



# B-SERIES PLASMA CUTTING TABLES PROPOSAL



*Figure 1 – Piranha B510 Plasma Cutting Table*

## Piranha B-Series Plasma Cutting Tables

### INCLUDED FEATURES

1. **Rugged Construction** – Simple and rugged bolted table with high accuracy linear guides and bearings. Machine is assembled complete at the factory
2. **Dual Side Drive** – gantry driven on both sides for maximum stability
3. **CNC Control with 10.4"** High resolution color LCD monitor, shape library with 20 configurable shapes, 8MB memory & USB interface
4. **Stepper motors and drives** – Stepper motors on both X-axis and Y-axis with a maximum traverse speed of 8000mm/min.
5. **Water table slag collection** – eliminates need for dust collector.
6. **MicroStep Programmable Torch Height Control** – controls torch height automatically
7. **Breakaway Torch Mounting** – protects the torch from inadvertent part tip-ups
8. **ProNEST® 2019 LT Programming System** – 2D CAD drawing, DXF importing, integrated shape library, drag and drop nesting.

*NOTE: Add-on modules are available for additional functionality of ProNEST® LT*

### MACHINE SPECIFICATIONS

FEATURE	SPECIFICATION
Maximum Rapid Speed	314 IPM
CNC Control	Starfire
Frame and Bridge Construction	Fabricated machine table Welded steel bridge
Drive Motors	X-axis – Two Stepper Motors Y-axis – Stepper Motor Torch Height Control – Stepper Motor
Drive System	X-axis – Rack and Pinion each side Y-axis – Rack and Pinion Z-axis – Ball Screw
Torch Control	Arc Voltage with Initial Height Sensing
Torch Protection	Pneumatic Breakaway

**AVAILABLE SIZES**

MODEL	CUTTING AREA	MACHINE SIZE*	MACHINE WEIGHT
Piranha B404	4' x 4'	82"L x 92"W x 60"H	1,300 lbs
Piranha B408	4' x 8'	138"L x 92"W x 60"H	1,700 lbs
Piranha B510	5' x 10'	158"L x 102"W x 60"H	2,200 lbs

\* Excludes optional tube cutting attachment

**AVAILABLE PLASMA SYSTEMS**

PLASMA SYSTEM**	MAX MAT'L THICKNESS Mild Steel
Powermax 45XP	1/2" (12mm) Production / 1/2" (12mm) Maximum
Powermax 65	5/8" (16mm) Production / 5/8" (16mm) Maximum
Powermax 85	3/4" (20mm) Production / 3/4" (20mm) Maximum
Powermax 105	3/4" (20mm) Production / 7/8" (22mm) Maximum
Powermax 125	3/4" (20mm) Production / 1" (25mm) Maximum

\*\* Includes interface cable

**INVESTMENTS**

MODEL	B404 4' X 4'	B408 4' X 8'	B510 5' X 10'	STANDARD CUTTING TABLE
NO PLASMA	\$15,995*	\$17,995	\$19,995	Water
w/ Powermax 45	\$18,995*	\$20,995	\$22,995	Water
w/ Powermax 65	\$19,995*	\$21,995	\$23,995	Water
w/ Powermax 85	\$20,995*	\$22,995	\$24,995	Water
w/ Powermax 105**	\$22,495*	\$24,495	\$26,495	Water
w/ Powermax 125**	\$25,495*	\$27,495	\$29,495	Water

\* Special pricing while supplies last

\*\* Powermax 105 & Powermax 125 require a 4" depth water table which is included.

**CUSTOMER PROVIDED PLASMA SYSTEMS/**

Piranha can integrate existing air plasma systems up to 125A. The customer must provide details and specifications on the existing air plasma system for review before Piranha can approve the integration. There will be a minimum charge of \$1,000 for systems not supplied by Piranha. Charges for additional components, cables, and shipping may be required after review. Piranha will not provide any warranty on the existing system and will not guarantee the cut quality.

**PLASMA CUTTING SPEEDS**

Plasma cutting speed cannot exceed the maximum cutting speed of 314 IPM (8,000 mm/min). Recommended cutting speeds in the Hypertherm Powermax cut charts will be limited to a maximum of 314 IPM.

