

DESCRIPTION



Figure 2 - Piranha 4400MAX w/ Ball Transfer Tables (optional)

The Piranha 4400MAX Combination Machine Tool uses the fastest technologies to make parts – Punching and Plasma Cutting.

- Punched holes provide accurate internal features.
- It is faster to punch holes than to pierce and contour holes with plasma or laser.
- External features are plasma cut. Advanced plasma-cutting technology provides highly productive contouring (much faster than laser) with high quality.
 - Small kerf angle (vertical cuts)
 - Dross-free cutting
- Additional features such as forming (countersinks, tread plate, louvers), drilling and tapping can be added to eliminate additional downstream operations, allowing parts to be completed in a single operation.

Manufacturing costs are lower using the combination machine technology.

- Labor costs are lower because it takes significantly less time to manufacture the parts.
- Operating costs are lower.
- Amortization of capital costs is significantly lower since
- Lower initial capital cost than laser
- Faster cycle time – Cost of capital per fabricated part is lower because capital costs are amortized over more fabricated parts.

The PROFIT-DOUBLER

- Higher profit per part —lower overall cost per piece gives a higher profit margin per piece.
- More parts generating profit—more parts are produced (in the same amount of time) on a combination machine, so there are more parts generating profit than on the other technologies.

SPECIFICATIONS – MODEL 4400MAX

	INCH	METRIC
PUNCHING FORCE	100 Tons	900 kN
MATERIAL THICKNESS		
Minimum	.074" (14 GA)	2.0 mm
Maximum	1.000"	25.0 mm
MAXIMUM PUNCH DIAMETER	3.000"	76 mm
PUNCHING CAPACITY A36 (60ksi / 410 MPa Shear Strength)		
.375" (10 mm)	2.828"	71.8 mm
.500" (12 mm)	2.109"	53.5 mm
.750" (19 mm)	1.406"	35.7 mm
1.000" (25 mm)	1.047"	26.6 mm
PUNCHING HIT RATE	125 HPM	
<i>10 gage (3 mm) material punched on 1" (25.4 mm) centers</i>		
MAXIMUM POSITIONING AREA		
X-axis	170"	4325 mm
Y-axis	96"	2450 mm
NOMINAL BLANK SIZE		
Without Auxiliary Tables	96" X 160"	2450mm x 4000mm
<i>The 4400MAX can punch and plasma cut a full 8' x 10' 2450 x 3000 mm) sheet of material without repositioning.</i>		
EXTENDED BLANK SIZE		
With Auxiliary Tables and Repositioning	96" x 320"	2450mm x 4000mm
<i>The 4400MAX can punch and plasma cut a full 8' x 10' 2450 x 3000 mm) sheet of material without repositioning.</i>		
POSITIONING SPEED PER AXIS	1,200 IPM	30,000 mm/min
POSITIONING ACCURACY	±0.005"	±0.13 mm
MINIMUM PROGRAMMED INCREMENT	0.001"	0.01 mm
MAXIMUM MATERIAL WEIGHT	4,900 #	2,250 kg
MAXIMUM BLANK SIZE		
Standard X-Axis Without Auxiliary Tables	96" x 160"	2450 x 4000 mm
Extended X-Axis Without Auxiliary Tables	96" x 320"	2450 x 8000 mm
<i>Longer plates may be accommodated in certain applications using automated repositioning. These applications must be reviewed by W. A. Whitney.</i>		
FOUNDATION REQUIREMENT		
<i>An 13" / 330 mm reinforced concrete foundation is required beneath the press frame.</i>		
ELECTRICAL REQUIREMENTS		
460/3/60	175 KVA	
<i>Contact W. A. Whitney for voltages other than 460/3/60.</i>		
APPROXIMATE FLOOR SPACE		
Front - Back	268"	11420mm
Left - Right	370"	9400mm
Height - Machine	120"	2953mm
Height (w/ dust collector)	173"	4395mm