

# Piranha Ironworkers

Single Operator, Dual Operator, and Single End Punch Presses



## Single Operator Ironworkers

P-50, P-65, P-90, P-110 and P-140

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.

**Available Attachments for P-50**: A, B, C, D, F, H, I, J, K **For P-65, P-90, P-110 and P-140**: A, B, C, D, E, F, G, H, I, J, K

## **Dual Operator Ironworkers**

PII-88 and 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.

Available Attachments: A, B, C, D, E, F, G, H, I, K

## **Single End Punch Presses**

#### Piranha SEP-120 and Whitney 1524

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

The Piranha SEP-120 Single End Punch Press is a 120 ton press with a large open throat that accommodates a variety of tooling and accessories.

Available Attachments for SEP-120: A, B, C, D, F, K

**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, countersinks and knockouts (requires pressure switch option)
- Process channel and angle iron (optional)
- Multiple program storage—up to 200 programs
- Offline programming (optional)

## Whitney Portable Presses

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.





## Stripping (Punch Station) 1



**Conventional Ironworker:** Fixed Stripper Plate needs adjustment for each material thickness; Requires extra stroke (slower) and finished part distorts (poor quality).

**Piranha Ironworker**: Urethane strippers keep material flat (better quality); Shorter stroke (faster) and no adjustment necessary (easier to use).



## Hold-downs (Shearing) 2



**Conventional Ironworker:** Fixed hold-down needs to be clamped/ unclamped with each stroke (slow); Material can shift while shearing (less accurate). Inadequate clamping promotes short blade life (more expensive).

Piranha Ironworker: Urethane hold-downs clamp and unclamp the material automatically with each stroke (fast); Parts remain clamped during entire shearing cycle (more accurate); Complete clamping promotes long blade life (less expensive).



## Visibility (Shearing) 3



Conventional Ironworker: Cannot see shear blade to line up a cut (less accurate).

Piranha Ironworker: Easily line up a cut line to the shear blade (more accurate).

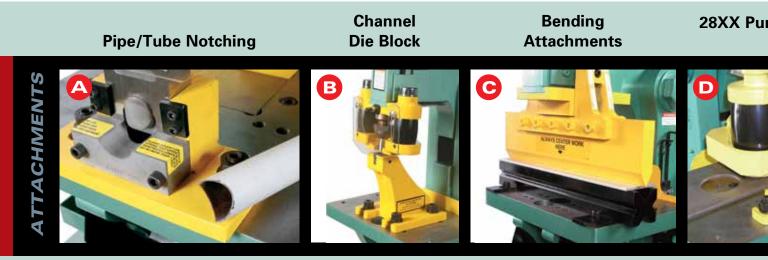


## Shear Blade 4



Conventional Ironworker: High rake angle shear blade distorts the finished part (poor quality); Most manufacturers provide only two blade edges (shorter life/more expensive).

**Piranha Ironworker**: Low rake angle shear blade results in flatter parts (better quality); Piranha provides four shear edges on each blade (longer life/less expensive).



## **Best Technology in the World**

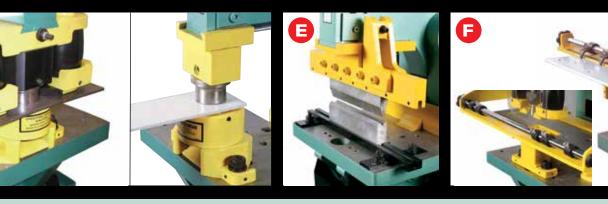
See our Virtual Demonstration at www.megafab.com



ch Attachment With Stripper (left)
Without Stripper (right)

Press Brake Tooling Holders

**Quickset Gauging Tables** 



## Angle Shear 5



Conventional Ironworker: Fixed upper blade does not seat in center of angle causing the cut piece to deform (poor quality).

**Piranha Ironworker:** Floating upper blade seats in center of the angle eliminating distortion (better quality).



## Coper Notcher 6



Conventional Ironworker: High rake angle blade deforms and moves part while notching (poor quality).

Piranha Ironworker: Low rake angle blade keeps part flat and under control during notching (better quality).



## Bending Attachment (Optional)



Conventional Ironworker: Attachment guided on two sides and must be center loaded. Cannot bend angle iron (hard to use).

Piranha Ironworker: Attachment open ended allowing angle to be bent easily (easy to use).



## **Installing the Bending Attachment (Optional)**



Conventional Ironworker: Large, heavy attachment is awkward and time consuming to install (hard to use).

Piranha Ironworker: The dovetail slide makes the bending attachment easy to install (easy to use).



## Ease of Use

Conventional Ironworker: Attachments and stations are at different heights (harder to use); The height of a feed table requires manual adjustment for use with each station (harder to use).

Piranha Ironworker: All attachments and stations are at the same height (easier to use); No need to adjust the feed table height between stations (easier to use).



