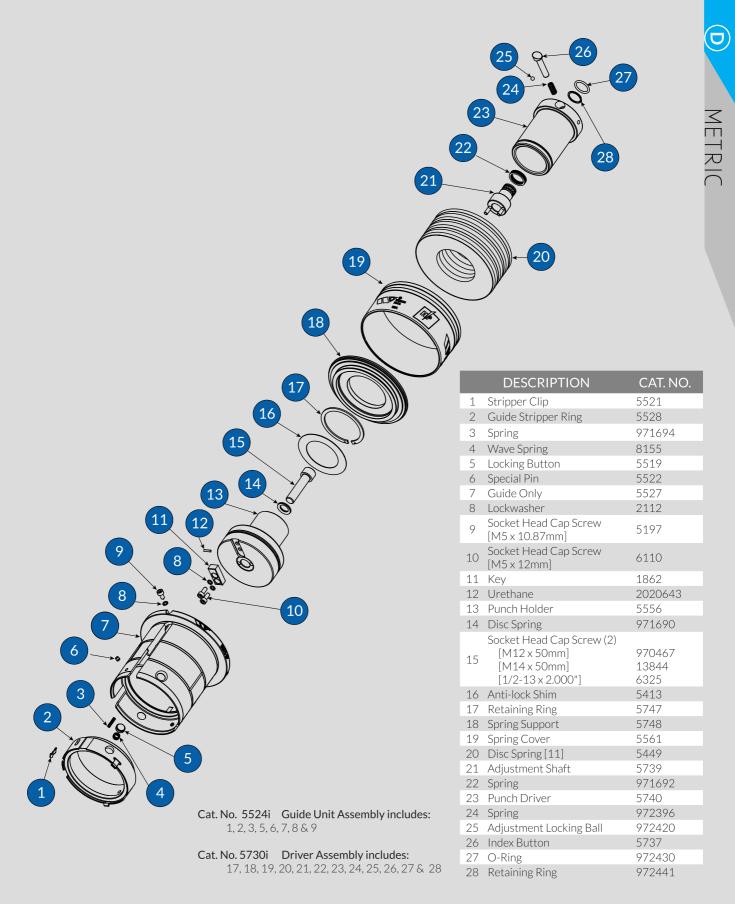








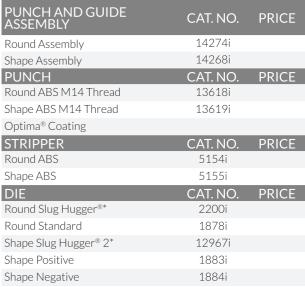








**GUIDE ASSEMBLY** 



CAT. NO.

**PRICE** 

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

DIE SHIM		CAT. NO.	PRICE
.010 [0.25mm]	single	2073	
.030 [0.76mm]	single	2729	
.060 [1.5mm]	single	2076	
.010 [0.25mm]	pack of 5	2212	
.030 [0.76mm]	pack of 5	2730	
.060 [1.5mm]	pack of 5	2176	
	and the second second	and the second	

Additional charges may apply to non-standard features. See page 56.

	=		
			_

**PUNCH** 



STRIPPER

DIE

SHIM

DESCRIPTION	MAX A DIMENSION	MAX MATERIAL THICKNESS	NOTES
HP has a push button release for quick stripper plate removal. Guide assemblies are keyed for shapes at 0°, 90° and 225°.	4.500" [114.3mm]	.250" [6.35mm]	.062" [1.6mm] rooftop shear is given to all punches with 'A' dimension > 2.000" [50.8mm] and width > .250" [6.35mm].  Dies available in Ultima® tool steel upon request.























CAT. NO.

5521

5528

8155 5519

5522

5537

5209

5210

6110

2112

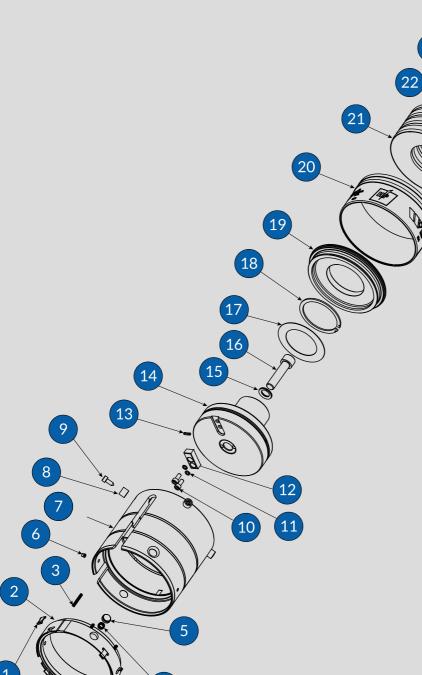
1862

5737

972430

972441

971694



13	Urethane	2020643
14	Punch Holder	5560
15	Disc Spring	971690
16	Socket Head Cap Screw (2) [M12 x 50mm] [M14 x 50mm] [1/2-13 x 2.000"]	970467 13844 6325
17	Anti-lock Shim	5413
18	Retaining Ring	5747
19	Spring Support	5741
20	Spring Cover	5561
21	Disc Spring [7]	5449
22	Adjustment Shaft	5739
23	Wave Spring	971692
24	Punch Driver	5742
25	Spring	972396
26	Adjustment Locking Ball	972420

27 Index Button

Retaining Ring

28 O-Ring

**DESCRIPTION** 

Stripper Clip

Spring

4 Wave Spring

Special Pin

Guide only

Lifter Button

[M5 x 12mm] 11 Lockwasher

12 Key

[M5 x 13.39mm] Socket Head Cap Screw

Socket Head Cap Screw

Locking Button

3

5

Guide Stripper Ring

Cat. No. 5534i Guide Unit Assembly includes: 1, 2, 3, 5, 6, 7, 8 & 9

**Cat. No. 5731i Driver Assembly includes:** 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28 & 29





PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round Assembly	14271i	
Shape Assembly	14265i	
PUNCH	CAT. NO.	PRICE
Round ABS M14 Thread	13614i	
Shape ABS M14 Thread	13615i	
Optima® Coating		
STRIPPER	CAT. NO.	PRICE
Round ABS	5150i	
Shape ABS	5151i	
DIE	CAT. NO.	PRICE
	C/ (1.11C).	INCL
Round Slug Hugger®*	2196i	111102
		TRIGE
Round Slug Hugger®*	2196i	TRIGE
Round Slug Hugger®* Round Standard	2196i 1850i	TRICL
Round Slug Hugger®* Round Standard Shape Slug Hugger® 2*	2196i 1850i 12964i	TRICE
Round Slug Hugger®* Round Standard Shape Slug Hugger® 2* Shape Positive	2196i 1850i 12964i 1855i 1856i ered punch size plu:	
Round Slug Hugger®* Round Standard Shape Slug Hugger® 2* Shape Positive Shape Negative * Slug Hugger dies must be order	2196i 1850i 12964i 1855i 1856i ered punch size plu:	
Round Slug Hugger®* Round Standard Shape Slug Hugger® 2* Shape Positive Shape Negative * Slug Hugger dies must be order clearance. Size restrictions app	2196i 1850i 12964i 1855i 1856i ered punch size plus	S
Round Slug Hugger®* Round Standard Shape Slug Hugger® 2* Shape Positive Shape Negative * Slug Hugger dies must be order clearance. Size restrictions app	2196i 1850i 12964i 1855i 1856i ered punch size plus bly. CAT. NO.	S

DESCRIPTION	MAX A DIMENSION	MAX MATERIAL THICKNESS	NOTES
Standard assembly strippers are held in by a stripper ring or clips.	2.000" [50.8mm]	.250" [6.35mm]	All punches shipped with no shear unless specified.
Guide assemblies are keyed for shapes at 0°, 90° and 225°.	A		Full assemblies ship with guide stripper ring installed. Spring clips are also included.
		1	Dies available in Ultima® tool steel upon request.

















