

The Ironworker Tooling MegaBook

Tooling for ALL Major Ironworker Brands

Piranha

Ironworker & Structural Tooling



For machines manufactured by: Buffalo™ • Bully™ • Clausing™ • Cleveland Steel Tool™ • Edwards™ • Controlled Automation™ • Davco™
Ficep™ • Franklin™ • Gairu™ • Geka™ • Hawthorne™ • Hendley & Whittemore™ • Hill-ACME™ • HMI™ • Ironcrafter™ • Kingsland™ • Kling™
Metal Muncher™ • Mubea™ • Omera™ • Omes™ • Peddinghaus™ • Piranha™ • Promoco™ • Scotchman™ • Spartan™ • Uni-Hydro™ • W.A. Whitney™

Genuine Piranha Tooling

Piranha Tooling



The name Piranha is synonymous with high quality ironworkers. In fact, Piranha has produced tens of thousands of ironworkers since the first ironworker was sold in 1973. With a large customer base and a wealth of application expertise, we understand the needs of today's ironworker users. This application expertise extends beyond the ironworker and into the tooling and accessories that make an ironworker perform for each unique circumstance.

Genuine Piranha tooling is available for all makes and models of ironworkers. Standard sizes of ironworker tooling are in stock and available for same-day shipment. In fact, all standard shapes of non-stock tooling will ship within 48 hours, regardless of size. We know that fast delivery is important to you, and we have created manufacturing methods to provide you with the fastest delivery in the industry.

Sometimes, a unique application requires custom tooling and accessories. We recognize that your ironworker is only as flexible as the tooling you use. We welcome the challenges associated with making unique tools that allow you to do those special applications. Whether the challenge is a special shaped punch, a unique formed hole, or an accessory that bends a unique section, we have the talent to design and build the tools to meet your needs.

We appreciate the opportunity to serve you, and we welcome the chance to earn your business. While our fast delivery may earn us your first order, our strong customer service and the high quality of our product may be the reason you decide to keep us as your preferred supplier.



1-800-435-2823
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Genuine Piranha Tooling

Hard-working tooling for your ironworker

Genuine Piranha Tooling

Set-up Information

Punch and Die Alignment

Alignment of the punch to the die is extremely important to the life of the tooling and quality of the hole being punched. Improperly aligned tools will cause premature wear.

Stripping Forces

Punch ends are usually broken off as a result of improper stripping. For good results the stripper must contact the material in at least two points, 180° apart *simultaneously*. Stripper should also be adjusted as close to material as possible.

Lubrication

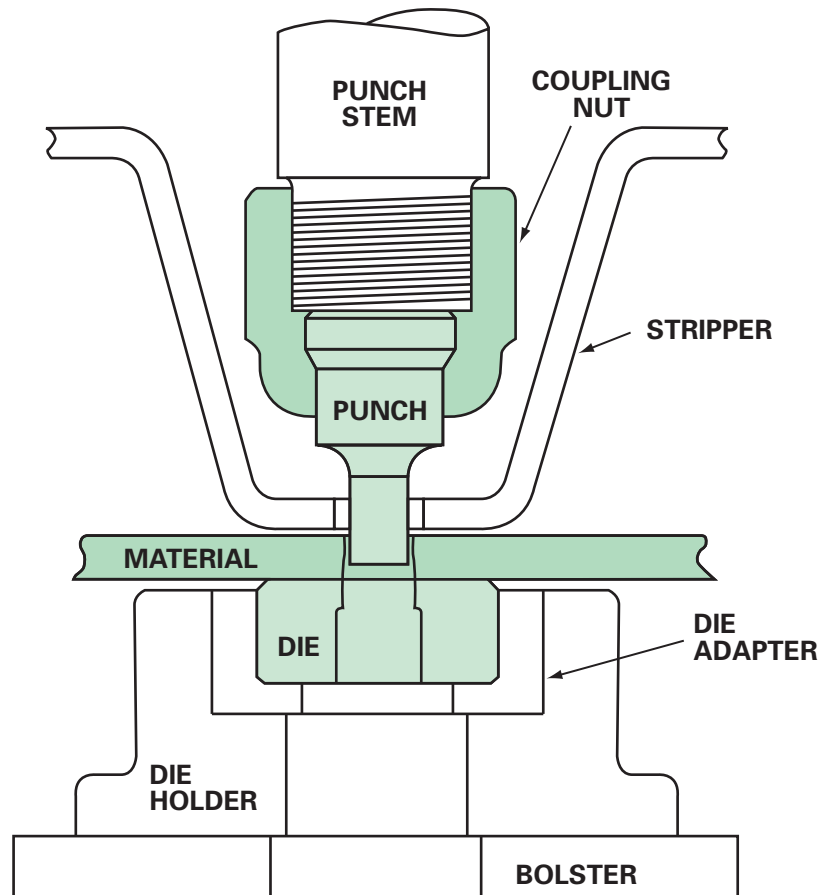
Lubricating the material and the punch with a good grade of cutting fluid will prolong the life of the tooling and reduce stripping forces. (Do not use penetrating oil)

Inspection

- * Check that punches mate with dies of proper clearance.
- * Clean all surfaces and holders.
- * Check for proper fit and tightness of coupling nut to punch stem.

Warning: It is the users responsibility to set up and use the machinery and tooling in accordance with local and national OSHA laws and ANSI B11.5 safety standards. Only qualified personnel should be allowed to set up and operate the machine. Use extreme caution at all times.

Caution: Extreme pressures can be generated in metal punching. Use approved guards and safety glasses.



Ironworker Dies

Clearances Recommended for Mild Steel

Material Thickness	Die Clearance
16 Ga. thru 5/32	1/64
3/16 thru 5/16	1/32
11/32 thru 1/2	1/16
17/32 thru 3/4	3/32
7/8 thru 1	1/8

Ironworker dies made to nominal size.

Determining Die Clearance

In order to receive optimum performance it is necessary that proper clearance be used. Without proper clearance, material will not fracture cleanly and excess punching pressures will result.



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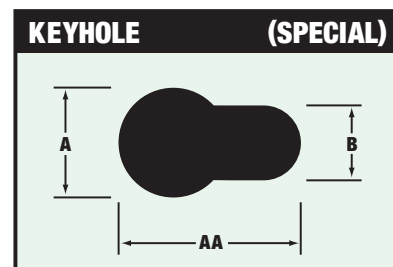
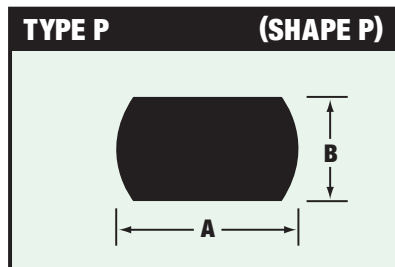
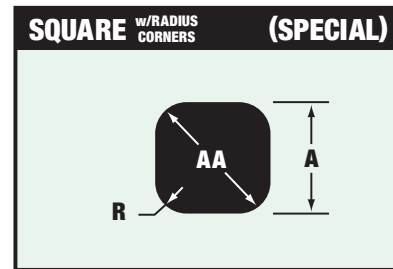
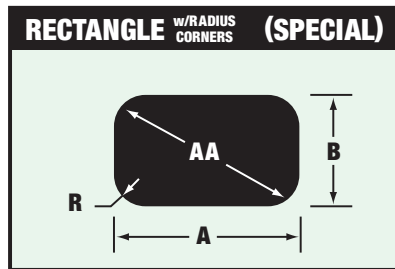
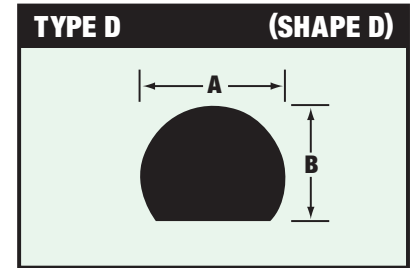
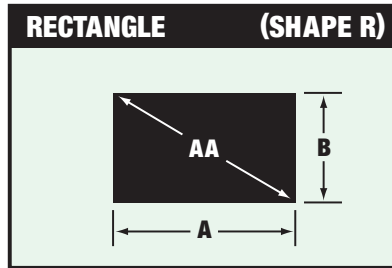
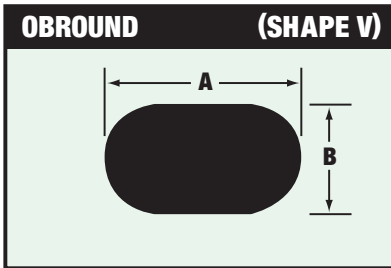
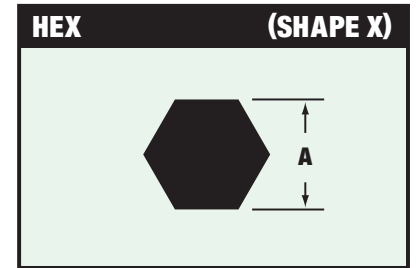
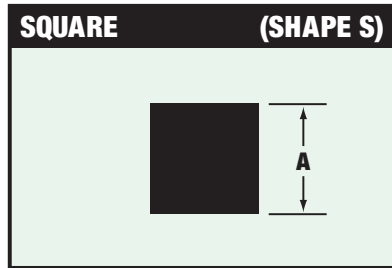
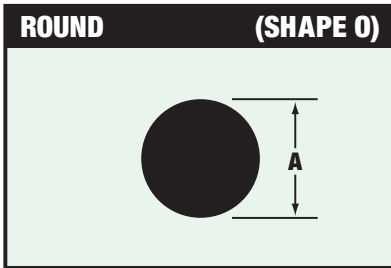
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Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



Shapes

All punches in this catalog can be made in any shape. Shown below are a few of the most commonly used shapes. Please call or fax your inquiries to us.



Genuine Piranha Tooling

Part Number Cross Reference Chart

Punch Part Numbers

Piranha™/ Whitney™	George F. Marchant™	Cleveland Punch & Die™	Cleveland Steel Tool™	Mubea™	Piranha™/ Whitney™	George F. Marchant™	Cleveland Punch & Die™	Cleveland Steel Tool™	Mubea™
BF	150-151	SR-20	DVP/UHP	-	TR	-	F-31	-	-
BJ	158	S.S.	BNP	-	TS	-	C-51/F-32	-	-
DE	34	F-12	216	-	TT	-	C-52	-	-
DH	37	F-16	219	H-1	TU	-	SP51P	51 MM	-
EA	40	F-20	221	H-2	TV	-	SP60P	60 MM	-
EF	45	F-26	228	-	TW	-	SP80P	80 MM	-
FF	55	F-9	P36	-	TX	-	SP90P	90 MM	-
FG	56	F-664	P66	-	TY	-	SP100P	100 MM	-
FJ	58	F-3T-10220	P3T	-	UP	-	C-400	67	-
PP	-	9010	9010KND	-	UY	-	C-48	234	-
PR	-	9011	9011KND	-	VP	-	C-50	237	-
PS	-	F-2	202	-	VR	-	SR-150	UHP2	-
PT	-	F-3	204	-	VT	-	C-53	239	-
PU	-	F-4	206	-	VU	-	C-54	240	-
PV	-	BF-10	BF10	-	VV	-	-	241	-
PW	-	F-6	207	-	VW	-	-	241 Punch Tip	-
PX	-	F-7	208	-	VX	-	H-3	H3	-
PY	-	C-282	65	-	VY	-	H-4	H4	-
PZ	-	C-292	292C	-	VZ	-	H-5	H5	-
RP	-	F-10	210	-	XV	-	F-GOS1	11	-
RR	-	F-11	-	-	XW	-	F-GOS2	12	-
RU	-	-	100 MM Punch Tip	-	XX	-	F-GOS3	13	-
RV	-	F-15	218	-	XY	-	-	13 Two Piece	-
RX	-	F-17	220	-	ZT	-	C-PFP3	-	-
RZ	-	F-19	222	-	ZZ	-	F-19L	-	-
SP	-	SR-200	DVP2	-	710	121	C-232/C-710	61	-
SR	-	F-21	223	-	720	122	C-242/C-720	62	-
ST	-	F-23	224	-	740	123	C-252/C-740	63	-
SX	-	F-26S	228 Short	-	770	124	C-272/C-770	64	-
SY	-	F-28	231	-	790XX	124-21B	C-790XX	64XX	-
SZ	-	F-29	-	-	7501	-	C-7501	66	-
TP	-	F-30	233	-					



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Part Number Cross Reference Chart

Die Part Numbers

Piranha™/ Whitney™	George F. Marchant™	Cleveland Punch & Die™	Cleveland Steel Tool™	Mubea™	Piranha™/ Whitney™	George F. Marchant™	Cleveland Punch & Die™	Cleveland Steel Tool™	Mubea™
BA	100	F-202	D66	-	XT	-	F-73	426	-
BB	101	F-203	D90	-	XU	-	F-74	428	-
BG	155	F-155	DVD/UHD	-	XZ	-	F-GOS1	11	-
HC	72	F-41	402	-	YP	-	F-GOS2	12	-
HH	77	F-46	408	-	YR	-	F-GOS3	13	-
JB	81	F-55	413	H-1	YS	-	F-GOS4	200 MM	-
JC	82	F-59	417	H-2	YT	-	SP80D	80 MM	-
JF	85	F-62	419	-	YU	-	SP110D	110 MM	-
JG	86	F-65	420	H-3	YV	-	SP150D	150 MM	-
JK	89	C-89	421	-	YW	-	SP250D	250 MM	-
KJ	98	F-200	D85	-	YY	-	C-88	-	-
KK	99	F-201	D14	-	ZP	-	C-90	-	-
RS	-	-	DVD 2	-	ZR	-	C-91MM	490	-
RT	-	F-123	-	-	ZS	-	C-92	423	-
SS	-	F-122	401	-	ZU	-	C-94	425	-
SU	-	F-124	404	-	ZV	-	F-9024	9024KND	-
SV	-	F-125	410	-	ZX	-	F-9025	9025KND	-
SW	-	Scotchman™ 6 x 6	6.5 x 6.5	-	ZY	-	F-9026	9026KND	-
TZ	-	F-130	-	-	ZW	-	C-96	427	-
US	-	F-42	403	-	710	130	C-231/C-710	49	-
UR	-	C-403	43	-	710 B.S.*	-	-	49B	-
UT	-	F-43	405	-	720	131	C-241/C-720	48	-
UU	-	C-400	44	-	720 B.S.*	131J	-	48B	-
UV	-	F-45	407	-	740	132	C-271/C-740	47	-
UW	-	C-291FS/291A3	291	-	740 B.S.*	132J	-	47B	-
VS	-	F-52	-	-	790XX	-	C-790XX	47XX	-
WP	-	F-60	418	-	7502	-	C-7502	46	-
WT	-	F-62S	60 MM	-	7602	-	C-7602	45	-
WR	-	H-4	H4	-					
WS	-	H-5	H5	-					
XR	-	F-71	422	-					
XS	-	F-72	424	-					

* Bevel Serrated Die

Genuine Piranha Tooling

Hard-working tooling for your ironworker

Genuine Piranha Tooling

Ironworker Tooling Quick Reference Chart

Manufacturer	Model	Uses Punch	Uses Die
Buffalo™ (See page 14)	0	FF	KJ
	1/2	FG	KK
	1-1/2	FG	BA
	2-1/2 thru 1952	EA	BB
	2-1/2 after 1952	FJ	BB
Clausing™	DP50, GB35, GB40, GB50, MM35, MM40, MM61	DH	JC
Metal Muncher™ (See page 17)	DP50/110, GB70, GB7018, GB100, GB10018, GB135, GB13518, MM70A, MM70A18, MM100A, MM100A18, MM135A, MM135A18	EF	JF
	ALTERNATIVE TOOLING	770	740
	OVERSIZED	28XX	28XX
Controlled Automation™ (See page 18)	ABL-86T	740 or 770	740
	ABL-100 65 Ton 115 Ton 143 Ton	740	740
		770	740
		EF	7502
	ABL-100-2 65 Ton 115 Ton 143 Ton	740	7502
		770	7502
		EF	7502
	BFC-522, BFC-530, PFP-115	770	740
2AT-175	770	740	
	7501	7502, 7602	
115-3	FJ	KJ or BB	
Davco™/Bully™ (See page 20)	ALL MODELS	DH	JC
	OVERSIZE ATTACHMENT	EF	JF
	CLOSEGAGE LINE	DH	KJ
	OPTIONAL ATTACHMENT	28XX	28XX
Edwards™/Hawthorne™ Cleveland Steel Tool™ (See page 21)	25 TON, 30 TON, 30 TON DUO, 50 TON, 50 TON DUO, 55 TON, 65 TON, 75 TON, 85 TON, 100 TON, 100 TON DELUXE, 115 TON, 125 TON SUPER	DH	JB
	OVERSIZED	EF, VV, VW	JF or 28XX
Ficep™ (See page 22)	SUPER 10, SUPER 10E	DH	HH
	SUPER 13	DH	JC
	SUPER 14, ST SUPER 16	EA	JC
	SUPER 16 & 20	EF	JF
	UIW-45, UIW-60	DH	JC
	UIW-80	EA	JC
	UIW-100	EF	JF



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Ironworker Tooling Quick Reference Chart

Manufacturer	Model	Uses Punch	Uses Die
Franklin™ (See page 23)	F530X3, W530X4	740	720
	F550X4, F570X6, F5100X6, W550X7, W570X8, W5100X12	770	740
	W5100X18, W5100X30	740	740
	F5125X6, F5175X6, F5175X12, F5275X12, W5125X12, W5175X18	7501	7502
	BL100-5, AFC5106, AFC5108, AFC5138	770	740
	PF196X72G	770 7501	740 7502
	SF70A	770	740
Gairu™ (See page 25)	MF10, SUPREMA 11, SUPREMA 13	DE	HH
	MF16, MF20, SUPREMA 16, SUPREMA 20	EA	JC
Geka™ (See page 26)	MICROCROP, MINICROP, MAXICROP, 11H, 13H, CEP 11, CEP13, HYDRACROP 50, HYDRACROP 70, PUMA 11, PUMA 13, PUMA50H, PUMA70H	DH	JC
	MULTI 11	PX	UT
	16H, 20H, CEP16, CEP20, HYDRACROP 100, PUMA16, PUMA20, PUMA100H	EA	JC
	25H, HYDRACROP 150, HYDRACROP 165, HYDRACROP 200, HYDRACROP 220, PUMA 150H, PUMA 165H, PUMA200H, PUMA 220H	EF	JK
	PUMA 55H, PUMA 80, DUAL STATIC, 55A,80A	EA SX	JC WT
	PUMA 110H, PUMA 110A	EA EF	JC JK
	OVERSIZED	XV XW XX XY (2 pcs)	XZ YP YR YS
Hendley & Whittemore™ (See page 28)	51, 52	PX	HH
	53	DE	HH
	54	DE	JC
	55	EA	JC
	55-1/2	EF	JF

Genuine Piranha Tooling

Ironworker Tooling Quick Reference Chart

Manufacturer	Model	Uses Punch	Uses Die
Hill-ACME™/Kling™ (See page 29)	#3 COMBINATION	PX	HH HC
	#3, #30, MW30	DE	HH HC
	#3A, #4, #4 COMBINATION	EA	HH HC
	#4A, #5, #50, MW50, #6, #6A	EA	JC HC HH
	#7, #7A, #7 COMBINATION	EF	JF HH
HMI™ (Hydraulic Machines Inc.) (See page 30)	35-19, 35-20, 35DT-19, 35DT-20	DH	JC
	42-20, 4214-20	EA	JC
	3514, 35017, 50-19, 50-20, 50-25, 50-31, 50DT-19, 50DT-20, 5007, 5010-25, 58-20, 5810-25, 5814-20, 7025, 70-31, 7010-25, 7014, 7810-25, 90-25, 90-31, 9010-25, 9014, 9510-25, 110-25, 110-31, 11014, 11810-25, 130-25, 130-31, 13014	EF	JF
	OVERSIZED	28XX	28XX
Ironcrafter™ (See page 31)	40	720 740	720 740
	30-41-50-70-95	EA	JC
	120-150	EF	JF
	OVERSIZED	VP 28XX	ZR 28XX
Kingsland™ (See page 32)	COMPACT 50, COMPACT 65, J14/A or B, J18/GXA or B, J21/GXA or B, J25/GXA or B, 60DP, 75DP, 95DP, 125DP, 60P625, 75P625, 95P625, 125P625, 175P625, 50XA, 65XA, 45XM, 60XS, 75XS, 95XS, 125XS, 175XS, SHARK, ULTIMA MODELS	EA EF	JF JC*
	OVERSIZED	VP PP PR	XR ZV ZX ZY

* Die adapter required



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Ironworker Tooling Quick Reference Chart

Manufacturer	Model	Uses Punch	Uses Die
Mubea™ (See page 33)	BF10, 350	PV	JB
	BFL 350	DH	JB
	BFLH 400	DH	JB
	HIW 450, 550, 600, 750; HP 450; HPS 250, 350, 350E	DH	JB
	HPSN 350, 450, 500, 600	DH	JB
	KBL 1/2, 0, 1-1/2, 48-4, 50-4, 71-5, 88-6, 560	DH	JB
	KBLH 500, 700; KL 33, 350, 560, 750; KLH 500, 700; KLSH 550	DH	JB
	MIW 400, 600, 800; PROFI 500	DH	JB
	BULLDOG 65	DH	JC
	HIW 1000	EA VX	JC JG
	KBL 3-1/2, 110-7, 143-8, 900, 1300	EA VX	JC JG
	KBLH 1000	EA VX	JC JG
	KL 110, 143, 900, 1100, 1300	EA VX	JC JG
	KLH 1000	EA VX	JC JG
	KLS 1100	EA VX	JC JG
	KLSH 1000	EA VX	JC JG
OVERSIZED	VY VZ	WR WS	
Omera™ (See page 35)	M-10, OM1/2	115-35S, 13-45S	EA JC
	16-70S	20-95S	EF JF
Peddinghaus™ (See page 36)	Ironworkers		
	FORAX 25E, FORAX 45, FORAX 65, 210/11, 210/13, 225/11, 225/13, 225B45, 225B60, 450M, 31/44, 44/66H, 66/88, 66/110H, 88/120, 360H, 400H, 440, 550, 660, 880, H40, H60N	DE	JB
	FORAX 80, FORAX 100, 210/16, 210/20, 225/16, 225/20, 225B80, 225B100, 88/140, 110/140, 110/175H, 120/185, 881, H100, H1000, H1000GA, 1050, G1100, H1100	EA	JC
	BRADLEY 500, 700, 1100	EA	JC
	210/25, 225/25, 225B130, H1400	EF	JF
	H140	EF	JG
OVERSIZED	VP	ZR	
Anglemaster, Fabripunch, Fabriline (Portables) & others see next page			

Genuine Piranha Tooling

Ironworker Tooling Quick Reference Chart

Manufacturer	Model	Uses Punch	Uses Die
Peddinghaus™ (See page 38)	Anglemaster		
	623, 645	770	740
	823	770 PY	740 UW
	823B	PY	UW
	1563, 2063	770 PY	740
	Fabripunch		
	118, 120	770 PY	740
	500/3, 1120, 1154, 1154-30	770 PY	JF
	600/3, 1170, 1500/3, 1800/3	770 PZ	740 UW
	Fabriline (Portables)		
	FP6	710	710
	FP12, FP20, FP20-4, FP20-6, WP20	720	720
	FP35, FP35-8,	740	740
	FP35CC, WP35	740	720
	FP45, FP60, FP80, FP80-9, FP100	770 PY	740
	FP100-12, WP60, WP80, WP100, WP100-18, WP100-25	770 PY	740 4902
	STATIONARY 140	PZ	JK
	WP140	PZ	UW
	WP140-12-1/2, FP140-6-1/4, FP140-12-1/2	UP	UU
	FP250-12-1/2	UP	UR
	Other Peddinghaus Machines		
	7130 DUPLICATOR	770	740
	BEAM FABRICATOR	PY	4902
2000CNCBPL1000/5	770 PY	740 JF	
<i>Ironworkers see previous page</i>			
Piranha™ (See page 41)	P-2, P-3, P-36, P-40, P-50, PII-35, SEPP-35	DH	JB
	P-4, P-70, P-90, P-120, PII-35, PII-65, PII-88, PII-110, PII-140, SEPP-35, SEPP-65, SEPP-88, SEP-120, SEPP-140	EF	JF
	1-1/2 OVERSIZED	EF	JF
	28XX OVERSIZED ATTACHMENTS: 2-3/4, 3-3/4, 4-3/4, 5-3/4	28XX 59 STYLE 64 STYLE	28XX
Promoco™/Omes™ (See page 46)	CH50	DH	JB
	CH70/CH100	EA	JC



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Ironworker Tooling Quick Reference Chart

Manufacturer	Model	Uses Punch	Uses Die
Scotchman™ (See page 47)	207, 314, 314C6, 314T, 424, 4014C, 4014CM, 4014T, 4060B, 5014, PRO-FAB 45	BF	BG
	2450, 5024, 5075, 6012, 6509, 7012, 7575, 9012, 9075, 12012, 9012, 9075, 12012, FI-5009, FI-5109, FI-6008, FI-8507, DO-70, DO-100, XL MODELS	EA	JC
	1-1/2 OVERSIZED	EF	JG
	OVER 1-1/2 OVERSIZED	SP	RS XR SW
Spartan™ (See page 50)	SINGLE CYLINDER MACHINES MANUFACTURED PRIOR TO 2000	EA EF	JB JF
	SINGLE CYLINDER MACHINES	EA	JB
	DUAL CYLINDER MACHINES	EF	JF
	OVERSIZED	TU	YT
		TV	YU
		TW	YV
TX		YS	
TY	YW		
Uni-Hydro™ (See page 52)	All Models	BF	BG
	OVER 1-1/2 OVERSIZED	VR VP	JG XR ZR
W.A. Whitney™ (See page 53)	705	710	710 1102
	710, 720, 720X4, 720X6, 721	720	720 2102
	710CC	720	710 1102
	730CC, 730X8CC, 731	740	720 2102
	730, 730X8, 750, 751	740	740 4102
	750AX6, 751AX7, 771AX9, 790AX6, 791AX18, 791AX30	770	740 4102
		790XX	790XX
	770, 771, 790, 790X6, 791, 791X18	770	740 4102
	7150AX6, 7151AX12	770	7502
		790XX 7501	8XXX (B.S.7502)*
	7150AX12	770	7602
		790XX 7501	8XXX (B.S.7602)*
	7250AX12	7501	7602
			8XXX (B.S.7602)*
ANGLEMATIC	770	740	
	790XX	790XX	
BEAMLIN	770	740 4102	
	790XX	790XX	
PLATE DUPLICATOR	770	740	
	790XX	790XX	

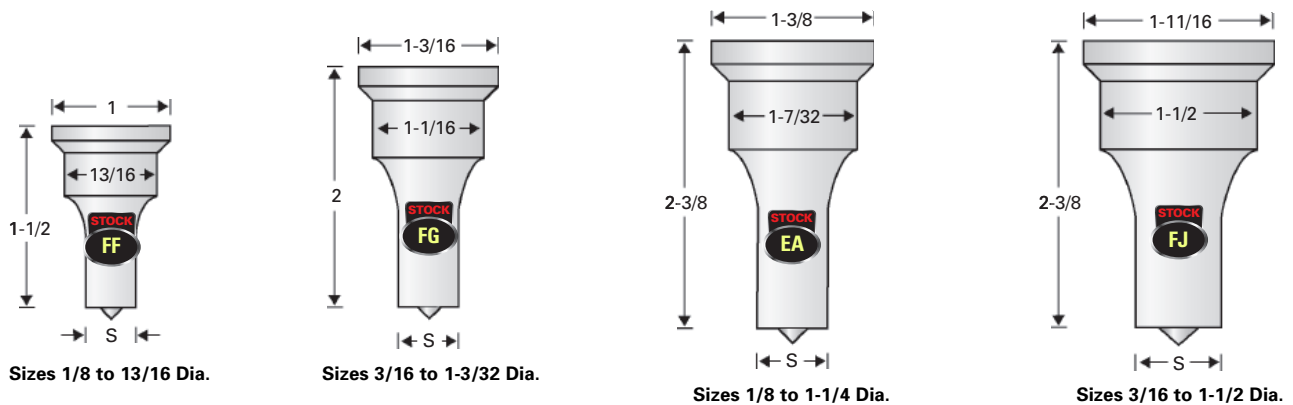
* B.S. = Bevel Serrated Die

Genuine Piranha Tooling

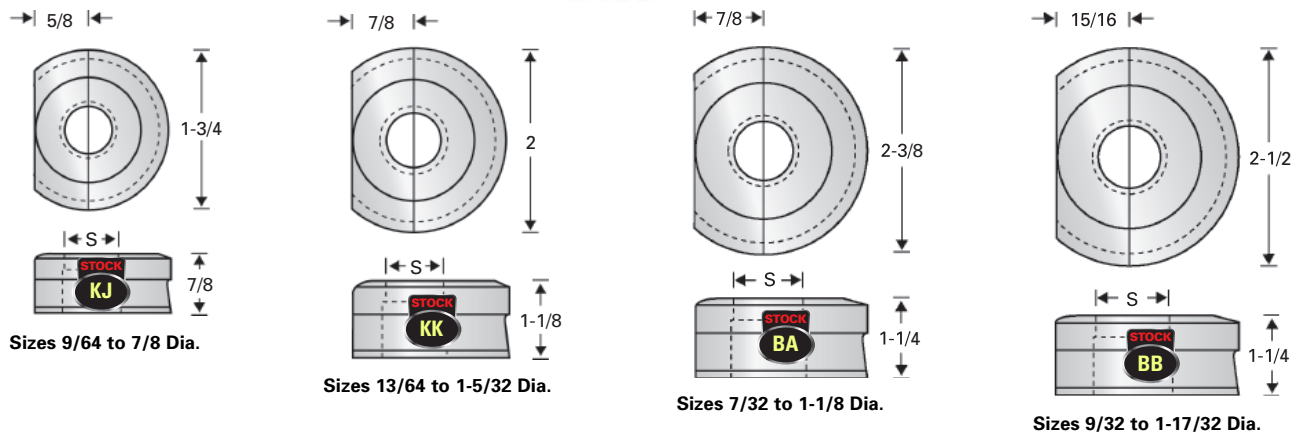
Tooling for Buffalo™ Machines

Model	Uses Punch	Uses Die
0	FF	KJ
1/2	FG	KK
1-1/2	FG	BA
2-1/2 thru 1952	EA	BB
2-1/2 after 1952	FJ	BB

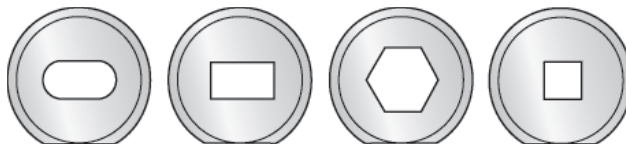
Punches



Dies



Please note: Dies with obround and rectangular holes are produced with the long dimension of shape parallel to flat unless other orientation is requested.



