

## Used FPB-1500/3-B PLATE PUNCHING SYSTEM

**The FPB-1500/3-B is a 177 ton (160 ton metric) hydraulic plate punching system. This CNC fabrication cell incorporates a triple gag punching attachment to process flat material. The punching capacity in material with maximum shear strength of 60,000 P.S.I.**

<b>1-3/4" diameter through</b>	<b>1"</b>
<b>1-1/4" diameter through</b>	<b>1-1/4"</b>

**The following material size can be processed.**

**Plate/Flat Maximum 20' x 60" x 1-1/4"**

**For a maximum length of 20 foot it is necessary to employ sufficient roller transfer modules to support material of this length.**



## GENERAL SPECIFICATIONS

<b>Capacity throughout the entire</b>	
<b>Stroke tons:</b>	<b>177 Tons</b>
<b>Maximum material thickness:</b>	<b>1-1/4"</b>
<b>Minimum programmed increment:</b>	<b>.001"</b>
<b>Positioning accuracy:</b>	<b>1/32"</b>
<b>Full stroke of press ram:</b>	<b>2"</b>
<b>Maximum hole size with 292 Punch:</b>	<b>1-3/4"</b>
<b>Maximum hole size with 272 Punch:</b>	<b>1-1/4"</b>
<b>Pressure:</b>	<b>3000 P.S.I. (204 Bar)</b>
<b>Power unit motor:</b>	<b>25 H.P. (19 kW)</b>
<b>Power unit reservoir capacity:</b>	<b>120 gallons (455 Liters)</b>
<b>Operating voltage</b>	<b>230/460/60Hz.</b>



## Punch Head

The 177 ton punching head is equipped with a triple punch head. The three tools are located on 3” centers and can be activated individually or in any combination. The orientation of the three punches is perpendicular to the longitudinal or transport axis of the material.

## Punch Slug Removal System

The FPB 1500/3 incorporates a patented vacuum system that automatically removes the slug from the machine. As the slugs are generated they are automatically deposited in a custom supplied 55 gallon drum.

## Layout

Programmable layout is automatically adjustable to the plate thickness.

## HT 2000 PLASMA CUTTING

A plasma cutting system utilizing a Hypertherm HT 2000 torch assembly will be supplied. The HT 2000 is designed as a dual gas machine mounted cutting system utilizing 200 Amps for optimum performance on various thicknesses of metal (Max. 1-1/4”). The HT 2000 can be configured for air, oxygen, nitrogen, or argon/hydrogen cutting. The torch height adjustment is an automatic function of the Software. The system is capable of cutting up to 1-1/4” material when starting from an edge. Integrated into the FPB-1500/3-B is a self-contained, high efficiency continuous cleaning cartridge type dust collection device. The system is complete with nine filter elements that are automatically cleaned by means of solenoid controlled air jets. A 55 gallon drum-lid-kit with flexible hose is included to discharge the dust.



## Plenum Chamber and Unloader

A copper lined plenum chamber is integrated into the FPB 1500/3-B system. The removal of scrap and residue from the plasma process is easily achieved by means of a cart system. Parts up to 20" x 60" can be unloaded by means of the FPB 1500/3-B's three positive unloading system which facilitates the removal of punched parts easily from the remaining stock plate.

## Opposite Datum Switch

This allows mirroring of nested parts with hole locations taken from the common required material edge.

## Closed Loop Roller Feed Measuring System with Measuring Disk

The Roller Feed Drive and Measuring System is integrated in the machine and consists of two sets of power feed pressure rollers and measuring disk on the entry and discharge side of the machine. The control of the drive and the measuring in the X-axis is performed by means of the CNC control. The drive itself consists of an X-axis motor which is synchronized with both feed rolls to transport the plate through the system. The pressure rolls are automatically engaged and disengaged by means of the program.

The FPB-1500/3-B is equipped with twenty feet of entry tables complete with an independent hydraulic drive and clutching mechanism. This is used to disengage the rollers when the Roller Feed Drive is utilized to position the work piece.

An X-axis (length) zero set probe is designed into the system to establish the leading end reference for the part being processed.



