



Torchmate 2

The Torchmate 2 CNC cutting machine was designed for continuous plasma or oxy-fuel use in small industrial settings. It uses precision linear motion components for the Y (short) axis, and its electronics are fully equipped for 3 axes. Add the optional Z axis column and a router or drill to produce shapes or holes in wood, plastic, laminate, soft metals, etc.

The heavy anodized aluminum frame allows for ease of use and portability in an industrial strength machine capable of running multiple shifts in an industrial environment. Brackets are supplied to accommodate 3/16"x3" hot rolled steel support slats which you purchase locally to save shipping costs.

Standard Features

- Lightweight
- Easy assembly
- Precision ground, hardened rails
- Legs with industrial leveling screws on bolt together tables 4'x8' and larger

Machine Size

- 4'x4' to 6'x40'
- 4'x8' machine leaves 80"x132" footprint

Table Type

- Gantry Kit or Bolt Together

Cutting Capacity

- Cutting Width 4' up to 6'
- Cutting Length 4' up to 40'
- Plasma Cutting
 - Up to 3" Mild Steel
 - Up to 3" Aluminum
 - Up to 1-1/4" Stainless
- Oxy-Fuel Cutting Up to 10"

Standard Equipment

Gantry Kit

- Plans, 3 axis Windows-based electronics, components for the ¾" diameter drive shaft, and steel brackets

Bolt Together

- Precision hardened and ground x-axis rails
- Heavy anodized extruded aluminum ready for easy bolt together assembly

Hardware

Construction

- Heavy reinforced extruded aluminum gantry
- Y-axis industrial linear motion roller cassette and rail system
- X-axis has eight 1" diameter hardened needle bearing cam followers riding on 4 hardened and ground steel rails
- Rail height 36"

Electronics/Motion System

- 2 amp half-stepping motors
- Micro-stepping motors available
- 8 amp optically encoded servo motors available
- One x-axis drive and motor and one y-axis drive and motor
- 269 oz. in. motors

User Controls

- PC based control software with USB interface

Weight

- Approximately 350 lbs. for 4'x8' table

Input Power

- 15 amp/ 110 volt for controls
- 220 volt models available for international customers

Cutting Area

- 4'x4' to 6'x40'

Drive System

- Dual rack and pinion
- Belt reduction rack and pinion drive

Traverse Speed

- Up to 300 ipm with stepper motors
- Up to 1500 ipm with servo motors

Cut Speed

- Up to 150 ipm with stepper motors
- Up to 500 ipm with servo motors

Machine Resolution

- Approximately .0015" with stepper motors
- Approximately .0004" with servo motors

Available Plasma Units - Compatible with most plasma cutters

Lincoln Electric

- Tomahawk® 375
- Tomahawk® 625

Thermal Dynamics

- Auto Cut Series
- Ultra Cut Series
- Manual Systems
- Cutmaster A Series

Hypertherm

- Powermax Series

Standard Software

- Torchmate Driver Software
- Accepts any .dxf or G-code

Available Software

Torchmate CAD/CAM

- The Torchmate CAD/CAM program was developed specifically to create shapes for cutting. It contains every feature needed, including dxf importation, conversion of scanned shapes, full automatic nesting, automatic kerf compensation, automatic lead-ins and lead-outs, & much more.

BobCAD-CAM

- In addition to being a full-blown computer assisted design program, BobCAD renders 2D images into three dimensional shapes. It then generates G-code to create the 3D pieces with torchmate's automated z-axis in conjunction with a router, roto-ZIP tool, engraver, etc.

Rhino 3D

- Create digital 3D models of your projects before you start the actual fabrication process. All parts fit together just as they would in a physical model. It is possible to rotate the model, zoom in to see the finest detail, and view its components model from the real thing.

RhinoCAM

- RhinoCAM is a general purpose machining program for the general machinist. RhinoCAM includes 2 ½ axis, 3 axis, 4 axis and 5 axis operations. This powerful package is ideal for mold, die and tooling, wood working rapid prototyping and general machining markets and generate G-code to be directly sent to the Torchmate machines. This product boasts of powerful toolpath generation strategies coupled with tools for efficiently controlling the cutting tool for detailed machining capabilities, while not sacrificing ease of use. It has all the basic functionality as well as additional features suitable for demanding users with sophisticated manufacturing requirements.

Computer Requirements

- Windows XP/Vista/'07
- 1 GB processor
- 1 GB ram
- 30 GB hard drive

Warranty

- 1 year warranty on electronics, parts, and software
- Lifetime unlimited free technical support