

PLASMA BASE DESIGN

Quality cutting starts from the ground up and that is why the Techno CNC HD II Plasma Series is engineered for optimal performance. Our highly-trained staff of engineers use state of the art software that provides mathematical testing of designs, called Finite Element Analysis (FEA). It allows them to analyze load characteristics of the machines components ultimately determining whether material improvements are required to build a better machine or if deductions/different building strategies can be taken to reduce the cost without sacrificing quality. We at Techno go the extra mile to provide a complete system of strength and power while reducing costs. The end result is money saved in our customer's pockets.

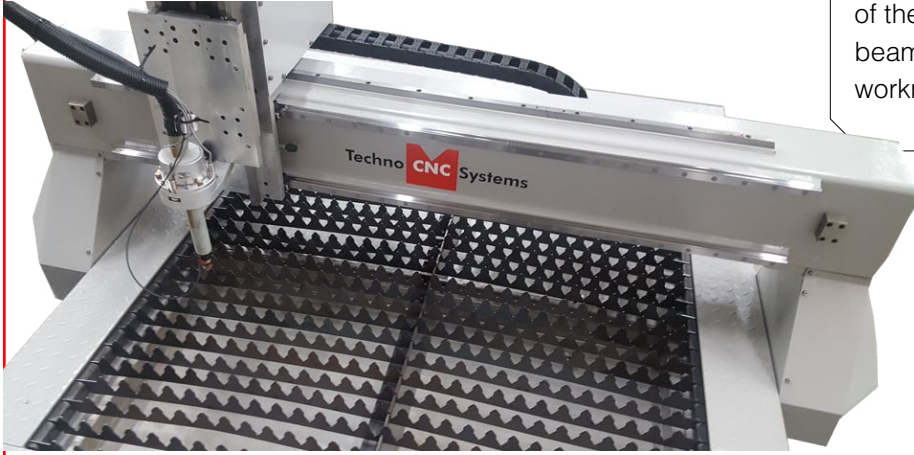
- Automatic Digital Torch Height Control
- Torch Error Detection (Increases Consumable Life)
- Automatic Torch Touch Off
- Backed with over 30 Years of CNC Expertise



NEW

FEATURES

- ✓ Available in 4' x 4', 4' x 8' and 5' x 10' stock sizes
- ✓ PC based WinCNC Controller
- ✓ Unique design, easy to learn and operate
- ✓ Brushless micro stepper motors and drives (servo optional)
- ✓ Precision Helical Rack-n-Pinion on X and Y axes with ballscrew on the Z axes
- ✓ Water table / Steel V-grid / Down draft
- ✓ All steel construction for rigid platform
- ✓ Cuts up to 1.5" thick steel capacity
- ✓ High-speed cutting up to 800 IPM
- ✓ Electronic Torch Break away
- ✓ Multiple torch options available

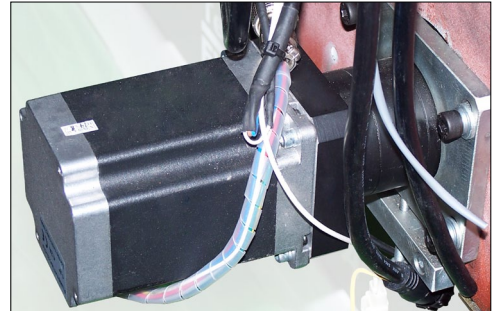


Gantry

The gantry is constructed of tubular steel with reinforcing ribs welded throughout the length of the column which results in a steady firm beam assembly. This quality engineering and workmanship result in smooth precision cutting.

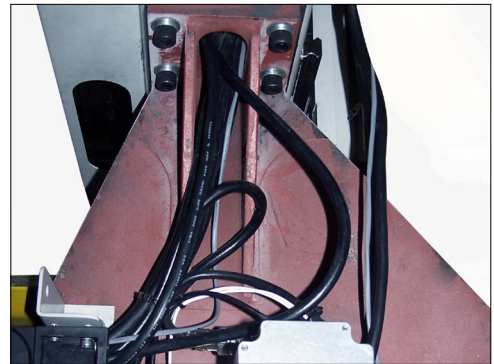
Drive Motors

The HD II Plasma Cutter utilizes brushless micro-stepper motors. These motors require no regular maintenance, therefore reducing any maintenance downtime.



Gantry Support (Uprights)

The Gantry uprights are cast iron with heavy duty gussets formed into the casting. Each support is precision machined for housing the various drive assemblies including motors, bearings, belts, and wiring harnesses.