.010 [0.25mm] pack of 10

pack of 10

pack of 10

Additional charges may apply to non-standard features.

.030 [0.76mm]

.060 [1.5mm]

See page 56.





2210

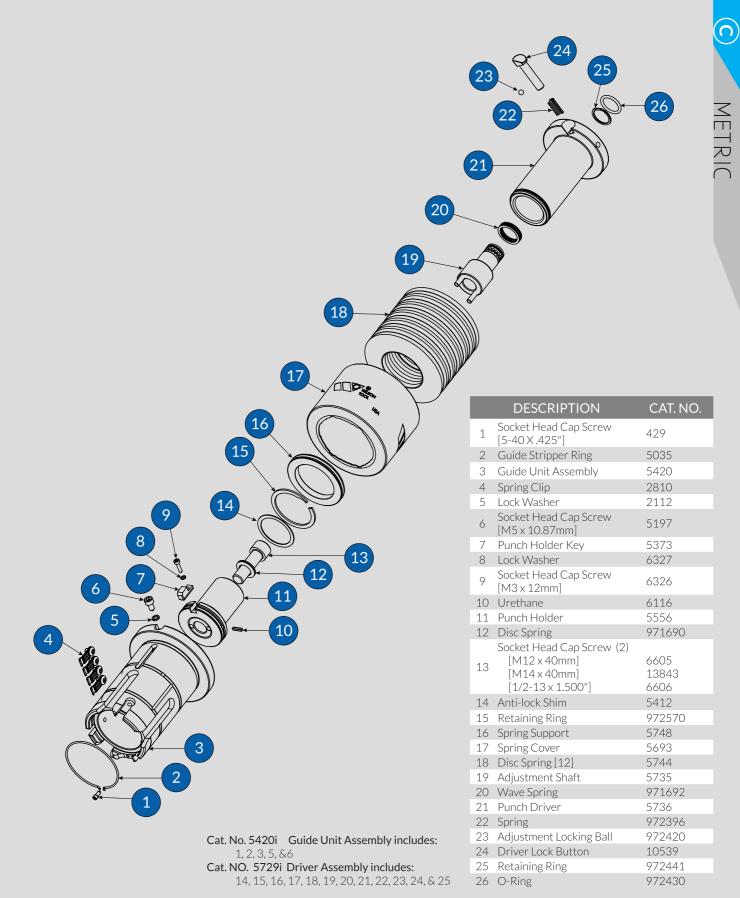
2726

2174









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PUNCH



STRIPPER

DIE

SHIM

PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round Assembly	14273i	
Shape Assembly	14267i	
PUNCH	CAT. NO.	PRICE
Round ABS M14 Thread	13616i	
Shape ABS M14 Thread	13617i	
Optima® Coating		
STRIPPER	CAT. NO.	PRICE
Round ABS	5152i	
Shape ABS	5153i	
DIE	CAT. NO	PRICE
Round Slug Hugger®*	2198i	
Round Standard	1865i	
Shape Slug Hugger® 2*	12965i	
Shape Positive	1870i	
Shape Negative	1871i	
* Slug Hugger dies must be order	ed punch size plus	

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 5	2175	

Additional charges may apply to non-standard features. See page 56.

clearance. Size restrictions apply.

DESCRIPTION	MAX A DIMENSION	MAX MATERIAL THICKNESS	NOTES
Standard assembly strippers are held in by a stripper ring or clips. Guide assemblies are keyed for shapes at 0°, 90° and 225°.	3.500" [88.9mm]	.250" [6.35mm]	.062" [1.6mm] rooftop shear is given to all punches with 'A' dimension > 2.000" [50.8mm] and width > .250" [6.35mm]. Dies available in Ultima® tool steel upon request.











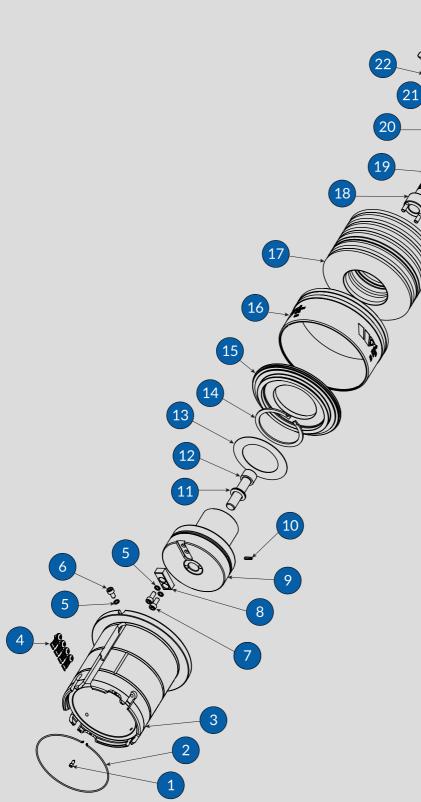












Cat. No. 5430i Guide Unit Assembly includes: 1, 2, 3, 5, & 6

**Cat. No. 5730i Driver Assembly includes:** 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, & 25

	DESCRIPTION	CAT. NO.
1	Socket Head Cap Screw [5-40 x .425"]	429
2	Guide Stripper Ring	5036
3	Guide Unit Assembly	5430
4	Spring Clip	2810
5	Lock Washer	2112
6	Socket Head Cap Screw [M5 x 10.87mm]	5197
7	Socket Head Cap Screw [M5 x 12mm]	6110
8	Key	1862
9	Punch Holder	5558
10	Urethane	6116
11	Disc Spring	971690
12	Socket Head Cap Screw (2) [M12 x 50mm] [M14 x 50mm] [1/2-13 x 2.000"]	970467 13844 6325
13	Anti-lock Shim	5413
14	Retaining Ring	5747
15	Spring Support	5738
16	Spring Cover	5423
17		5449
18	Adjustment Shaft	5739
19	Wave Spring	971692
20		5740
21	Spring	972396
22	Adjustment Locking Ball	972420
23		5737
24		972441
25	O-Ring	972430









PUNCH



STRIPPER

DIE

SHIM

PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round Assembly	14275i	
Shape Assembly	14269i	
PUNCH	CAT. NO.	PRICE
Round ABS M14 Thread	13618i	
Shape ABS M14 Thread	13619i	
Optima® Coating		
STRIPPER	CAT. NO.	PRICE
Round ABS	5154i	
Shape ABS	5155i	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	2200i	
Round Standard	1878i	
Shape Slug Hugger® 2*	12967i	
Shape Positive	1883i	
Shape Negative	1884i	
*Slug Hugger dies must be order	ed punch size plus	clearance.