Orientation of shaped holes relative to flat side of die



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Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



Tooling for Buffalo™ Machines

Stock Round Punches

Size	FF	FG	EA	FJ
1/8	•	•	•	
5/32	•	•	•	•
3/16	•	•	•	•
7/32	•	•	•	•
1/4	•	•	•	•
9/32	•	•	•	•
5/16	•	•	•	•
11/32	•	•	•	•
3/8	•	•	•	•
13/32	•	•	•	•
7/16	•	•	•	•
15/32	•	•	•	•
1/2	•	•	•	•
17/32	•	•	•	•
9/16	•	•	•	•
19/32	•	•	•	•
5/8	•	•	•	•
21/32	•	•	•	•
11/16	•	•	•	•
23/32	•	•	•	•
3/4	•	•	•	•
25/32	•	•	•	•
13/16	•	•	•	•
27/32	•	•	•	•
7/8	•	•	•	•
29/32	•	•	•	•
15/16	•	•	•	•
31/32	•	•	•	•
1	•	•	•	•
1-1/32	•	•	•	•
1-1/16	•	•	•	•
1-3/32	•	•	•	•
1-1/8	•	•	•	•
1-5/32	•	•	•	•
1-3/16	•	•	•	•
1-1/4	•	•	•	•
1-5/16	•	•	•	•
1-3/8	•	•	•	•
1-7/16	•	•	•	•
1-1/2	•	•	•	•

Stock Obround Punches

Size	FF	FG	EA	FJ
3/16 x 1		•	•	
7/32 x 1		•	•	
1/4 x 1/2		•	•	
1/4 x 1		•	•	
9/32 x 9/16		•	•	
9/32 x 1		•	•	
5/16 x 5/8		•	•	
5/16 x 3/4	•	•	•	
5/16 x 1		•	•	
11/32 x 11/16		•	•	
11/32 x 1		•	•	
3/8 x 1/2		•	•	
3/8 x 3/4	•	•	•	
3/8 x 1		•	•	
13/32 x 13/16		•	•	
13/32 x 1		•	•	
7/16 x 9/16		•	•	
7/16 x 3/4		•	•	•
7/16 x 13/16	•	•	•	
7/16 x 7/8		•	•	•
7/16 x 1		•	•	•
7/16 x 1-1/4		•	•	•
7/16 x 1-1/2		•	•	•
15/32 x 1		•	•	•
1/2 x 3/4		•	•	•
1/2 x 1		•	•	•
1/2 x 1-1/4		•	•	•
1/2 x 1-1/2		•	•	•
17/32 x 1		•	•	•
17/32 x 1-1/4		•	•	•
17/32 x 1-1/2		•	•	•
9/16 x 3/4		•	•	•
9/16 x 13/16	•	•	•	
9/16 x 1		•	•	•
9/16 x 1-1/16		•	•	•
9/16 x 1-1/4		•	•	•
9/16 x 1-1/2		•	•	•
5/8 x 1		•	•	•
5/8 x 1-1/4		•	•	•
5/8 x 1-1/2		•	•	•
11/16 x 1		•	•	•
11/16 x 1-1/16		•	•	•
11/16 x 1-1/4		•	•	•
11/16 x 1-1/2		•	•	•
3/4 x 1		•	•	•
3/4 x 1-1/4		•	•	•
3/4 x 1-1/2		•	•	•
13/16 x 1		•	•	•
13/16 x 1-1/16		•	•	•
13/16 x 1-3/16		•	•	•
13/16 x 1-1/4		•	•	•
13/16 x 1-1/2		•	•	•
7/8 x 1		•	•	•
7/8 x 1-1/4		•	•	•
7/8 x 1-1/2		•	•	•
15/16 x 1-1/4		•	•	•
15/16 x 1-1/2		•	•	•
1 x 1-1/4		•	•	•
1 x 1-1/2		•	•	•
1-1/16 x 1-1/2		•	•	•

Stock Square Punches

Size	FF	FG	EA	FJ
1/4	■	■	■	
9/32	■	■	■	
5/16	■	■	■	
11/32	■	■	■	
3/8	■	■	■	
13/32	■	■	■	
7/16	■	■	■	
15/32	■	■	■	
1/2	■	■	■	
17/32	■	■	■	
9/16	■	■	■	
19/32	■	■	■	
5/8	■	■	■	
21/32	■	■	■	
11/16	■	■	■	
23/32	■	■	■	
3/4	■	■	■	
25/32	■	■	■	
13/16	■	■	■	
27/32	■	■	■	
7/8	■	■	■	

• ■ Same-Day Shipment Sizes

Genuine Piranha Tooling

Hard-working tooling for your ironworker

Genuine Piranha Tooling

Tooling for Buffalo™ Machines

Stock Round Dies

Size	KJ	KK	BA	BB
5/32	•	•	•	•
3/16	•	•	•	•
7/32	•	•	•	•
1/4	•	•	•	•
9/32	•	•	•	•
5/16	•	•	•	•
11/32	•	•	•	•
3/8	•	•	•	•
13/32	•	•	•	•
7/16	•	•	•	•
15/32	•	•	•	•
1/2	•	•	•	•
17/32	•	•	•	•
9/16	•	•	•	•
19/32	•	•	•	•
5/8	•	•	•	•
21/32	•	•	•	•
11/16	•	•	•	•
23/32	•	•	•	•
3/4	•	•	•	•
25/32	•	•	•	•
13/16	•	•	•	•
27/32	•	•	•	•
7/8	•	•	•	•
29/32	•	•	•	•
15/16	•	•	•	•
31/32	•	•	•	•
1	•	•	•	•
1-1/32	•	•	•	•
1-1/16	•	•	•	•
1-3/32	•	•	•	•
1-1/8	•	•	•	•
1-5/32	•	•	•	•
1-3/16	•	•	•	•
1-7/32	•	•	•	•
1-1/4	•	•	•	•
1-9/32	•	•	•	•
1-5/16	•	•	•	•
1-11/32	•	•	•	•
1-3/8	•	•	•	•
1-13/32	•	•	•	•
1-7/16	•	•	•	•
1-15/32	•	•	•	•
1-1/2	•	•	•	•
1-17/32	•	•	•	•
1-9/16	•	•	•	•

• • ■ Same-Day
Shipment Sizes

Stock Obround Dies

Size	KJ	KK	BA	BB
7/32 x 1-1/32	•	•	•	•
1/4 x 1-1/32	•	•	•	•
9/32 x 17/32	•	•	•	•
9/32 x 1-1/32	•	•	•	•
5/16 x 19/32	•	•	•	•
5/16 x 1-1/32	•	•	•	•
11/32 x 21/32	•	•	•	•
11/32 x 25/32	•	•	•	•
11/32 x 1-1/32	•	•	•	•
3/8 x 23/32	•	•	•	•
3/8 x 1-1/32	•	•	•	•
13/32 x 17/32	•	•	•	•
13/32 x 25/32	•	•	•	•
13/32 x 1-1/32	•	•	•	•
7/16 x 27/32	•	•	•	•
7/16 x 1-1/32	•	•	•	•
15/32 x 19/32	•	•	•	•
15/32 x 25/32	•	•	•	•
15/32 x 27/32	•	•	•	•
15/32 x 29/32	•	•	•	•
15/32 x 1-1/32	•	•	•	•
15/32 x 1-9/32	•	•	•	•
15/32 x 1-17/32	•	•	•	•
1/2 x 1-1/32	•	•	•	•
17/32 x 25/32	•	•	•	•
17/32 x 1-1/32	•	•	•	•
17/32 x 1-9/32	•	•	•	•
17/32 x 1-17/32	•	•	•	•
9/16 x 1-1/32	•	•	•	•
9/16 x 1-9/32	•	•	•	•
9/16 x 1-17/32	•	•	•	•
19/32 x 25/32	•	•	•	•
19/32 x 27/32	•	•	•	•
19/32 x 1-1/32	•	•	•	•
19/32 x 1-3/32	•	•	•	•
19/32 x 1-9/32	•	•	•	•
19/32 x 1-17/32	•	•	•	•
5/8 x 1-1/16	•	•	•	•
5/8 x 1-5/16	•	•	•	•
5/8 x 1-9/16	•	•	•	•
21/32 x 1-1/32	•	•	•	•
21/32 x 1-9/32	•	•	•	•
21/32 x 1-17/32	•	•	•	•
11/16 x 1-1/16	•	•	•	•
11/16 x 1-5/16	•	•	•	•
11/16 x 1-9/16	•	•	•	•
23/32 x 1-1/32	•	•	•	•
23/32 x 1-3/32	•	•	•	•
23/32 x 1-9/32	•	•	•	•
23/32 x 1-17/32	•	•	•	•

Stock Obround Dies

Size	KJ	KK	BA	BB
3/4 x 1-1/16	•	•	•	•
3/4 x 1-5/16	•	•	•	•
3/4 x 1-9/16	•	•	•	•
25/32 x 1-1/32	•	•	•	•
13/16 x 1-1/16	•	•	•	•
13/16 x 1-5/16	•	•	•	•
13/16 x 1-9/16	•	•	•	•
27/32 x 1-1/32	•	•	•	•
27/32 x 1-3/32	•	•	•	•
27/32 x 1-9/32	•	•	•	•
27/32 x 1-17/32	•	•	•	•
7/8 x 1-1/16	•	•	•	•
7/8 x 1-1/4	•	•	•	•
7/8 x 1-5/16	•	•	•	•
7/8 x 1-9/16	•	•	•	•
29/32 x 1-1/32	•	•	•	•
15/16 x 1-1/16	•	•	•	•
15/16 x 1-5/16	•	•	•	•
15/16 x 1-9/16	•	•	•	•
31/32 x 1-9/32	•	•	•	•
31/32 x 1-17/32	•	•	•	•
1 x 1-5/16	•	•	•	•
1 x 1-9/16	•	•	•	•
1-1/16 x 1-5/16	•	•	•	•
1-1/16 x 1-9/16	•	•	•	•
1-1/8 x 1-9/16	•	•	•	•

Stock Square Dies

Size	KJ	KK	BA	BB
9/32	■	■	■	■
5/16	■	■	■	■
11/32	■	■	■	■
3/8	■	■	■	■
13/32	■	■	■	■
7/16	■	■	■	■
15/32	■	■	■	■
1/2	■	■	■	■
17/32	■	■	■	■
9/16	■	■	■	■
19/32	■	■	■	■
5/8	■	■	■	■
21/32	■	■	■	■
11/16	■	■	■	■
23/32	■	■	■	■
3/4	■	■	■	■
25/32	■	■	■	■
13/16	■	■	■	■
27/32	■	■	■	■
7/8	■	■	■	■



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Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



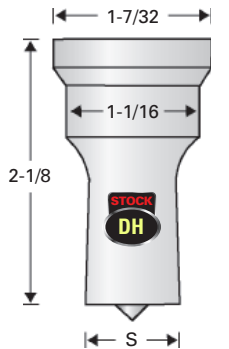
Tooling for Clausing™/Metal Muncher™ Machines

Model	Uses Punch	Uses Die
DP50, GB35, GB40, GB50, MM35, MM40, MM61	DH	JC
DP50/110, GB70, GB7018, GB100, GB10018, GB135, GB13518, MM70A, MM70A18, MM100A, MM100A18, MM135A, MM135A18	EF	JF
ALTERNATIVE TOOLING	770	740
OVERSIZED	28XX	28XX

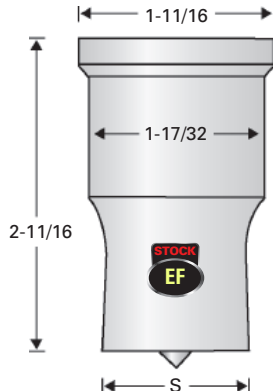
28XX TOOLING
See pages 60 to 62

Punches

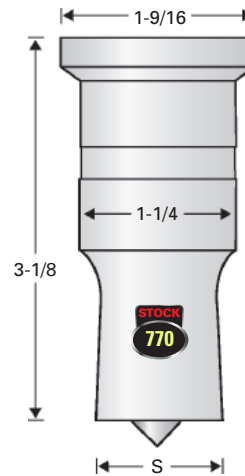
See pages 70 - 71 for stock sizes of punches.



Sizes 1/8 to 1-1/8 Dia.



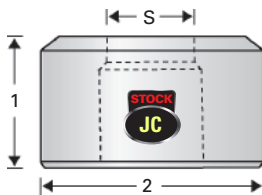
Sizes 1/8 to 1-9/16 Dia.



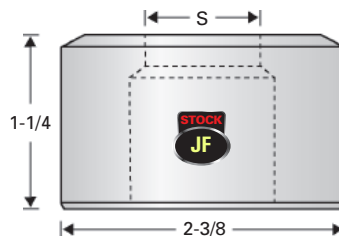
Sizes 7/32 to 1-1/2 Dia.

Dies

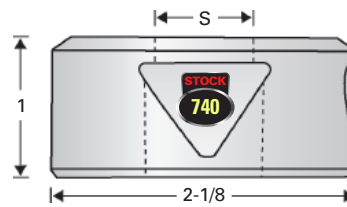
See pages 74 - 75 for stock sizes of dies.



Sizes 9/64 to 1-3/8 Dia.



Sizes 7/32 to 1-5/8 Dia.



Sizes 7/32 to 1-17/32 Dia.

Genuine Piranha Tooling

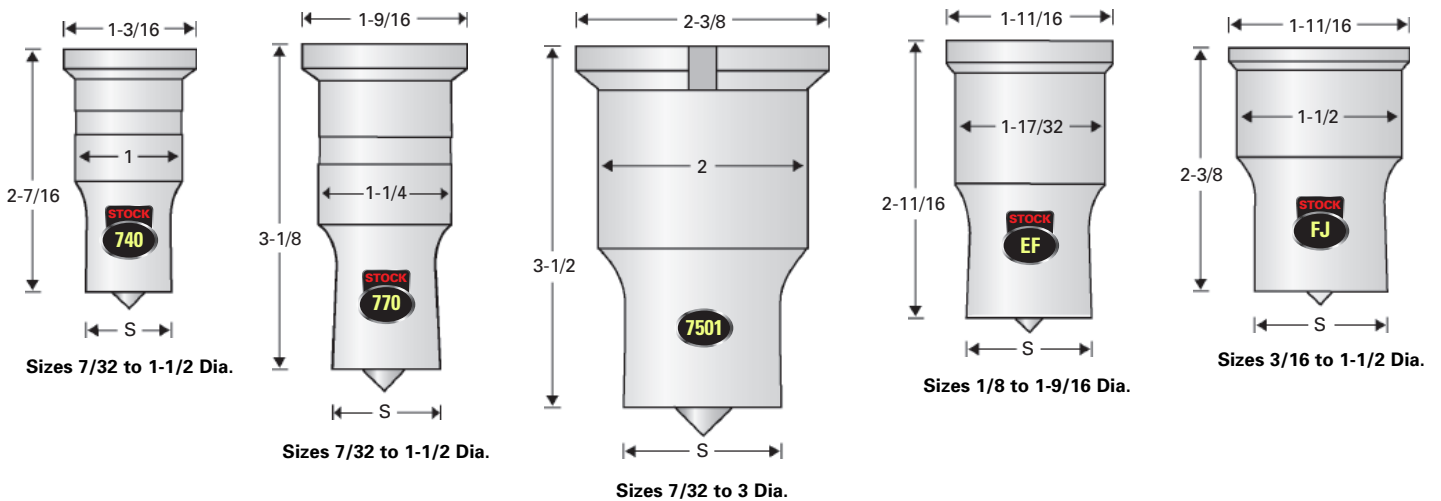
Hard-working tooling for your ironworker

Genuine Piranha Tooling

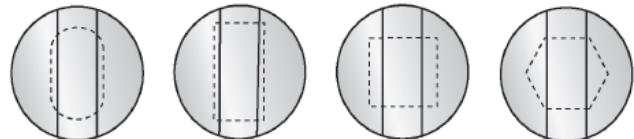
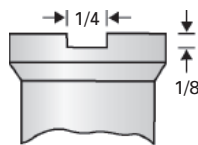
Tooling for Controlled Automation™ Machines

Model		Uses Punch	Uses Die
ABL-86T		740 or 770	740
ABL-100	65 Ton	740	740
	115 Ton	770	740
	143 Ton	EF	7502
ABL-100-2	65 Ton	740	7502
	115 Ton	770	7502
	143 Ton	EF	7502
BFC-522, BFC-530, PFP-115		770	740
2AT-175		770	740
		7501	7502, 7602
115-3		FJ	KJ or BB

Punches



Please note: Keyways allow for the easy alignment of shaped punches. Controlled Automation shaped punches are produced with a 1/4" wide by 1/8" deep keyway. If machine brand is not stated no keyway will be provided.



Orientation of standard keyways relative to shapes



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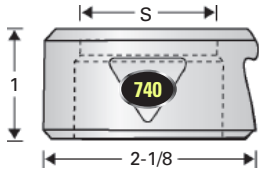
Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



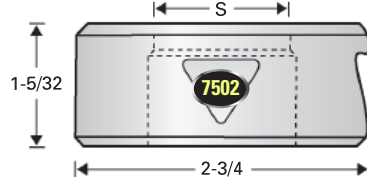
Tooling for Controlled Automation™ Machines

Dies

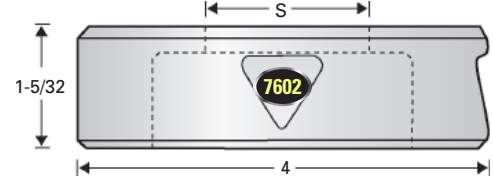
See pages 74 - 75 for stock sizes of dies.



Sizes 7/32 to 1-17/32 Dia.

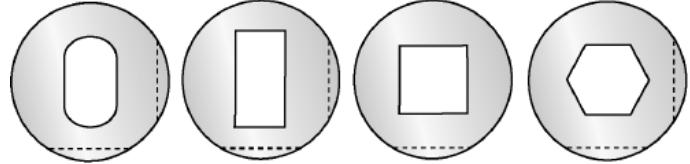
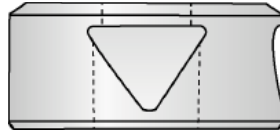


Sizes 7/32 to 2 Dia.

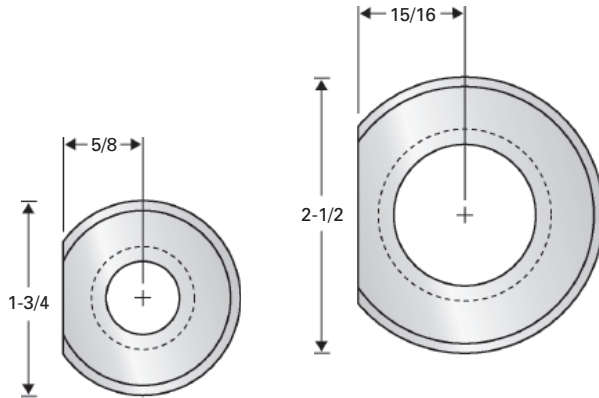


Sizes 7/32 to 3-1/16 Dia.

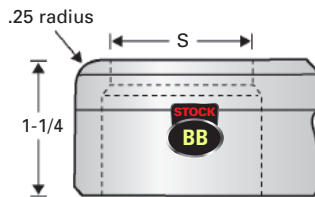
Please note: Whistle notches allow for the easy alignment of shaped dies. Controlled Automation shaped dies are produced with a whistle notch. If machine brand is not stated no whistle notch will be provided.



Orientation of standard whistle notches relative to shapes

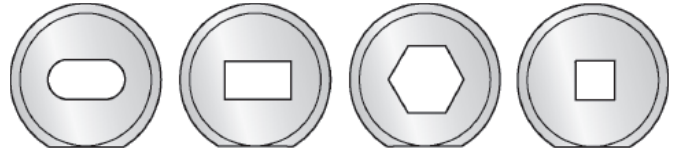


Sizes 9/64 to 7/8 Dia.



Sizes 9/32 to 1-17/32 Dia.

Please note: Dies with obround and rectangular holes are produced with the long dimension of shape parallel to flat unless other orientation is requested.



Orientation of shaped holes relative to flat side of die

Genuine Piranha Tooling

Hard-working tooling for your ironworker

Genuine Piranha Tooling

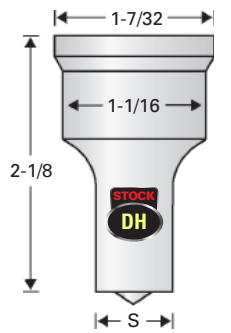
Tooling for Davco™/Bully™ Machines

Model	Uses Punch	Uses Die
ALL MODELS	DH	JC
OVERSIZE ATTACHMENT	EF	JF
CLOSEGAGE LINE	DH	KJ
OPTIONAL ATTACHMENT	28XX	28XX

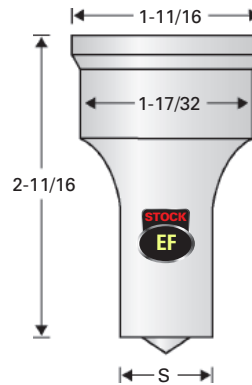
**28XX
TOOLING**
See pages
60 to 62

Punches

See pages 70 - 71
for stock sizes
of punches.



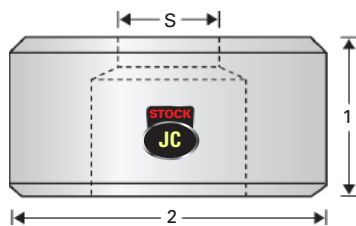
Sizes 1/8 to 1-1/8 Dia.



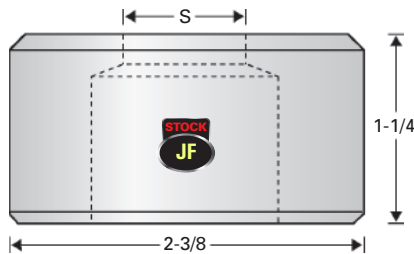
Sizes 1/8 to 1-9/16 Dia.

Dies

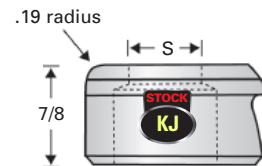
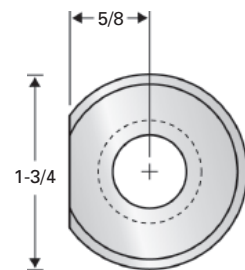
See pages 74 - 75
for stock sizes
of dies.



Sizes 9/64 to 1-3/8 Dia.

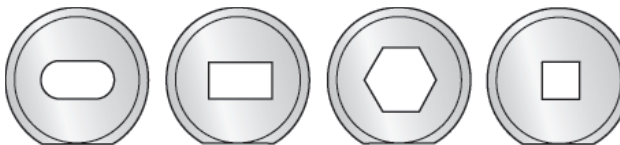


Sizes 7/32 to 1-5/8 Dia.



Sizes 9/64 to 7/8 Dia.

Please note: Dies with obround and rectangular holes are produced with the long dimension of shape parallel to flat unless other orientation is requested.



Orientation of shaped holes relative to flat side of die



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Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



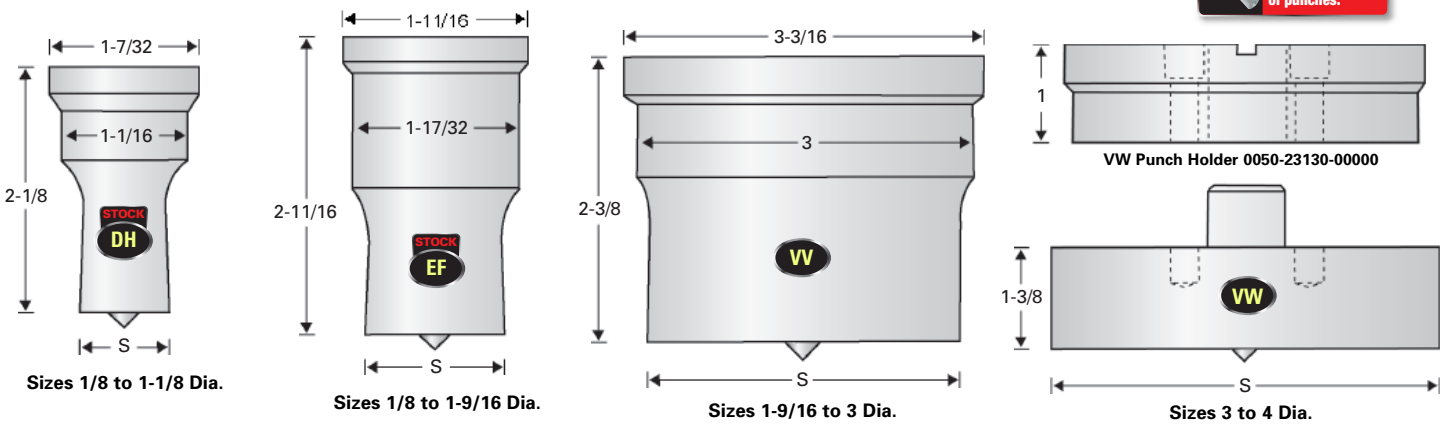
Tooling for Edwards™, Hawthorne™ & Cleveland Steel Tool™ Machines

Model	Uses Punch	Uses Die
25 TON, 30 TON, 30 TON DUO, 50 TON, 50 TON DUO, 55 TON, 65 TON, 75 TON, 85 TON, 100 TON, 100 TON DELUXE, 115 TON, 125 TON SUPER	DH	JB
OVERSIZED	EF, VV, VW	JF or 28XX

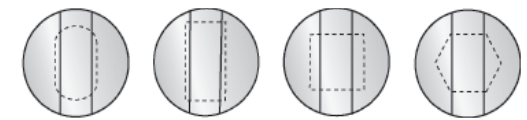
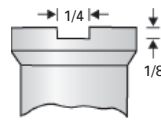
28XX TOOLING
See pages 60 to 62

Punches

See pages 70 - 71 for stock sizes of punches.



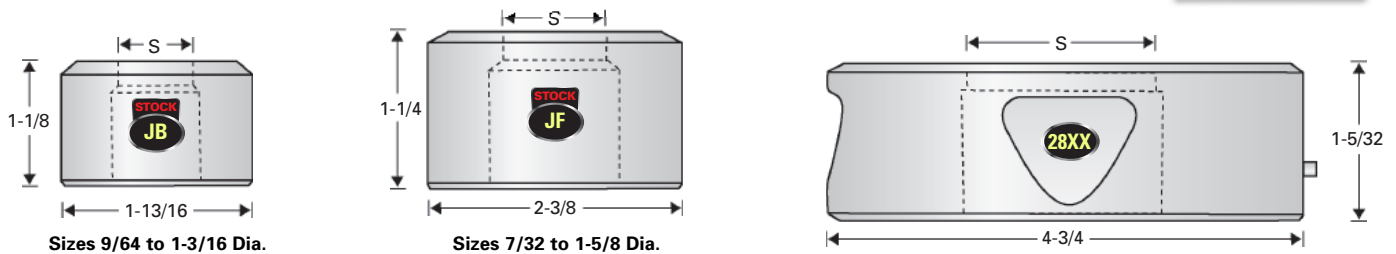
Please note: Keyways allow for the easy alignment of shaped punches. Edwards, Hawthorne and Cleveland Steel Tool shaped punches are produced with a 1/4" wide by 1/8" deep keyway. If machine brand is not stated no keyway will be provided.



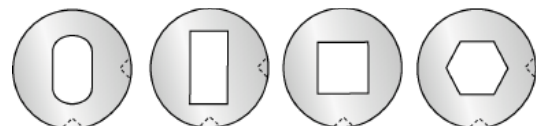
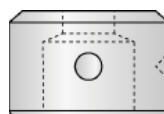
Orientation of standard keyways relative to shapes

Dies

See pages 74 - 75 for stock sizes of dies.



Please note: Drill spots allow for the easy alignment of shaped dies. Edwards, Hawthorne and Cleveland Steel Tool shaped dies are produced with a drill spot. If machine brand is not stated no drill spot will be provided.



Orientation of standard drill spots relative to shapes

Genuine Piranha Tooling

Hard-working tooling for your ironworker

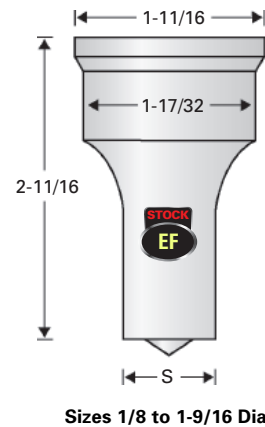
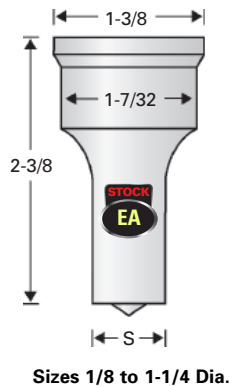
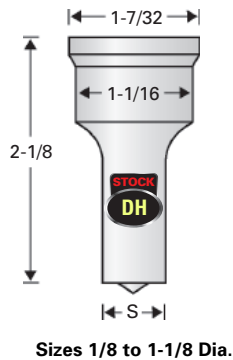
Genuine Piranha Tooling

Tooling for Ficep™ Machines

Model	Uses Punch	Uses Die
SUPER 10, SUPER 10E	DH	HH
SUPER 13	DH	JC
SUPER 14, ST SUPER 16	EA	JC
SUPER 16 & 20	EF	JF
UIW-45	DH	JC
UIW-60	DH	JC
UIW-80	EA	JC
UIW-100	EF	JF

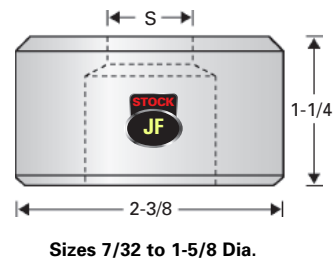
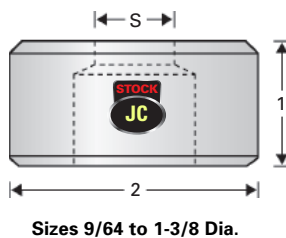
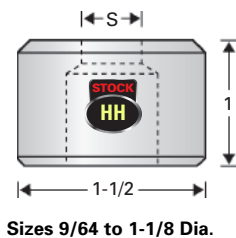
Punches

See pages 70 - 71 for stock sizes of punches.



Dies

See pages 74 - 75 for stock sizes of dies.



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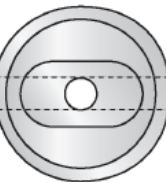
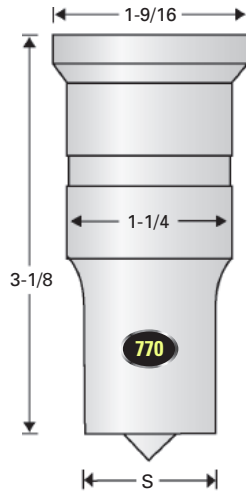
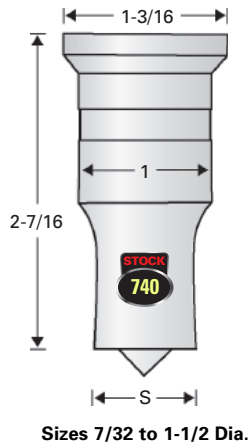
Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.

