

### 3. MACHINE SPECIFICATIONS AND TOOLING

#### 3.1 Technical Specifications for FPDB-2500

Type	Units of Measure	FPDB-2500	
<b>MATERIAL PROCESSING SPECIFICATIONS</b>			
Maximum Material Width	inches (mm)	96 (2,500)	
Minimum Material Width	inches (mm)	6 (150)	
Maximum Material Thickness	inches (mm)	3(75)	
Minimum Material Thickness	inches (mm)	1/4 (6)	
Minimum Length Material	inches (mm)	48 (1,220)	
Work Material Weight	max. pounds (kg)	19,630 (8,925)	
<b>PUNCHING SPECIFICATIONS</b>			
Punching Capacity Rating:	Tons (metric tons)	125 (113)	
Travel Punch Ram	inches (mm)	4.25 (108.0)	
Maximum Velocity X-Axis	inches/min	600	
Maximum Velocity Y-Axis	inches/min	600	
<b>DRILL SPINDLE SPECIFICATIONS</b>			
Number of drill spindles	-----	1 or 3	
Power per spindle 2 Speed Hydraulic Direct Drive Motor	Hp (kW)	15.0 (11.0)	
Spindle travel	inches (mm)	11.8 (300)	
Drill spindle rapid advance speed	inches/min (mm/min)	240 (6096)	
Variable feeds (individually for every spindle controlled by P.C.)	inches/min (mm/min)	1 - 12 (25-300)	
Three Spindle Drill	Spindle 1 = "Med." Speed	RPM (Min.- Max.)	75-757
	Spindle 2 = "Slow" Speed		62-623
	Spindle 3 = "Fast" Speed		90-907
Single Spindle Drill Speed	RPM (Min. – Max.)	62-623	
Maximum Drill Diameter *	inch (mm)	2 (50)	
* Drill Spindles have #4 Morse Taper			
<b>OXY-FUEL TORCH SPECIFICATIONS</b>			
Typical Cutting Speed 2 Inch Mild Steel	in/min (mm/min)	12.0 (305)	
Typical Cutting Speed .25 Inch Mild Steel	in/min (mm/min)	25.0 (635)	
<b>HT2000 PLASMA TORCH SPECIFICATIONS</b>			
Max. Material (Edge Start)	inches (mm)	2.0 (50)	
Max. Material (Material Pierce Start)	inches (mm)	1.00(25)	
Typical Cutting Speed 2 Inch Mild Steel	max. in/min (mm/min)	10.0 (254)	
Typical Cutting Speed .25 Inch Mild Steel	max. in/min (mm/min)	230.0 (5842)	

Type	Units of Measure	FPDB-2500
<b>HT4400 PLASMA TORCH SPECIFICATIONS</b>		
Max. Material (Edge Start)	inches (mm)	2.0 (50)
Max. Material (Material Pierce Start)	inches (mm)	1.25(32)
Typical Cutting Speed 2 Inch Mild Steel	max. in/min (mm/min)	15.0 (381)
Typical Cutting Speed .375 Inch Mild Steel	max. in/min (mm/min)	195.0 (4953)
<b>SIGNOSCRIPT SPECIFICATIONS</b>		
Power	HP	0.85
Collect Size	inch	3/8
Air Consumption	SCFM	41.7
Free Speed	RPM	18,000
Load Speed @ Max. HP	RPM	9,000
Character Height	inch (mm)	5/8 (16) Nominal (Adjustable)
Character Depth	inch (mm)	1/16 (1.6) Nominal (Variable)
Cut Speed	Character/min	16 Nominal
<b>OPERATING POWER REQUIREMENTS</b>		
Power consumption Machine	total kVA	99
Power consumption (HT2000)	total kVA	37
Power consumption (HT4400)	total kVA	89
<b>HYDRAULIC POWER UNIT SPECIFICATIONS</b>		
Power of motor	Hp (kW)	40 (29.8)
Hydraulic pressure High	psi (kPa)	2750 (18960)
Hydraulic pressure Medium	psi (kPa)	1700 (11730)
Hydraulic pressure Low	psi (kPa)	800(5515)
<b>AIR USAGE SPECIFICATIONS</b>		
Air consumption Machine	scfm (s cu.m/hr)	50 (85)
Air pressure Min.	psi (bar)	90 (6.2)
<b>MATERIAL CLAMPING PRESSURE</b>		
Horizontal & Vertical Clamping pressure (each separately controlled, variable)	psi (kPa)	100 - 1700 (690 - 11720)
<b>CONTROL INFORMATION</b>		
Control type	-----	PC
<b>PHYSICAL MACHINE SIZE DATA</b>		
Machine Dimensions (Height x Width x Length)	approx. inches approx. (mm)	116 x 90 x 314 (2946 x 2286 x 7982)
Weight	approx. pounds (kg)	65,000 (29,550)