DIE SHIM		CAT. NO.	PRICE
.010 [0.25mm]	single	2073	
.030 [0.76mm]	single	2729	
.060 [1.5mm]	single	2076	
.010 [0.25mm]	pack of 5	2212	
.030 [0.76mm]	pack of 5	2730	
.060 [1.5mm]	pack of 5	2176	
Additional charge	c may apply to p	on standard faatures	

Additional charges may apply to non-standard features. See page 56.

Size restrictions apply.

DESCRIPTION	MAX A DIMENSION	MAX MATERIAL THICKNESS	NOTES
Standard assembly strippers are held in by a stripper ring or clips. Guide assemblies are keyed for shapes at 0°, 90° and 225°.	4.500" [114.3mm]	.250" [6.35mm]	.062" [1.6mm] rooftop shear is given to all punches with 'A' dimension > 2.000" [50.8mm] and width > .250" [6.35mm].  Dies available in Ultima® tool steel upon request.













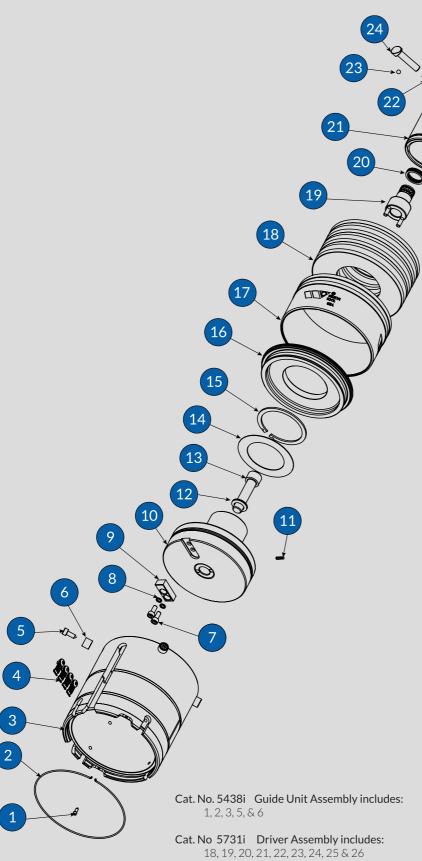












	DESCRIPTION	CAT. NO.
1	Socket Head Cap Screw [5-40 X .425"]	429
2	Guide Stripper Ring	5037
3	Guide Unit Assembly	5438
4	Spring Clip	2810
5	Socket Head Cap Screw [M5 x 13.39mm]	5210
6	Lifter Button	5209
7	Socket Head Cap Screw [M5 x 12mm]	6110
8	Lock Washer	2112
9	Key	1862
10	Punch Holder	5560
11	Urethane	6116
12	Disc Spring	971690
13	Socket Head Cap Screw (2) [M12 x 50mm] [M14 x 50mm] [1/2-13 x 2.000"]	970467 13844 6325
14	Anti-lock Shim	5413
15	Retaining Ring	5747
16	Spring Support	5741
17	Spring Cover	5423
18	Disc Spring [7]	5449
19	Adjustment Shaft	5739
20	Wave Spring	971692
21	Punch Driver	5742
22	. •	972396
23	Adjustment Locking Ball	972420
24	Index Button	5737
25	Retaining Ring	972441
26	O-Ring	972430









PUNCH



STRIPPER



DIE

SHIM

PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round ABS /WLS Assembly	5769i	
Shape ABS /WLS Assembly	5768i	
PUNCH	CAT. NO.	PRICE
Round	5026i	
Shape	5025i	
Optima® Coating		
HEAVY DUTY PUNCH	CAT. NO.	PRICE
Round .500-1.250 [12.7 - 31.75mm]	5117i	
Round 1.251 - 1.625 [31.77 - 41.27mm]	5120i	
Shape .500-1.250 [12.7 - 31.75mm]	5118i	
Shape 1.251 - 1.625 [31.77 - 41.27mm]	5119i	
STRIPPER	CAT. NO.	PRICE
Round ABS	5150i	
Shape ABS	5151i	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	2196i	
Round Standard	1850i	
Shape Slug Hugger® 2*	12964i	
Shape Positive	1855i	
Shape Negative	1856i	
* Slug Hugger dies must be ordered punct	n size plus clea	rance

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	2725	
.060 [1.5mm]	single	2092	
.010 [0.25mm]	pack of 10	2210	
.030 [0.76mm]	pack of 10	2726	
.060 [1.5mm]	pack of 10	2174	

Additional charges may apply to non-standard features. See page 56.

DESCRIPTION	MAX A DIMENSION	MAX MATERIAL THICKNESS	NOTES
Guide assemblies achieve angles of 0°, 45°, 90°, 180°, 225° and 270°.	2.000" [50.8mm]	.250" [6.35mm]	All punches will be shipped with no shear, unless specified.  Use heavy duty punches for material thickness > .250" [6.35mm].  HP punches and dies are available in Ultima tool steel upon request.





















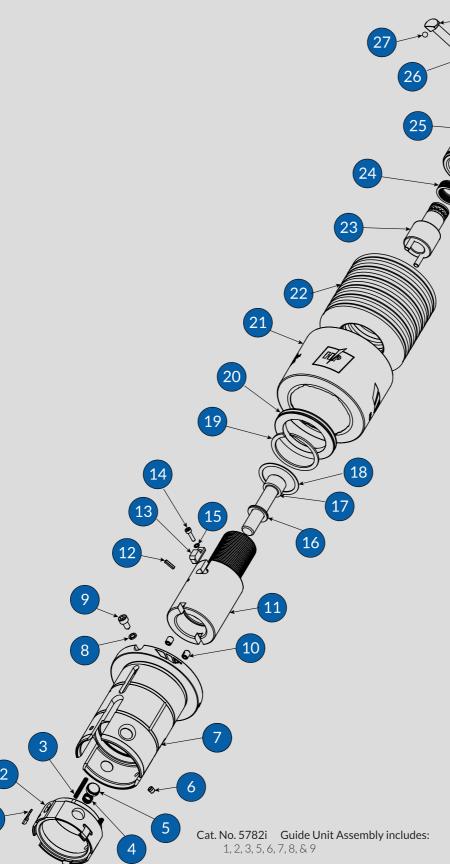






30

WILSON



	DESCRIPTION	CAT. NO.
1	Stripper Clip	5521
2	Guide Stripper Ring	5780
3	Spring	971694
4	Wave Spring	8155
5	Locking Button	5519
6	Special Pin	5522
7	Guide only	5579
8	Lockwasher	2112
9	Socket Head Cap Screw [M5 x 10.87mm]	5197
10	Set Screw	6298
11	Punch Holder	5510
12	Urethane	2020643
13	Punch Holder Key	5373
14	Socket Head Cap Screw [M3 x 12mm]	6326
15	Washer	6327
16	Disc Spring	971690
17	Socket Head Cap Screw [1/2-13 x 2.250"]	6002
18	Anti-lock Shim	5412
19	Retaining Ring	972570
20	Spring Support	5748
21	Spring Cover	5517
22	Spring Disc [12]	5744
23	Adjustment Shaft	5735
24	Wave Spring	971692
25	Punch Driver	5736
26	Spring	972396
27		972420
28	Driver Lock Button	10539
29	Retaining Ring	972441
30	O-Ring [.687 x .094"]	972430