Tooling for Franklin™ Machines

Model	Uses Punch	Uses Die
F530X3, W530X4	740	720
F550X4, F570X6, F5100X6, W550X7, W570X8, W5100X12	770	740
W5100X18, W5100X30	740	740
F5125X6, F5175X6, F5175X12, F5275X12, W5125X12, W5175X18	7501	7502, 7602
BL100-5, AFC5106, AFC5108, AFC5138	770	740
PF196X72G	770 7501	740 7502
SF70A	770	740

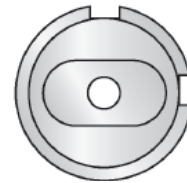
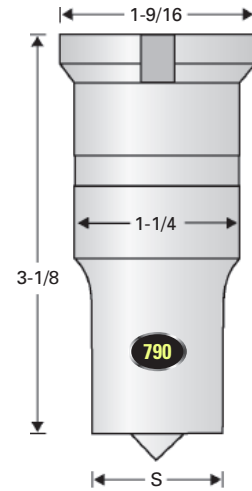
Punches

See pages 70 - 71 for stock sizes of punches.



Under 100 ton

Sizes 7/32 to 1-1/2 Dia.



100 Ton and above

Sizes 7/32 to 1-1/2 Dia.

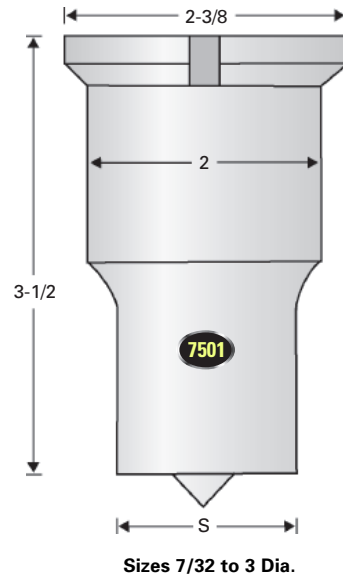
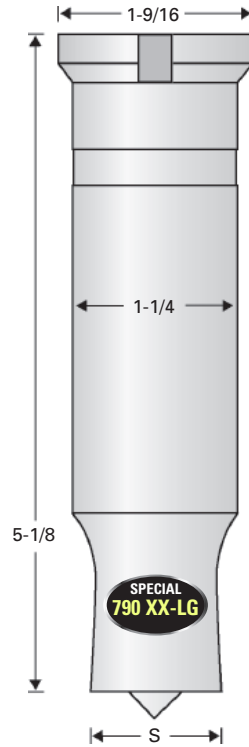
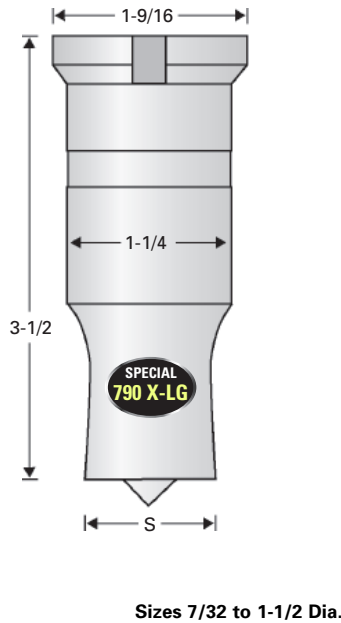
Genuine Piranha Tooling

Hard-working tooling for your ironworker

Genuine Piranha Tooling

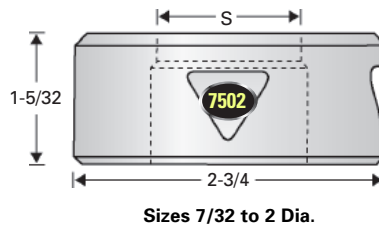
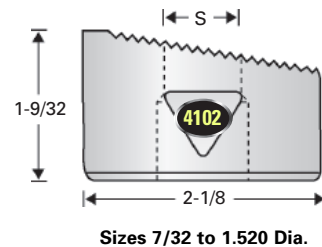
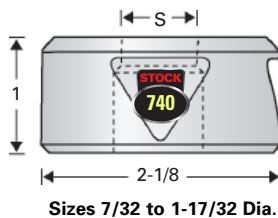
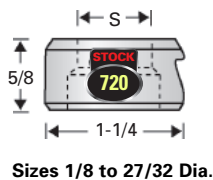
Tooling for Franklin™ Machines

Punches cont.



Dies

See pages 74 - 75 for stock sizes of dies.



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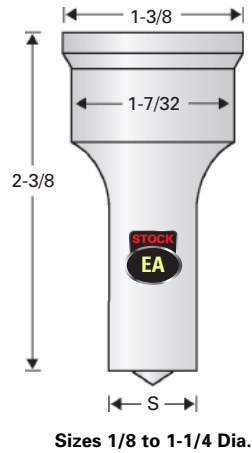
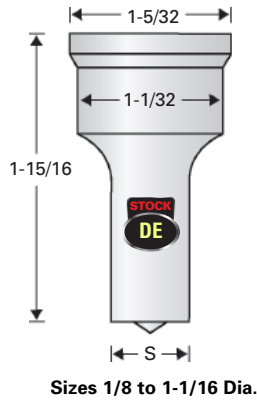
Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.

Tooling for Gariu™ Machines

Model	Uses Punch	Uses Die
MF10, SUPREMA 11, SUPREMA 13	DE	HH
MF16, MF20, SUPREMA 16, SUPREMA 20	EA	JC

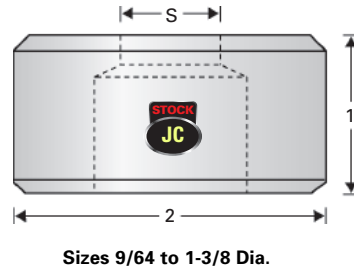
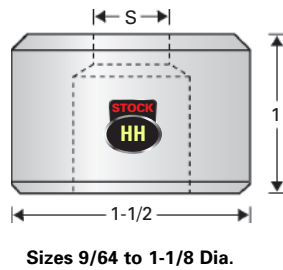
Punches

See pages 70 - 71 for stock sizes of punches.



Dies

See pages 74 - 75 for stock sizes of dies.



Genuine Piranha Tooling

Hard-working tooling for your ironworker

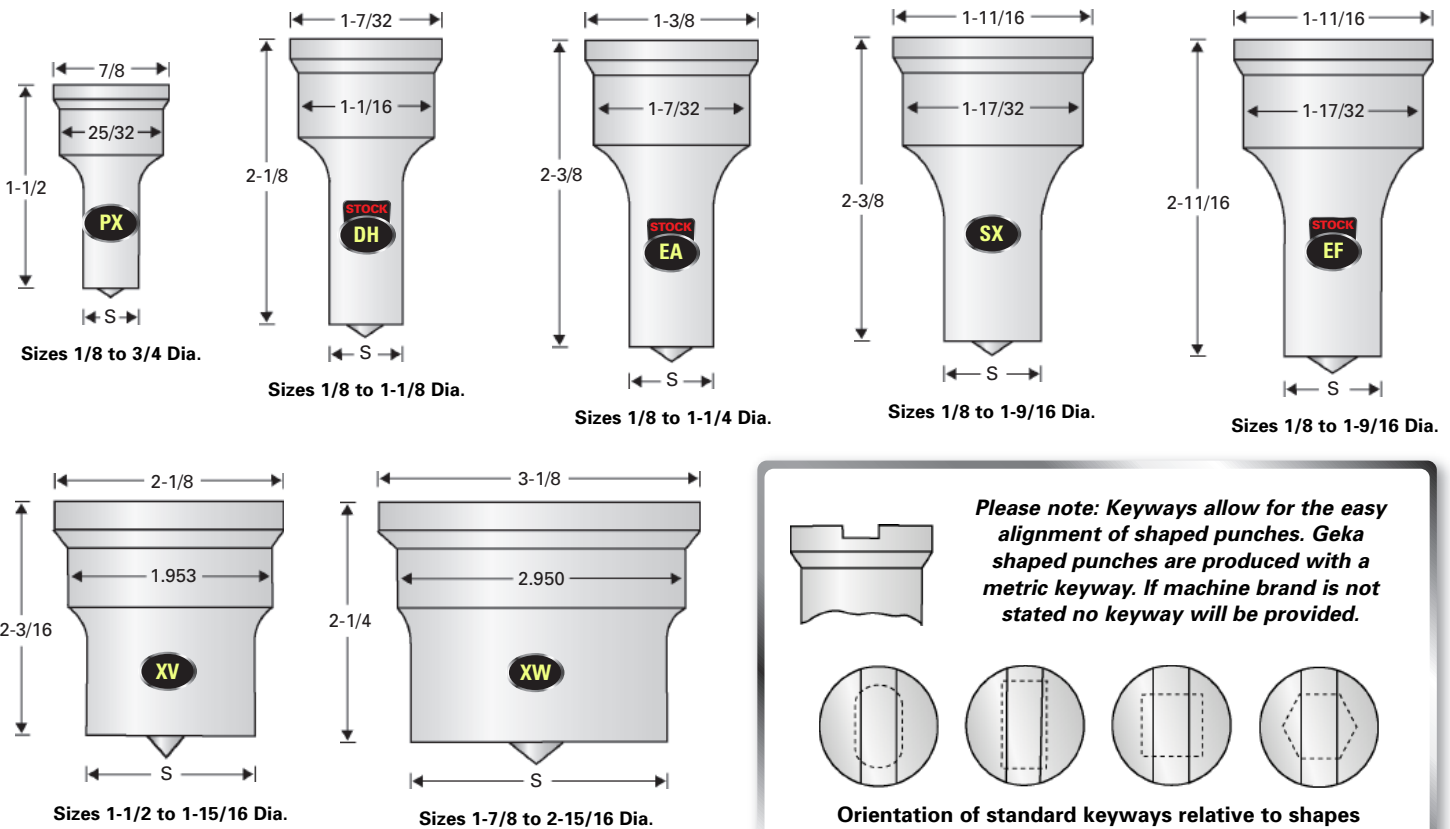
Genuine Piranha Tooling

Tooling for Geka™ Machines

Model	Uses Punch	Uses Die
MICROCROP, MINICROP, MAXICROP, 11H, 13H, CEP 11, CEP13, HYDRACROP 50, HYDRACROP 70, PUMA 11, PUMA 13, PUMA50H, PUMA70H	DH	JC
MULTI 11	PX	UT
16H, 20H, CEP16, CEP20, HYDRACROP 100, PUMA16, PUMA20, PUMA100H	EA	JC
25H, HYDRACROP 150, HYDRACROP 165, HYDRACROP 200, HYDRACROP 220, PUMA 150H, PUMA 165H, PUMA200H, PUMA 220H	EF	JK
PUMA 55H, PUMA 80, DUAL STATIC, 55A, 80A	EA SX	JC WT
PUMA 110H, PUMA 110A	EA EF	JC JK
OVERSIZED	XV XW XX XY (2 pcs)	XZ YP YR YS

See pages 70 - 71 for stock sizes of punches.

Punches



Please note: Keyways allow for the easy alignment of shaped punches. Geka shaped punches are produced with a metric keyway. If machine brand is not stated no keyway will be provided.

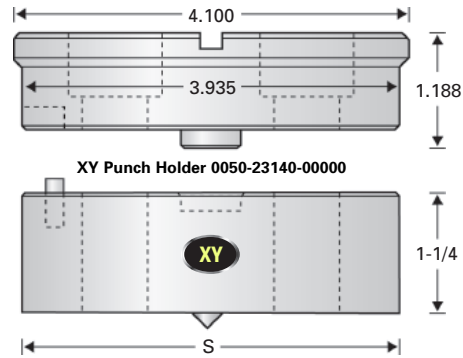
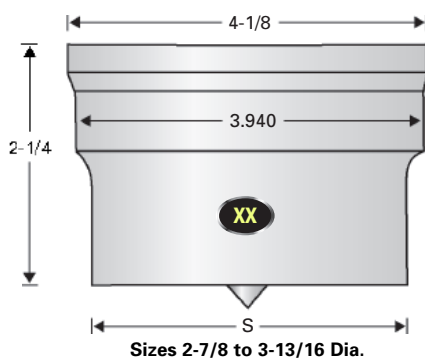


Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



Tooling for Geka™ Machines

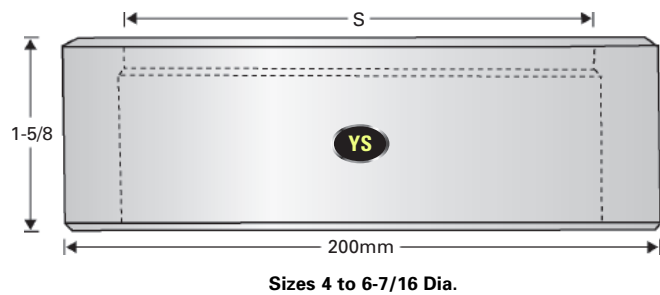
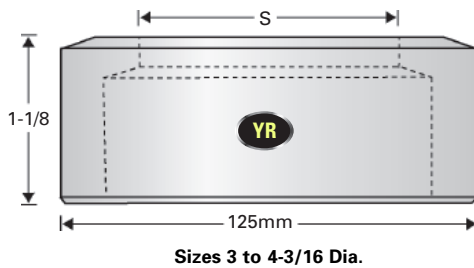
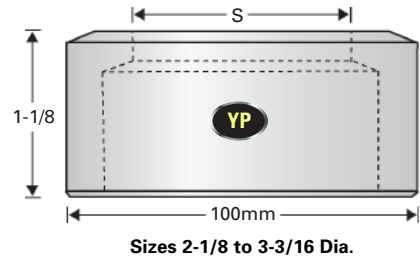
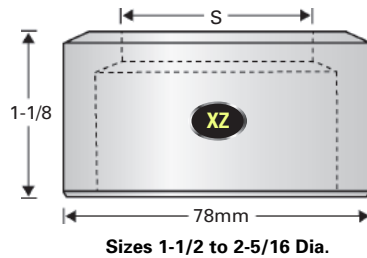
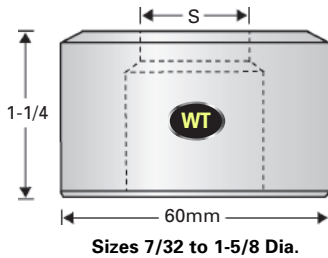
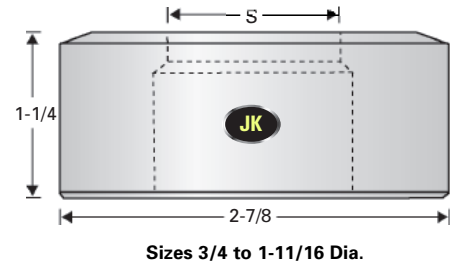
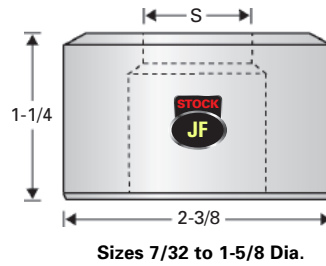
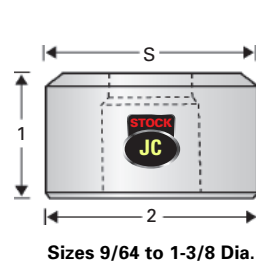
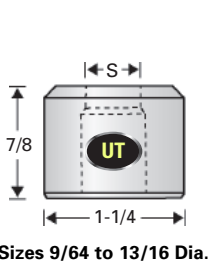
Punches cont.



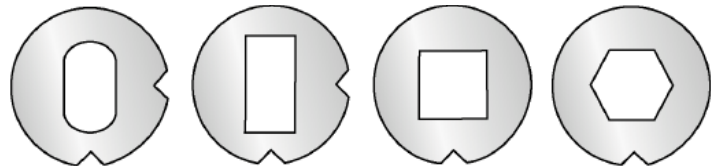
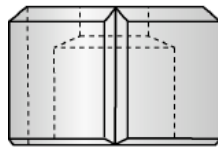
Sizes
3-7/8 to 6-5/16 Dia.
(Min. width for
shapes = 1.250)

Dies

See pages 74 - 75
for stock sizes
of dies.



Please note: "V" grooves allow for the easy alignment of shaped dies. Geka shaped dies are produced with a "V" groove. If machine brand is not stated no "V" groove will be provided.



Orientation of standard "V" grooves relative to shapes

Genuine Piranha Tooling

Hard-working tooling for your ironworker

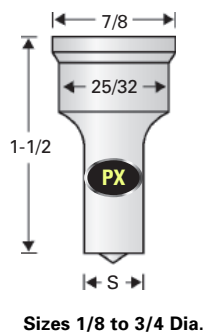
Genuine Piranha Tooling

Tooling for Hendley & Whittemore™ Machines

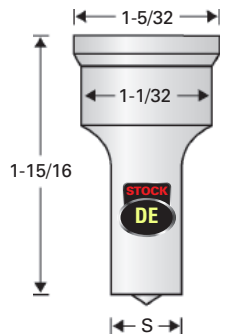
Model	Uses Punch	Uses Die
51, 52	PX	HH
53	DE	HH
54	DE	JC
55	EA	JC
55-1/2	EF	JF

Punches

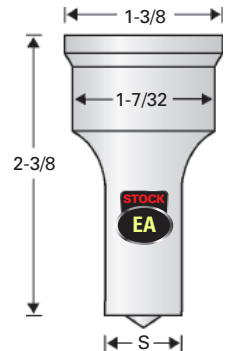
See pages 70 - 71 for stock sizes of punches.



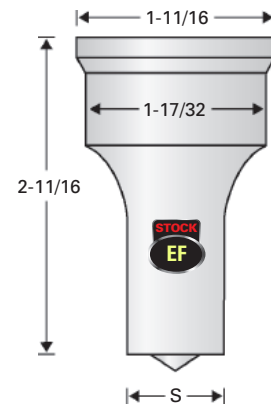
Sizes 1/8 to 3/4 Dia.



Sizes 1/8 to 1-1/16 Dia.



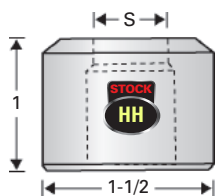
Sizes 1/8 to 1-1/4 Dia.



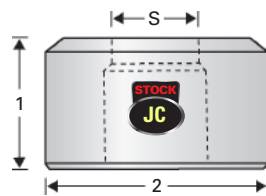
Sizes 1/8 to 1-9/16 Dia.

Dies

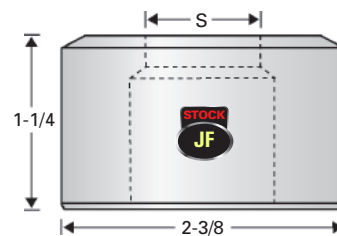
See pages 74 - 75 for stock sizes of dies.



Sizes 9/64 to 1-1/8 Dia.



Sizes 9/64 to 1-3/8 Dia.



Sizes 7/32 to 1-5/8 Dia.



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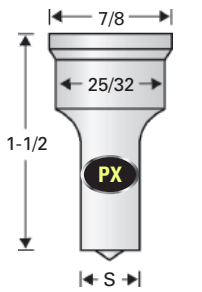
Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.

Tooling for Hill Acme™/Kling™ Machines

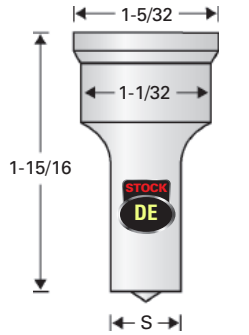
Model	Uses Punch	Uses Die
#3 COMBINATION	PX	HH HC
#3, #30, MW30	DE	HH HC
#3A, #4, #4 COMBINATION	EA	HH HC
#4A, #5, #50, MW50, #6, #6A	EA	JC HC HH
#7, #7A, #7 COMBINATION	EF	JF HH

Punches

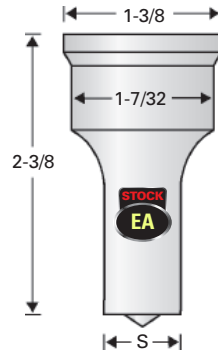
See pages 70 - 71 for stock sizes of punches.



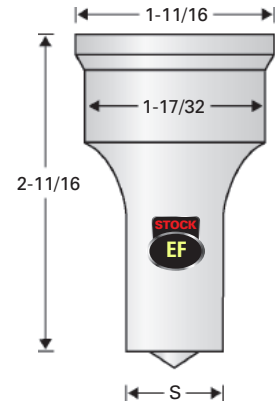
Sizes 1/8 to 3/4 Dia.



Sizes 1/8 to 1-1/16 Dia.



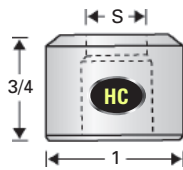
Sizes 1/8 to 1-1/4 Dia.



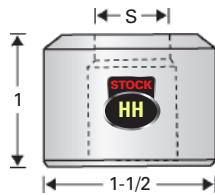
Sizes 1/8 to 1-9/16 Dia.

Dies

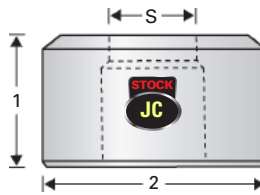
See pages 74 - 75 for stock sizes of dies.



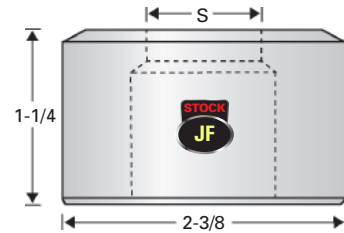
Sizes 9/64 to 3/4 Dia.



Sizes 9/64 to 1-1/8 Dia.



Sizes 9/64 to 1-3/8 Dia.



Sizes 7/32 to 1-5/8 Dia.

Genuine Piranha Tooling

Hard-working tooling for your ironworker

Genuine Piranha Tooling

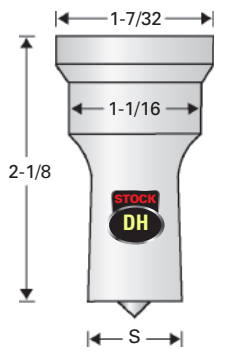
Tooling for HMI™ Machines

Model	Uses Punch	Uses Die
35-19, 35-20, 35DT-19, 35DT-20	DH	JC
42-20, 4214-20	EA	JC
3514, 35017, 50-19, 50-20, 50-25, 50-31, 50DT-19, 50DT-20, 5007, 5010-25, 58-20, 5810-25, 5814-20, 7025, 70-31, 7010-25, 7014, 7810-25, 90-25, 90-31, 9010-25, 9014, 9510-25, 110-25, 110-31, 11014, 11810-25, 130-25, 130-31, 13014	EF	JF
OVERSIZED	28XX	28XX

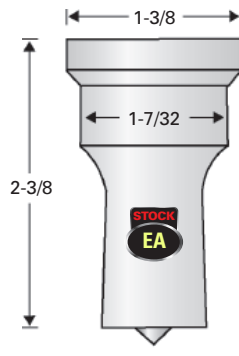
**28XX
TOOLING**
See pages
60 to 62

Punches

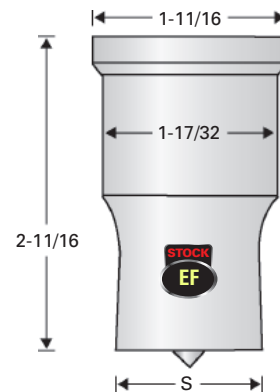
See pages 70 - 71
for stock sizes
of punches.



Sizes 1/8 to 1-1/8 Dia.



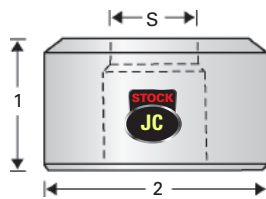
Sizes 1/8 to 1-1/4 Dia.



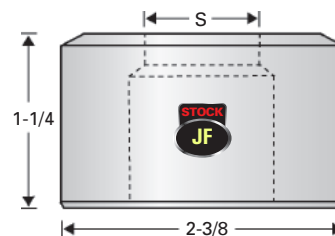
Sizes 1/8 to 1-9/16 Dia.

Dies

See pages 74 - 75
for stock sizes
of dies.



Sizes 9/64 to 1-3/8 Dia.



Sizes 7/32 to 1-5/8 Dia.



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Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



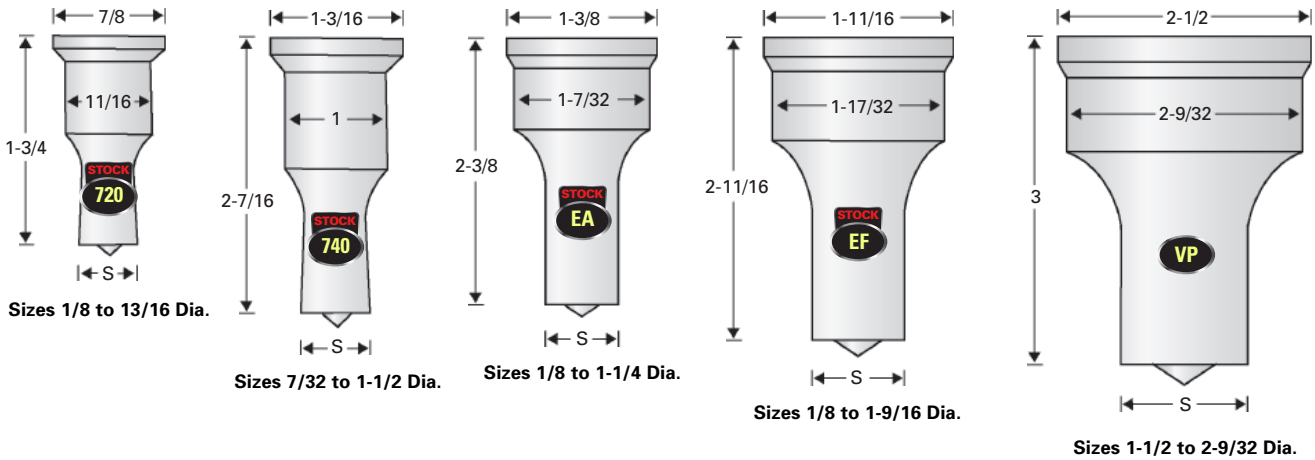
Tooling for Ironcrafter™ Machines

Model	Uses Punch	Uses Die
40	720 740	720 740
30-41-50-70-95	EA	JC
120-150	EF	JF
OVERSIZED	VP 28XX	ZR 28XX

28XX TOOLING
See pages 60 to 62

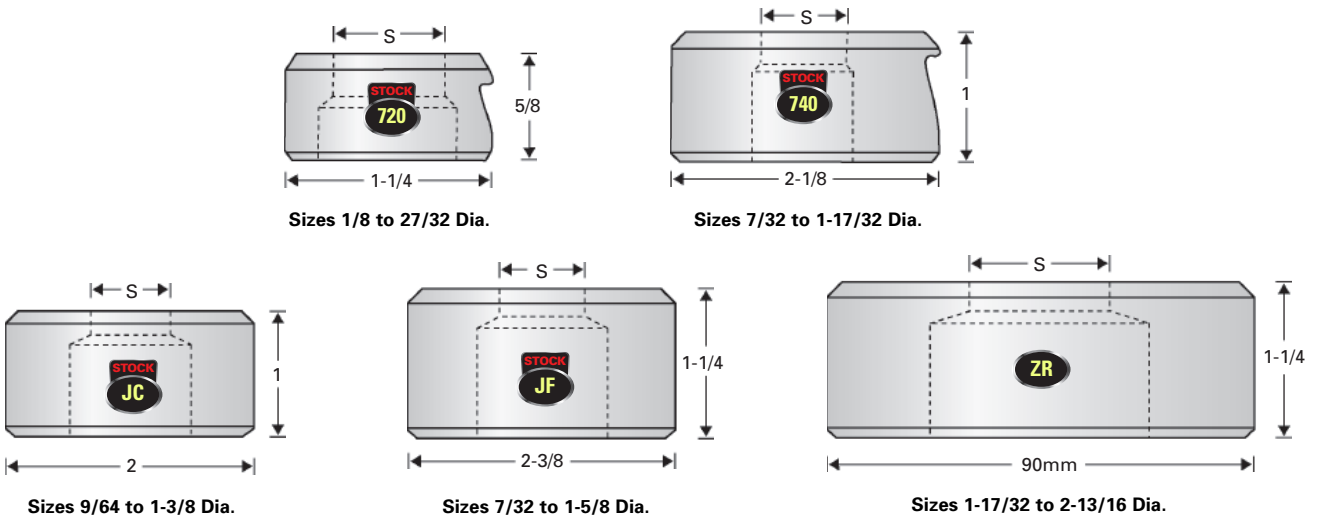
Punches

See pages 70 - 71 for stock sizes of punches.



Dies

See pages 74 - 75 for stock sizes of dies.



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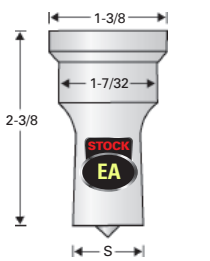
Tooling for Kingsland™ Machines

Model	Uses Punch	Uses Die
COMPACT 50, COMPACT 65, J14/A or B, J18/GXA or B, J21/GXA or B, J25/GXA or B, 60DP, 75DP, 95DP, 125DP, 60P625, 75P625, 95P625, 125P625, 175P625, 50XA, 65XA, 45XM, 60XS, 75XS, 95XS, 125XS, 175XS, SHARK, ULTIMA MODELS	EA EF	JF JC*
OVERSIZED	VP PP PR	XR ZV ZX ZY

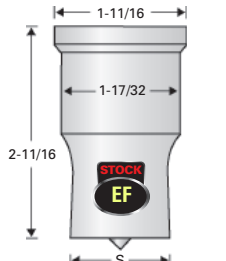
* Die adapter required

Punches

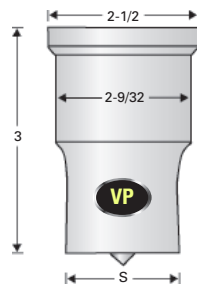
See pages 70 - 71 for stock sizes of punches.



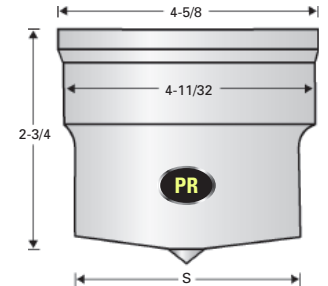
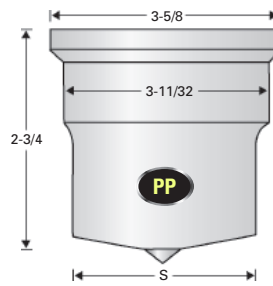
Sizes 1/8 to 1-1/4 Dia.



Sizes 1/8 to 1-9/16 Dia.