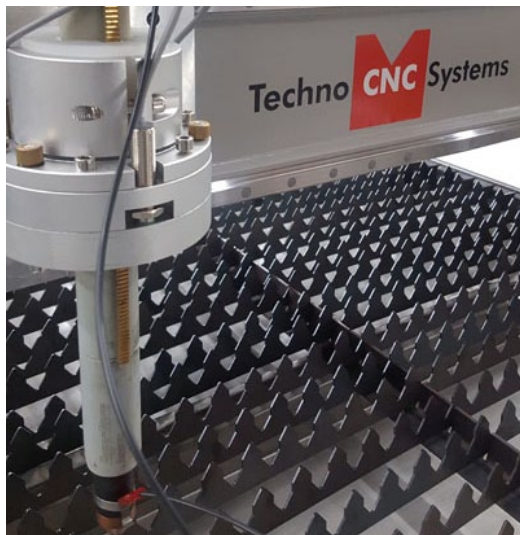


Drive Train Assembly

The Techno HD II Plasma Cutter uses precision helical rack and pinion on the X and Y axes. The mounting of the rack is inverted to help keep dust and debris from building up on the drive system, and this assures smooth motion and long term reliability. The precision gearbox is directly coupled to the stepper motor and pinion. This eliminates belt stretch inaccuracies assuring high-speed machining while the system positions the torch accurately.

Base Frame

The base frame is fabricated from heavy-duty tubular steel that is welded, precision machined and stress relieved so that the foundation remains true and steady over the operational life of the machine.



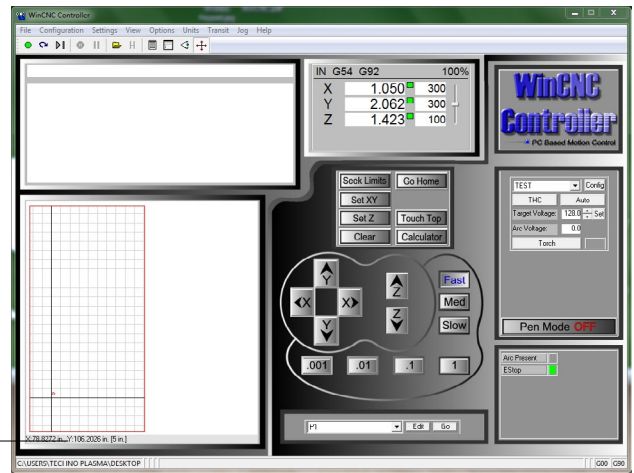
Techno's V-groove slats provide the best part cut quality reducing slat slag or weld to part that can effect contact edge finish.

Some awesome sheet metal designs produced using our CNC Plasma Cutter



\$ Small Investment, BIG RETURN \$

- Improve Cut Quality
- Increase Production
- Decrease Overhead
- Easy to Use and Operate
- Up and Running in Under a Day
- Ships Factory Tested and Assembled

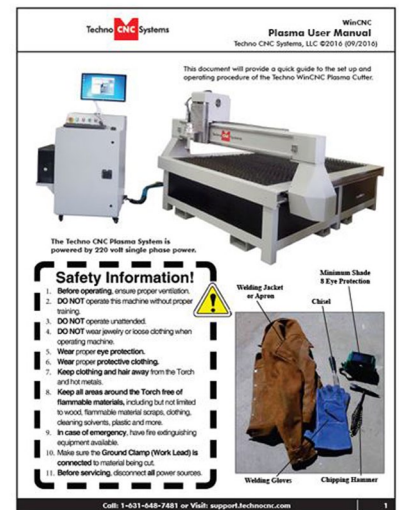


Techno provides a 34-page detailed User Manual that includes:

- Safety Information
- Setup and Installation
- Controller Functionality
- Quick Start Guide
- Maintenance Information
- Cut Quality, Consumables, and more

Electronics

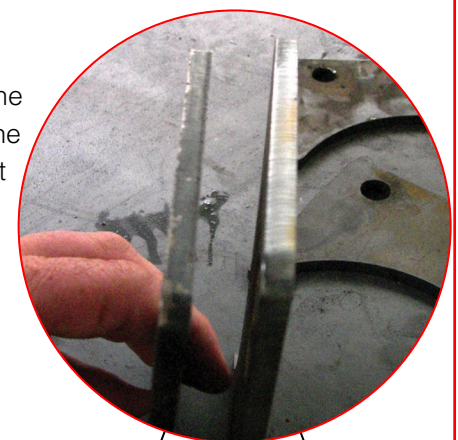
All the electrical components are housed and wired in a doubled-doored Nema 4 electrical enclosure. This allows for easy access and service when needed. All wiring is tagged so that when service is required, the customer can easily navigate the cabinet. In addition, the cabinet serves as a work bench for the tools required.



FREE Lifetime Technical Support

At Techno, our customers remain our concern long after their machine ships. We provide FREE application assistance and tech support.