19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 & 30

Cat. No. 5724i Driver Assembly includes:









PUNCH



STRIPPER

DIE

SHIM

PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round ABS/WLS Assembly	5771i	
Shape ABS/WLS Assembly	5770i	
PUNCH	CAT. NO.	PRICE
Round	5028i	
Shape	5027i	
Optima® Coating		
STRIPPER	CAT. NO.	PRICE
Round ABS	5152i	
Shape ABS	5153i	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	2198i	
Round Standard	1865i	
Shape Slug Hugger® 2*	12965i	
Shape Positive	1870i	
Shape Negative	1871i	
* Clug Hugger dies must be order	od punch sizo plur	-

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 5	2175	
A 1 1212 1 1	1	1 1 10 1	

Additional charges may apply to non-standard features. See page 56.

DESCRIPTION	MAX A DIMENSION	MAX MATERIAL THICKNESS	NOTES
Guide assemblies achieve angles of 0°, 45°, 90°, 180°, 225° and 270°.	3.500" [88.9mm]	.250" [6.35mm]	.062" [1.6mm] rooftop shear is given to all punches with 'A' dimension > 2.000" [50.8mm] and width > .250" [6.35mm].  Ultima® Premium tool steel available for punches and dies.















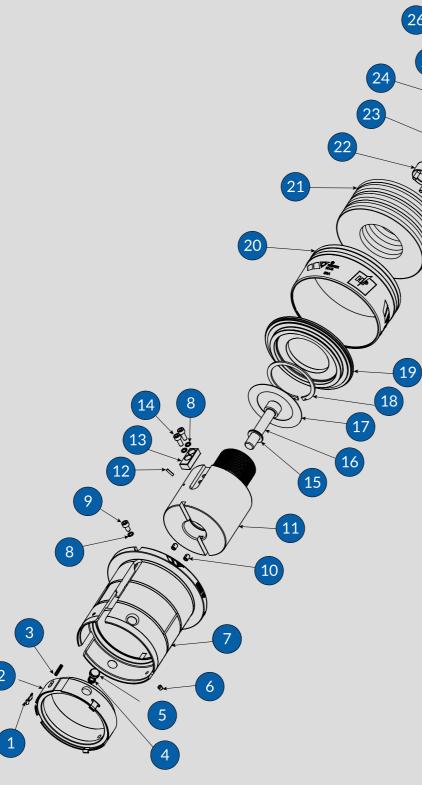












Cat. No. 5524i	Guide Unit Assembly includes:
1, 2, 3, 5, 6,	7, 8, & 9

**Cat. No. 5725i Driver Assembly includes:** 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 & 30

	DESCRIPTION	CAT. NO.
1	Stripper Clip	5521
2	Guide Stripper Ring	5528
3	Spring	971694
4	Wave Spring	8155
5	Locking Button	5519
6	Special Pin	5522
7	Guide only	5527
8	Lockwasher	2112
9	Socket Head Cap Screw [M5 x 10.87mm]	5197
10	Set Screw	6298
11	Punch Holder	5525
12	Urethane	2020643
13	Punch Holder Key	1862
L4	Socket Head Cap Screw [M5 x 12mm]	6110
15	Disc Spring	971690
L6	Socket Head Cap Screw [1/2-13 x 2.500"]	6566
17	Anti-lock Shim	5413
18	Retaining Ring	5747
L9	Spring Support	5738
20	Spring Cover	5561
21	Spring Disc [11]	5449
22		5739
23		971692
24	Punch Driver	5740
	Spring	972396
	Adjustment Locking Ball	972420
27	Index Button	5737
28	Retaining Ring	972441
29	O-Ring	972430
	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 23 24 25 27 28	Guide Stripper Ring Guide Stripper Ring Spring Wave Spring Locking Button Special Pin Guide only Lockwasher Socket Head Cap Screw [M5 x 10.87mm] Set Screw Punch Holder Urethane Punch Holder Key Socket Head Cap Screw [M5 x 12mm] Socket Head Cap Screw [1/2 -13 x 2.500"] Anti-lock Shim Retaining Ring Spring Support Spring Cover Spring Cover Spring Disc [11] Adjustment Shaft Wave Spring Adjustment Locking Ball Index Button Retaining Ring





PUNCH AND GUIDE ASSEMBLY	CAT. NO.	PRICE
Round ABS/WLS Assembly	5773i	
Shape ABS/WLS Assembly	5772i	
PUNCH	CAT. NO.	PRICE
Round	5030i	
Shape	5029i	
Optima® Coating		
STRIPPER	CAT. NO.	PRICE
Round ABS	5154i	
Shape ABS	5155i	
DIE	CAT. NO.	PRICE
Round Slug Hugger®*	2200i	
Round Standard	1878i	
Shape Slug Hugger® 2*	12967i	
Shape Positive	1883i	
Shape Negative	1884i	
* Slug Hugger dies must be ordered	d punch size pl	us



STRIPPER

PUNCH

DIE

SHIM

clearance. Size	restrictions apply.	'	
DIE SHIM		CAT. NO.	PRICE
.010 [0.25mm]	single	2073	
.030 [0.76mm]	single	2729	
.060 [1.5mm]	single	2076	
.010 [0.25mm]	pack of 5	2212	
.030 [0.76mm]	pack of 5	2730	
.060 [1.5mm]	pack of 5	2176	
Additional charges may apply to non-standard features.			

DESCRIPTION	MAX A DIMENSION	MAX MATERIAL THICKNESS	NOTES
Guide assemblies achieve angles of 0°, 45°, 90°, 180°, 225° and 270°.	4.500" [114.3mm]	.250" [6.35mm]	.062" [1.6mm] rooftop shear is given to all punches with 'A' dimension > 2.000" [50.8mm] and width > .250" [6.35mm].  Ultima® Premium tool steel available for punches and dies.