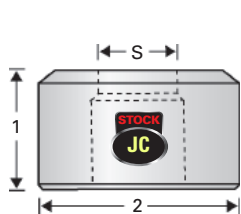


Sizes 1-1/2 to 2-9/32 Dia.

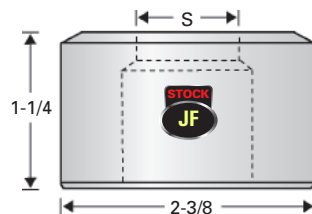


Dies

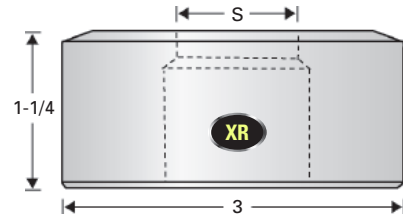
See pages 74 - 75 for stock sizes of dies.



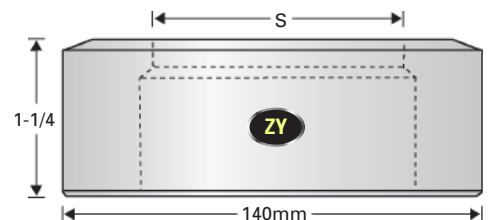
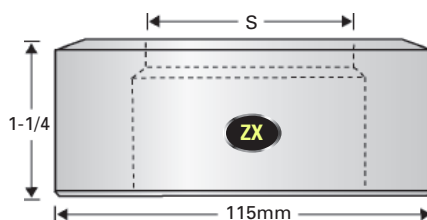
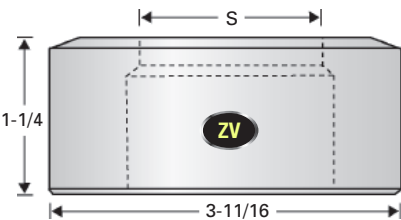
Sizes 9/64 to 1-3/8 Dia.



Sizes 7/32 to 1-5/8 Dia.



Sizes 1-1/2 to 2-5/16 Dia.



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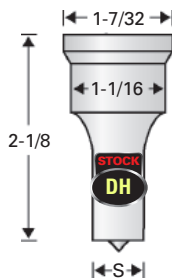
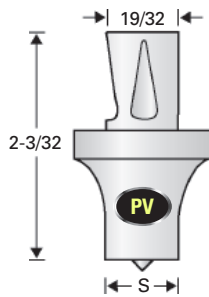
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Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.

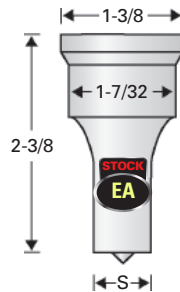
Tooling for Mubea™ Machines

Model	Uses Punch	Uses Die
BF10, 350	PV	JB
BFL 350	DH	JB
BFLH 400	DH	JB
HIW 450, 550, 600, 750; HP 450; HPS 250, 350, 350E; HPSN 350, 450, 500, 600	DH	JB
KBL 1/2, 0, 1-1/2, 48-4, 50-4, 71-5, 88-6, 560	DH	JB
KBLH 500, 700; KL 33, 350, 560, 750; KLH 500, 700; KLSH 550	DH	JB
MIW 400, 600, 800; PROFI 500	DH	JB
BULLDOG 65	DH	JC
HIW 1000	EA VX	JC JG
KBL 3-1/2, 110-7 143-8 900, 1300	EA VX	JC JG
KBLH 1000	EA VX	JC JG
KL 110, 143, 900, 1100, 1300	EA VX	JC JG
KLH 1000	EA VX	JC JG
KLS 1100	EA VX	JC JG
KLSH 1000	EA VX	JC JG
OVERSIZED	VY VZ	WR WS

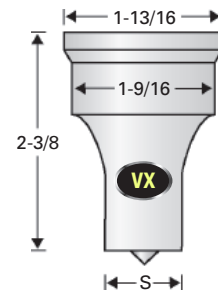
Punches



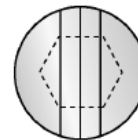
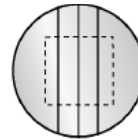
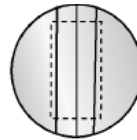
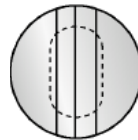
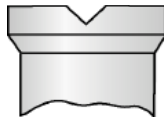
Sizes 1/8 to 1-1/8 Dia.



Sizes 1/8 to 1-1/4 Dia.



Please note: Keyways allow for the easy alignment of shaped punches. Mubea shaped punches are produced with a "V" groove keyway. If machine brand is not stated no keyway will be provided.



Orientation of standard keyways relative to shapes

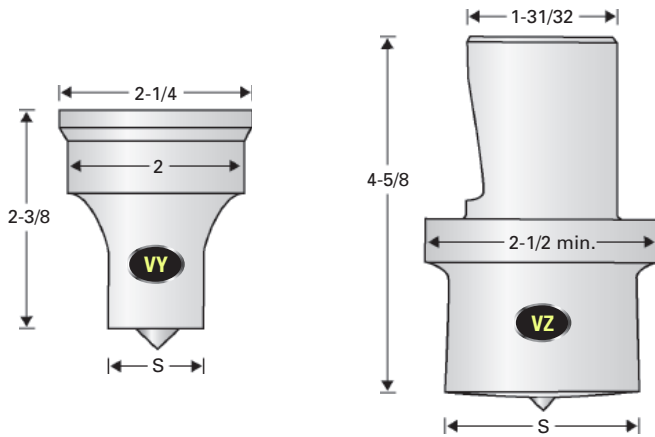
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Tooling for Mubea™ Machines

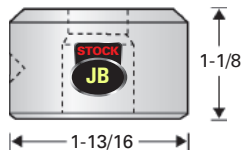
Punches cont.



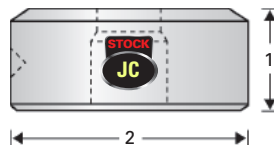
Stock Round Punches & Dies

Size	DH Punch	JB Die	EA Punch	JC Die
7/32	•	•	•	•
1/4	•	•	•	•
9/32	•	•	•	•
5/16	•	•	•	•
11/32	•	•	•	•
3/8	•	•	•	•
13/32	•	•	•	•
7/16	•	•	•	•
15/32	•	•	•	•
1/2	•	•	•	•
17/32	•	•	•	•
9/16	•	•	•	•
19/32	•	•	•	•
5/8	•	•	•	•
21/32	•	•	•	•
11/16	•	•	•	•
23/32	•	•	•	•
3/4	•	•	•	•
25/32	•	•	•	•
13/16	•	•	•	•
27/32	•	•	•	•
7/8	•	•	•	•
29/32	•	•	•	•
15/16	•	•	•	•
31/32	•	•	•	•
1	•	•	•	•
1-1/32	•	•	•	•
1-1/16	•	•	•	•
1-1/8	•	•	•	•
1-3/16	•	•	•	•
1-1/4	•	•	•	•
1-5/16	•	•	•	•

Dies

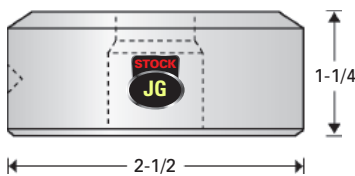


Sizes 9/64 to 1-3/16 Dia.

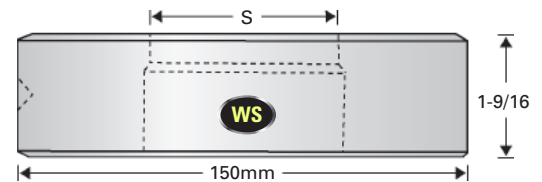
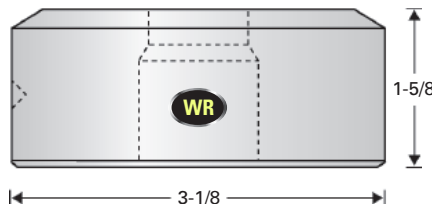


Sizes 9/64 to 1-3/8 Dia.

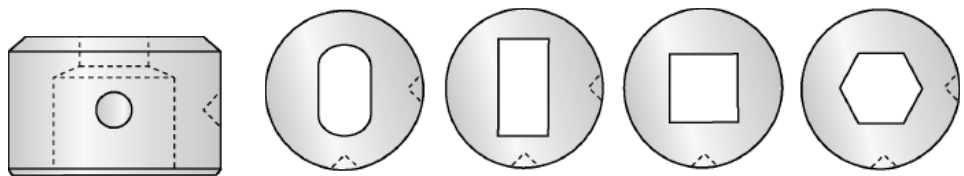
• Same-Day Shipment Sizes



Sizes 3/4 to 1-5/8 Dia.



Please note: Drill spots allow for the easy alignment of shaped dies. Mubea shaped dies are produced with a drill spot. If machine brand is not stated no drill spot will be provided.



Orientation of standard drill spots relative to shapes



Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.

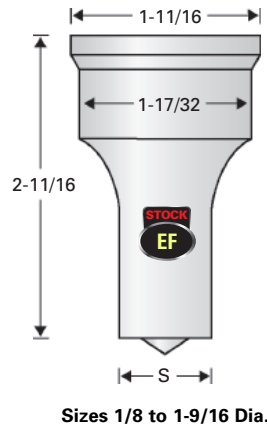
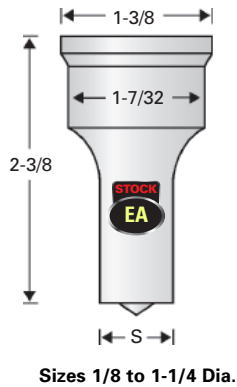


Tooling for Omera™ Machines

Model	Uses Punch	Uses Die
M-10, OM1/2, 115-35S, 13-45S	EA	JC
16-70S, 20-95S	EF	JF

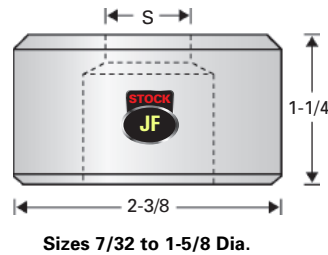
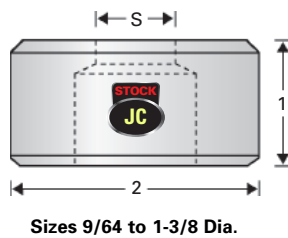
Punches

See pages 70 - 71 for stock sizes of punches.



Dies

See pages 74 - 75 for stock sizes of dies.



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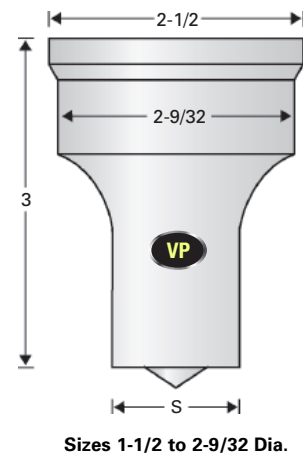
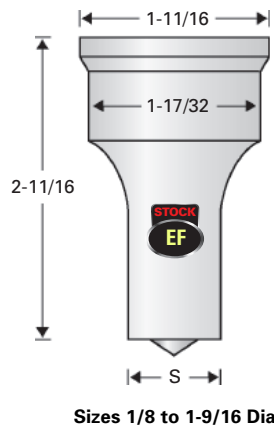
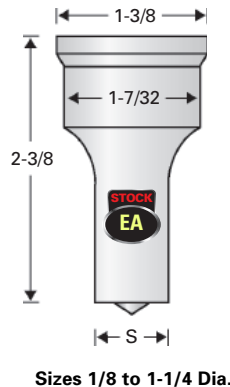
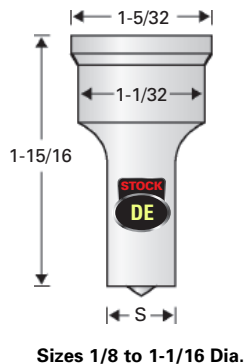
Genuine Piranha Tooling

Tooling for Peddinghaus™ Machines

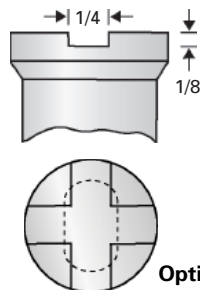
Model	Uses Punch	Uses Die
Ironworkers		
FORAX 25E, FORAX 45, FORAX 65, 210/11, 210/13, 225/11, 225/13, 225B45, 225B60, 450M, 31/44, 44/66H, 66/88, 66/110H, 88/120, 360H, 400H, 440, 550, 660, 880, H40, H60N	DE	JB
FORAX 80, FORAX 100, 210/16, 210/20, 225/16, 225/20, 225B80, 225B100, 88/140, 110/140, 110/175H, 120/185, 881, H100, H1000, H1000GA, 1050, G1100, H1100, BRADLEY 500, 700, 1100	EA	JC
210/25, 225/25, 225B130, H1400	EF	JF
H140	EF	JG
OVERSIZED	VP	ZR
<i>Anglemaster, Fabripunch, Fabriline (Portables) & others see pages 38 - 40</i>		

Punches

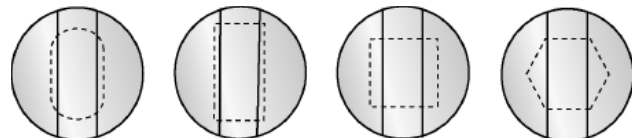
See pages 70 - 71 for stock sizes of punches.



Please note: Keyways allow for the easy alignment of shaped punches. Peddinghaus shaped punches are produced with a 1/4" wide by 1/8" deep keyway. If machine brand is not stated no keyway will be provided.



Orientation of standard keyways relative to shapes



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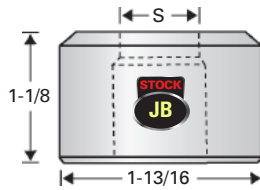
Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



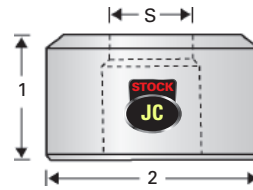
Tooling for Peddinghaus™ Machines

Dies

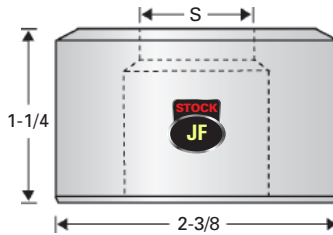
See pages 74 - 75 for stock sizes of dies.



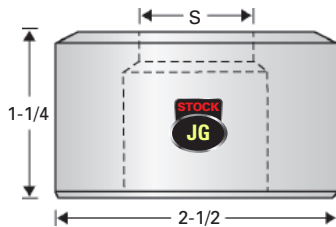
Sizes 9/64 to 1-3/16 Dia.



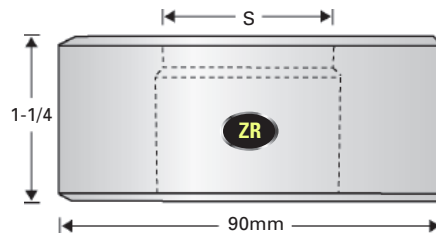
Sizes 9/64 to 1-3/8 Dia.



Sizes 7/32 to 1-5/8 Dia.

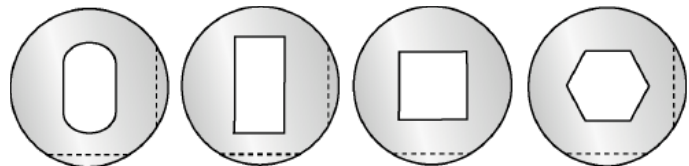
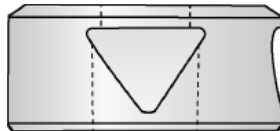


Sizes 3/4 to 1-5/8 Dia.



Sizes 1-17/32 to 2-13/16 Dia.

Please note: Whistle notches allow for the easy alignment of shaped dies. Peddinghaus shaped dies are produced with a whistle notch. If machine brand is not stated no whistle notch will be provided.



Orientation of standard whistle notches relative to shapes

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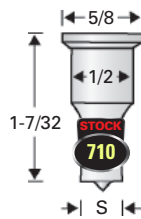
Genuine Piranha Tooling

Tooling for Peddinghaus™ Machines

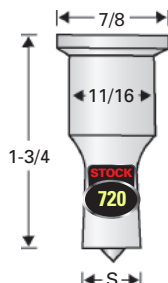
Model	Uses Punch	Uses Die
Anglemaster		
623, 645	770	740
823	770 PY	740 UW
823B	PY	UW
1563, 2063	770 PY	740
Fabripunch		
118, 120	770 PY	740
500/3, 1120, 1154, 1154-30	770 PY	JF
600/3, 1170, 1500/3, 1800/3	770 PZ	740 UW
Fabriline (Portables)		
FP6	710	710
FP12, FP20, FP20-4, FP20-6, WP20	720	720
FP35, FP35-8,	740	740
FP35CC, WP35	740	720
FP45, FP60, FP80, FP80-9, FP100	770 PY	740
FP100-12, WP60, WP80, WP100, WP100-18, WP100-25	770 PY	740 4902
STATIONARY 140	PZ	JK
WP140	PZ	UW
WP140-12-1/2, FP140-6-1/4, FP140-12-1/2	UP	UU
FP250-12-1/2	UP	UR
Other Peddinghaus Machines		
7130 DUPLICATOR	770	740
BEAM FABRICATOR	PY	4902
2000CNCBPL1000/5	770 PY	740 JF
<i>Ironworkers see pages 36 - 37</i>		



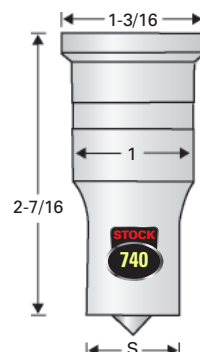
Punches



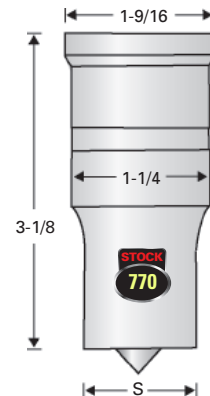
Sizes 3/32 to 9/16 Dia.



Sizes 1/8 to 13/16 Dia.



Sizes 7/32 to 1-1/2 Dia.



Sizes 7/32 to 1-1/2 Dia.



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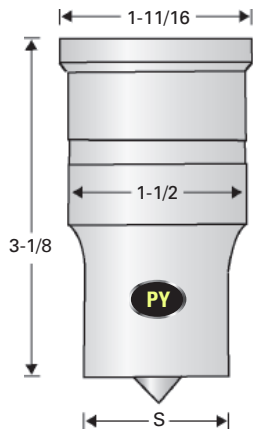
Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



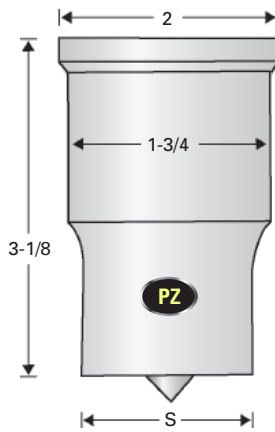
Tooling for Peddinghaus™ Machines

Punches cont.

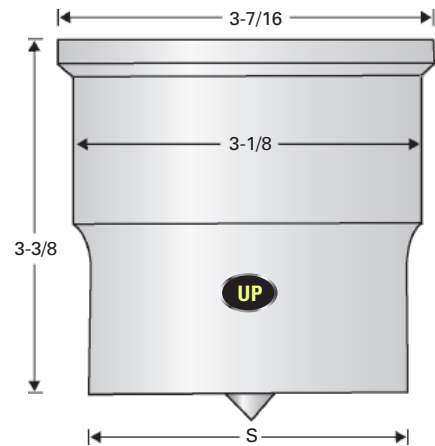
See pages 70 - 71 for stock sizes of punches.



Sizes 7/32 to 1-31/64 Dia.



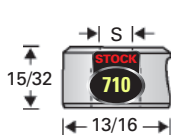
Sizes 7/32 to 1-47/64 Dia.



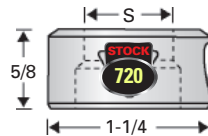
Sizes 7/32 to 3 Dia.

Dies

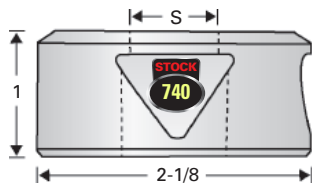
See pages 74 - 75 for stock sizes of dies.



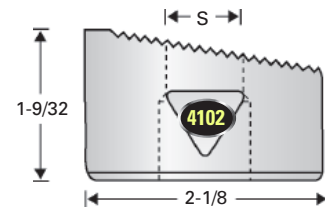
Sizes 3/32 to 9/16 Dia.



Sizes 1/8 to 27/32 Dia.



Sizes 7/32 to 1-17/32 Dia.



Sizes 7/32 to 1.520 Dia.

Genuine Piranha Tooling

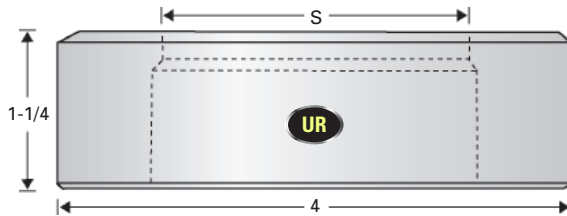
Hard-working tooling for your ironworker

Genuine Piranha Tooling

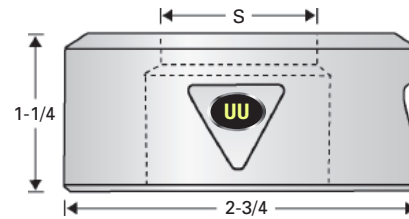
Tooling for Peddinghaus™ Machines

Dies cont.

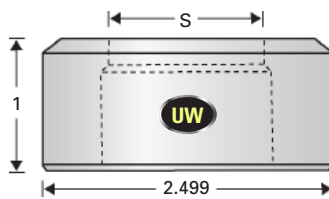
See pages 74 - 75
for stock sizes
of dies.



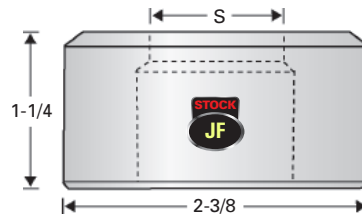
Sizes 7/32 to 3-1/8 Dia.



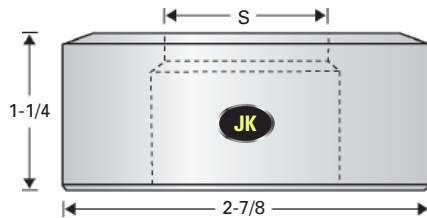
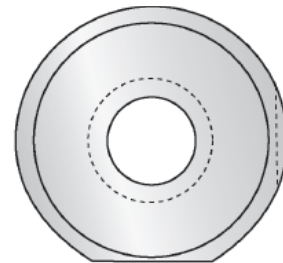
Sizes 7/32 to 2-1/16 Dia.



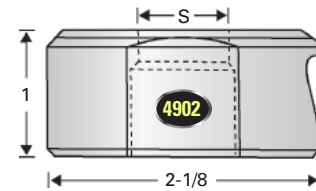
Sizes 7/32 to 1-13/16 Dia.



Sizes 7/32 to 1-5/8 Dia.

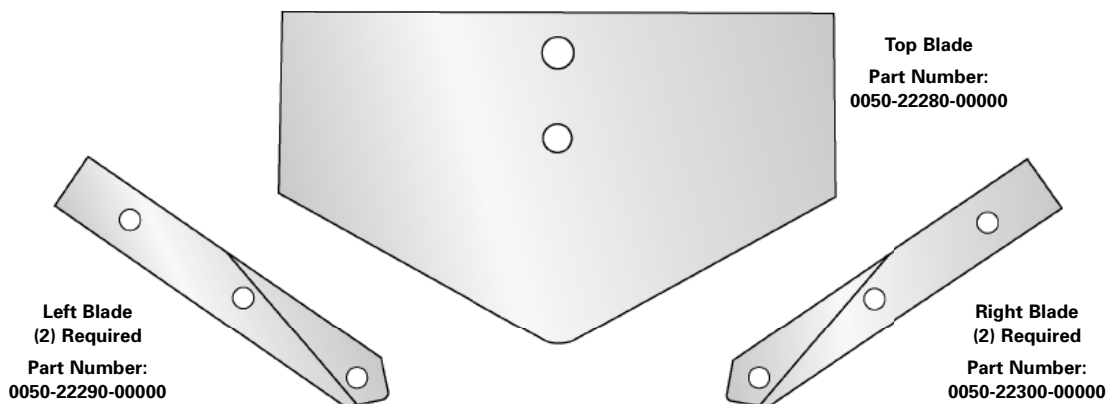


Sizes 3/4 to 1-11/16 Dia.



Sizes 7/32 to 1.520 Dia.

Anglemaster Shear Blades



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Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



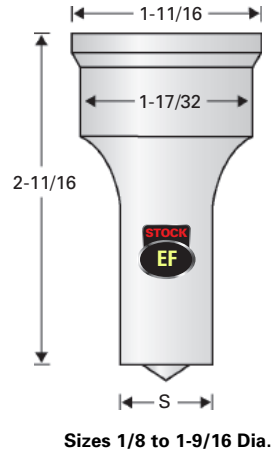
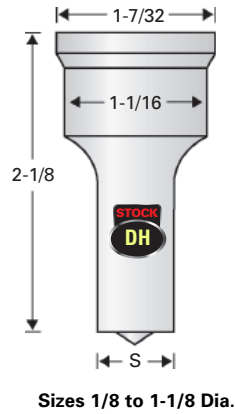
Tooling for Piranha™ Machines

Model	Uses Punch	Uses Die
P-2, P-3, P-36, P-40, P-50, PII-35, SEPP-35	DH	JB
P-4, P-70, P-90, P-120, PII-35, PII-65, PII-88, PII-110, PII-140, SEPP-35, SEPP-65, SEPP-88, SEP-120, SEPP-140	EF	JF
1-1/2 OVERSIZED	EF	JF
28XX OVERSIZED ATTACHMENTS: 2-3/4, 3-3/4, 4-3/4, 5-3/4	28XX 59 STYLE 64 STYLE	28XX

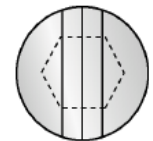
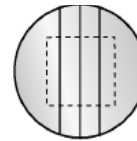
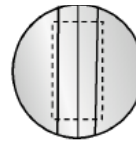
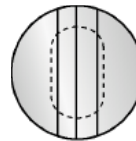
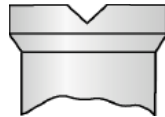
28XX TOOLING
See pages 60 to 62

Punches

See pages 70 - 71 for stock sizes of punches.



Please note: Keyways allow for the easy alignment of shaped punches. Piranha shaped punches are produced with a "V" groove keyway. If machine brand is not stated no keyway will be provided.



Orientation of standard keyways relative to shapes

Genuine Piranha Tooling

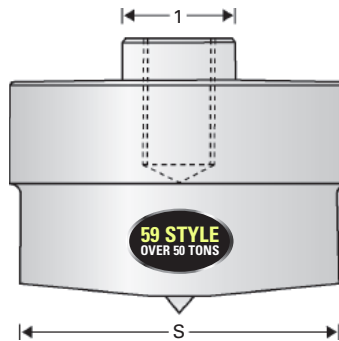
Hard-working tooling for your ironworker

Genuine Piranha Tooling

Tooling for Piranha™ Machines

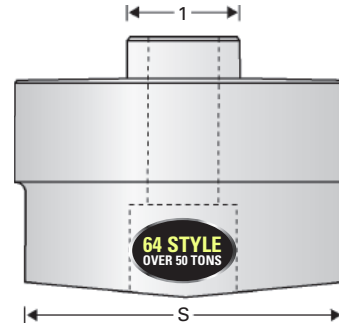
Heavy Duty Punches

Modified 28XX
For over 50 ton applications



Threaded Style

2-9/32 to 2-21/32
length varies depending
on oversize attachment size
and amount of shear on punch



Bolt On Style

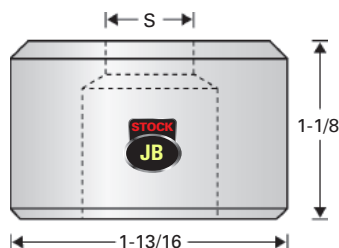
(Minimum size = 1.970 dia. or min. width of shape)

2-9/32 to 2-21/32
length varies depending
on oversize attachment size
and amount of shear on punch

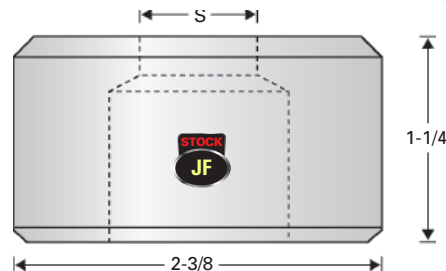
Note: When ordering 59 & 64 style punches, please specify machine model, punch size, 28XX oversized attachment size and material type and thickness so appropriate shear is supplied for application. See page 60 for 28XX punches used with oversized attachments.

Dies

See pages 74 - 75
for stock sizes
of dies.



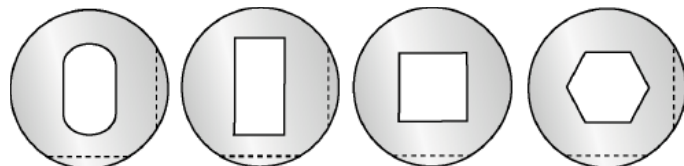
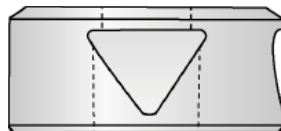
Sizes 9/64 to 1-3/16 Dia.



Sizes 7/32 to 1-5/8 Dia.

See page 60 for 28XX dies used with 28XX oversized attachments.

Please note: Whistle notches allow for the easy alignment of shaped dies. Piranha shaped dies are produced with a whistle notch. If machine brand is not stated no whistle notch will be provided.



Orientation of standard whistle notches relative to shapes



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Tooling for Piranha™ Machines

Piranha Oversize Attachments

Please Note: Standard 28XX punch holders have a 50 ton maximum punching capacity. Heavy duty punches must be used when punching applications exceed 50 tons. 28XX punch attachments are furnished without strippers. Contact Piranha's engineering department for heavy duty part numbers.



**P-50/70/90/120 28XX
Oversized Heavy Duty
Stripping Attachment**

*Max. punch diameter on P-50 is 3".
Max. punch diameter on P-70/90/120 is 5".*



**P-II-65/88 28XX
Punch Holder**



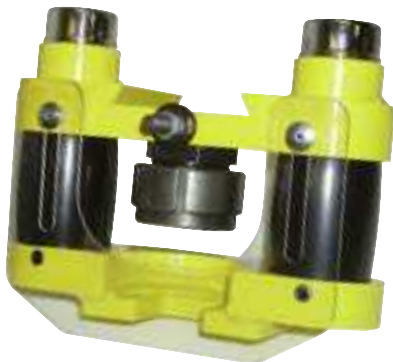
**P-II-110/140 28XX
Punch Holder**



**P-50/P-70 28XX
Punch Holder**



**P-90/P-120 28XX
Punch Holder**



**Piranha P-50 1-1/2"
Oversize Attachment**

Note: Spanner wrench required.