## HYPERTHERM PLASMA SPECIFICATIONS

### POWERMAX 45XP

MATERIAL THICKNESS		MAXIMUM CUTTING SPEED	
10 GA MS		181 IPM	
1/4" MS		72 IPM	
3/8" MS		38 IPM	
1/2" MS		24 IPM	
GAS TYPE		AIR	NITROGEN
Gas Quality		Clean, dry, oil-free per ISO 8573-1 Class 1.2.2	99.95% pure
Recommended gas inlet flow and pressure		400 scfh @ 85 psi (190 slpm @ 5.9 bar)	

#### Power Connections for the Powermax 45XP (CSA Models)

INPUT VOLTAGE	INPUT CURRENT AT RATED OUTPUT (A)	INPUT CURRENT AT ARC STRETCH (A)	FUSE/BREAKER SIZE (SLOW-BLOW) (A)
200-240V SINGLE PHASE	39	44	50A
208V SINGLE PHASE	37	43	50A
480V THREE-PHASE	9.4	17	20A

**NOTE:** Plasma table and CNC control require separate 230V single phase / 20A supply

**REF:** Hypertherm Operator Manual 809240 Revision 1

### POWERMAX 65

MATERIAL THICKNESS		MAXIMUM CUTTING SPEED	
10 GA MS		224 IPM	
1/4" MS		116 IPM	
3/8" MS		62 IPM	
1/2" MS		40 IPM	
5/8" MS		26 IPM	
GAS TYPE		AIR	NITROGEN
Gas Quality		Clean, dry, oil-free per ISO 8573-1 Class 1.2.2	99.995% pure
Recommended gas inlet flow and pressure		Cutting: 400 scfh @ 85 psi (190 slpm @ 5.9 bar)	

#### Power Connections for the Powermax 65 (CSA Models)

INPUT VOLTAGE	INPUT CURRENT AT RATED OUTPUT (A)	INPUT CURRENT AT ARC STRETCH (A)	FUSE/BREAKER SIZE (SLOW-BLOW) (A)
200-208V SINGLE-PHASE	52	74	80
230-240V SINGLE-PHASE	44	74	80
480V SINGLE PHASE	22	38	40
200-208V THREE-PHASE	32	45	50
230-240V THREE-PHASE	27	45	50
400V THREE-PHASE	15	27	30
480V THREE-PHASE	13	23	25
600V THREE-PHASE	13	23	25

**NOTE:** Plasma table and CNC control require separate 230V single phase / 20A supply

**REF:** Hypertherm Operator Manual 806650 Revision 3

**POWERMAX 85**

MATERIAL THICKNESS		MAXIMUM CUTTING SPEED	
10 GA MS		314 IPM	
1/4" MS		164 IPM	
3/8" MS		80 IPM	
1/2" MS		48 IPM	
5/8" MS		30 IPM	
3/4" MS		24 IPM	
GAS TYPE		AIR	NITROGEN
Gas Quality		Clean, dry, oil-free per ISO 8573-1 Class 1.2.2	99.995% pure
Recommended gas inlet flow and pressure		Cutting: 400 scfh @ 85 psi (190 slpm @ 5.9 bar)	

**Power Connections for the Powermax 85 (CSA Models)**

INPUT VOLTAGE	INPUT CURRENT AT RATED OUTPUT (A)	INPUT CURRENT AT ARC STRETCH (A)	FUSE/BREAKER SIZE (SLOW-BLOW) (A)
200-208V SINGLE-PHASE	70	98	100
230-240V SINGLE PHASE	60	98	100
480V SINGLE PHASES	29	50	50
200-208V THREE-PHASE	42	60	60
230-240V THREE-PHASE	36	60	60
400V THREE PHASE	21	38	40
480V THREE-PHASE	18	31	30
600V THREE-PHASE	17	30	30