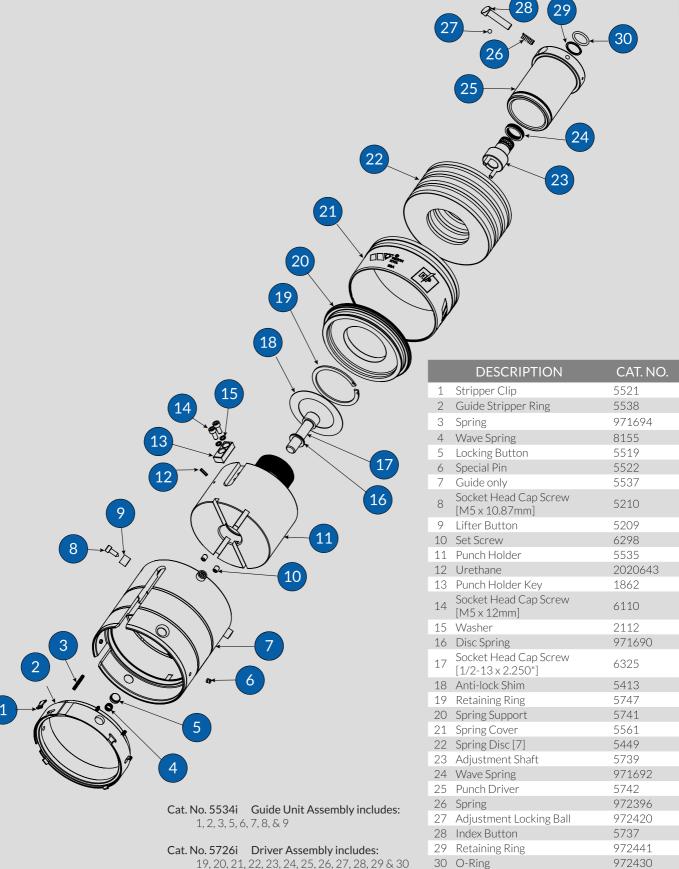


See page 56.









19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29 & 30



# ULTIMA® PREMIUM TOOL STEEL IMPROVES DURABILITY AND PERFORMANCE

Available exclusively from Wilson Tool, this advanced steel is engineered to increase wear resistance by up to an astounding 100% over conventional tool steels.

#### A New Level of Performance

Ultima<sup>®</sup> punches and dies set a new benchmark for durability and performance, dramatically improving tool life when punching materials that are abrasive or have a high tensile strength. Ultima excels in applications where ordinary punches wear quickly and it is ideal for long-run jobs. It significantly reduces micro chipping, where cutting edge failure most often begins.

#### **Remarkable Downtime Reductions**

With up to twice as long between regrinds, Ultima punches and dies substantially reduce downtime and tool replacement costs. Breaking, chipping, cracking, tool fatigue and other problems are minimized, providing long-term gains in productivity and profitability.

Ultima premium steel punches and dies are especially useful for the toughest applications, but are effective for any job.



EXP punches shown



### PARTING TOOLS



Parting and slitting are common practices

in sheet metal fabrication. Whether you are parting nested parts or straightening the edge of the sheet, you need a product that is rigid and delivers a long tool life.

Wilson Tool developed the HP DuraBlade® and Dura-Die parting products specifically to maximize your productivity for these applications.

HP DuraBlade features a simple push button adjustment and replaceable cutting blade insert made with Ultima® premium tool steel to significantly increase grind life. The punch blades are supplied flat, or with rooftop shear upon request at no additional charge.

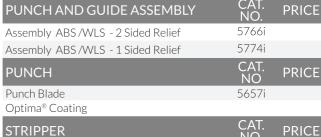












STRIPPER	NO.	М
ABS 2-Sided Relief	5664i	
ABS 1-Sided Relief	5666i	
DIE	CAT. NO.	Pl

DIE		CAT. NO.	PRICE
Slug Hugger® 2*	(relief 2 sides, shape at 90°)	5499i	
Slug Hugger® 2*	(relief 2 sides, shape at 0°-90°)	5500i	
Slug Hugger® 2*	(relief 1 side, shape at 90°)	12966i	
Slug Hugger® 2*	(relief 1 side, shape at 0°-90°)	5501i	
Positive (relief 2	sides, shape at 90°)	5101i	
Positive (relief 2	sides, shape at 0°-90°)	5328i	
Positive (relief 1	side, shape at 90°)	2462i	
Positive (relief 1	side, shape at 0°-90°)	5331i	
Negative (relief 2	2 sides, shape at 90°)	5156i	
Negative (relief 2	2 sides, shape at 0°-90°)	5329i	
Negative (relief:	1 side, shape at 90°)	2463i	
Negative (relief 1	. side, shape at 0°-90°)	5332i	

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

1.7				
	DIE SHIM		CAT NO.	
	.010 [0.25mm]	single	2081	L
	.030 [0.76mm]	single	2727	7
	.060 [1.5mm]	single	2084	1
	.010 [0.25mm]	pack of 5	2211	L
	.030 [0.76mm]	pack of 5	2728	3
	.060 [1.5mm]	pack of 5	2175	

STRIPPER

**PUNCH** 

DIE

SHIM

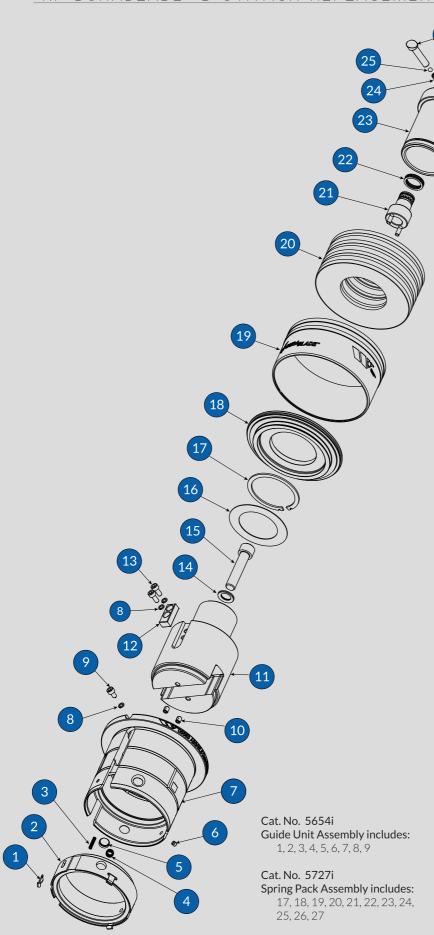
DESCRIPTION	MAX WIDTH FOR BLADE INSERT	MAX. MATERIAL THICKNESS	NOTES
HP DuraBlade® guide assemblies are keyed for shapes at 0°, 45° and 90°. Punch blades are Ultima® Premium tool steel.	.750" [19.05mm]	.250" [6.35mm]	Ultima® Premium tool steel is available on dies.