Max. punch diameter is 1-9/16".



**28XX 3-3/4"
Die Holder**



**28XX 5-3/4"
Die Holder**

Genuine Piranha Tooling

Hard-working tooling for your ironworker

Genuine Piranha Tooling

Tooling for Piranha™ Machines

Piranha Parts

Piranha Punch Stems, Coupling Nuts and Miscellaneous Parts

The table below lists our stock Piranha punch stems, coupling nuts, die holders, urethane strippers and filter elements. Please provide the model and serial number when ordering replacement parts. If the part required is not listed, please provide a part number, sketch or drawing.



P-40/50
Die Holder



P-70/90/120
Die Holder



Punch Stems



Urethane Strippers



Filter Element



Coupling Nut
P-36/P-40/P-50



Coupling Nut
P-70/P-90/P-120



Coupling Nut
Oversize Attachment

Model No.	P-36	P-40	P-50 (P-3)	RP-50	P-70	P-90	P-120	PII-35	PII-65	PII-88	PII-110	PII-140	SEPP-35	SEPP-65	SEPP-88	SEP-120	SEPP-140
Urethane Stripper	•	•	•	•	•	•	•	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Punch Stem	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Die Holder		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Coupling Nut	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Filter Element		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

• Same-Day Shipment Items



1-800-435-2823

Fax: 1-815-964-0831

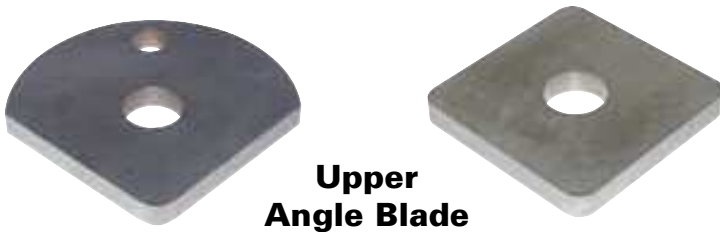
www.piranhatooling.com



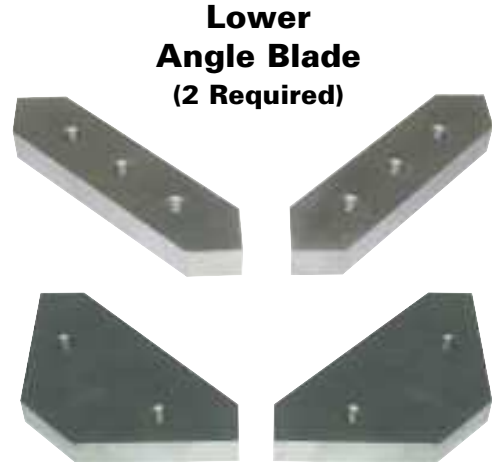
Tooling for Piranha™ Machines

Piranha Blades

The table below lists our stock Piranha shear blades, angle blades and copers. Please provide the model and serial number when ordering replacement blades. If the blade required is not listed, please provide a part number, sketch or drawing.



Upper Angle Blade



**Lower Angle Blade
(2 Required)**

Upper Coper



**Lower Coper—Side
(2 Required)**



**Shear Blade
(2 Required)**

Long and short available

Lower Coper—Front

Model No.	P-36	P-40	P-50 (P-3)	RP-50	P-70	P-90	P-120	PII-35	PII-65	PII-88	PII-110	PII-140
Short Shear Blade (2 Required)	•	•	•	•	•	•	•	•	•	•	•	•
Long Shear Blade (2 Required)	•	•	•	N/A	N/A	•	•	•	N/A	•	•	•
Upper Angle	•	•	•	•	•	•	•	•	•	•	•	•
Lower Angle (2 Required)	•	•	•	•	•	•	•	•	•	•	•	•
Upper Coper	•	•	•	•	•	•	•	•	•	•	•	•
Lower Coper—Front	•	•	•	•	•	•	•	•	•	•	•	•
Lower Coper—Side (2 Required)	•	•	•	•	•	•	•	•	•	•	•	•

• Same-Day Shipment Items

Genuine Piranha Tooling

Hard-working tooling for your ironworker

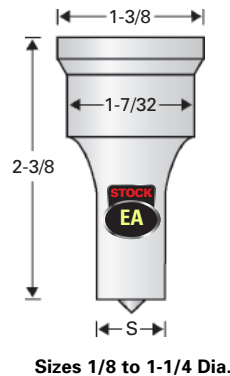
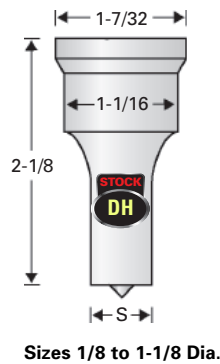
Genuine Piranha Tooling

Tooling for Promoco™ /Omes™ Machines

Model	Uses Punch	Uses Die
CH50	DH	JB
CH70/CH100	EA	JC

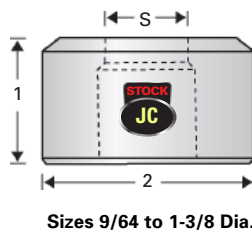
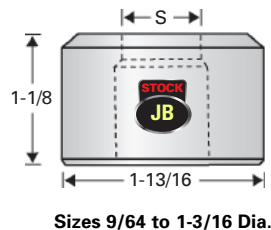
Punches

See pages 70 - 71 for stock sizes of punches.



Dies

See pages 74 - 75 for stock sizes of dies.



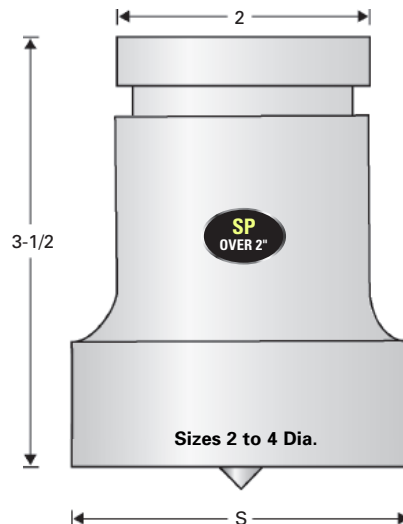
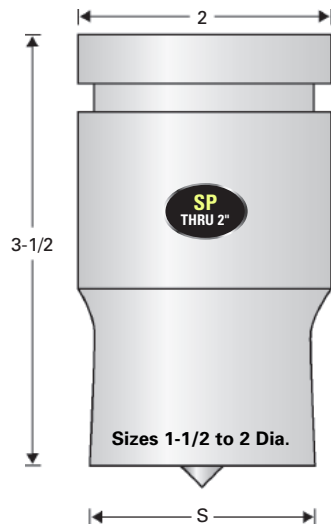
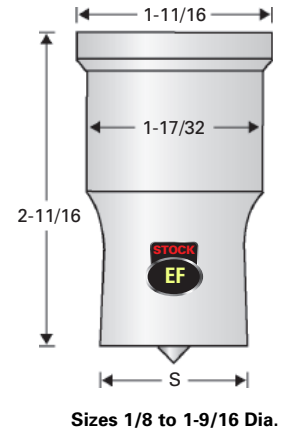
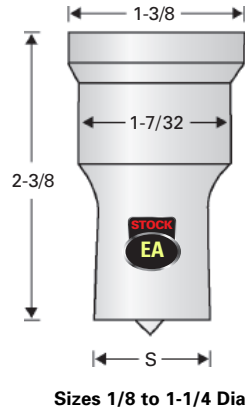
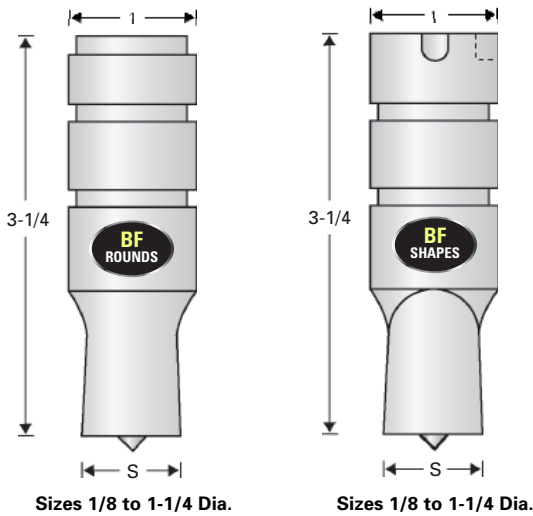
Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.

Tooling for Scotchman™ Machines

Model	Uses Punch	Uses Die
207, 314, 314C6, 314T, 424, 4014C, 4014CM, 4014T, 4060B, 5014, PRO-FAB 45	BF	BG
2450, 5024, 5075, 6012, 6509, 7012, 7575, 9012, 9075, 12012, 9012, 9075, 12012, FI-5009, FI-5109, FI-6008, FI-8507, DO-70, DO-100, XL MODELS	EA	JC
1-1/2 OVERSIZED	EF	JG
		RS
		XR
OVER 1-1/2 OVERSIZED	SP	SW

Punches

See pages 70 - 71 for stock sizes of punches.



Genuine Piranha Tooling

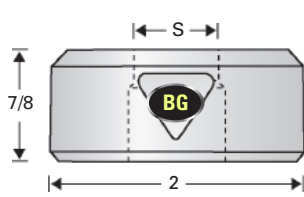
Hard-working tooling for your ironworker

Genuine Piranha Tooling

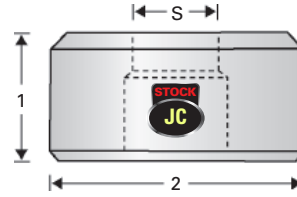
Tooling for Scotchman™ Machines

Dies

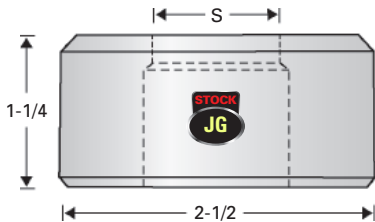
See pages 74 - 75
for stock sizes
of dies.



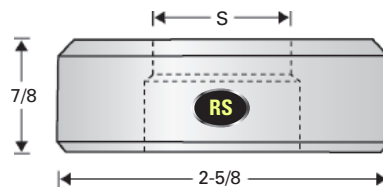
Sizes 9/64 to 1-3/8 Dia.



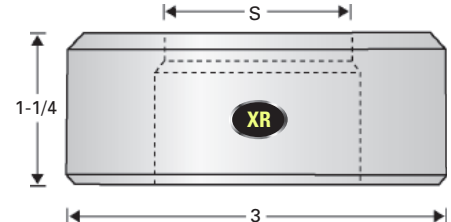
Sizes 9/64 to 1-3/8 Dia.



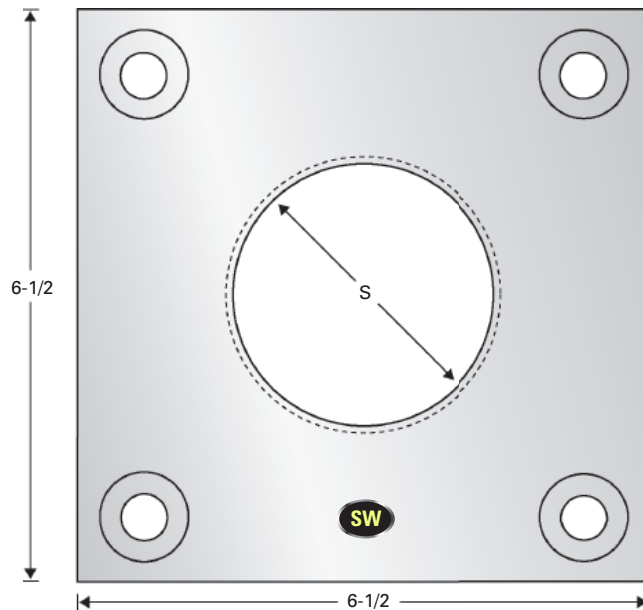
Sizes 3/4 to 1-5/8 Dia.



Sizes 7/32 to 1-7/8 Dia.



Sizes 1-1/2 to 2-5/16 Dia.



Sizes 1.506 to 4.062 Dia.



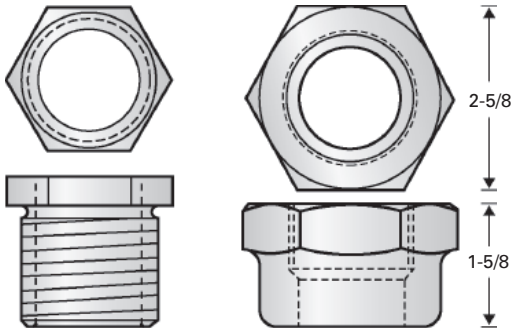
1-800-435-2823
Fax: 1-815-964-0831
www.piranhatooling.com

Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



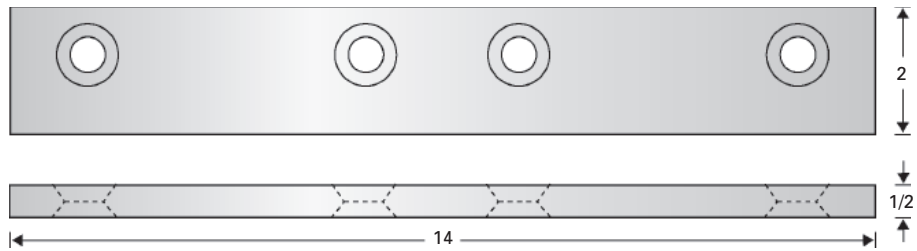
Tooling for Scotchman™ Machines

Coupling Nuts

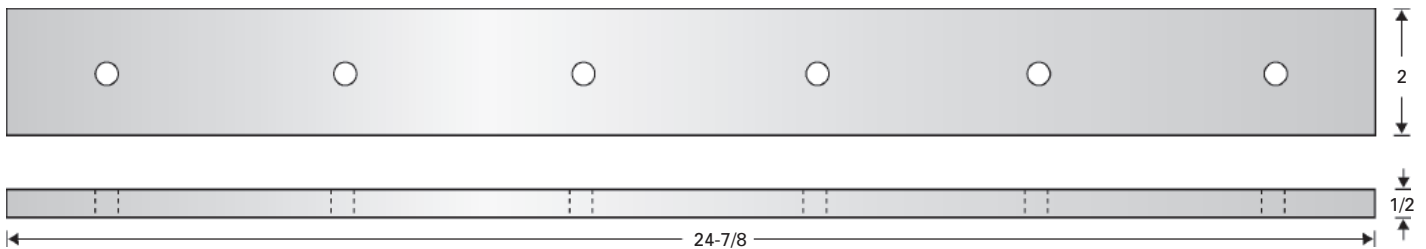


Coupling Nut Part #	For Punch
0050-21630-00000	EA
0050-21620-00000	EF
0050-22270-00000	BF

Shear Blades



Part Number: 0050-21740-00000
(2 Required)



Part Number: 0050-21700-00000
(2 Required)

Genuine Piranha Tooling

Hard-working tooling for your ironworker

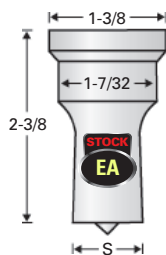
Genuine Piranha Tooling

Tooling for Spartan™ Machines

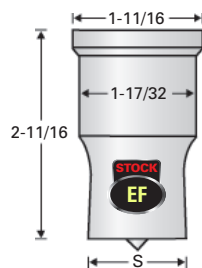
Model	Uses Punch	Uses Die
SINGLE CYLINDER MACHINES MANUFACTURED PRIOR TO 2000	EA EF	JB JF
SINGLE CYLINDER MACHINES	EA	JB
DUAL CYLINDER MACHINES	EF	JF
OVERSIZED	TU TV TW TX TY	YT YU YV YS YW

Punches

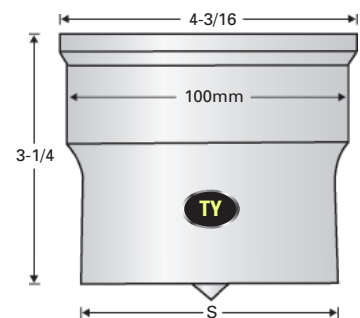
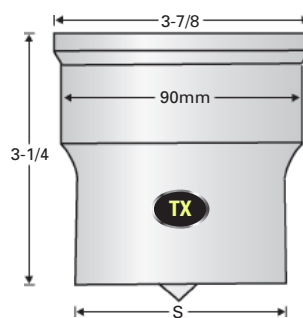
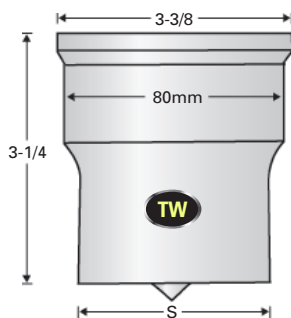
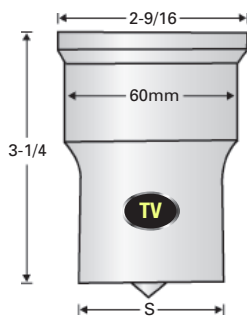
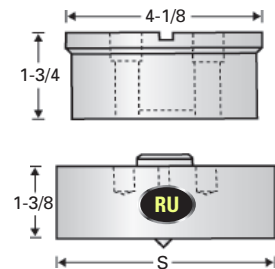
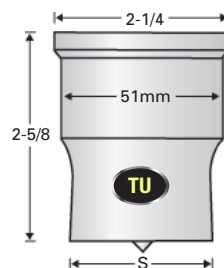
See pages 70 - 71 for stock sizes of punches.



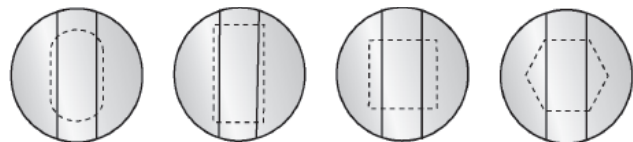
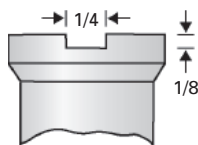
Sizes 1/8 to 1-1/4 Dia.



Sizes 1/8 to 1-9/16 Dia.



Please note: Keyways allow for the easy alignment of shaped punches. Spartan shaped punches are produced with a 1/4" wide by 1/8" deep keyway. If machine brand is not stated no keyway will be provided.



Orientation of standard keyways relative to shapes



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www.piranhatooling.com

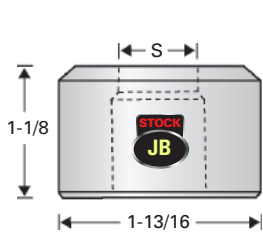
Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



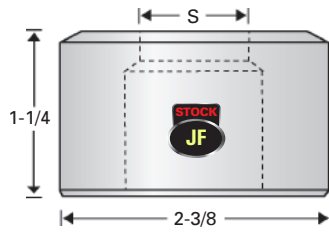
Tooling for Spartan™ Machines

Dies

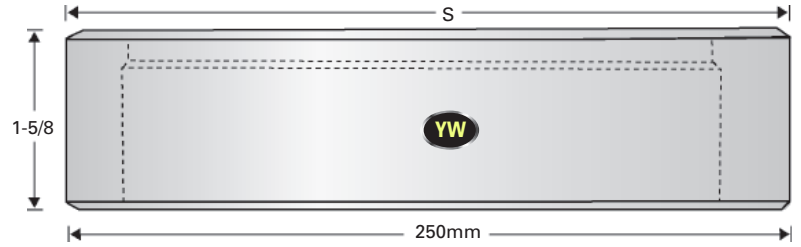
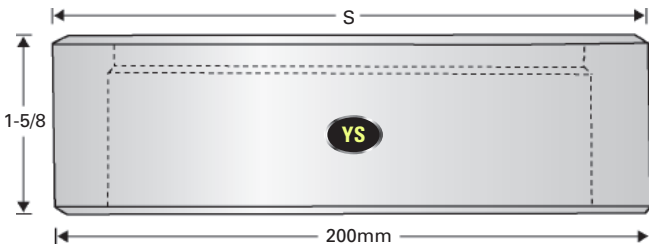
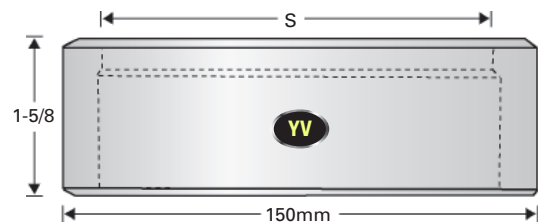
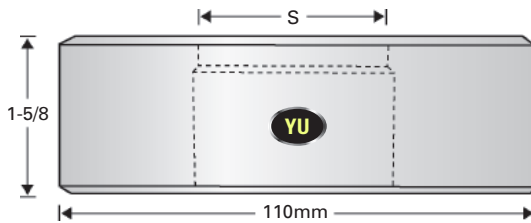
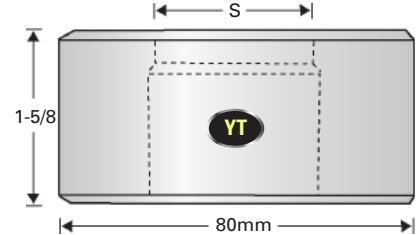
See pages 74 - 75 for stock sizes of dies.



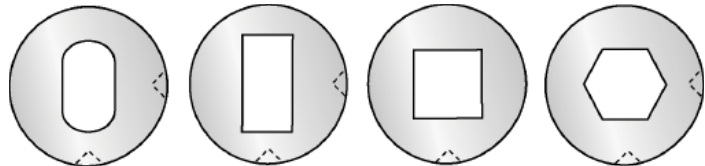
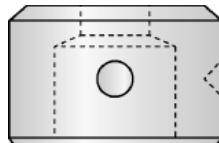
Sizes 9/64 to 1-3/16 Dia.



Sizes 7/32 to 1-5/8 Dia.



Please note: Drill spots allow for the easy alignment of shaped dies. Spartan shaped dies are produced with a drill spot. If machine brand is not stated no drill spot will be provided.



Orientation of standard drill spots relative to shapes

Genuine Piranha Tooling

Hard-working tooling for your ironworker

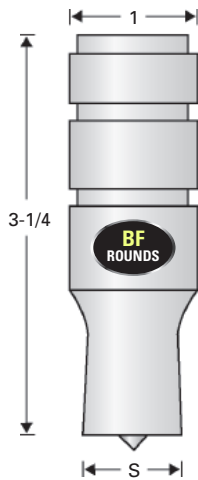
Genuine Piranha Tooling

Tooling for Uni-Hydro™ Machines

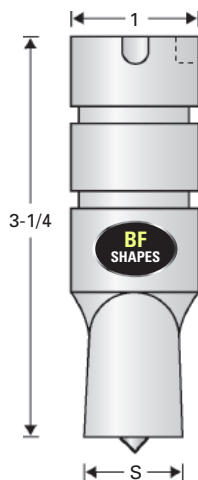
Model	Uses Punch	Uses Die
All Models	BF	BG
OVER 1-1/2 OVERSIZED	VR VP	JG XR ZR

Punches

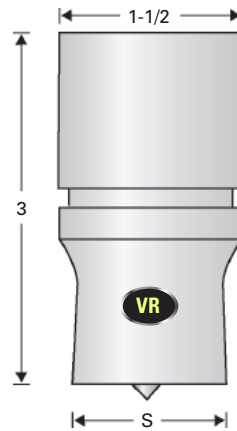
See pages 70 - 71 for stock sizes of punches.



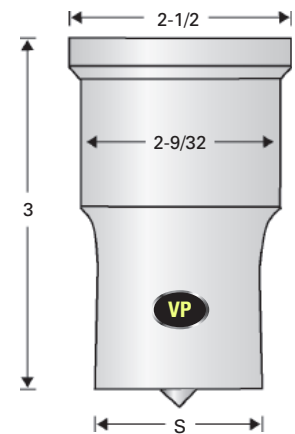
Sizes 1/8 to 1-1/4 Dia.



Sizes 1/8 to 1-1/4 Dia.



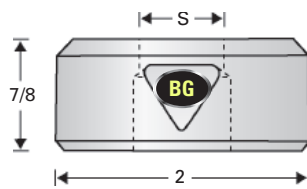
Sizes 1 to 1-1/2 Dia.



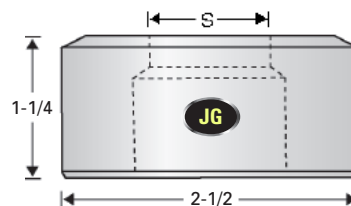
Sizes 1-1/2 to 2-9/32 Dia.

Dies

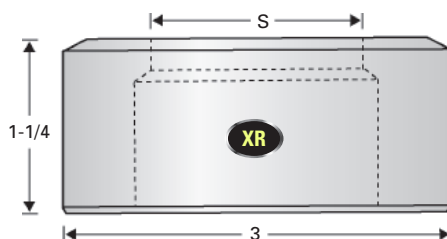
See pages 74 - 75 for stock sizes of dies.



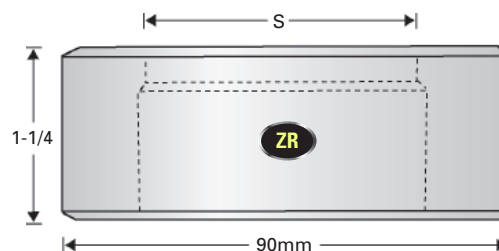
Sizes 9/64 to 1-3/8 Dia.



Sizes 3/4 to 1-5/8 Dia.



Sizes 1-1/2 to 2-5/16 Dia.



Sizes 1-17/32 to 2-13/16 Dia.



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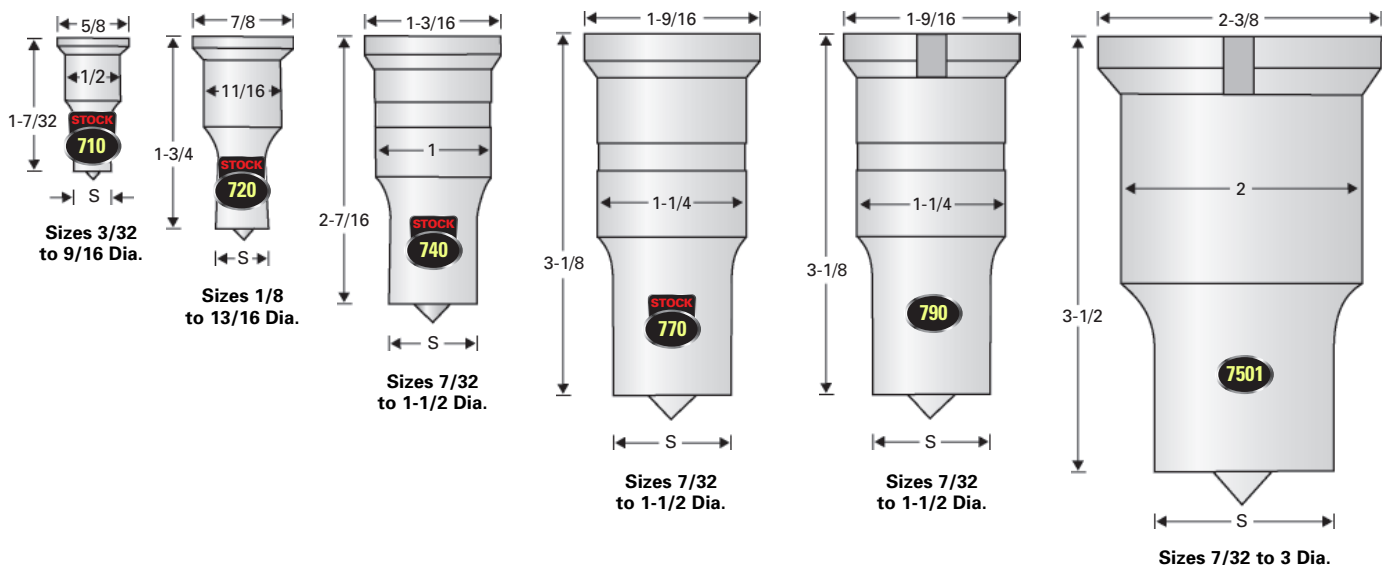
Tooling for W.A. Whitney™ Machines

Model	Uses Punch	Uses Die
705	710	710 1102
710, 720, 720X4, 720X6, 721	720	720 2102
710CC	720	710 1102
730CC, 730X8CC, 731	740	720 2102
730, 730X8, 750, 751	740	740 4102
750AX6, 751AX7, 771AX9, 790AX6, 791AX18, 791AX30	770 790XX	740 4102 790XX
770, 771, 790, 790X6, 791, 791X18	770	740 4102
7150AX6, 7151AX12	770	7502
	790XX	8XXX (B.S. 7502)*
	7501	
7150AX12	770	7602
	790XX	8XXX (B.S. 7602)*
	7501	
7250AX12	7501	7602
		8XXX (B.S. 7602)*
ANGLEMATIC	770	740
	790XX	790XX
BEAMLINER	770	740 4102
	790XX	790XX
PLATE DUPLICATOR	770	740
	790XX	790XX

* B.S. = Bevel Serrated Die

Punches

See pages 70 - 71 for stock sizes of punches.



Genuine Piranha Tooling

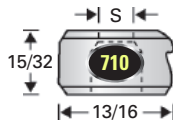
Hard-working tooling for your ironworker

Genuine Piranha Tooling

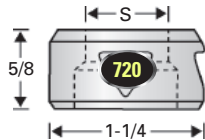
Tooling for W.A. Whitney™ Machines

Dies

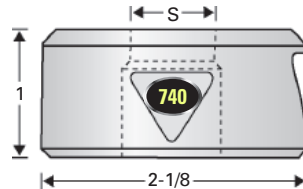
See pages 74 - 75 for stock sizes of dies.



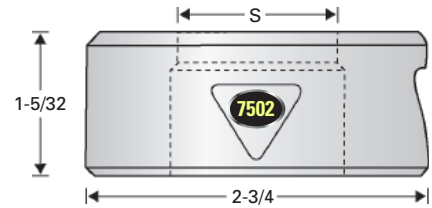
Sizes 3/32 to 9/16 Dia.



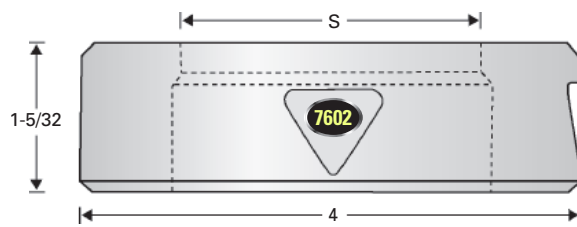
Sizes 1/8 to 27/32 Dia.