**NOTE:** Plasma table and CNC control require separate 230V single phase / 20A supply

**REF:** Hypertherm Operator Manual 806650 Revision 3

**POWERMAX 105**

MATERIAL THICKNESS		MAXIMUM CUTTING SPEED	
10 GA MS (85 amp process)		314 IPM	
1/4" MS		192 IPM	
3/8" MS		116 IPM	
1/2" MS		76 IPM	
5/8" MS		52 IPM	
3/4" MS		40 IPM	
GAS TYPE		AIR	NITROGEN
Gas Quality		Clean, dry, oil-free per ISO 8573-1 Class 1.2.2	99.995% pure
Recommended gas inlet flow and pressure		Cutting: 460 scfh @ 85 psi (220 slpm @ 5.9 bar)	

**Power Connections for the Powermax 105 (CSA Models)**

INPUT VOLTAGE	INPUT CURRENT AT RATED OUTPUT (A)	INPUT CURRENT AT ARC STRETCH (A)	FUSE/BREAKER SIZE (SLOW-BLOW) (A)
200V THREE-PHASE	58	82	80
208V THREE-PHASE	56	82	80
240V THREE-PHASE	49	78	80
480V THREE-PHASE	25	40	40
600V THREE-PHASE	22	35	40

**NOTE:** Plasma table and CNC control require separate 230V single phase / 20A supply

**REF:** Hypertherm Operator Manual 817390 Revision 2

**POWERMAX 125**

MATERIAL THICKNESS		MAXIMUM CUTTING SPEED	
10 GA MS (65 amp process)		296 IPM	
1/4" MS		225 IPM	
3/8" MS		138 IPM	
1/2" MS		93 IPM	
5/8" MS		66 IPM	
3/4" MS		48 IPM	
GAS TYPE		AIR	NITROGEN
Gas Quality		Clean, dry, oil-free per ISO 8573-1 Class 1.2.2	99.995% pure
Recommended gas inlet flow and pressure		Cutting: 550 scfh @ 85 psi (260 slpm @ 5.9 bar)	

**Power Connections for the Powermax 125 (CSA Models)**

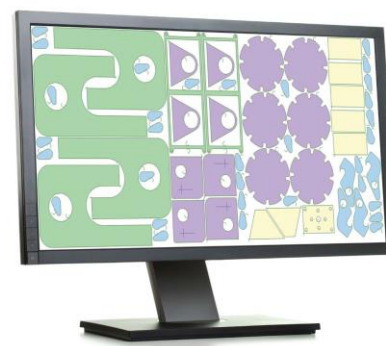
INPUT VOLTAGE	INPUT CURRENT AT RATED OUTPUT (A)	INPUT CURRENT AT ARC STRETCH (A)	FUSE/BREAKER SIZE (SLOW-BLOW) (A)
480V THREE-PHASE	31	50	50
600V THREE-PHASE	24	38	40

**NOTE:** Plasma table and CNC control require separate 230V single phase / 20A supply

**REF:** Hypertherm Operator Manual 808080 Revision 3

## ProNest® LT Smart Start (INCLUDED)

Hypertherm ProNest® LT Smart Start is a powerful CAD/CAM nesting software designed for light industrial, mechanized cutting in production environments. It provides a single software solution for all of your conventional plasma cutting machines. ProNest® LT Smart Start helps fabricators and manufacturers increase material savings, boost productivity, reduce operating costs, and improve part quality by offering the right level of cutting expertise for your needs. It also supports Hypertherm SureCut™ technology, including easy setup, optimized process parameters, and easy trouble shooting. In addition, ProNestLT® Smart Start is backed by Hypertherm's global network of professionals, meaning you'll always have access to the service and support you need.