26

28





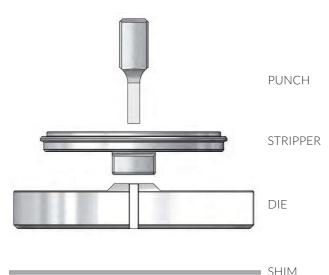
	DESCRIPTION	CAT. NO.
1	Stripper Clip	5521
2	Guide Stripper Ring	5528
3	Spring	971694
4	Wave Spring	8155
5	Locking Button	5519
6	Special Pin	5522
7	Guide Unit Only	5659
8	Lock Washer	2112
9	Socket Head Cap Screw [M5 x 10.87mm]	5197
10	Set Screw [M6 x 8mm]	6298
11	Punch Holder with Bushing	5655
12	Punch Holder Key	1862
13	Socket Head Cap Screw [M5 x 12mm]	6110
14	Disc Spring	971690
15	Socket Head Cap Screw [M12 x 55mm]	6026
16	Anti Lock Shim	5413
17	Retaining Ring	5747
18	Spring Support	5738
19	Spring Cover	5679
20	Disc Spring [11]	5449
21	Adjustment Shaft	5739
22	Wave Spring	971692
23	Driver	5740
24	Spring	972396
25	Adjustment Locking Ball	972420
26	Adjustment Button	5737
27	Retaining Ring	972441
28	O-Ring	972430





GUIDE ASSEMBLY

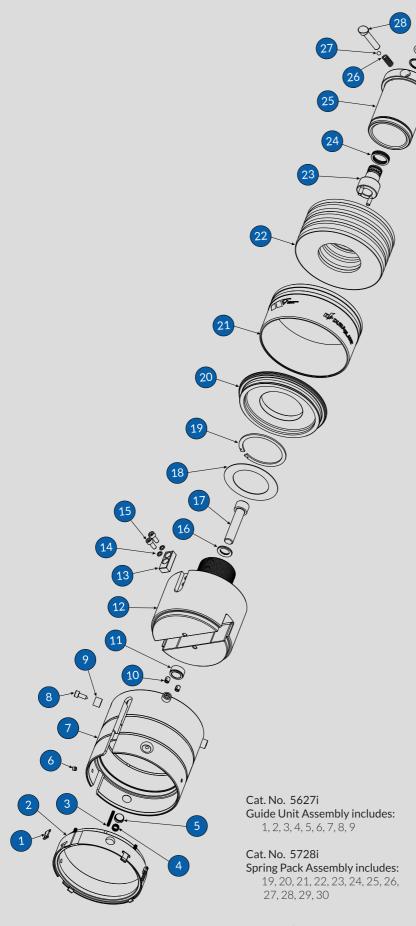




DESCRIPTION	MAX WIDTH FOR BLADE INSERT	MAX. MATERIAL THICKNESS	NOTES
HP DuraBlade® guide assemblies are keyed for shapes at 0°, 45° and 90°. Punch blades are Ultima® Premium tool steel.	.750" [19.05mm]	.250" [6.35mm]	Ultima® Premium tool steel is available on dies.

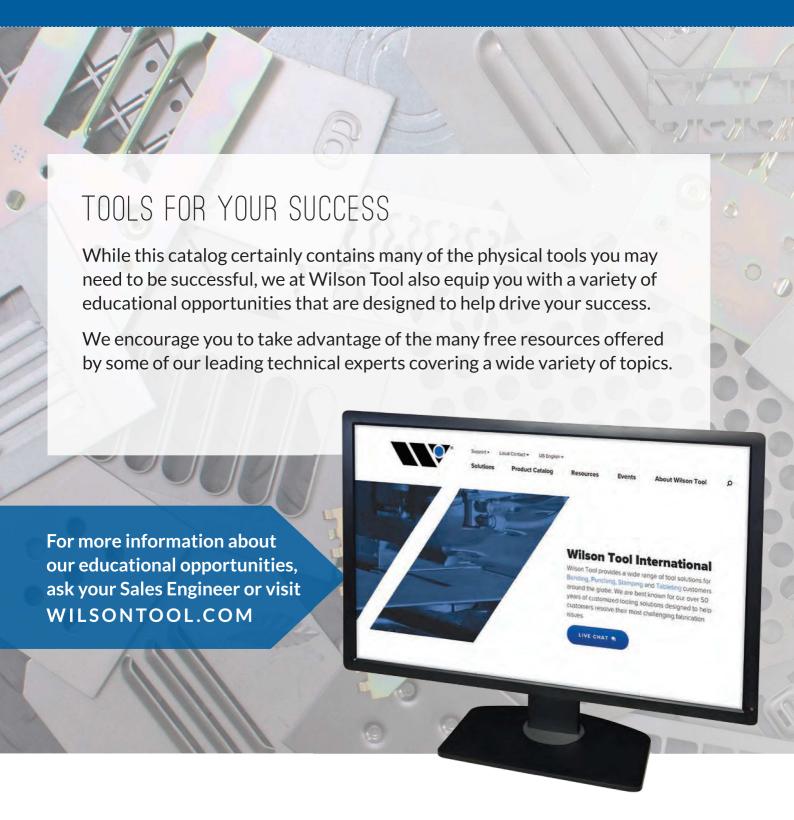
PARTING TOOL





_		
	DESCRIPTION	CAT. NO.
1	Stripper Clip	5521
2	Guide Stripper Ring	5538
3	Spring	971694
4	Wave Spring	8155
5	Locking Button	5519
6	Special Pin	5522
7	Guide Unit Only	5632
8	Socket Head Cap Screw [M5 x 13.39mm]	5210
9	Lifter Button	5209
10	Set Screw [M6 x 8mm]	6298
11	Bushing	5631
12	Punch Holder with Bushing	5628
13	Punch Holder Key	1862
14	Lock Washer	2112
15	Socket Head Cap Screw [M5 x 12mm]	6110
16	Disc Spring	971690
17	Socket Head Cap Screw [M12 x 55mm]	6026
18	Anti Lock Shim	5413
19	Retaining Ring	5747
20	Spring Support	5741
21	Spring Cover	5679
22	Disc Spring [7]	5449
23	Adjustment Shaft	5739
24	Wave Spring	971692
25	Driver	5742
26	Spring	972396
27	Adjustment Locking Ball	972420
28	Adjustment Button	5737
29	Retaining Ring	972441
30	O-Ring	972430

# **EDUCATIONAL OPPORTUNITIES**



## PROBLEM SOLVING NEWSLETTERS



Sign up for our e-newsletters, which deliver troubleshooting articles, application tips and tricks, industry highlights and more to your email inbox.

### EDUCATIONAL WEBINARS



Designed to help resolve specific fabrication and stamping issues, our webinars offer practical material to help solve real-world problems. And they are recorded so if you miss a live event, you can always go back and view the recording later.

### IN-PERSON SEMINARS



From seminars on implementing a Lean program at your facility to Fabrication Forums that offer an entire day of solution-based content, our seminars always receive high marks from the attendees for not only the information provided but also in the way it is presented.



### **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-sided 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

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 1.5 x 77, 2 x 83, 2.5 x 90, 3 x 98, 4 x 106, 5 x 118, 6 x 137, 8 x 156 and 10 x 170mm.

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/ Strippit 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 MEASURING EQUIPMENT

### 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 degree
- Set angles in .05 degree increments
- Front locking lever to hold the arm position
- 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

### **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.
А	Pack of 10	6083
В	Pack of 10	6084
С	Pack of 10	6085
D	Pack of 10	6086
Е	Pack of 10	6087
Sheet	6" x 12" [15.2 x 30.5 cm]	6108

### ALIGNMENT TOOLS, BALL RIDING AND BRUSH DIE



One tool is required to align each station.