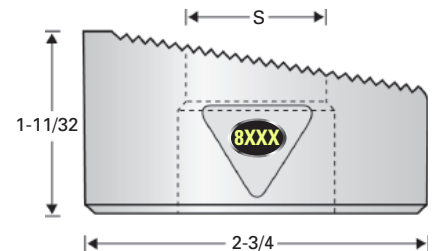
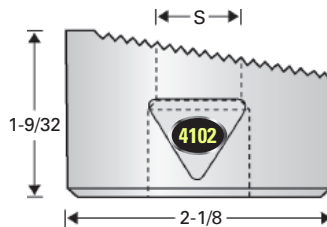
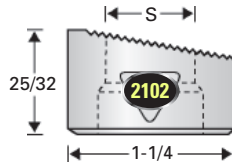
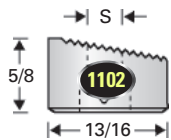
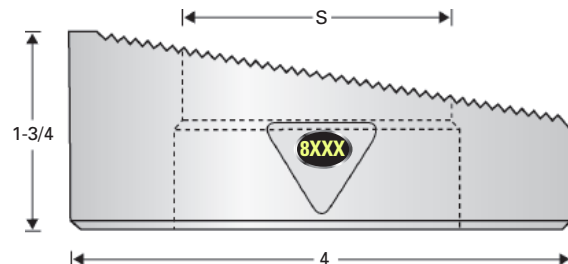
Sizes 7/32 to 1-17/32 Dia.



Sizes 7/32 to 2 Dia.

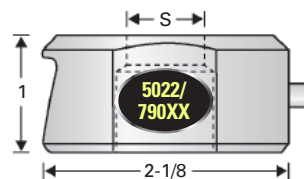
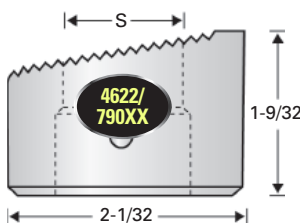
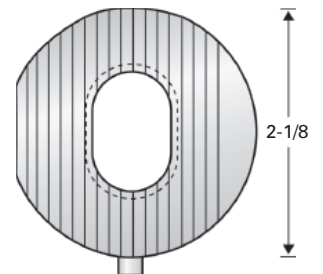
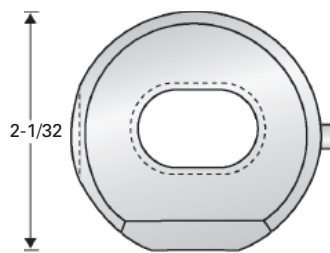
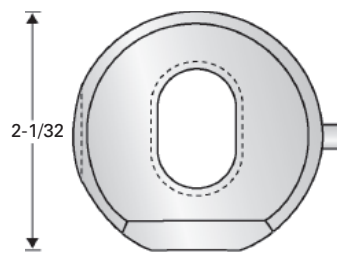
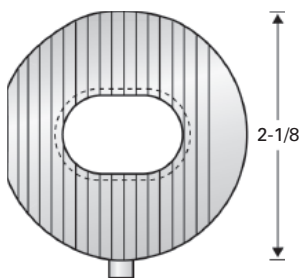


Sizes 7/32 to 3-1/16 Dia.

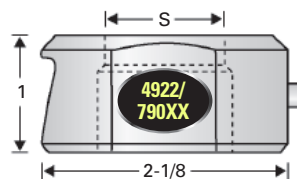


Shape perpendicular to flat on O.D.

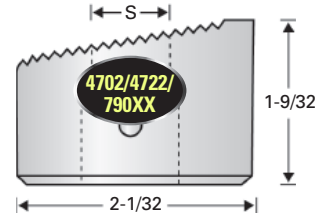
Rounds or shapes parallel to flat on O.D.



Sizes 7/32 to 1.520 Dia.



Sizes 7/32 to 1.520 Dia.



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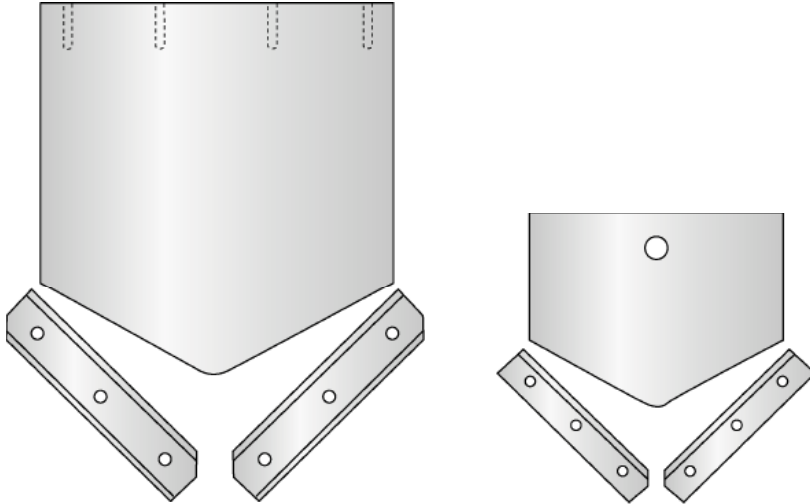
www.piranhatooling.com

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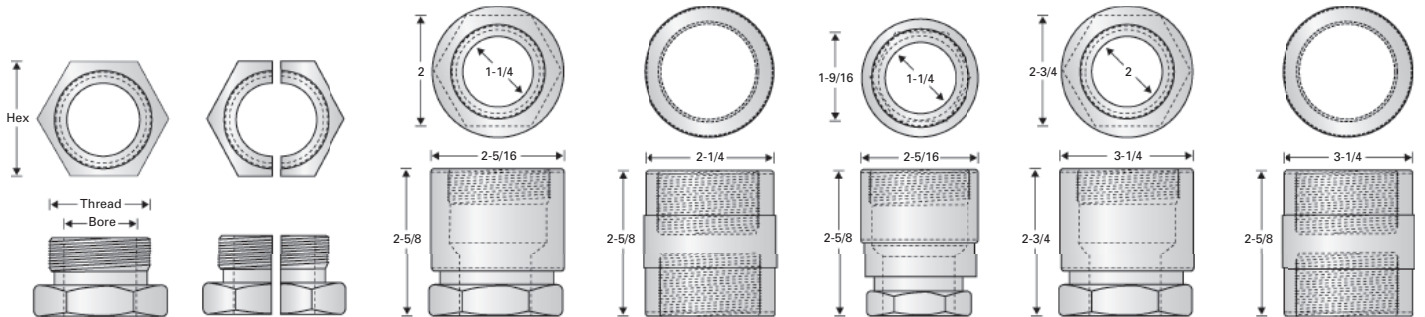
Tooling for W.A. Whitney™ Machines

Shear Blades



Model	Upper Blade Part #	Lower Blade Part #
606	606-008	606-010 (2) L 606-113 (2) R
609	609-004	609-039 (2) L 609-040 (2) R
664	664-061	609-039 (2) L 609-040 (2) R
764	664-061	609-039 (2) L 609-040 (2) R
765	765-036	765-032 (4)
845	609-004	845-269 (2) R
846		845-270 (2) L

Coupling Nuts & Adapters



Coupling Nut for punches 710, 720, 740 & 770

Split Coupling Nut for punches 720, 740, 770, 790XX & 7501

Coupling Nut for punch 790XX

Straight Coupling Adapter for 790XX Split Coupling Nut

Coupling Nut for 790XX Punch on 845/846 Anglematics

Coupling Nut for punch 7501

Straight Coupling Adapter for 7501 Punch Split Coupling Nut

Coupling Nut Part No.	Split Coupling Nut Part No.	Straight Coupling Adapter for Split Coupling Nut Part No.	Thread	Bore	Hex	Fits Punch
010-001	-	-	3/4"-16	1/2"	3/4"	710
010-002	-	-	3/4"-16	9/16"	3/4"	710
020-001	020-002	-	1"-16	11/16"	1"	720
040-001	040-002	-	1-3/8"-12	1"	1-3/4"	740
770-016	770-024	-	1-3/4"-12	1-1/4"	2"	770
790-061	770-024	790-070	1-3/4"-12	1-1/4"	2"	790XX
845-689	-	-	1-3/4"-12	1-1/4"	1-9/16"	790XX
715-010	715-021	715-020	2-5/8"-12	2"	2-3/4"	7501

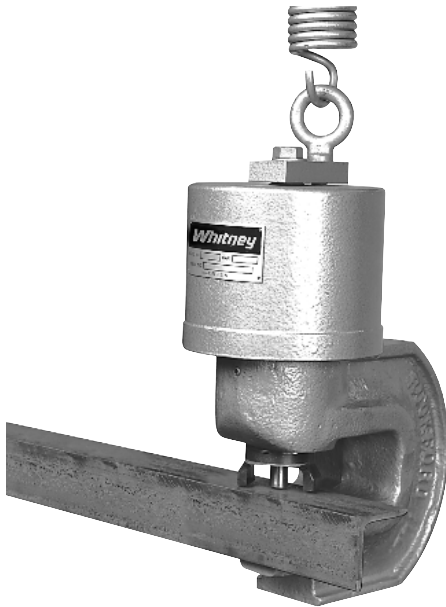
To adapt 770 round and 790XX punches to 7150AX6, 7151AX12 or 7150AX12 order coupling nut assembly 715-022 and either invert or remove punch key in ram.

Genuine Piranha Tooling

Hard-working tooling for your ironworker

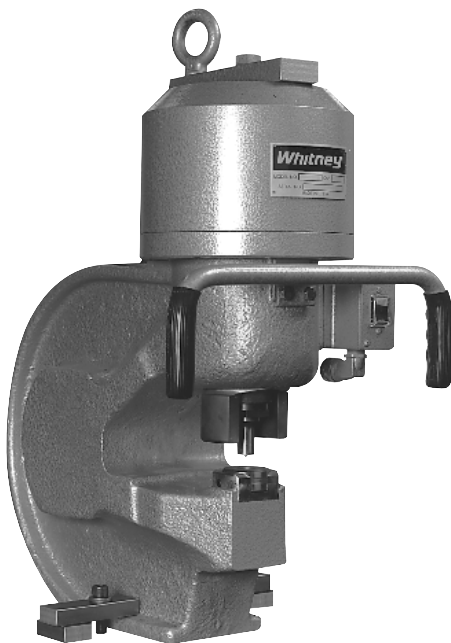
Genuine Piranha Tooling

W.A. Whitney Portable Presses



Standard Flange Presses

- 20 to 90 ton capacities
- Handgrips optional on 30 to 90 ton models



"A" Series Flange Presses

- 100 to 250 ton capacities
- Automatic ram reversal
- Can use keyed punches and dies
- Replaceable die pockets
- Handgrips standard- 100 & 150 ton models only

Shows clamps for mounting to bench

	720
	720X6
	730
	730CC
	730X8
	750
	770
	790
	790AX6
	7150AX6
	7150AX12
	7250AX12



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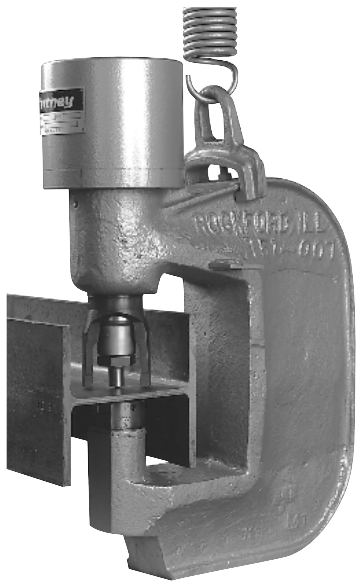
Whitney's Portable Press product line allows you to move your punching machine to the workpiece. These presses are great for structural shapes. Tonnages are available from 20 to 250 tons, in both web and flange styles.

CAPACITY (tons)	MAX. DIA. HOLE*	MAX. MATERIALS THICKNESS*	THROAT DEPTH	STROKE	WEIGHT (lbs.)	PUNCH STYLE	DIE STYLE	RECOMMENDED POWER UNIT	PUNCHING CYCLE TIME**
20	13/16	9/16	2-1/4	7/8	36	720	720	700-SV-1A or 700-SV-3A	5.00 3.00
20	13/16	9/16	6	7/8	77	720	720	700-SV-1A or 700-SV-3A	5.00 3.00
30	1-1/2	5/8	3-1/8	7/8	70	740	740	700-SV-1A or 700-SV-3A	7.00 4.00
30	13/16	5/8	3-1/8	7/8	70	740	720	700-SV-1A or 700-SV-3A	7.00 4.00
30	1-1/2	5/8	8	7/8	130	740	740	700-SV-1A or 700-SV-3A	7.00 4.00
50	1-1/2	3/4	4-1/4	1-3/8	200	740	740	700-SV-3A or 700-SV-10A	12.00 5.00
70	1-3/8	1	4-1/4	1-3/8	240	770	740	700-SV-10A	6.00
90	1-1/4	1	4-1/4	1-3/8	275	770	740	700-SV-10A or 700-SV-20A	7.00 4.00
100	1-1/2	1-1/8	6-1/4	1-5/8	450	770 790XX	740 790XX	700-SV-10A or 700-SV-20A	8.00 5.00
150	2	1-3/8	6-1/4	2	1100	770/790XX 7501	7502	700-SV-20A	9.00
150	3	1-3/8	12-1/2	2	2100	770/790XX 7501	7602	700-SV-20A	9.00
250	2-3/8	1-3/8	12-1/2	2	4800	7501	7602	700-SV-20A	14.00

* Hole diameter & material thickness capacities are given independent of each other. Maximum diameter of hole punched in a given thickness of material is dependent on press tonnage capacity and material specifications. See charts on page 64.

Genuine Piranha Tooling

W.A. Whitney Portable Presses



Standard Web Presses

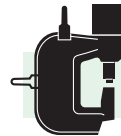
- 20 to 90 ton capacities
- Eye brackets adjustable for horizontal or vertical suspension
- Handgrips optional-all models



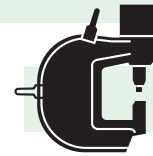
721



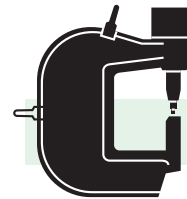
731



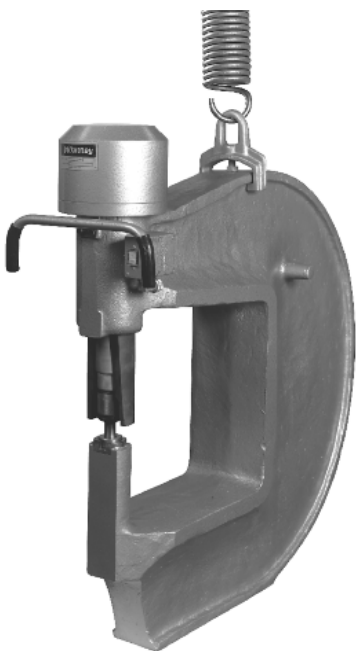
751



771

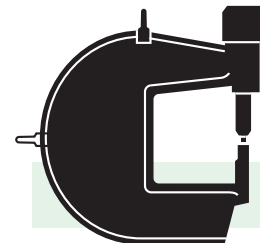


791

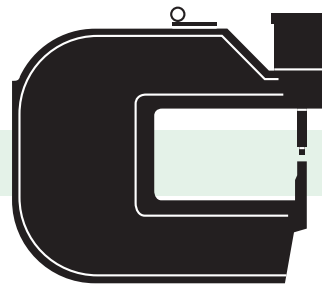


"A" Series Web Presses

- 100 to 150 ton capacities
- Can use keyed punches and dies
- Automatic ram reversal
- Replaceable die pocket
- Heavy tonnage capacity
- Hand grips standard on 100-150 ton models
- Eye brackets adjustable for horizontal or vertical suspension



791AX18



791AX30



7151AX12



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Whitney's Portable Press product line allows you to move your punching machine to the workpiece. These presses are great for structural shapes. Tonnages are available from 20 to 250 tons, in both web and flange styles.

CAPACITY (tons)	MAX. DIA. HOLE*	MAX. MATERIALS THICKNESS*	THROAT DEPTH	STROKE	WEIGHT (lbs.)	PUNCH STYLE	DIE STYLE	RECOMMENDED POWER UNIT	PUNCHING CYCLE TIME**
20	13/16	9/16	2-3/4	7/8	58	720	720	700-SV-1A or 700-SV-3A	5.00 3.00
30	13/16	9/16	4-1/4	7/8	124	740	720	700-SV-1A or 700-SV-3A	7.00 4.00
50	1-1/2	3/4	6-1/4	1-3/8	300	740	740	700-SV-3A or 700-SV-10A	12.00 5.00
70	1-1/2	1	7-3/4	1-3/8	560	770	740	700-SV-10A	6.00
90	1-1/2	1	12-1/2	1-3/8	1200	770	740	700-SV-10A or 700-SV-20A	7.00 4.00
100	1-1/2	1-1/8	18-1/2	1-5/8	2000	770 790XX	740 790XX	700-SV-10A or 700-SV-20A	8.00 5.00
100	1-1/2	1-1/8	30-1/2	1-5/8	4500	770 790XX	740 790XX	700-SV-10A or 700-SV-20A	8.00 5.00
150	2	1-3/8	12-1/2	2	3600	770/790XX 7501	7502	700-SV-20A	9.00

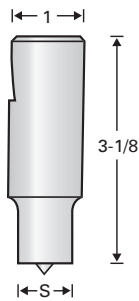
* Hole diameter & material thickness capacities are given independent of each other. Maximum diameter of hole punched in a given thickness of material is dependent on press tonnage capacity and material specifications. See charts on page 64.

Genuine Piranha Tooling

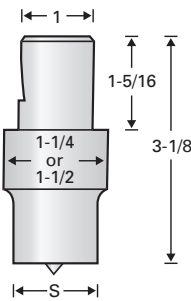
Piranha 28XX Tooling

Dimensions & Specifications

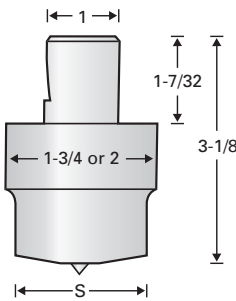
28XX round and shaped punches and dies for oversize attachments.



Sizes .062 to 1.000 Dia.



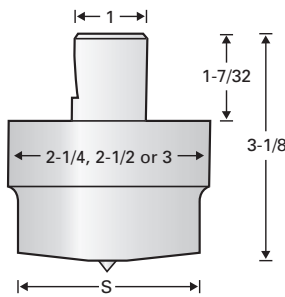
Sizes 1.001 to 1.453 Dia.



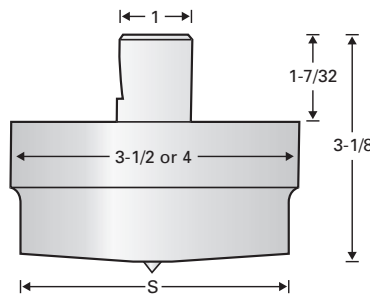
Sizes 1.454 to 1.969 Dia.

28XX Punches are available up to 5.000" in diameter.

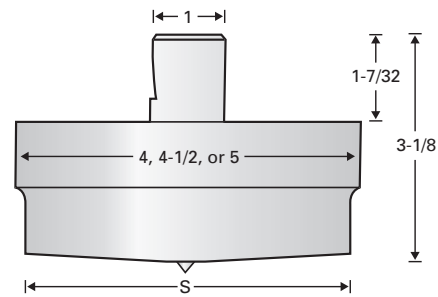
All punches through 1.453" diameter (or equivalent size shape) are flat-faced, with a center point on the punch face. Larger punches are standard with 1/8" housetop shear and center point. Other shear types are available at customer request.



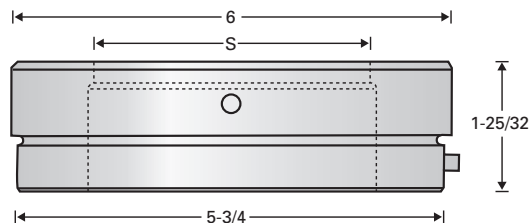
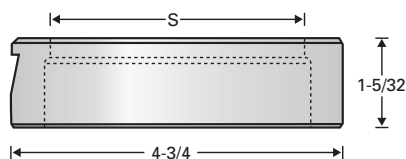
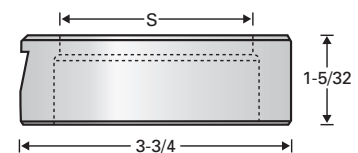
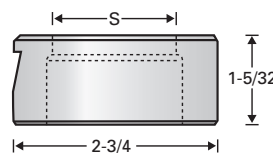
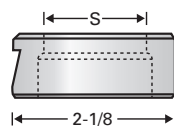
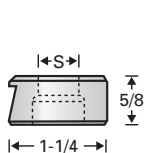
Sizes 1.970 to 2.969 Dia.



Sizes 2.970 to 3.969 Dia.



Sizes 3.970 to 5.000 Dia.



Please specify the size of the oversize attachment when ordering.



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Piranha 28XX Tooling

28XX Punches & Dies—Standard Shapes



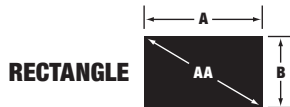
Punch (6301-) Size "A"	Die (6302-) Size "A"	Die O.D.
.050 - .172	Thru .209	1-1/4
.173 - .812	.210 - .824	1-1/4
.813 - 1.000	.825 - 1.068	2-1/8
1.001 - 1.453	1.069 - 1.465	2-1/8
1.454 - 2.000	1.466 - 2.012	2-3/4
2.001 - 2.500	2.013 - 2.537	3-3/4
2.501 - 3.000	2.538 - 3.012	3-3/4
3.001 - 3.500	3.013 - 3.537	4-3/4
3.501 - 4.000	3.538 - 4.012	4-3/4
4.001 - 4.500	4.013 - 4.537	5-3/4
4.501 - 5.000	4.538 - 5.012	5-3/4



Punch (6311-) Size "A"	Die (6312-) Size "A"	Die O.D.
.125 - .500	Thru .512	1-1/4
.501 - .688	.513 - .724	2-1/8
.689 - 1.000	.725 - 1.012	2-1/8
1.001 - 1.406	1.013 - 1.418	2-3/4
1.407 - 1.766	1.419 - 1.778	3-3/4
1.767 - 2.125	1.779 - 2.137	3-3/4
2.126 - 2.469	2.138 - 2.481	4-3/4
2.470 - 2.812	2.482 - 2.824	4-3/4
2.813 - 3.156	2.825 - 3.168	5-3/4
3.157 - 3.500	3.169 - 3.512	5-3/4



Punch (6321-) Size "A"	Die (6322-) Size "A"	Die O.D.
.125 - .812	Thru .824	1-1/4
.813 - 1.000	.825 - 1.068	2-1/8
1.001 - 1.453	1.069 - 1.465	2-1/8
1.454 - 2.000	1.466 - 2.012	2-3/4
2.001 - 2.500	2.013 - 2.537	3-3/4
2.501 - 3.000	2.538 - 3.012	3-3/4
3.001 - 3.500	3.013 - 3.537	4-3/4
3.501 - 4.000	3.538 - 4.012	4-3/4
4.001 - 4.500	4.013 - 4.537	5-3/4
4.501 - 5.000	4.538 - 5.012	5-3/4



Punch (6331-) Size "AA"	Die (6332-) Size "AA"	Die O.D.
.125 - .750	Thru .762	1-1/4
.751 - .999	.763 - 1.068	2-1/8
1.000 - 1.438	1.069 - 1.450	2-1/8
1.439 - 2.000	1.451 - 2.012	2-3/4
2.001 - 2.500	2.013 - 2.537	3-3/4
2.501 - 3.000	2.538 - 3.012	3-3/4
3.001 - 3.500	3.013 - 3.537	4-3/4
3.501 - 4.000	3.538 - 4.012	4-3/4
4.001 - 4.500	4.013 - 4.537	5-3/4
4.501 - 5.000	4.538 - 5.012	5-3/4



Punch (6361-) Size "A"	Die (6362-) Size "A"	Die O.D.
.125 - .812	Thru .824	1-1/4
.813 - .999	.825 - 1.068	2-1/8
1.000 - 1.453	1.069 - 1.465	2-1/8
1.454 - 2.000	1.466 - 2.012	2-3/4
2.001 - 2.500	2.013 - 2.537	3-3/4
2.501 - 3.000	2.538 - 3.012	3-3/4



Punch (6351-) Size "A"	Die (6352-) Size "A"	Die O.D.
.125 - .812	Thru .824	1-1/4
.813 - .999	.825 - 1.068	2-1/8
1.000 - 1.453	1.069 - 1.465	2-1/8
1.454 - 2.000	1.466 - 2.012	2-3/4
2.001 - 2.500	2.013 - 2.537	3-3/4
2.501 - 3.000	2.538 - 3.012	3-3/4



Punch (6341-) Size "A"	Die (6342-) Size "A"	Die O.D.
.125 - .688	Thru .700	1-1/4
.689 - 1.250	.701 - 1.262	2-1/8
1.251 - 1.719	1.263 - 1.731	2-3/4
1.720 - 2.594	1.732 - 2.606	3-3/4



Punch (8XXX-) Size "AA"	Die (8XXX-) O.D.
Thru .812	1-1/4
.813 - 1.453	2-1/8
1.454 - 2.000	2-3/4
2.001 - 3.000	3-3/4
3.001 - 4.000	4-3/4
4.001 - 5.000	5-3/4



Punch (8XXX-) Size "AA"	Die (8XXX-) O.D.
Thru .812	1-1/4
.813 - 1.453	2-1/8
1.454 - 2.000	2-3/4
2.001 - 3.000	3-3/4
3.001 - 4.000	4-3/4
4.001 - 5.000	5-3/4

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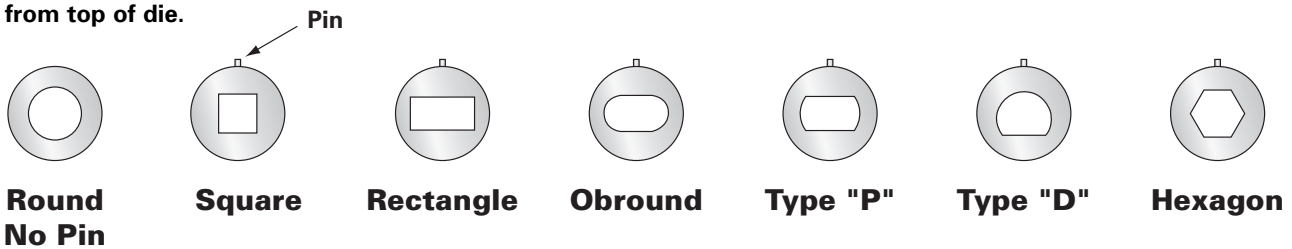
Piranha 28XX Tooling

Orientations and Pin Locations

All shaped 28XX punches and dies are pinned for 0° and 90° positioning. Pin locations are shown for standard shapes. Other pin locations may be specified, at additional cost, when ordering. Use the three step procedure shown here to determine the proper degree of location for a custom pin location.

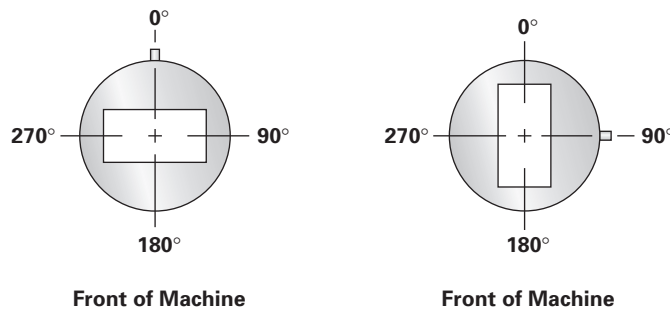
Pin Locations for Standard Shapes

View from top of die.



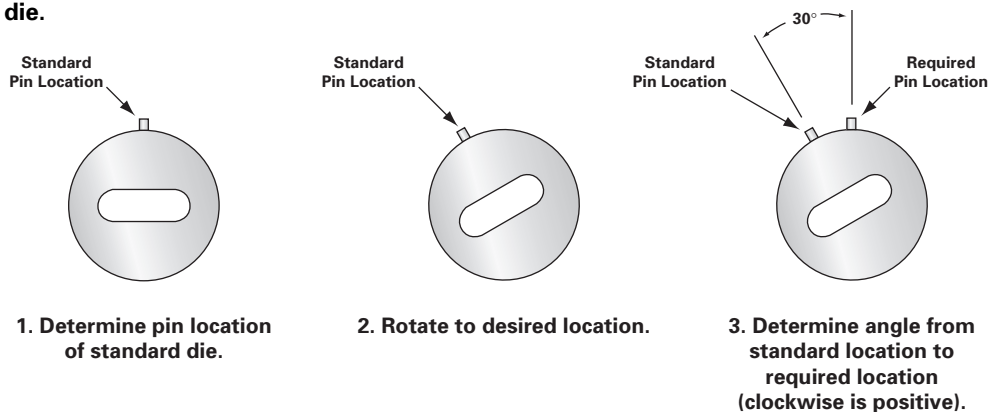
Standard Shaped Dies—Orientations in Machine

View from top of die.



Determining Custom Pin Location

View from top of die.



Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.

Piranha Eccentric Dies

Stock Round Offset Dies

Size	JB	JF
9/32	•	•
5/16	•	•
11/32	•	•
3/8	•	•
13/32	•	•
7/16	•	•
15/32	•	•
1/2	•	•
17/32	•	•
9/16	•	•
19/32	•	•
5/8	•	•
21/32	•	•
11/16	•	•
23/32	•	•
3/4	•	•
25/32	•	•
13/16	•	•
27/32	•	•
7/8	•	•
29/32	•	•
15/16	•	•
31/32	•	•
1	•	•
1-1/32	•	•
1-1/16	•	•
1-3/32	•	•
1-1/8	•	•

• Same-Day
Shipment Sizes

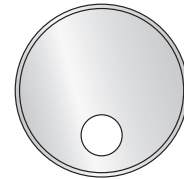
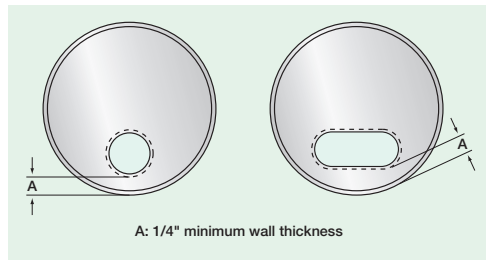
Stock Obround Offset Dies

Size	JB	JF
13/32 x 25/32	•	•
13/32 x 1-1/32	•	•
15/32 x 25/32	•	•
15/32 x 1-1/32	•	•
17/32 x 1-1/32	•	•
19/32 x 25/32	•	•
19/32 x 1-1/32	•	•
23/32 x 1-1/32	•	•
27/32 x 1-1/32	•	•

Eccentric Dies

Offset dies are made with at least a 1/4" wall thickness.

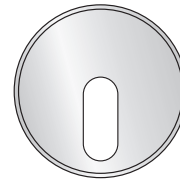
Please specify location of whistle notch if required. Stock dies do not have whistle notch.