FEATURE	BENEFIT
Part design and development	<ul style="list-style-type: none"> <li>• Integrated 2D CAD program to create and edit CAD files</li> <li>• Variable Shape Parts feature to develop common parts from templates</li> </ul>
CAD/CAM import and conversion	<ul style="list-style-type: none"> <li>• Import CAD files (industry-standard file formats)</li> <li>• Raster to vector converts static images to CAD</li> <li>• Automatic CAD file correction and error notification</li> <li>• Automatic spline/ellipse smoothing and reduction</li> <li>• Separate multiple parts from a single CAD file</li> <li>• Automatic mapping of CAD layers to processes (cut, mark)</li> </ul>
Job Set-Up	<ul style="list-style-type: none"> <li>• Material database (with grade and gauge)</li> <li>• Custom remnant creation (define irregular shapes for nesting)</li> <li>• Grain constraint</li> <li>• Safe zones for plate clamping applications</li> </ul>
SureCut™ technology and built-in process expertise	<ul style="list-style-type: none"> <li>• Material type, thickness, grade and class-based process parameters: <ul style="list-style-type: none"> <li>– Separations for part, plate, and pierce spacing</li> <li>– Kerf compensation and feed rate</li> <li>– Lead-in/out style optimized for part geometry and quality</li> <li>– Cutting techniques</li> </ul> </li> <li>• Cut sequencing – automatic or manual</li> </ul>

FEATURE	BENEFIT
Interactive manual nesting	<ul style="list-style-type: none"> <li>• Group parts into clusters for nesting</li> <li>• Color parts according to part property</li> <li>• Drag, drop, bump, and auto-bump parts on the nest</li> <li>• Move, mirror, and drag to rotate parts</li> <li>• Click and drag to automatically array parts</li> <li>• Prohibit/permit nesting inside of a part</li> <li>• Part interference detection</li> <li>• Edit lead-in/out position and properties within the nest</li> <li>• Animated cutting sequence simulation</li> <li>• Control cut direction and cut sequencing on part-by-part basis</li> <li>• Plate cropping</li> </ul>
Detailed reporting	<ul style="list-style-type: none"> <li>• Management and shop reports</li> <li>• Export reports directly to PDF, Excel spreadsheet, CSV, or webpage</li> </ul>

### ProNest® Essentials (OPTIONAL)

Includes:

**Automatic Nesting** – nest with the click of a button. Choose a preferred nesting strategy to control the balance between nesting speed and material utilization or select “IntelliChoice” and ProNest will determine a strategy and nest. Parts are nested for maximum cutting efficiency and material utilization, without any operator intervention required.

### ProNest® Unlimited (OPTIONAL)

Includes:

**Automatic Nesting** – nest with the click of a button. Choose a preferred nesting strategy to control the balance between nesting speed and material utilization or select “IntelliChoice” and ProNest will determine a strategy and nest. Parts are nested for maximum cutting efficiency and material utilization, without any operator intervention required.

**Common Line Cutting** – share the common edges of adjacent parts. This feature can be applied automatically to similar parts or manually for dissimilar part profiles. Kerf compensation is applied automatically. Fewer pierces and reduced cutting distance will maximize productivity and consumable life. It also can save material by eliminating the separation between parts that otherwise becomes scrap.

