

TORCHMATE 3

CNC CUTTING SYSTEMS®

Bolt-Together

Available in 4' x 8' to 10' x 40'

The Torchmate Three features our exclusive heavy-duty extruded aluminum frame and gantry. The X axis (long axis) is guided by precision industrial bearings riding on ground steel rails.

The Y axis (short axis) consists of a precision linear motion multi-rail, supporting a roller cassette with eight 1" diameter needle bearing rollers at right angles to one-another for added repeatability. The carriage is fitted with replaceable felt wipers at both ends.

The rollers are calibrated to grip 4 hardened and ground rails with zero clearance. Load capacity is an amazing 4,518 lbs.

Hardened cap screws secure the rail assembly every 3" to the machine's heavy extruded aluminum carriage. It is possible for a man of normal weight to stand on the carriage and have the machine carry him on both axes.

Massive extruded aluminum frame is diagonally gusseted for its full length. This gives the rigidity of steel with less weight.

The Torchmate 3 is driven by motors on both sides of the gantry. This allows the Torchmate 3 to produce twice the power of competing models. The special 1 1/4" x 3/8" gear rack is protected by a 1" steel rail overhang.

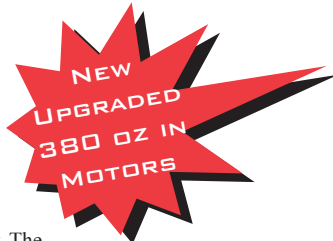
One side of the Torchmate 3 is eight inches lower than the other to permit the material to be loaded with a forklift as well as by crane or hand. The motors powering the system utilize a new gearbox system that greatly reduces backlash, transfers more torque, is more durable, and provides greater accuracy than a belt drive system.

The Torchmate 3 gear racks are mounted on the outside of the frame, and sit under a 1" shelf to protect them from debris, etc. This eliminates the jamming problems associated with spring-loaded upside-down gear rack designs.

Torchmate 3 "Bolt Together" is our most complete system. Many accessories are included (TM CAD, interface, motor cables, slat support brackets, upgraded gear rack, and torch holder) which are optional on our other systems.

Torchmate Three Gantry Kit

Since many Torchmate customers are professional metal fabricators, it makes sense for them to save money by fabricating their own support table and rails. We make this easy, by offering kits that include everything. Detailed instructions to build the frame are provided. In most cases it costs more to ship the steel than its worth.



The project requires only simple fabrication using rectangular and square steel tubing, and cold roll steel bar. Most customers are able to complete the job in a couple of days or less. The completed unit will be identical to our

finished machines, except the table will be constructed of steel instead of extruded aluminum.



All of our kits include everything above the table's rails. Items such as our CAD software module, slat support brackets, etc., are sold separately. This permits customers on a budget to purchase these accessories as

finances permit. Those who intend to use their Torchmate Three for routing, drilling or oxy-fuel will only have to buy what they actually need.

Large Industrial Machines

With 1900 oz. in. torque on the Y axis and 1800 oz. in. on the X axis, the Torchmate Three can be supplied with cutting capacities up to 10' x 40'.

They are available either in finished, bolt-together form or as a gantry kit.

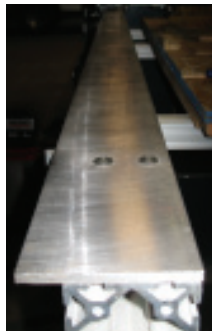
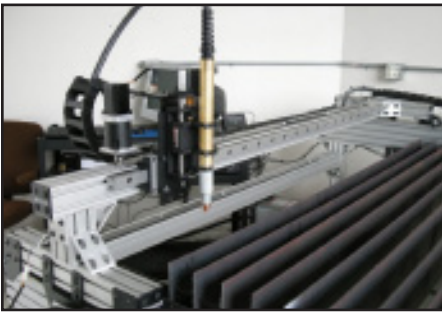
While Torchmate machines are designed to be used indoors, one customer uses his 10' x 40' unit outdoors every day in a large steel tank manufacturing operation. While the steel surfaces on this outdoor unit develop some surface rust that has to be removed periodically, the machine functions perfectly despite its exposure to the elements. The computer and electronics are covered when not in use.



Call us and discuss your particular application. We will be happy to provide you with a quotation for a machine built around your needs.



CLICK HERE TO SEE
TORCHMATE CNC
TABLES IN ACTION!



Precision Ground Gantry Guide Rails:

- Ground from 1/4" oversized stock to exact specifications
- .001 tolerances
- 63 Micro finish
- Custom made in the USA
- Allows your Torchmate CNC machine to maintain high levels of accuracy and repeatability

Precision aluminum roller guides:

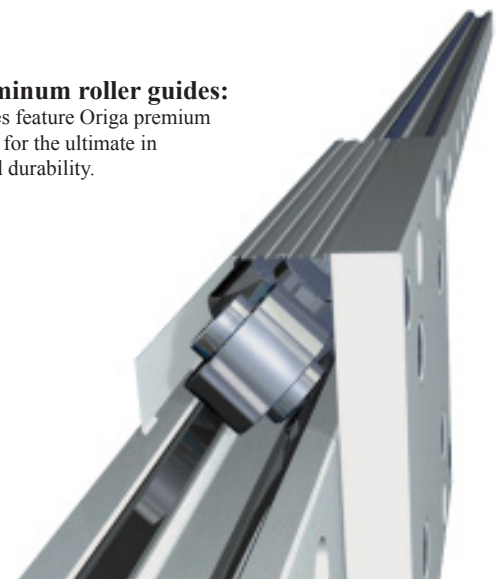
- Our machines feature Origa premium roller guides for the ultimate in accuracy and durability.



Our bolt together kits feature extruded aluminum components.

Extrusion specs:

- Yield strength 35,000 lbs/sq.in.
- Tensile strength 38,000 lbs/sq. in.
- Elongation minimum 10%
- Elasticity minimum 8%
- Elasticity approximately 10,200 k lbs./sq. in.
- Extrusion conforms for DIN 17 615 specifications
- Flatness .004" per inch of width
- Straightness 0.0125 per foot of length, not to exceed .120 inches over 20 feet of length
- Rockwell hardness approximately E-88



Torchmate Three Specifications:

Cutting Capacity	4' x 4' to 10' x 40'
Construction	Reinforced extruded aluminum
Power (X axis)	Two 380 oz. in. motors
Power (Y axis)	Single 380 oz. in. motor
Electronics	8 amp microstepping
Machine accuracy	Approximately .0015"
Speed range IPM	Approximately .125 – 750
Y axis	Industrial linear motion components
X axis	Hardened needle bearing cam followers riding on ground steel rails
Drive	Rack & pinion on both axes
Legs	Leveling feet or anchor mount
Weight	Approximately 450 lbs. (4'x8' capacity)
Rail height	41" & 33"
Footprint	80" x 132" (4' x 8' capacity)



Drop side rail
allows for easy
forklift loading

INTERNATIONAL CALLS 1.775.673.2200

TOLL FREE 1.866.571.1066