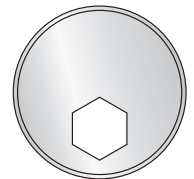
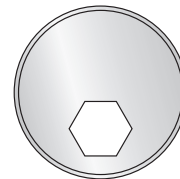
Round

Position A

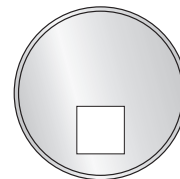
Position B



Obround or Rectangle



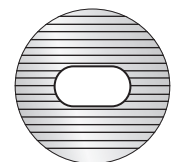
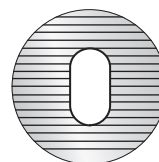
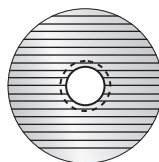
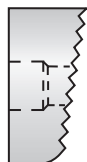
Hexagon



Square

Bevel Serrated Dies

Bevel serrated dies are available on request. Please specify die style, shape, orientation of shape to bevel and size.



Perpendicular to serrations

Parallel to serrations

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Reference Data

Calculating Tonnage Requirements

To determine the tonnage needed to punch a single hole with a flat faced punch:

- Calculate the Hole Perimeter using the formulas on page 65.
- Find the Material Shear Strength on the table on page 65.
- Then use the following equation:

Flat Face Punch Force (lbs) = Punch Perimeter (inches) x Material Thickness (inches) x Material Shear Strength (lbs/in²)

To change from pounds of punch force to tons of punch force use the following equation: tons = lbs/2000

Example: To punch a 1/4" square hole in 3/16" stainless steel:

$4(1/4") \times 3/16" \times 70,000 \text{ lbs/in}^2 = 13,125 \text{ lbs (6.56 tons)}$ of punching force.

Note: Tonnage to punch a hole is reduced when the punch has shear. To find actual punch force needed (for round holes only) find the shear factor and use the following formula:

Actual Punch Force with Shear (lbs or tons) = Flat Face Punch Force (lbs or tons) x Shear Factor

28XX™ punches up thru 1.453" diameter have no shear; 1.454" thru 5.000" diameter have 1/8" housetop shear.*

Shear Factor for Round Punches

Thickness	1/8" Shear Factor
.135" (3.4 mm)	.55
.187" (5.0 mm)	.64
.250" (6.0 mm)	.74
.313" (8.0 mm)	.84
.375" (10.0 mm)	.95
.500" (12.0 mm)	1.00
.625" (16.0 mm)	1.00
.750" (18.0 mm)	1.00
.875" (22.0 mm)	1.00
1.00" (25.0 mm)	1.00

*Other shear sizes and types are available.

Tonnage Requirements for Round Holes in Mild Steel

HOLE DIA (INCHES)	20 GA	18 GA	16 GA	14 GA	12 GA	11 GA	10 GA	3/16	1/4	5/16	3/8	1/2	5/8	3/4	7/8	1
1/8	0.35	0.47	0.59	0.73	1.0	1.2										
3/16	0.53	0.70	0.88	1.1	1.5	1.8	2.0	2.8								
1/4	0.70	0.94	1.2	1.5	2.1	2.3	2.6	3.7	4.9							
5/16	0.88	1.2	1.5	1.8	2.6	2.9	3.3	4.6	6.1	7.7						
3/8	1.06	1.4	1.8	2.2	3.1	3.5	4.0	5.5	7.4	9.2	11.0					
7/16	1.23	1.6	2.1	2.6	3.6	4.1	4.6	6.4	8.6	10.7	12.9	17.2				
1/2	1.41	1.9	2.3	2.9	4.1	4.7	5.3	7.4	9.8	12.3	14.7	19.6				
9/16	1.59	2.1	2.6	3.3	4.6	5.3	5.9	8.3	11.0	13.8	16.6	22.1	27.6			
5/8	1.76	2.3	2.9	3.7	5.1	5.9	6.6	9.2	12.3	15.3	18.4	24.5	30.7			
11/16	1.94	2.6	3.2	4.0	5.6	6.5	7.3	10.1	13.5	16.9	20.2	27.0	33.7	40.5		
3/4	2.11	2.8	3.5	4.4	6.2	7.0	7.9	11.0	14.7	18.4	22.1	29.5	36.8	44.2		
13/16	2.29	3.1	3.8	4.8	6.7	7.6	8.6	12.0	16.0	19.9	23.9	31.9	39.9	47.9	55.8	
7/8	2.47	3.3	4.1	5.1	7.2	8.2	9.2	12.9	17.2	21.5	25.8	34.4	43.0	51.5	60.1	68.7
15/16	2.64	3.5	4.4	5.5	7.7	8.8	9.9	13.8	18.4	23.0	27.6	36.8	46.0	55.2	64.4	73.6
1.00	2.82	3.8	4.7	5.9	8.2	9.4	10.6	14.7	19.6	24.5	29.5	39.3	49.1	58.9	68.7	78.5
1.50	4.23	5.6	7.0	8.8	12.3	14.1	15.8	22.1	29.5	36.8	44.2	58.9	73.6	88.4	103	118
2.00	5.64	7.5	9.4	11.7	16.4	18.8	21.1	29.5	39.3	49.1	58.9	78.5	98.2	118	137	157
2.50	7.05	9.4	11.7	14.7	20.5	23.5	26.4	36.8	49.1	61.4	73.6	98.2	123	147	172	196
3.00	8.46	11.3	14.1	17.6	24.6	28.2	31.7	44.2	58.9	73.6	88.4	118	147	177	206	236
3.50	9.87	13.1	16.4	20.5	28.8	32.9	37.0	51.5	68.7	85.9	103	137	172	206	241	275
4.00	11.28	15.0	18.8	23.5	32.9	37.6	42.3	58.9	78.5	98.2	118	157	196	236	275	314
4.50	12.69	16.9	21.1	26.4	37.0	42.3	47.5	66.3	88.4	110	133	177	221	265	309	353
5.00	14.10	18.8	23.5	29.3	41.1	47.0	52.8	73.6	98.2	123	147	196	245	295	344	393

Single Hole Punching—When using a press for single round hole punching, refer to the chart above to determine the amount of force (tonnage) required to pierce a given hole. This chart is based on punching mild steel—50,000 PSI shear strength using flat face punches only.

Example: To pierce a 15/16" diameter hole through 10 gauge mild steel, the force required would be 9.9 tons.



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Reference Data

Formulas for Calculating the Perimeter of Standard Shapes

<p>Round P = 3.142(A)</p>	<p>Square P = 4(A)</p>	<p>Obround P = 1.142(B) + 2(A)</p>	<p>Rectangle P = 2(A) + 2(B)</p>
<p>Hexagon P = 3.465(A)</p>	<p>Square with radius corners P = 4(A) - 1.717(R)</p>	<p>Rectangle with radius corners P = 2(A) + 2(B) - 1.717(R)</p>	

Calculate your own tonnage requirements or call a Piranha Service Representative.

Average Shear Strength of Materials (pounds per square inch)

Material	Shear Strength (PSI)	Chart Multiplier	Material	Shear Strength (PSI)	Chart Multiplier
<u>Aluminum</u>			<u>Steel</u>		
1100-0	9,500	.19	Mild Steel	50,000	1.00
1100-H14	11,000	.22	Boiler Plate	55,000	1.10
3003-H14	14,000	.28	Cold Drawn	60,000	1.20
2024-T4	44,000	.88	40-50 Carbon	74,000	1.48
5005-H18	19,000	.38	Structural A-36	60,000	1.20
6063-T5	18,000	.36	Structural EX-TEN		
6061-T4	24,000	.48	(ASTM-A572) – Grade 42	50,000	1.00
6061-T6	29,000	.58	Grade 45	50,000	1.00
7075-T6	54,000	1.08	Grade 50	55,000	1.10
<u>Brass</u>			Grade 55	60,000	1.20
Rolled Sheet (Soft)	42,000	.84	Grade 60	65,000	1.30
1/2 Hard	56,000	1.12	Grade 65	70,000	1.40
Hard	68,000	1.36	Structural COR-TEN		
<u>Copper</u>			(ASTM-A242)	60,000	1.20
1/4 Hard	29,000	.58	Cold Rolled C-1018	60,000	1.20
Hard	43,000	.86	Hot Rolled C-1050	125,000	2.50
Chart Multiplier			Hot Rolled C-1095	125,000	2.50
For piercing materials with a different shear strength than 50,000 psi it is necessary to use a multiplier for calculating the proper amount of force required to punch the hole.			Hot Rolled C-1095 Annealed	90,000	1.80
Example: To pierce a 15/16" diameter hole through 10 gage stainless steel (70,000 psi shear strength) the force required (from the table on page 22) is 9.9 tons. The multiplier is 1.4—therefore, 9.9 tons x 1.4 = 13.9 tons actual force.			Stainless 302 Annealed	70,000	1.40
			Stainless 304 Cold Rolled	70,000	1.40
			Stainless 316 Cold Rolled	70,000	1.40
			Steel, Abrasion Resisting	110,000	2.20
			ASTM A656 – Grade 80	85,000	1.70

These are average values only. Actual shear strength can be higher depending on actual tensile and yield strengths of material batch. Consult Piranha engineers with any punching problems.

Genuine Piranha Tooling

Reference Data

Table of Diagonals (Squares and Rectangles)

	1/8	5/32	3/16	7/32	1/4	9/32	5/16	11/32	3/8	13/32	7/16	15/32	1/2
1/8	.1767	.2001	.2253	.2519	.2795	.3077	.3365	.3657	.3953	.4250	.4550	.4851	.5153
5/32	.2001	.2209	.2440	.2689	.2948	.3217	.3494	.3775	.4062	.4352	.4645	.4941	.5240
3/16	.2253	.2440	.2651	.2881	.3125	.3378	.3644	.3914	.4192	.4474	.4759	.5048	.5340
7/32	.2519	.2689	.2881	.3093	.3322	.3563	.3814	.4074	.4340	.4614	.4891	.5172	.5458
1/4	.2795	.2948	.3125	.3322	.3535	.3763	.4001	.4250	.4507	.4770	.5035	.5312	.5591
9/32	.3077	.3217	.3378	.3563	.3763	.3977	.4204	.4441	.4687	.4941	.5201	.5467	.5737
5/16	.3365	.3494	.3644	.3814	.4001	.4204	.4419	.4645	.4881	.5125	.5376	.5633	.5897
11/32	.3657	.3775	.3914	.4074	.4250	.4441	.4645	.4861	.5067	.5321	.5564	.5812	.6067
3/8	.3953	.4062	.4192	.4340	.4507	.4687	.4881	.5087	.5303	.5528	.5762	.6003	.6250
13/32	.4250	.4352	.4474	.4614	.4770	.4941	.5125	.5321	.5528	.5745	.5970	.6203	.6442
7/16	.4550	.4645	.4759	.4891	.5035	.5201	.5376	.5564	.5762	.5970	.6187	.6412	.6644
15/32	.4851	.4941	.5048	.5172	.5312	.5467	.5633	.5812	.6003	.6203	.6412	.6629	.6854
1/2	.5153	.5240	.5340	.5458	.5591	.5737	.5897	.6067	.6250	.6442	.6644	.6854	.7071

Note:

For square sizes not shown, multiply square size x 1.414

For rectangular sizes not shown:

$$\text{Rect} = \sqrt{a^2 + b^2}$$

	17/32	9/16	19/32	5/8	21/32	11/16	23/32	3/4	25/32	13/16	27/32	7/8	29/32	15/16	31/32	1
1/8	.5457	.5762	.6067	.6373	.6680	.6987	.7295	.7603	.7911	.8220	.8529	.8839	.9148	.9458	.9768	1.0078
5/32	.5537	.5538	.6139	.6442	.6746	.7050	.7355	.7661	.7967	.8274	.8581	.8888	.9196	.9504	.9812	1.0121
3/16	.5633	.5929	.6226	.6525	.6825	.7126	.7428	.7731	.8034	.8339	.8643	.8948	.9254	.9560	.9867	1.0174
7/32	.5745	.6035	.6327	.6622	.6918	.7215	.7513	.7812	.8113	.8414	.8716	.9019	.9323	.9627	.9931	1.0236
1/4	.5871	.6155	.6442	.6731	.7022	.7315	.7610	.7906	.8203	.8501	.8800	.9100	.9401	.9703	1.0000	1.0307
9/32	.6011	.6289	.6570	.6853	.7140	.7428	.7718	.8010	.8303	.8598	.8894	.9191	.9488	.9788	1.0087	1.0387
5/16	.6163	.6434	.6709	.6987	.7268	.7552	.7837	.8125	.8414	.8705	.8997	.9291	.9586	.9882	1.0179	1.0477
11/32	.6327	.6592	.6861	.7133	.7408	.7686	.7967	.8250	.8535	.8822	.9111	.9401	.9692	.9985	1.0279	1.0574
3/8	.6503	.6760	.7022	.7288	.7558	.7831	.8107	.8385	.8666	.8948	.9233	.9519	.9808	1.0097	1.0387	1.0680
13/32	.6688	.6938	.7194	.7454	.7718	.7985	.8256	.8529	.8805	.9084	.9364	.9647	.9931	1.0217	1.0506	1.0794
7/16	.6882	.7126	.7375	.7629	.7887	.8149	.8414	.8682	.8954	.9228	.9504	.9783	1.0063	1.0345	1.0629	1.0915
15/32	.7085	.7322	.7565	.7812	.8064	.8321	.8581	.8844	.9111	.9380	.9652	.9926	1.0203	1.0481	1.0762	1.1044
1/2	.7295	.7526	.7763	.8004	.8250	.8501	.8756	.9014	.9275	.9540	.9808	1.0077	1.0350	1.0625	1.0802	1.1180



Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



Reference Data

Table of Diagonals (Squares and Rectangles) cont.

	17/32	9/16	19/32	5/8	21/32	11/16	23/32	3/4	25/32	13/16	27/32	7/8	29/32	15/16	31/32	1
17/32	.7513	.7737	.7967	.8203	.8443	.8688	.8938	.9191	.9447	.9707	.9971	1.0236	1.0505	1.0775	1.1048	1.1323
9/16	.7737	.7955	.8179	.8408	.8643	.8883	.9127	.9375	.9627	.9882	1.0141	1.0402	1.0688	1.0933	1.1202	1.1473
19/32	.7967	.8179	.8397	.8620	.8850	.9084	.9323	.9566	.9813	1.0063	1.0317	1.0574	1.0834	1.1097	1.1362	1.1630
5/8	.8203	.8408	.8620	.8839	.9062	.9291	.9525	.9763	1.0005	1.0251	1.0500	1.0753	1.1009	1.1267	1.1529	1.1792
21/32	.8443	.8643	.8850	.9082	.9281	.9604	.9733	.9985	1.0203	1.0444	1.0889	1.0937	1.1189	1.1443	1.1701	1.1981
11/16	.8688	.8883	.9084	.9281	.9504	.9723	8946	1.0174	1.0407	1.0643	1.0884	1.1126	1.1375	1.1625	1.1879	1.2135
29/32	.8938	.9127	.9323	.9625	.9733	.9946	1.0164	1.0388	1.0618	1.0848	1.1084	1.1324	1.1566	1.1813	1.2062	1.2315
3/4	.9191	.9375	.9566	.9763	.9965	1.0174	1.0388	1.0606	1.0829	1.1057	1.1289	1.1524	1.1763	1.2006	1.2251	1.2500
25/32	.9447	.9627	.9813	1.0005	1.0203	1.0407	1.0616	1.0829	1.1048	1.1271	1.1499	1.1730	1.1965	1.2203	1.2445	1.2690
13/16	.9707	.9882	1.0063	1.0251	1.0444	1.0643	1.0848	1.1057	1.1271	1.1490	1.1713	1.1941	1.2171	1.2406	1.2644	1.2884
27/32	.9971	1.0141	1.0317	1.0500	1.0689	1.0884	1.1084	1.1289	1.1499	1.1713	1.1932	1.2155	1.2382	1.2613	1.2847	1.3084
7/8	1.0236	1.0402	1.0574	1.0753	1.0937	1.1128	1.1324	1.1524	1.1730	1.1941	1.2155	1.2374	1.2597	1.2824	1.3054	1.3287
29/32	1.0505	1.0686	1.0834	1.1009	1.1189	1.1375	1.1566	1.1763	1.1965	1.2171	1.2382	1.2597	1.2818	1.3039	1.3265	1.3495
15/16	1.0775	1.0933	1.1097	1.1267	1.1443	1.1625	1.1813	1.2006	1.2203	1.2406	1.2613	1.2824	1.3039	1.3258	1.3481	1.3707
31/32	1.1048	1.1202	1.1362	1.1529	1.1701	1.1878	1.2062	1.2251	1.2445	1.2644	1.2847	1.3054	1.3265	1.3481	1.3700	1.3923
1"	1.1323	1.1478	1.1630	1.1792	1.1961	1.2135	1.2315	1.2500	1.2690	1.2884	1.3084	1.3287	1.3495	1.3707	1.3923	1.4142

Table of Diagonals (Hexagons)

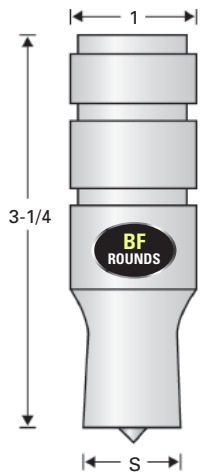
Size	Diagonal	Size	Diagonal	Size	Diagonal
1/4	.2886	13/16	.9380	1-3/8	1.5881
9/32	.3247	27/32	.9941	1-13/32	1.6242
5/16	.3608	7/8	1.0102	1-7/16	1.6598
11/32	.3968	29/32	1.0463	1-15/32	1.6959
3/8	.4329	15/16	1.0824	1-1/2	1.7320
13/32	.4690	31/32	1.1184	1-17/32	1.7681
7/16	.5051	1	1.1547	1-9/16	1.8042
15/32	.5412	1-1/32	1.1907	1-19/32	1.8403
1/2	.5773	1-1/16	1.2268	1-5/8	1.8764
17/32	.6133	1-3/32	1.2629	1-21/32	1.9124
9/16	.6494	1-1/8	1.2990	1-11/16	1.9485
19/32	.6855	1-5/32	1.3351	1-3/4	2.0207
5/8	.7216	1-3/16	1.3712	1-13/16	2.0929
21/32	.7576	1-7/32	1.4073	1-7/8	2.1650
11/16	.7937	1-1/4	1.4434	1-15/16	2.2372
23/32	.8298	1-9/32	1.4794	2	2.3094
3/4	.8659	1-5/16	1.5155		
25/32	.9020	1-11/32	1.5520		

Genuine Piranha Tooling

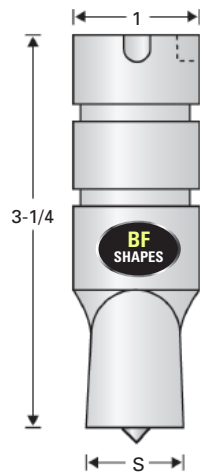
Hard-working tooling for your ironworker

Genuine Piranha Tooling

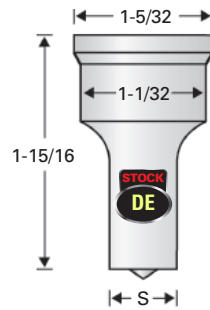
Standard Punches



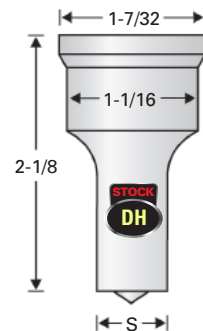
Sizes 1/8 to 1-1/4 Dia.



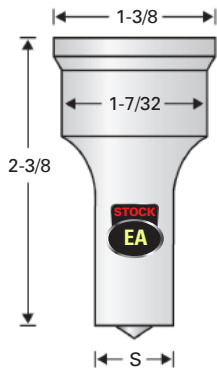
Sizes 1/8 to 1-1/4 Dia.



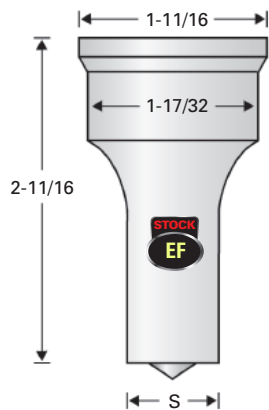
Sizes 1/8 to 1-1/16 Dia.



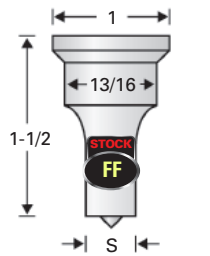
Sizes 1/8 to 1-1/8 Dia.



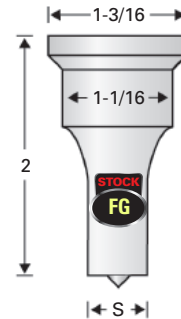
Sizes 1/8 to 1-1/4 Dia.



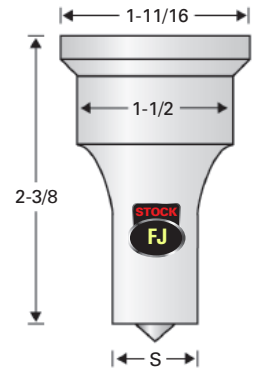
Sizes 1/8 to 1-9/16 Dia.



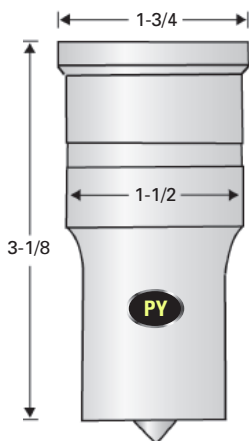
Sizes 1/8 to 13/16 Dia.



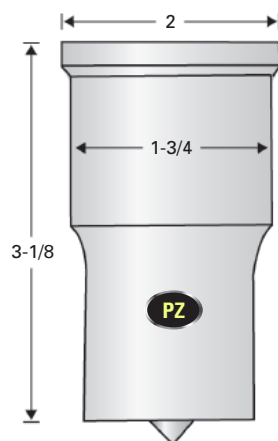
Sizes 3/16 to 1-3/32 Dia.



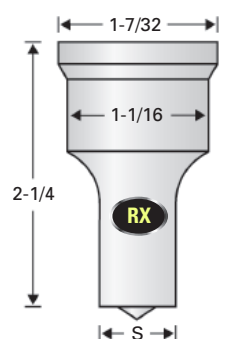
Sizes 3/16 to 1-1/2 Dia.



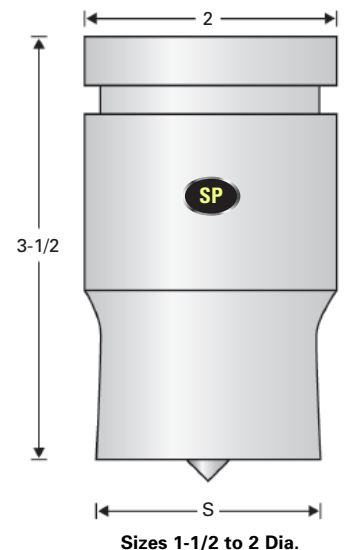
Sizes 7/32 to 1-31/64 Dia.



Sizes 7/32 to 1-47/64 Dia.



Sizes 1/8 to 1-3/64 Dia.

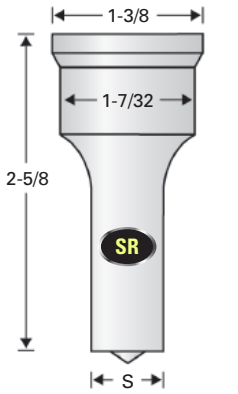


Sizes 1-1/2 to 2 Dia.

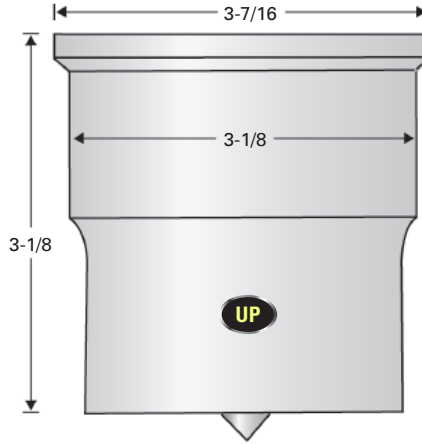


Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.

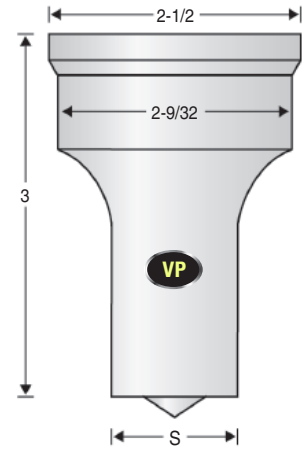
Standard Punches



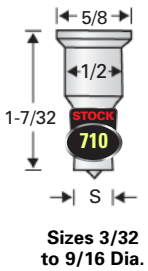
Sizes 1/8 to 1-13/64 Dia.



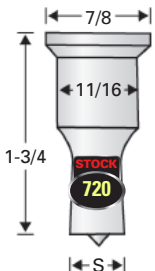
Sizes 7/32 to 3 Dia.



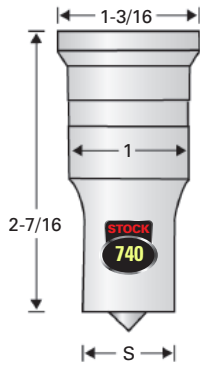
Sizes 1-1/2 to 2-9/32 Dia.



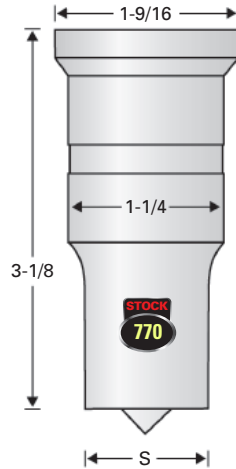
Sizes 3/32 to 9/16 Dia.



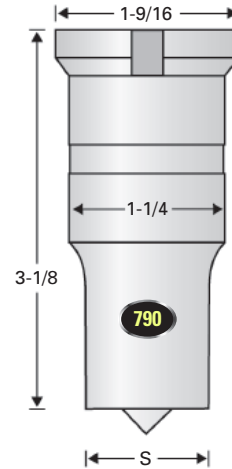
Sizes 1/8 to 13/16 Dia.



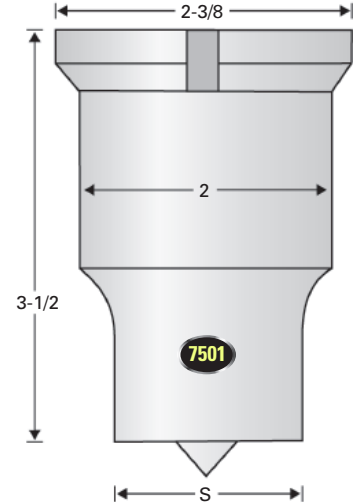
Sizes 7/32 to 1-1/2 Dia.



Sizes 7/32 to 1-1/2 Dia.

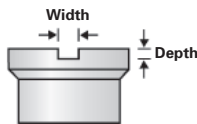
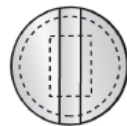


Sizes 7/32 to 1-1/2 Dia.

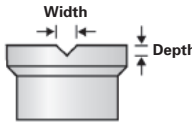
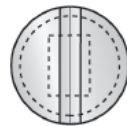


Sizes 7/32 to 3 Dia.

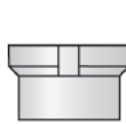
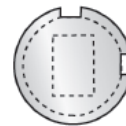
Keyways allow for the easy alignment of shaped punches. Please refer to the section of this catalog for your machine or contact a Piranha Service Representative to help select the appropriate keyways for your machine's punches.