	STATION	UPPER CAT. NO	LOWER CAT. NO
Α	[1/2"]	2597	2598
В	[1-1/4"]	2599	495



### SINGLE TRACK MACHINE ALIGNMENT TOOLS

Press Brake Compatible
Punch Press Compatible

Two tools are required to align each station — one in front of the station and one in back.

	STATION	CAT. NO
Α	[1/2"]	2601
В	[1-1/4"]	2602



### MULTIPLE TRACK MACHINE ALIGNMENT TOOLS

Press Brake Compatible
Punch Press Compatible

One tool is required to align each station.

:	STATION	UPPER CAT. NO	LOWER CAT. NO
С	[2"]	1840	1841
D	[3-1/2"]	1947	1948
Ε	[4-1/2"]	1949	1950
F	[6"]	2290	2291



### **ALIGNMENT TOOLS**

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.

S	STATION	BALL RIDING CAT. NO	BRUSH CAT. NO
Α	[1/2"]	2375	2760
В	[1-1/4"]	10685	2761
С	[2"]	14591	2762
D	[3-1/2"]	14582	2763
Ε	[4-1/2"]	14583	2764



### 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.



### **TOOL STORAGE CABINET**

### 8 DRAWER ARRANGEMENT & CAPACITY:

#### 3 drawers for 'A' station tooling:

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

#### 3 drawers for 'B' station tooling:

- 12 punch & guide assemblies (per drawer)24 dies & 12 additional punches (per drawer)

#### 1 drawer for 'C' & 'D' station tooling:

• 12 - 'C' or 'D' station punches, stripper plates & dies

1 drawer (9 compartments)
• 'E' or 'F' large station guide assemblies

Includes lock with two keys and forklift base.

#### Overall Dimensions:

42" high x 28" wide x 29" deep 107cm high x 71cm wide x 74cm deep



CABINET	CAT. NO.
Thick Turret	90001
OPTIONS	CAT. NO.
Plastic Drawer Liners	90002
Mobile Base	90003
Maple Top	90004
Cart Handle (1)	90005
Ribbed Rubber Mat	90006

### **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			

6158

24mm Punch & Die Holder



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



### **PUNCH AND DIE GRINDER**

This 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 horsepower 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: 40" x 48" [101 x 122cm]

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



### 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.
- Dimensions: 33" x 17" x 60"
- Weight 800 lbs.



### **NYLON VICE JAWS**

Press Brake Compatible

Punch Press Compatible



Used to aid in the assembly and maintenance of A & B Station Thick Turret style punch assemblies.

Cat. No. 24001

### **ASSEMBLY FIXTURE**

Press Brake Compatible

Punch Press Compatible



Ideal bench mounted aid for assembling and retaining a variety of assemblies. For C and D Stations.

Cat. No. 24162

### HP SPRING COMPRESSION KIT

Press Brake Compatible
Punch Press Compatible



Includes spring base, external circlip pliers, spacer sleeve, washer and M-12 bolt.

> Cat. No. 6940 For old style: Cat. No. 8104

### RUBBERIZED ABRASIVE WHEEL

Press Brake Compatible

Punch Press Compatible



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

Cat. No. 8050



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

Cat. No. 6055



### **PUNCH LUBRICANT**

Press Brake Compatible

Punch Press Compatible

Xcel 1 Liter Spray Bottle Cat. No. 24315

.....

Xcel 5 Liter Concentrate Cat. No. 24316



### SHEET LUBRICANT

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



### CUT-MAX 570

Press Brake Compatible
Punch Press Compatible

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

Cat. No. 6120



### **SURE SHOT SPRAYER**

Press Brake Compatible
Punch Press Compatible



### ADAPTERS



THICK TURRET 1-1/4" [B] to 1/2" [A] STATION ADAPTER			
DESCRIPT	TON	CAT. NO.	
Punch & Guide Assembly Adapter	(Keyed at 0° & 180°)	2284	
Die Adapter		2220	
Screw		2119	

THICK TURRET 2" [C] to 1-1/4" [B] STATIC	N ADAPTER
DESCRIPTION	CAT. NO.
Punch & Guide Assembly Adapter	2476
Die Adapter	2475
Screw	6206

THICK TURRET 3-1/2" [D] to 1-1/4" [B] STAT	ION ADAPTER
DESCRIPTION	CAT. NO.
Punch & Guide Assembly Adapter (not shown)	2492
Die Adapter	35058



THICK TURRET 4-1/2" [E] to 1-1/4" [B] STAT	ION ADAPTER
DESCRIPTION	CAT. NO.
Punch & Guide Assembly Adapter (not shown)	2680
Die Adapter	2681

### MAX. MATERIAL THICKNESS FOR ABOVE ADAPTERS

.135" [3.4mm] mild steel and aluminum .090" [2.3mm] stainless steel



Other style adapters are available, please consult our sales desk.





ROOFTOP



CONCAVE OR DOUBLE CONCAVE



INVERTED ROOFTOP



DOUBLE VALLEY



JK SHEAR



Best shear for punching at maximum tonnages.



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



Best shear for nibbling because it inverts stresses.



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



Good shear for nibbling because it inverts stresses.



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



Best shear for nibbling when shape is long and narrow.



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



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'	Inverted Rooftop Single Concave		Double Valley Double Concave	
JIAII	OIN	Dimension	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]		N/A		N/A
2"	(C)	Within 2.000" [50.8mm]				
3-1/2"	(D)	Within 3.500" [88.9mm]				
4-1/2"	(E)	Within 4.500" [114.3mm]				

SHEAR DETAILS	'A' DIMENSION	EXCEPTION
1/16" (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.	A	In some instances, inverted rooftop is substituted for single and double concave shears.
All punches .250" (6.35mm) and under in width will be shipped with no shear unless specified.		

### **JK SHEAR**

SHAPE	ADD ON PRICE
Round	
Rectangle, Square, Hexagon, Singe 'D', Double 'D'	
Obround	

### **SPECIAL SHEAR DETAILS**

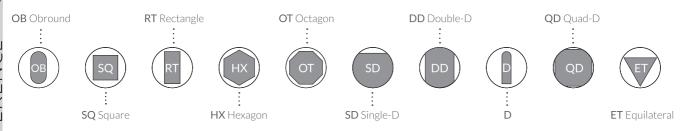
If specified: 1/8" (3.2mm) maximum rooftop shear can be given at N/C for any round or shape in 2"(C), 3-1/2"(D), 4-1/2"(E) or 6"(F) stations.

Rooftop shear available on any round or shape in 1/2"(A) or 1-1/4"(B) stations.