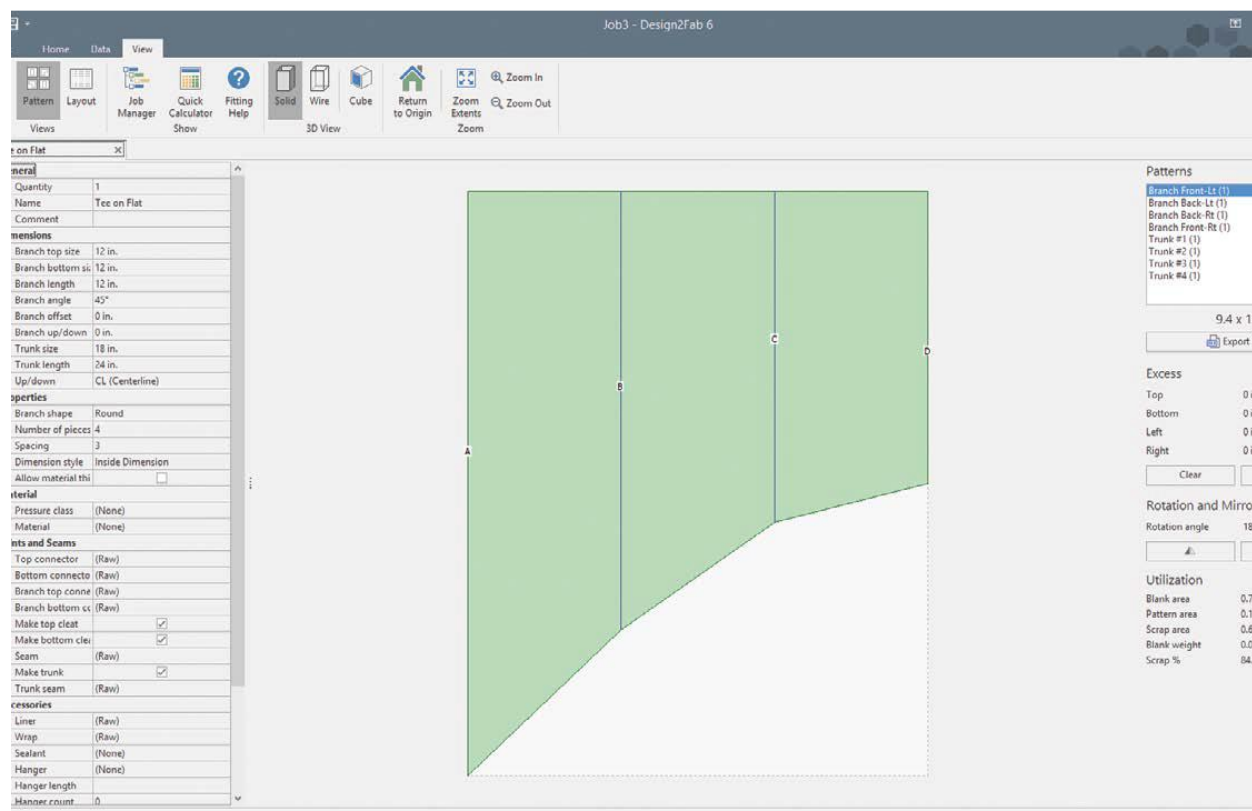
**Chain and Bridge Cutting** – link multiple part profiles into one continuous cut. The chain can be created manually, after parts have been nested, or automatically as an array of parts. Use Bridge Cutting to create a thin web of material between parts, which helps prevent tip-ups on small parts. This forms a single exterior profile, which can stabilize parts during separation from the plate, making them less prone to the effects of thermal movement. Both techniques result in fewer pierces and greater consumable life.

**Skeleton Cut-Up** – makes dedicated cuts to a sheet, making it easier to remove skeleton material from the table. Skeleton cuts are added automatically; and can be edited to meet your needs. Skeleton lines may be cut before or after the parts are cut



## Design2Fab® Sheet Metal Layout Software (OPTIONAL)

Design2Fab sheet metal layout software makes it easy to create HVAC duct, mechanical, kitchen, industrial, roofing, and other specialty fitting layouts. Engineered to dramatically reduce the time it takes to develop and lay out flat patterns, Design2Fab provides sheet metal fabricators, HVAC shops, and MEP contractors with the ability to create complex custom fitting layouts in minutes, rather than hours. Design2Fab also helps ensure perfect fit-up when installing parts in the field, contributing to increased productivity and lower operating costs to accomplish more, while increasing profitability.



Starting with the parametric fittings library, you will have access to a complete range of templates including all core shapes and sizes which can be customized to virtually any design. You can apply SMACNA or DIN based shop standards to any fitting in the job, including pressure class, metal gauge, seam styles, joints, stiffeners, wrap, acoustic liner, and sealant. Once the design is complete, it can export patterns to DXF for automated cutting. You can also export patterns for manual cutting using HPGL print files, printed to a plotter, or laid out manually using XY or triangulation points

- Comprehensive fittings library with unlimited customization
- 3D view verification of fittings
- 2D layout view of pattern fitting
- Job manager for multi-level zones
- Copy fitting or zone
- Fully customizable shop standards
- Based on SMACNA and DIN standards
- DXF export for nesting and automated cutting
- HPGL export for printing and manual cutting
- Custom seam and joint types
- Custom list of liners, wrap, sealant, stiffeners, vanes, and hangers
- Shear list – blank sizes calculated
- Fitting list – quick list of fittings in job
- Detail list – shop ticket format shows fitting, details, and dimensions
- Shear list – blank sizes calculated
- Multiple reports