**Channel Shear** 

**Backgauges** 

1-1/2" Oversize **Punch Attachment** 

**Roller Feed Tables** 









*TTACHMENTS* 

## Attachments to Enhance Your Piranha's Versatility

#### Pipe/Tube Notching Attachment

- · Mounts easily to platen
- · Spring-loaded return
- · Standard base die accommodates several die sizes
- Allows single notch in Schedule 40 pipe 3/4" through 2" diameter\*
- Notching dies available for 3/4", 1", 1-1/4", 1-1/2", 2"
- · Attaches to punch end of ironworker
- \*Contact Piranha for options for larger pipe or special notching applications.

#### B Channel Die Block

- Punch channel legs and other structural shapes
- · Use standard punch holder and material stripper
- · Punch close to material web with offset dies
- · Mounts in place of standard die block
- · Die is flush with front of channel die block
- Designed to punch a hole in the leg of a 3" through 6" standard weight channel
- Designed to punch a hole in the web of a 4" through 6" standard weight channel
- · 50 ton punching capacity for all models
- Uses urethane punch attachment (P-50, P-65, P-90, P-110 and P-140)

Note: The machine stroke control must be used with this option.

#### Bending Attachments

Optional sizes range from 8" to 48". See specifications chart for sizes available for each model.

#### 28XX Punch Attachment

- · Accommodates all standard 28XX tooling
- · Expand punching capacity up to 5"
- · Mounts in place of standard punch holder and die block
- Available with and without urethane stripper (shown)

Note: Standard 28XX tooling is for 50-ton and lighter applications. For applications greater than 50 tons, a heavy-duty punch is required. Please refer to the Piranha Tooling & Attachments catalog for more information.

#### Press Brake Tooling Holders

- Available for models P-65, P-90, P-110, P-140, PII-88, and PII-140,
- Allows use of press brake punches and dies for precision bending
- Lengths up to 24"
- Accepts a 1/2" wide by 5/8" tall tang (tooling sold separately)

#### Quickset Gauging Tables

- · Fast set-up for punching multiple holes
- · Includes plate and angle-gauging guide bars
- Left and right hand extensions available in 5' and 10' lengths
- Gauging table mounts on machine platen table without removing punch attachment or die block
- · Table and guide bars have measuring rules
- All models have 3 left-hand stops on the table and 6 stops (3 left-hand and 3 right-hand) on the angle guide bar

#### Channel Shear

- Attaches to punch end of ironworker in place of standard punch holder
- Each cut removes 1/2" slug from standard weight channel
- Slug slides out the front of the shear after each cut
- Pinned slide block adjusts to accommodate different widths of channel
- · Quick release locking handle secures material

#### (I) Mechanical Backgauges

- Allows quick set-up to repeat shearing length with a mechanical backstop
- · Positions in angle, plate and round bar sections
- · Lengths available-3', 6', 9', 12'
- · Bolts on with no machine modifications
- · Easy access of sheared material
- · Backgauge allows for infinite adjustment
- Compression sleeve for positive locking and no marring of the gauge bar

#### Electrical Backgauge

- Electronic version automatically cycles the ironworker when material contacts the backgauge
- Available for models P-50, P-65, P-90, P-110, P-140, PII-88 and PII-140
- Incorporates all features of the mechanical backgauge
- Available with new machines or as an option for existing machines\*
- · Dedicated power switch and run light standard
- Lengths available—3', 6', 9', 12'—leg support included with 9' and 12' lengths

Note: Field installation requires minor modifications to electrical components.

#### 1-1/2" Oversize Punch Attachment

- Punches up to 1-9/16" hole within capacity limits of the machine
- Mounts in place of standard punch holder and die block
- Use same stripper action as standard punch attachment
- · Use No. EF punches and No. JF dies
- · Available in P-50 and P-65 models

#### Roller Feed Tables

- · For fast, easy feeding of bar, plate and angle
- Available in 5' increments—bolt together for longer lengths
- Adjust to accommodate floor height and machine type
- · Includes rollers for angle and flat bar sections
- · 20" wide flat rollers; 6" angle rollers

## **High Quality Genuine Piranha Tooling**

### Make your Piranha Ironworker even more productive and flexible!

## **High Quality Tooling**

- Genuine Piranha tooling is formulated to extend your tooling life.
- Each tool is laser-engraved for easy identification.
- Tuffskin tooling for extended tool life.
- Oversized tooling for all of your larger punching needs.
- Tooling is packed with a protective coating and then shrink-wrapped to cardboard. Piranha tooling arrives at your facility in the same condition it leaves ours.
- · Look for the Piranha logo on your tooling.

# Fast Delivery

- Stock items ordered by 3:00 p.m. C.S.T. are shipped the same day.
- Non-stock items ordered by 11:00 a.m. C.S.T. are shipped the same day.

## **Special Tooling**

Piranha Engineers are on staff to design Special Tooling that may be unique to your operation. These may include gang punches, radius tools, dimples, etc.

Use your imagination to determine what your ironworker can do for you.



