



AXYZ Plasma Cutting System



Description

The AXYZ plasma cutter option along with the Hypertherm Powermax 1100 power supply used on AXYZ tables, is a dual-gas system designed for cutting most metals ranging up to 1/2" (12mm) in thickness.

Powermax1100

The Powermax1100 offers unsurpassed cut capacity and speed for cutting most metals, including mild steel, stainless steel and aluminum. It delivers advanced, high-power output control for dependable, high-performance cutting results.

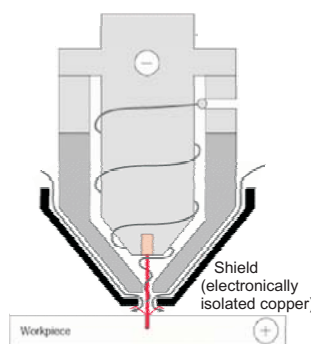


Torch Technology

The design of the Hypertherm torch allows for a very accurate repeatable torch parts alignment. This ensures that the cut part angularity will be consistent.

Shield Technology

The shield technology virtually eliminates the double arcing problem that adversely affects nozzle life and cut quality. This technology incorporates a thin, electrically insulated copper shield that isolates the nozzle from the workpiece. This shield technology dramatically increases nozzle life and improves workpiece piercing capacity.



AXYZ Torch height control

The AXYZ Height control setting allows the table to automatically control the torch above the material. Any variations in the height of the arc caused by unevenness of the material is sensed and adjusted automatically by the voltage provided to the arc. If the arc touches the table, the arc will be lost and the cutting operation is stopped.

This constant height control ensures the cleanest cut possible.





AXYZ Plasma Cutting System

Setup

ToolPath Plasma cutting Controls

- allows user to set start points of every job. Proper order of start points reduces machining time and maximizes material usage

- choose and configure tools (all on screen, easy setup)

- leadin/out generates a short path into and out of the work piece on the specified length and eliminates damage caused by the arc piercing the material

- set cutting speed

Once the user-friendly ToolPath controls are completed, several important steps still need to be carried out in order to achieve your desired cut.

Table Operation

Function 340 is used to set the software control settings at the table,

- initiate the plasma cutter
- height control setting-this allows the table to automatically control the torch height above the material
- set initial height
- set pierce time

Lead in and lead out: notice length and arc plus tab width define shape and size of tab to be ground off.

Tab width

Radius defined by 'radial distance'

Radius defined by 'inner fillet'

Lead In/Out

Group Settings for Machine Control

Special Plasma Settings

Status: OFF

Radial Distance: 0.250

Inner Fillet: 0.250

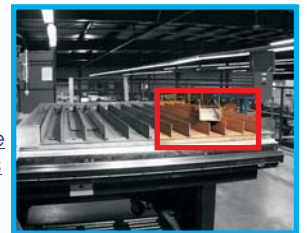
ToolPath Controls

Plasma Grid

The AXYZ plasma grid further enhances the versatility of your AXYZ router table. It is designed to be fully removable and rebuildable at any time, with considerable ease. Grid supporting ribs are made of steel and are easily replaceable once deteriorated. The complete grid is easily removable from the table, allowing for countless other routing operations



Complete Plasma Grid



Replaceable support ribs

Fume Extraction

The most important advantage of the AXYZ fume extraction system is its efficiency. The exhaust pickup manifold moves with the gantry and is always inline with the Plasma cutter. Therefore it focuses only on the area where fumes are being produced. This ensures immediate fume extraction, and prevents settling and/or spreading of unwanted plasma fumes.



Close-up of exhaust tube