- Call: 1-631-648-7481
- E-mail: support@technocnc.com
- Visit us at: www.technocnc.com



Other Plasma Cut

Techno Plasma Cut

HYPERTHERM POWERMAX PLASMA TORCHES

Techno's CNC Plasma Cutters can be equipped with one of four Hypertherm Powermax Plasma torches. These high-quality torches are designed to cut through Aluminum and Stainless steel cutting applications and each torch can cut through a different material thickness.

Hypertherm Powermax 45 Plasma Torch

Production pierce = 3/8" • Edgecut severance = 1/2"

Requirements: A clean dry non-fluctuating 90psi Compressed air or Nitrogen (required for Aluminum and Stainless steel cutting applications) source.

Input Voltage:

200-240V, 1-PH, 50/60Hz, CSA

230V, 1-PH, 50/60Hz, CE

400V, 3-PH, 50/60Hz, CE

Input Current:

200-240V, 1-PH: 30Amps

230V, 1-PH: 30Amps

400V, 3-PH: 10Amps

Flow Rate and Pressure: 360scfh @ 90psi

Duty Cycle: 50%

More Information on PMX45, visit our Web site!

Hypertherm Powermax 65 Plasma Torch

Production pierce = 1/2 " • Edgecut severance = 1-1/4"

Requirements:.

A clean dry non-fluctuating 90psi Compressed air or Nitrogen (required for Aluminum and Stainless steel cutting applications) source.

Input Voltage:

200-600V, 1/3-PH, 50/60Hz, CSA

230-400V, 3-PH, 50/60Hz, CE

Input Current:

200/208/240/480/600V@ 9kW output

1-PH: 52/50/44/22Amps

3-PH: 32/31/26/27/13/13Amps

Flow Rate and Pressure: 400scfh 6.7cfm @ 85psi

Duty Cycle:

50% @ 65Amps, 230-600V, 1/3-PH

40% @ 65Amps, 200-208V, 1/3-PH

100% @ 46Amps, 230-600V, 1/3-PH

For More Information on PMX65, visit our Web site!



Hypertherm Powermax 85 Plasma Torch

Production pierce = 5/8" • Edgecut severance = 1-1/2"

Requirements: A clean dry non-fluctuating 90psi Compressed air or Nitrogen (required for Aluminum and Stainless steel cutting applications) source.

Input Voltage:

200-480V, 1-PH, 50/60Hz, CSA
200-600V, 3-PH, 50/60Hz, CSA

Input Current:

@ 12.2kW Output
200/208/240/480 V, 1-PH, 70/68/58/29 A
200/208/240/480/600 V, 3-PH, 42/40/35/18/17 A

Flow Rate and Pressure: 400scfh 6.7cfm @ 85psi

Duty Cycle:

60%, @ 85Amps, 230-600V, 3-PH
60%, @ 85Amps, 480V, 1-PH
50%, @ 85Amps, 240-600V, 1-PH
50%, @ 85Amps, 200-208V, 3-PH
40%, @ 85Amps, 200-208V, 1-PH
100% @ 66Amps, 230-600V, 1/3-PH
100% @ 46Amps, 230-600V, 1/3-PH

For More Information on the PMX85, visit our Web site!

Hypertherm Powermax 105 Plasma Torch

Production pierce = 7/8 " • Edgecut severance = 2.0"

Estimated Operating Costs:

1/2" Steel = \$0.63 per linear foot
1/4" Steel = \$0.25 per linear foot
18ga Steel = \$0.12 per linear foot

Recommended gas inlet flow rate / pressure	Cutting: 217 1/min (460 scfh, 7.7 scfm) @5.9 bar (85 psi)
	Gouging: 227 1/min (480 scfh, 8.0 scfm) @4.8 bar (70 psi)

Requirements: A clean dry non-fluctuating 90psi Compressed air or Nitrogen (required for Aluminum and Stainless steel cutting applications) source.

Input Voltage:

200-600V, 3-PH, 50/60Hz, CSA
230V-400V, 3-PH, 50/60Hz, CE

Input Current:

200/208/240/480/600V,
3-PH: 58/56/49/25/22Amps

Flow Rate and Pressure: 550scfh @ 75psi

Duty Cycle:

80%, 400-600V, 3-PH
70%, 230-240V, 3-PH
60%, 200-208V, 3-PH

CSA 200-600 V	70%@105A, 240V,3-PH 80%@105A, 480-600V,3-PH 100%@94A, 480-600V,3-PH 100%@88A, 240V,3-PH
CE 230-400 V	70%@105A, 230V,3-PH 80%@105A, 400V,3-PH 100%@94A, 400V,3-PH 100%@88A, 230V,3-PH
CE 400 V	80%@105A, 400V,3-PH 100%@94A, 400V,3-PH
CCC 380 V	80%@105A, 380V,3-PH 100%@94A, 380V,3-PH

For More Information on the PMX 105, visit our Web site!