Standard



Tuffskin



## **Piranha Ironworkers Capacities & Specifications**

#### Rated on Mild Steel (60,000) PSI Tensile Strength

All machines subject to changes in specification

	P-50	P-65	P-90	P-110	P-140	PII-88	PII-140	SEP-120	1524
Throat Depth	5"	8"	10"	12"	12"	9"	20.5"	21.5"	24"
Open Height	11-1/2"	13-1/2"	15"	15-1/2"	15-1/2"	14"	14"	12-1/4"	5-3/8"
Closed Height w/o Die Block	7-3/4"	9-1/4"	10-1/8"	10-1/4"	10-1/4"	7-3/4"	7-3/4"	10-1/4"	3-3/8"
Stroke Length	3-3/4"	4-1/4"	4-7/8"	5-1/4"	5-1/4"	7"	7"	2"	2"
Platen Table Size (D-W)	8" x 16"	10" x 17"	12" x 21"	14-1/2" x 21"	14-1/2" x 21"	11" x 38"	16" x 36"	20" x 10"	24" x 36"
Punch Hole Size (Max. Material) Max. Hole Size (Material)	50 Tons 13/16" (3/4") 3" (3/16")	65 Tons 1-1/16" (3/4") 5" (1/8")	90 Tons 1-1/8" (1") 5" (3/16")	110 Tons 1-7/16" (1") 5" (1/4")	140 Tons 1-3/4" (1") 5" (5/16")	88 Tons 1-1/16" (1") 5" (3/16")	140 Tons 1-3/8" (1-1/4") 5" (5/16")	120 Tons 1-1/2" (1") 5" (1/4")	50 Tons 1-1/16" (1/2") 5" (1/8")
Plate Shear	13" Long 3/4" x 6" 1/2" x 10" 3/8" x 12" 1/4" x 13"	15-1/2" Long 3/4" x 10" 5/8" x 15"	18" Long 1" x 8" 3/4" x 12" 1/2" x 18"	20-1/2" Long 1" x 12" 3/4" x 18" 1/2" x 20"	20-1/2" Long 1" x 14" 3/4" x 18" 1/2" x 20"	24" Long 3/4" x 8" 5/8" x 12" 1/4" x 24"	20-1/2" Long 1" x 14" 3/4" x 18" 1/2" x 20"	N/A	N/A
Angle Shear **w/ special blade	3" x 3" x 3/8" 3-1/2" x 3-1/2" x 5/16"	5" x 5" x 3/8" 4" x 4" x 1/2"	5" x 5" x 1/2"	6" x 6" x 5/8"	6" x 6" x 5/8"	5" x 5" x 3/8" **4" x 4" x 1/2"	6" x 6" x 5/8"	N/A	N/A
Bar Shear Round (min. to max.) Square (min. to max.)	Optional 1/4" to 1-3/8" 1/2" to 1"	1/4" to 1-1/2" 1/2" to 1"	1/2" to 2" 1/2" to 1-3/8"	1/2" to 2" 1/2" to 1-3/8"	1/2" to 2" 1/2" to 1-3/8"	1/4" to 1-1/2" 1/2" to 1"	1/2" to 2" 1/2" to 1-3/8"	N/A	N/A
Coper-Notcher (Tons) (Max.)	40 2-1/4" x 3" x 1/4"	56 2-3/4" x 4" x 1/4"	75 3-1/2" x 5" x 3/8"	95 4" x 6" x 3/8"	95 4" x 6" x 3/8"	56 2-3/4" x 4" x 1/4"	95 4" x 6" x 3/8"	N/A	N/A
Bending Attach. (Optional Length)	Optional 6", 12"	Optional 8", 12", 14", 24"	Optional 12", 24"	Optional 12", 24"	Optional 12", 24"	Optional 24", 36", 48"	Optional 18", 24", 36", 48"	Optional 18"	N/A
Punch End Strokes Per Minute Optional Speed-Up Kit	30 @ 1/2" N/A	30 @ 3/4" 45 @ 3/4"	32 @ 3/4" 45 @ 3/4"	30 @ 3/4" 41 @ 3/4"	30 @ 3/4" 35 @ 3/4"	19 @ 1" N/A	24 @ 1" N/A	16 @ 1" N/A	30 @ .135" N/A
Work Station Height (Approx.)	42"	42"	42"	44"	44"	41"	44"	42"	41"
Hydraulics Pump GPM System R/V PSI	3.6 2800	7.5 3000	10.5 2900	10.5 3200	15 3500	7.5 3500	15 3500	10.5 2850	4.2 5000
Fluid Capacity (gal.)	12	20	25	25	25	20	40	30	30
Motor Std. 230/460 3 Ph. 1800 RPM Opt. Phase & Voltage Available	3 HP 3 Ph.	7.5 HP 3 Ph.	10 HP 3 Ph.	10 HP 3 Ph.	15 HP 3 Ph.	10 HP 3 Ph.	20 HP 3 Ph.	10 HP 3 Ph.	10 HP 3 Ph.
Dimensions (Net) W-L-H Approx.	24" x 55" x 58"	24" x 66" x 60"	31" x 79" x 64"	35" x 90" x 66-1/2"	35" x 90" x 68-1/2"	38" x 90" x 72"	38" x 120" x 85"	48" x 60" x 72"	94" x 71" x 67"
Weight (Net) Lbs. Approx.	1700	2600	4250	5800	6200	4700	11,930	4100	6000



MegaFab — Piranha / Whitney / Bertsch

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