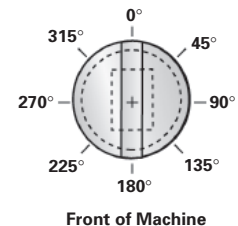
Square Key (use square key)



"V" Key (use round key)



Side Key



Genuine Piranha Tooling

Hard-working tooling for your ironworker

Genuine Piranha Tooling

Piranha Stock Punch Sizes

Stock Round Punches

Size	710	720	740	770	DE	DH	EA	EF
1/8	•	•	•			•	•	
5/32	•	•	•		•	•	•	
3/16	•	•	•	•	•	•	•	•
7/32	•	•	•	•	•	•	•	•
1/4	•	•	•	•	•	•	•	•
9/32	•	•	•	•	•	•	•	•
5/16	•	•	•	•	•	•	•	•
11/32	•	•	•	•	•	•	•	•
3/8	•	•	•	•	•	•	•	•
13/32	•	•	•	•	•	•	•	•
7/16	•	•	•	•	•	•	•	•
15/32	•	•	•	•	•	•	•	•
1/2	•	•	•	•	•	•	•	•
17/32		•	•	•	•	•	•	•
9/16		•	•	•	•	•	•	•
19/32		•	•	•	•	•	•	•
5/8		•	•	•	•	•	•	•
21/32		•	•	•	•	•	•	•
11/16		•	•	•	•	•	•	•
23/32		•	•	•	•	•	•	•
3/4		•	•	•	•	•	•	•
25/32		•	•	•	•	•	•	•
13/16		•	•	•	•	•	•	•
27/32		•	•	•	•	•	•	•
7/8		•	•	•	•	•	•	•
29/32		•	•	•	•	•	•	•
15/16		•	•	•	•	•	•	•
31/32		•	•	•	•	•	•	•
1		•	•	•	•	•	•	•
1-1/32		•	•	•	•	•	•	•
1-1/16		•	•	•	•	•	•	•
1-3/32		•	•	•	•	•	•	•
1-1/8		•	•	•	•	•	•	•
1-5/32		•	•	•	•	•	•	•
1-3/16		•	•	•	•	•	•	•
1-7/32		•	•	•	•	•	•	•
1-1/4		•	•	•	•	•	•	•
1-9/32		•	•	•	•	•	•	•
1-5/16		•	•	•	•	•	•	•
1-11/32		•	•	•	•	•	•	•
1-3/8		•	•	•	•	•	•	•
1-13/32		•	•	•	•	•	•	•
1-7/16		•	•	•	•	•	•	•
1-15/32		•	•	•	•	•	•	•
1-1/2		•	•	•	•	•	•	•
1-17/32		•	•	•	•	•	•	•
1-9/16		•	•	•	•	•	•	•

• Same-Day Shipment Sizes

Stock Square Punches

Size	710	720	740	770	DE	DH	EA	EF
1/4					■	■	■	
9/32					■	■	■	
5/16			■	■	■	■	■	
11/32		■	■	■	■	■	■	
15/32			■	■	■	■	■	■
1/2			■	■	■	■	■	■
17/32			■	■	■	■	■	■
9/16			■	■	■	■	■	■
19/32			■	■	■	■	■	■
5/8			■	■	■	■	■	■
21/32				■	■	■	■	■
11/16				■	■	■	■	■
23/32				■	■	■	■	■
3/4				■	■	■	■	■
25/32				■	■	■	■	■
13/16				■	■	■	■	■
27/32							■	■
7/8							■	■
15/16								■
1								■
1-1/16								■

■ Same-Day Shipment Sizes

Stock Hexagon Punches

Size	710	720	740	770	DE	DH	EA	EF
11/32					•	•	•	•
3/8					•	•	•	•
13/32					•	•	•	•
7/16					•	•	•	•
15/32					•	•	•	•
1/2					•	•	•	•
17/32					•	•	•	•
9/16					•	•	•	•
19/32					•	•	•	•
5/8					•	•	•	•
21/32					•	•	•	•
11/16					•	•	•	•
23/32					•	•	•	•
3/4					•	•	•	•
25/32					•	•	•	•
13/16					•	•	•	•
27/32					•	•	•	•
7/8							•	•
15/16								•
1								•
1-1/16								•
1-1/8								•

• Same-Day Shipment Sizes



Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



Piranha Stock Punch Sizes

Stock Obround Punches

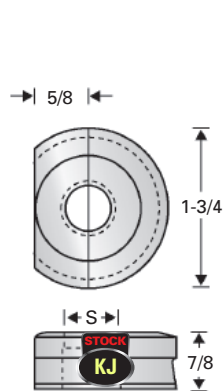
Size	740	770	DE	DH	EA	EF
3/16 x 3/4			•	•	•	
3/16 x 1			•	•	•	•
1/4 x 1/2			•	•	•	
1/4 x 3/4			•	•	•	
1/4 x 1	•	•	•	•	•	
9/32 x 9/16			•	•	•	
9/32 x 3/4			•	•	•	
9/32 x 1			•	•	•	
5/16 x 1/2			•	•	•	
5/16 x 5/8			•	•	•	
5/16 x 3/4			•	•	•	
5/16 x 1	•	•	•	•	•	•
5/16 x 1-1/16				•		
5/16 x 1-1/4		•			•	•
11/32 x 11/16			•	•	•	
11/32 x 1			•	•	•	•
3/8 x 1/2			•	•	•	
3/8 x 3/4			•	•	•	•
3/8 x 1	•	•	•	•	•	•
3/8 x 1-1/4					•	•
13/32 x 13/16			•	•	•	
13/32 x 1			•	•	•	•
13/32 x 1-1/4					•	•
7/16 x 9/16			•	•	•	
7/16 x 3/4			•	•	•	•
7/16 x 7/8			•	•	•	•
7/16 x 1	•	•	•	•	•	•
7/16 x 1-1/16			•	•	•	•
7/16 x 1-1/4		•			•	•
7/16 x 1-1/2						•
15/32 x 1			•	•	•	•
1/2 x 3/4			•	•	•	
1/2 x 1	•	•	•	•	•	•
1/2 x 1-1/16				•		
1/2 x 1-1/4					•	•

Size	740	770	DE	DH	EA	EF
1/2 x 1-1/2						•
17/32 x 1			•	•	•	•
17/32 x 1-1/4					•	•
17/32 x 1-1/2						•
9/16 x 3/4			•	•	•	•
9/16 x 1	•	•	•	•	•	•
9/16 x 1-1/16		•		•	•	
9/16 x 1-1/4		•			•	•
9/16 x 1-1/2		•				•
5/8 x 1	•	•	•	•	•	•
5/8 x 1-1/4		•			•	•
5/8 x 1-1/2						•
11/16 x 1	•	•	•	•	•	•
11/16 x 1-1/16		•		•	•	
11/16 x 1-1/4		•			•	•
11/16 x 1-1/2		•				•
3/4 x 1	•	•	•	•	•	•
3/4 x 1-1/4		•			•	•
3/4 x 1-1/2						•
13/16 x 1	•	•	•	•	•	•
13/16 x 1-1/16		•		•	•	•
13/16 x 1-1/8		•			•	•
13/16 x 1-1/4		•			•	•
13/16 x 1-1/2		•				•
7/8 x 1-1/4		•			•	•
7/8 x 1-1/2						•
15/16 x 1-1/16	•	•			•	
15/16 x 1-1/8		•				
15/16 x 1-1/4		•			•	•
15/16 x 1-1/2		•				•
15/16 x 1-9/16						•
1 x 1-1/4					•	•
1 x 1-1/2						•
1 x 1-9/16						•
1-1/16 x 1-9/16						•

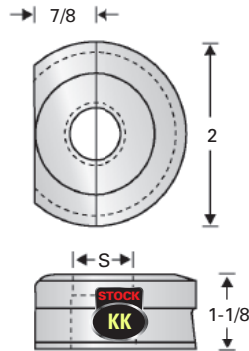
• Same-Day Shipment Sizes

Genuine Piranha Tooling

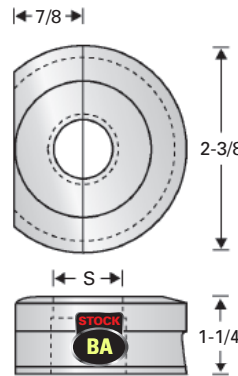
Standard Dies



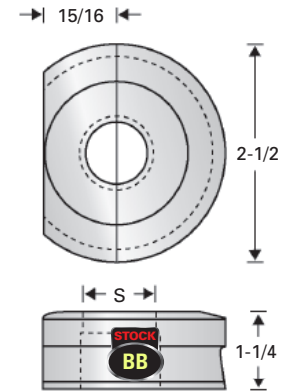
Sizes 9/64 to 7/8 Dia.



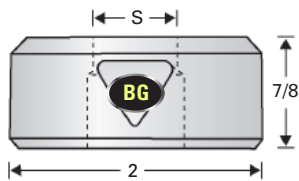
Sizes 13/64 to 1-5/32 Dia.



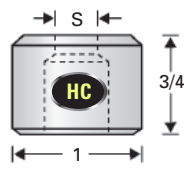
Sizes 7/32 to 1-1/8 Dia.



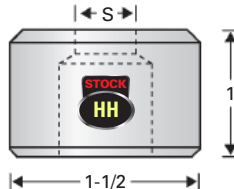
Sizes 9/32 to 1-17/32 Dia.



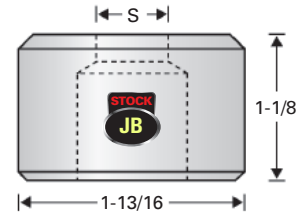
Sizes 9/64 to 1-3/8 Dia.



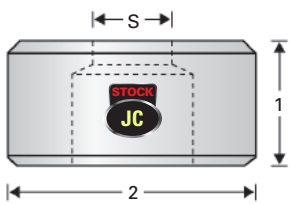
Sizes 9/64 to 3/4 Dia.



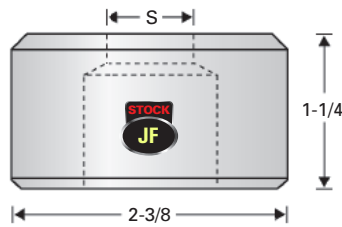
Sizes 9/64 to 1-1/8 Dia.



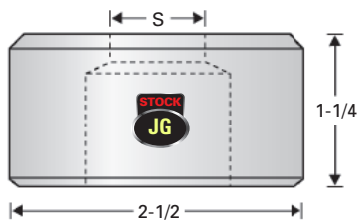
Sizes 9/64 to 1-3/16 Dia.



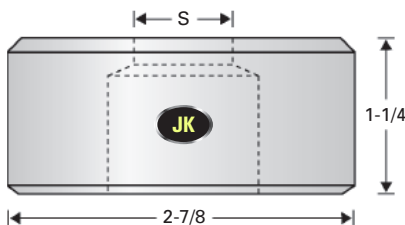
Sizes 9/64 to 1-3/8 Dia.



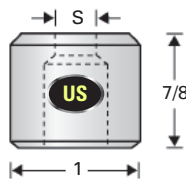
Sizes 7/32 to 1-5/8 Dia.



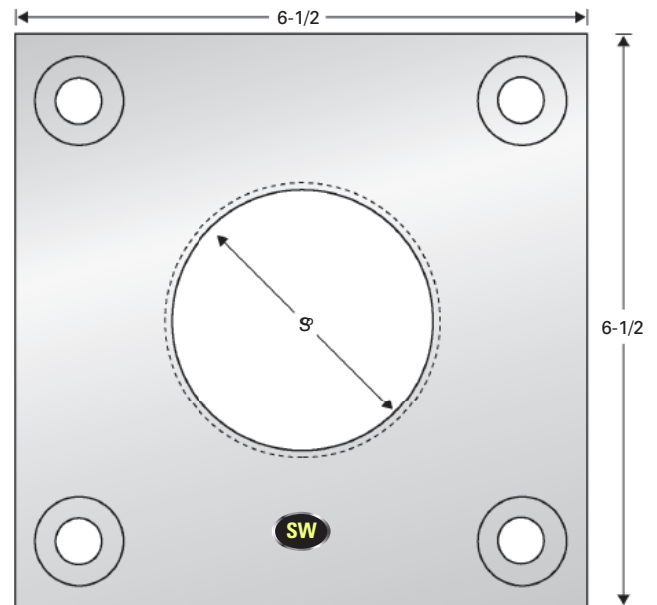
Sizes 3/4 to 1-5/8 Dia.



Sizes 3/4 to 1-11/16 Dia.



Sizes 9/64 to 3/4 Dia.



Sizes 1.506 to 4.062 Dia.



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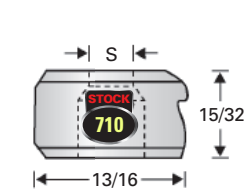
1-800-435-2823

Fax: 1-815-964-0831

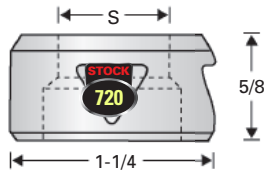
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Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.

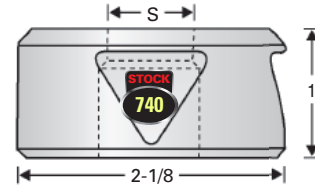
Standard Dies



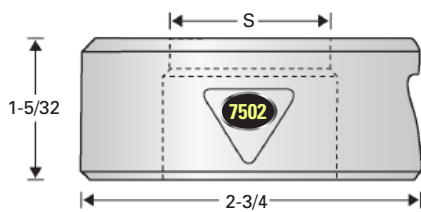
Sizes 3/32 to 9/16 Dia.



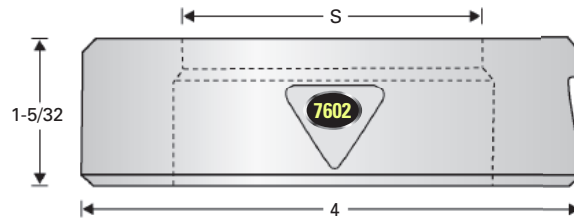
Sizes 1/8 to 27/32 Dia.



Sizes 7/32 to 1-17/32 Dia.

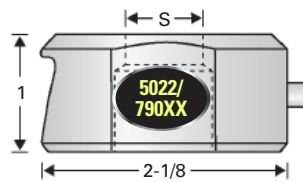
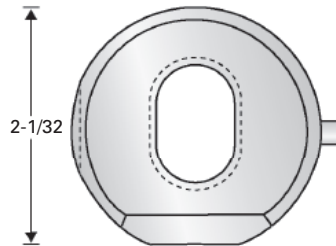


Sizes 7/32 to 2 Dia.

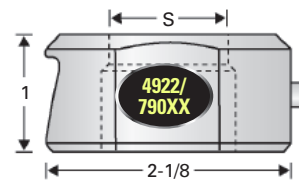
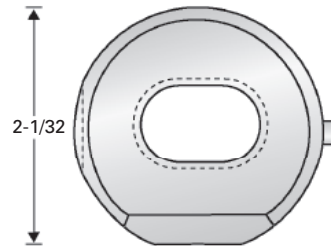


Sizes 7/32 to 3-1/16 Dia.

Shape perpendicular to flat on O.D.



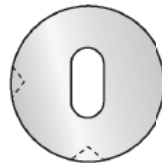
Sizes 7/32 to 1.520 Dia.



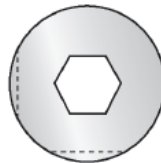
Sizes 7/32 to 1.520 Dia.

Rounds and shapes parallel to flat on O.D.

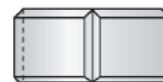
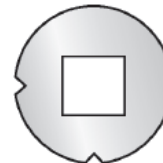
Drill spots, whistle notches and "V" Grooves allow for the easy alignment of shaped dies. Please refer to the section of this catalog for your machine or contact a Piranha Service Representative to help select the appropriate alignment feature for your machine's die.



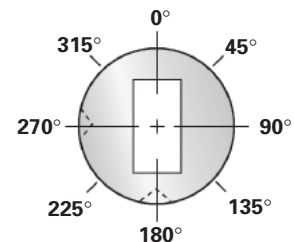
Drill Spot



Whistle Notch



"V" Groove



Front of Machine

Genuine Piranha Tooling

Hard-working tooling for your ironworker

Genuine Piranha Tooling

Piranha Stock Die Sizes

Stock Round Dies

Size	710	720	740	HH	JB	JC	JF	JG
5/32	•	•	•			•		
3/16	•	•	•	•		•	•	
7/32	•	•	•	•	•	•	•	
1/4	•	•	•	•	•	•	•	
9/32	•	•	•	•	•	•	•	
5/16	•	•	•	•	•	•	•	•
11/32	•	•	•	•	•	•	•	•
3/8	•	•	•	•	•	•	•	•
13/32	•	•	•	•	•	•	•	•
7/16	•	•	•	•	•	•	•	•
15/32	•	•	•	•	•	•	•	•
1/2	•	•	•	•	•	•	•	•
17/32	•	•	•	•	•	•	•	•
9/16	•	•	•	•	•	•	•	•
19/32	•	•	•	•	•	•	•	•
5/8	•	•	•	•	•	•	•	•
21/32	•	•	•	•	•	•	•	•
11/16	•	•	•	•	•	•	•	•
23/32	•	•	•	•	•	•	•	•
3/4	•	•	•	•	•	•	•	•
25/32	•	•	•	•	•	•	•	•
13/16	•	•	•	•	•	•	•	•
27/32	•	•	•	•	•	•	•	•
7/8	•	•	•	•	•	•	•	•
29/32	•	•	•	•	•	•	•	•
15/16	•	•	•	•	•	•	•	•
31/32	•	•	•	•	•	•	•	•
1	•	•	•	•	•	•	•	•
1-1/32	•	•	•	•	•	•	•	•
1-1/16	•	•	•	•	•	•	•	•
1-3/32	•	•	•	•	•	•	•	•
1-1/8	•	•	•	•	•	•	•	•
1-5/32	•	•	•	•	•	•	•	•
1-3/16	•	•	•	•	•	•	•	•
1-7/32	•	•	•	•	•	•	•	•
1-1/4	•	•	•	•	•	•	•	•
1-9/32	•	•	•	•	•	•	•	•
1-5/16	•	•	•	•	•	•	•	•
1-11/32	•	•	•	•	•	•	•	•
1-3/8	•	•	•	•	•	•	•	•
1-13/32	•	•	•	•	•	•	•	•
1-7/16	•	•	•	•	•	•	•	•
1-15/32	•	•	•	•	•	•	•	•
1-1/2	•	•	•	•	•	•	•	•
1-17/32	•	•	•	•	•	•	•	•
1-9/16	•	•	•	•	•	•	•	•
1-19/32	•	•	•	•	•	•	•	•
1-5/8	•	•	•	•	•	•	•	•

• ■ • Same-Day Shipment Sizes

Stock Square Dies

Size	720	740	HH	JB	JC	JF	JG
9/32			■	■	■	■	
5/16			■	■	■	■	
11/32	■	■	■	■	■	■	
3/8			■	■	■	■	
13/32	■	■	■	■	■	■	
7/16	■	■	■	■	■	■	■
15/32	■	■	■	■	■	■	■
1/2	■	■	■	■	■	■	■
17/32	■	■	■	■	■	■	■
9/16	■	■	■	■	■	■	■
19/32	■	■	■	■	■	■	■
5/8	■	■	■	■	■	■	■
21/32		■	■	■	■	■	■
11/16		■	■	■	■	■	■
23/32		■	■	■	■	■	■
3/4		■	■	■	■	■	■
25/32		■	■	■	■	■	■
13/16		■	■	■	■	■	■
27/32		■	■	■	■	■	■
7/8		■	■	■	■	■	■
29/32			■	■	■	■	■
15/16				■	■	■	■
31/32					■	■	■
1					■	■	■
1-1/32						■	■
1-1/16						■	■
1-3/32						■	■
1-1/8						■	■

Stock Hexagon Dies

Size	720	740	HH	JB	JC	JF	JG
3/8			•	•	•		•
13/32			•	•	•		•
7/16			•	•	•		•
15/32			•	•	•		•
1/2			•	•	•		•
17/32			•	•	•		•
9/16			•	•	•		•
19/32			•	•	•		•
5/8			•	•	•		•
21/32			•	•	•		•
11/16			•	•	•		•
23/32			•	•	•		•
3/4			•	•	•	•	•
25/32			•	•	•		•
13/16			•	•	•		•
27/32			•	•	•		•
29/32					•		•
15/16					•		•
31/32							•
1							•
1-1/32							•
1-1/16							•
1-3/32							•
1-1/8							•
1-5/32							•
1-3/16							•



1-800-435-2823

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Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



Piranha Stock Die Sizes

Stock Obround Dies

Size	740	HH	JB	JC	JF
7/32 x 25/32			•		
7/32 x 1-1/32		•	•	•	•
9/32 x 17/32		•	•	•	
9/32 x 25/32		•	•	•	
9/32 x 1-1/32	•	•	•	•	
5/16 x 19/32		•	•	•	
5/16 x 25/32		•	•	•	
5/16 x 1-1/32		•	•	•	
11/32 x 17/32		•	•	•	
11/32 x 21/32		•	•	•	
11/32 x 25/32		•	•	•	
11/32 x 1-1/32	•	•	•	•	•
11/32 x 1-3/32			•	•	
11/32 x 1-9/32	•		•	•	•
3/8 x 23/32		•	•	•	
3/8 x 1-1/32		•	•	•	•
3/8 x 1-5/16					•
13/32 x 17/32		•	•	•	
13/32 x 25/32		•	•	•	
13/32 x 1-1/32	•	•	•	•	•
13/32 x 1-9/32				•	•
7/16 x 27/32		•	•	•	
7/16 x 1-1/32		•	•	•	•
7/16 x 1-9/32				•	•
7/16 x 1-5/16					•
15/32 x 19/32		•	•	•	•
15/32 x 25/32		•	•	•	•
15/32 x 29/32		•	•	•	•
15/32 x 1-1/32	•	•	•	•	•
15/32 x 1-3/32		•	•	•	•
15/32 x 1-9/32	•		•	•	•
15/32 x 1-17/32					•
1/2 x 1-1/32		•	•	•	•
1/2 x 1-5/16					•
17/32 x 25/32		•	•	•	
17/32 x 1-1/32	•	•	•	•	•
17/32 x 1-3/32			•		

Size	740	HH	JB	JC	JF
17/32 x 1-9/32				•	•
17/32 x 1-17/32					•
9/16 x 13/16		•	•	•	
9/16 x 1-1/32		•	•		•
9/16 x 1-1/16	•	•	•	•	•
9/16 x 1-1/8			•		
9/16 x 1-9/32				•	•
9/16 x 1-5/16					•
9/16 x 1-17/32					•
9/16 x 1-9/16					•
19/32 x 25/32		•	•	•	
19/32 x 1-1/32	•	•	•	•	•
19/32 x 1-3/32	•	•	•	•	
19/32 x 1-9/32	•		•	•	•
19/32 x 1-17/32	•				•
5/8 x 13/16		•	•	•	•
5/8 x 1-1/16	•	•	•	•	•
5/8 x 1-1/8	•	•	•	•	
5/8 x 1-5/16	•		•	•	•
5/8 x 1-9/16	•				•
21/32 x 1-1/32	•	•	•	•	•
21/32 x 1-9/32	•			•	•
21/32 x 1-17/32					•
11/16 x 1-1/16	•	•	•	•	•
11/16 x 1-5/16	•			•	•
11/16 x 1-9/16					•
23/32 x 1-1/32	•	•	•	•	•
23/32 x 1-3/32	•	•	•	•	
23/32 x 1-9/32	•		•	•	•
23/32 x 1-17/32	•				•
3/4 x 1-1/16	•	•	•	•	•
3/4 x 1-1/8	•	•	•	•	
3/4 x 1-5/16	•		•	•	•
3/4 x 1-9/16	•				•
25/32 x 1-1/32	•	•	•	•	•
25/32 x 1-9/32	•			•	•
25/32 x 1-17/32					•

Size	740	HH	JB	JC	JF
13/16 x 1-1/16	•	•	•	•	•
13/16 x 1-5/16	•			•	•
13/16 x 1-9/16					•
27/32 x 1-1/32	•	•	•	•	•
27/32 x 1-3/32	•	•	•	•	•
27/32 x 1-5/32	•			•	•
27/32 x 1-9/32	•		•	•	•
27/32 x 1-17/32	•				•
7/8 x 1-1/16	•	•	•	•	•
7/8 x 1-1/8	•	•	•	•	•
7/8 x 1-3/16	•				
7/8 x 1-5/16	•		•	•	•
7/8 x 1-9/16	•				•
29/32 x 1-9/32	•			•	•
29/32 x 1-17/32					•
15/16 x 1-5/16	•			•	•
15/16 x 1-9/16					•
31/32 x 1-3/32				•	•
31/32 x 1-5/32	•				
31/32 x 1-9/32	•			•	•
31/32 x 1-17/32	•				•
1 x 1-1/8				•	
1 x 1-3/16	•				
1 x 1-5/16	•			•	•
1 x 1-9/16	•				•
1 x 1-5/8					•
1-1/32 x 1-9/32				•	•
1-1/16 x 1-5/16				•	•
1-1/16 x 1-9/16					•
1-1/16 x 1-5/8					•
1-1/8 x 1-5/8					•

• Same-Day Shipment Sizes

Genuine Piranha Tooling

Hard-working tooling for your ironworker

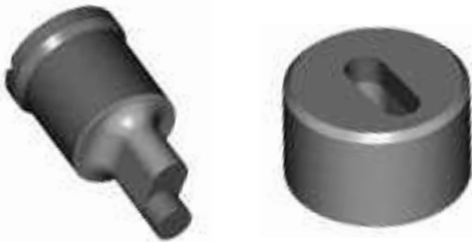
Genuine Piranha Tooling

Piranha Special Tooling

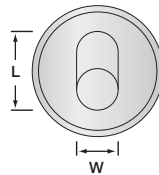
Expand Your Metal Fabricating Capabilities

Get greater productivity from your machine through the use of special tooling. Our design engineering department has a thorough understanding of your machine's capabilities for special parts fabrication. We can assist you with tooling to precisely fit your machine and maximize its capabilities.

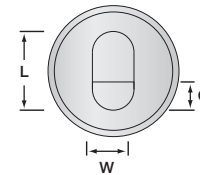
Ripping and Heel Punches



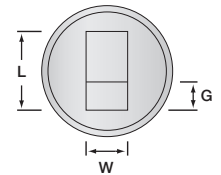
Obround Ripping Punch



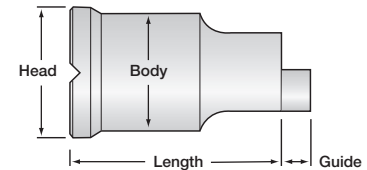
Obround Heel Punch



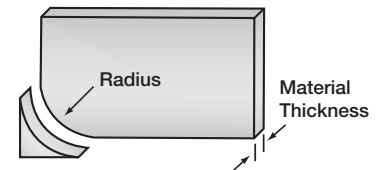
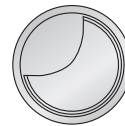
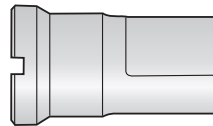
Rectangular Heel Punch



When ordering, please provide shape, material thickness and the dimensions shown. Guide should be 1/8" to 1/4" greater than material thickness.

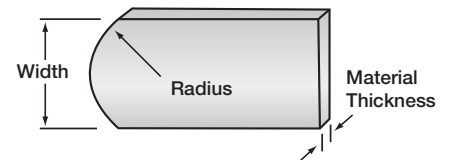
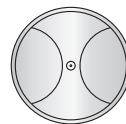
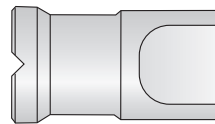


Corner Rounding Punch & Die



When ordering, please provide corner radius and material thickness. Minimum radius is 1/8". Maximum material thickness is 3/8".

Trim & Part (Lattice Bar) Punch & Die



Trim and Part tooling produces end radii on flat bar stock. When ordering please provide radius, material thickness and width. Special end configurations also available.

Maximum material thickness is 3/8".



Stock Punches & Dies are shipped the same day ordered (for ironworker tooling ordered by 3 p.m. and 28XX tooling ordered by 11 a.m.). Non-stock sizes (standard tooling with round, obround, square, rectangular or hexagonal shape) will be shipped within 48 hours.



Piranha P-50 Ironworker

No other brand of ironworker compares to the tremendously versatile Piranha P-50.

Features such as urethane stripping, automatic shear hold-downs, quick change tooling, low blade rake angles, and six standard work stations, coupled with its ergonomic design and clear lines of sight to all tools, including shear blades, place Piranha far above the competition. These features produce higher quality parts, and

make Piranha ironworkers easier to use than any other ironworker.

Most of the features of the tremendously successful P-50 can be found in the entire line of Piranha ironworkers.

It's no wonder that Piranha is the leading brand of ironworker in North America.



Urethane strippers dramatically reduce part distortion, and also minimize the stroke length. This, plus more horsepower per ton, is why Piranha machines punch faster than the competition.



Piranha's dovetail slide makes changeover from punching to bending fast and easy.



The P-50's unique automatic urethane hold-downs keep flat stock and sheet metal from distorting. There is no need for time-consuming adjustments between cuts.



A clear sight line, and low rake angle notcher allow easy notching and coping of all materials—fully removing the fillet on angle iron in one stroke.

What Can Your Ironworker Do?



Angle Iron — Sheared, coped, notched & bent



Saddle — Sheared, punched & bump-bent



Sheared Round Bar — Square and clean cut



Flat Stock — Sheared & bent



Pipe Notch

Genuine Piranha Tooling

Hard-working tooling for your ironworker

Genuine Piranha Tooling

Piranha Ironworkers

Piranha Single Operator Ironworkers

(P-40, P-50, P-70, P-90 & P-120)



P-40



P-50



P-70



P-90



P-120

Piranha ironworkers give metal fabricators outstanding quality and innovative features. Every Piranha provides quality work, savings in set-up time, adaptability and versatility through a wide range of tooling, and factory engineering and support.

Piranha Single Operator Ironworkers provide:

- Industry leading cycle times—punch holes in less time than other ironworkers
- Urethane Strippers—Results in less part distortion, faster cycle times, no need for stripper height adjustment
- Integrated notching station—Low shear removes fillet for precise, burr-free cuts and clean notches.
- Quick-Change Tooling—Split dovetail slide mountings—make tool changes from punching to bending in less than one minute
- Automatic Urethane Hold-Downs—This unique Piranha feature, coupled

with a low rake angle, keeps parts from deforming or shifting during the shearing process. The hold-downs work automatically, eliminating the need for time-consuming adjustments between cuts.

- Ergonomics—Convenient work height and visibility for all stations. The single work height also provides added benefits when using roller feed tables.

Piranha Ironworkers All Share These Standard Features

- Complete punching attachment with stripper
- 10 Punch and Die Sets appropriate to machine tonnage (14 included on the P-50!)
- Set of Round Bar Knives—2-way
- Two Chip Buckets
- Extra Oil Filter Element
- Coupling Wrench
- Integral lifting lug system for instant portability



IRONWORKERS • PRESS BRAKES • SHEARS • TOOLING

1-800-435-2823

Fax: 1-815-964-0831

www.piranhatooling.com



Piranha Ironworkers

Piranha Dual Operator Ironworkers

(P-II-35, PII-65, PII-88, PII-110 & PII-140)

Piranha Single Operator Ironworkers are capable of performing most applications. However, when two simultaneous operations are required (e.g. punching and notching), a dual operator ironworker fits the bill.

All Dual Operator Ironworkers have:

- Large, open punch station—allows unlimited range of optional equipment and special tooling
- Longer strokes/deeper throat depths
- Large platen—for options and special tooling applications
- Long bending capability—optional bending attachments up to 48"
- 10 punch and die sets appropriate to machine tonnage
- One chip bucket
- Automatic 3-position Urethane Hold-Down on Plate, Angle and Bar Shear Stations (Manually adjustable hold-downs are standard on PII-35)

- Dual Operator Controls—punch station and shear/coper station. Each station has both a foot pedal and joystick (PII-35 has manual control only on shear/coper station)
- Front and Rear Three-Position Electric Joystick Controls (PII-35 has manual joystick valve on shear/coper station)
- Set of Plate Shear Knives (4-way)
- Set of Angle Shear Knives (8-way top/4-way bottom)
- Set of Coper Knives (2-way top/4-way bottom)
- Set of Three Coper Table Guides



**PII-110
PII-140**

Piranha & Whitney Single End Punch Presses

(Whitney 1524, SEPP-35, SEPP-65, SEPP-88, SEP-120 & SEPP-140)

Piranha and Whitney Single End Punch Presses lead the way for those applications that require more punching capability, larger platens or deeper throats.

The **Whitney 1524** provides precision punching using a simple **CNC control** that automatically moves the X and Y gauge position. This workhorse machine provides:

- Flexible 28XX tooling system
- Accurate parts—no more layout work!
- Canned cycles for bolt holes, line and angle, slot nibbles, window cuts, arcs, circles and grid patterns
- Ability to use forming tools such as louvers, counter-sinks and knockouts (requires pressure switch option)
- Process channel and angle iron (optional)
- Multiple program storage—up to 200 programs
- Offline programming (optional)

The **Piranha Single End Punch Press (SEPP) Series** has capacities ranging from 35 to 140 tons. Large open throats accommodate a variety of tooling and accessories.

All SEPPs feature:

- Complete punching attachment with stripper
- Extra oil filter
- Coupling wrench
- Integral lifting lug for instant portability



SEPP-140

See **Piranha Ironworker Brochure for Specifications and Accessories**

Genuine Piranha Tooling

Hard-working tooling for your ironworker



The MegaBook
Tooling for All Major
Ironworker Brands

Buffalo™ • Bully™ • Clausing™ • Cleveland Steel Tool™ • Edwards™
Controlled Automation™ • Davco™ • Ficep™ • Franklin™ • Gairu™ • Geka™ • Hawthorne™
Hendley & Whittemore™ • Hill-ACME™ • HMI™ • Ironcrafter™ • Kingsland™
Kling™ • Metal Muncher™ • Mubea™ • Omera™ • Omes™ • Peddinghaus™
Piranha™ • Promoco™ • Scotchman™ • Spartan™ • Uni-Hydro™ • W.A. Whitney™

Piranha Ironworkers

Piranha ironworkers give metal fabricators outstanding quality and innovative features. Every Piranha provides quality work, savings in set-up time, adaptability and versatility through a wide range of tooling, and factory engineering and support.



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