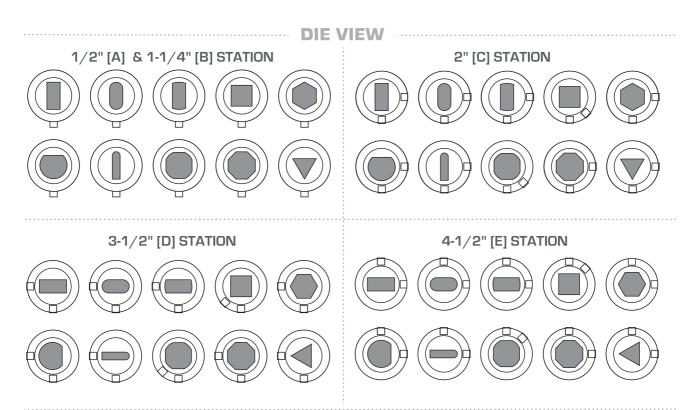


### STANDARD SHAPES & KEYING LOCATIONS

### STANDARD SHAPES

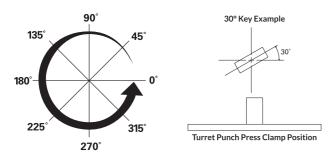


### STANDARD KEYING LOCATIONS





### **ISERIES TOOL KEYING DIAGRAM**



#### **Non-Standard Key Locations**

The example to the left shows a rectangle shape oriented at 30°. To ensure proper shape orientation, it is important that you refer to non-standard key locations by following this example.

SHAPE at single angles other than standard				
Station	Punch	Die	Guide or Stripper	
А	N/C		N/C	
В			Not Applicable	
С			Not Applicable	
D			Not Applicable	
Е			Not Applicable	

No additional charge on A & B stations for shape at 45° increments)

STANDARD keying, plus extra pins or keys for shapes at other than 45° increments				
Station	Punch	Die	Guide or Stripper	
А	Not Applicable	Not Applicable	/ key	
В	Not Applicable	Not Applicable	/ key	
С	/ pin	/ key	Not Applicable	
D	/ pin	/ key	Not Applicable	
Е	/ pin	/ key	Not Applicable	

STANDARD keying, plus extra pins or keys for shapes at 45° increments					
PUNCH		СН	DI	Cuido on	
Station	Available Options	Add On Price	Available Options	Add On Price	Guide or Stripper
А	Not Available	Not Available	Not Available	Not Available	/ key
В	0° & 45° 0° & 180°		0° & 45° 0° & 180°		/ key
С	45° increments	/ pin	45° increments	/ key	Not Applicable
D	45° increments	/ pin	45° increments	/ key	Not Applicable
Е	45° increments	/ pin	45° increments	/ key	Not Applicable

Die Clearance Selection Information								
	Total Clearance							
Material	Material 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

'A' ST	ATION		
Add on fo	r ROUND:	S	
Small Diameter	PUNCH	DIE	STRIPPER
.031061" [0.79 - 1.56mm]			N/C
.062092" [1.57 - 2.34mm]		N/C	N/C
Clearance < .004" [.10mm]			N/C
Add on fo	or SHAPES		
Small Width	PUNCH	DIE	STRIPPER
.031039" [0.79 - 1.0mm]			
.040092" [1.01 - 2.34mm]		N/C	
Clearance < .004" [0.10mm]			N/C

'B' ST	ATION					
Add on fo	Add on for ROUNDS					
Small Diameter	PUNCH	DIE	STRIPPER			
.031061" [0.79 - 1.56mm]			N/C			
.062092" [1.57 - 2.34mm]		N/C	N/C			
.093249" [ 2.35 - 6.32mm]		N/C	N/C			
Clearance < .004" [.10mm]			N/C			
Add on fo	or SHAPE:	5				
Small Width	PUNCH	DIE	STRIPPER			
.031039" [0.79 - 1.0mm]						
.040092" [1.01 - 2.34mm]		N/C				
'A' Dim < .437" [11.10mm]		N/C	N/C			
Clearance < .004" [0.10mm]			N/C			

'C' ST	ATION				
Add on fo	Add on for ROUNDS				
Small Diameter	PUNCH	DIE	STRIPPER		
<1.000" [ 25.4mm]		N/C	N/C		
Clearance < .004" [.10mm]	Clearance < .004" [.10mm] N/C				
Add on fo	or SHAPES	;			
Small Width	PUNCH	DIE	STRIPPER		
.031039" [0.79 - 1.0mm]					
.040092" [1.01 - 2.34mm]					
'A' Dim < 1.150" [29.21mm]		N/C	N/C		
Clearance < .004" [0.10mm]			N/C		

'D' STATION					
Add on fo	Add on for ROUNDS				
Small Diameter	PUNCH	DIE	STRIPPER		
<1.900" [ 48.26mm]		N/C	N/C		
Clearance < .004" [.10mm] N/C					
Add on fo	or SHAPES				
Small Width	PUNCH	DIE	STRIPPER		
.031039" [0.79 - 1.0mm]					
.040092" [1.01 - 2.34mm]	.040092" [1.01 - 2.34mm]				
'A' Dim < 1.150" [29.21mm]		N/C	N/C		
Clearance < .004" [0.10mm]			N/C		

'E' ST	ATION		
Add on fo	or ROUND:	S	
Small Diameter	PUNCH	DIE	STRIPPER
<3.400" [ 86.36mm]		N/C	N/C
Clearance < .004" [.10mm]			N/C
Add on f	or SHAPES	;	
Small Width	PUNCH	DIE	STRIPPER
.031039" [0.79 - 1.0mm]			
.040092" [1.01 - 2.34mm]			
'A' Dim < 1.150" [29.21mm]		N/C	N/C
Clearance < .004" [0.10mm]			N/C

RADIUS OR 45° CHAMFER 4 CORNERS				
RADIUS OR CHAMFER SIZE	PRICE			
.001062" [0.02 - 1.57mm]				
.063250" [1.58 - 6.35mm]				
> .25" [.10mm]				
RADIUS OR CHAMFER SIZE	PRICE			
Any Size				
	RADIUS OR CHAMFER SIZE .001062" [0.02 - 1.57mm] .063250" [1.58 - 6.35mm] > .25" [.10mm] RADIUS OR CHAMFER SIZE			

MAX 'A' DIMENSION	NOTES
	Round or shape punch options:  Extra straight before radius  Extra back taper  No back taper

## 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		



## SLUG HUGGER® 2 ELIMINATES COSTLY SLUG PULLING

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 lead us to develop the Slug Hugger® 2 die design which helps eliminate the very costly problem of slug pulling.



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.

Slug Hugger 2 dies help eliminate scrapped parts, costly downtime, and possible press and tooling damage due to slug pulling. Our unique design helps eliminate unnecessary back-pressure on small punch tips by preventing packed slugs. The Slug Hugger 2 design works on most material types and thicknesses including aluminum and stainless steel.





### **How Does it Work?**

The Slug Hugger 2 design grabs the slug just below the cutting surface of the die and retains it during the stripping process. Precision "nips" hold slugs in the die and when capacity is reached, one slug per hit is released through the relief.









### NOTES

### **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@wilsontool.com

### **NORTH AMERICA**

#### Wilson Tool - Canada

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#### Wilson Tool - Canada

Press Brake Division Tel: 800-268-4180 | Fax: 905-840-1032 Email: bending@wilsontoolcanada.com

### Wilson Tool - Mexico

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### Milling Ferramentas - Brazil

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### CHINA / PACIFIC RIM

### Wilson Tool - China

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### Toolspress - Italy

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