## OPTIONS AND PRICING

OPTION	DESCRIPTION	INVESTMENT
Air Dryer Unit (see note)	Water-oil separator and post filter. This option requires separate 120VAC electrical service.  <i>NOTE: Not needed if Three-Stage Filter System is ordered.</i>	\$1,750
Three-Stage Filter System (see note)	A series of three different filters to remove moisture, oil, and particulate.  <i>NOTE: Not needed if Air Dryer Unit is ordered.</i>	\$739
Consumable Kit Powermax 45	Includes consumables for the Powermax 45XP cutting system.	\$111
Consumable Kit Powermax 65	Includes consumables for the Powermax 65 cutting system.	\$249
Consumable Kit Powermax 85	Includes consumables for the Powermax 85 cutting system.	\$249
Consumable Kit Powermax 105	Includes consumables for the Powermax 105 cutting system.	\$254
Consumable Kit Powermax 125	Includes consumables for the Powermax 125 cutting system.	\$286
On-site Training (see note)	A Piranha Factory Technician is available to assist with training at your location based on our standard service rates attached. A standard one-day training session will include time, travel expenses and one day of machine training.  <i>NOTE: Typical estimate. Specific estimates upon request</i>	\$5,500
ProNEST® LT Optional Packages	Additional seat for ProNEST LT Smart Start	\$800
	ProNEST® LT Essentials includes: ProNEST® LT Smart Start <b>PLUS</b> Automatic nesting	\$400
	ProNEST® LT Unlimited includes: ProNEST® LT Smart Start <b>PLUS</b> Automatic nesting Common-line cutting Chain/bridge cutting Skeleton cut-up	\$1,000
	Design2Fab®6	\$2,200

## UTILITY REQUIREMENTS

Required:

- 230V SINGLE PHASE AC / 20A service for table and CNC control.

*NOTE: A transformer will be required if other voltages, such as 208V, are supplied.*

*Connection of other voltages to the machine will void the warranty unless approved in writing by Piranha.*

- Separate Electrical Service for Hypertherm Plasma System. The Hypertherm Powermax series is available with several power options. Consult factory for information.
- Dry Compressed air – 90 psi minimum
- Earth Ground Rod with separate green insulated number 4 stranded copper welding cable leading to plasma cutting system

Recommended:

- Air Dryer Unit or Three-Stage Filter System

## INSTALLATION

Customer is responsible for the complete installation of the equipment including (but not limited to):

1. Rigging
2. Leveling
3. Electrical Installation
4. Start-up

Piranha will supply appropriate installation and operations manuals for performing installation.

Installation and training by Piranha field service technicians is available at prevailing rates. Technical support for installation and ongoing operation is available via phone at no charge.

If customer purchases plasma system from another source, then customer will be responsible for the connection and integration of the plasma system to the machine.

## WARRANTY

Twelve (12) month parts warranty, covering defects in materials or workmanship.

## DELIVERY

Normal delivery is from stock subject to confirmation at the time of order. Price is FOB factory Rockford, Illinois and does not include any applicable sales tax or installation. The machine is shipped totally wired through to the electrical enclosure box. It has been left to the purchaser's discretion whether to wire direct to a disconnect or to install a cord and plug for mobility.

## SHIPMENT REQUIREMENTS

MegaFab requires Flatbed Trailer(s), with adequate Chains and tarps (to cover full height and width), to assure protection of this equipment when using truck transportation. Please make sure that adequate deck space is allotted for machine and all accessories shipping with order. Upon request, MegaFab will arrange shipping to destination. Freight and insurance charges are the responsibility of the customer and will be invoiced on machine order. Please consult the factory for any questions regarding shipping requirements.

**PAYMENT TERMS**

Stock machines require 100% payment prior to shipment. Non-stock machines require a down payment of 50%, with the remaining 50% due prior to shipment.

**\*Prices and specs subject to change without notice.**