

Torus PRO Stepper (Servo Axes Optional)



Torus PRO Bed Mill

The Largest CNC BED mill of its class. The newly upgraded professional stand is the foundation to allow this mill system to process and contain your work debris. Available are optional upgrades such as the Power Draw Bar (PDB), Automatic Tool Changer (ATC), 4th Axis rotary table, and the cabinet enclosure; you will have an industrial work horse at a fraction of the price.

Here are the improved capabilities of the Torus PRO:

- **Work Cube:** The 24" (X) x 15" (Y) x 11.5" (Z) travels give plenty of working space for most jobs.
- **Upgraded Coolant System:** Standard to the Torus PRO is the new stand that provides incredible flow of used coolant through a drainage system that filters chips through a large collection drawer system and then empties into a large 29 gallon reservoir. Two separate pumps are used to provide coolant to the spindle for cutting and a hand operated spray down hose for cleanup. The spray down hose was added for cleanup on the fly. Just wash the chips down the drain and continue into next cutting operation!
- **4th Axis Rotary Table:** Add a rotary table for the creation of the most sophisticated project you can design. Add the optional stepper driver with the rotary table and you will be set.
- **Power Draw Bar (PDB):** An electrical PDB will be available to replace the LDB system. The PDB is an electrically driven motorized drive system that makes the insertion and removal of TTS style tools. The PDB will be a prerequisite for the ATC system.
- **Automatic Tool Changer (ATC):** A fully automatic tool changer with a magazine of 12 tools (expandable to 20) can be added. Prerequisite accessory is the Power Draw Bar (PDB).

Coming soon-

- **Enclosure:** Include the full enclosure to contain the most vigorous cutting. The enclosure is designed as a two part (left and right) system that be easily removed in a few minutes for maintenance or robust cleanup. The front door system is a slide by system using ball bearing slides for ease of use. The overhead bar is easily removable so when the doors are open, a jib crane can be used to set heavy fixtures into place. You don't have to work inside a cave!

INPUT POWER

220 VAC, 15 AMP Single Phase

SPINDLE

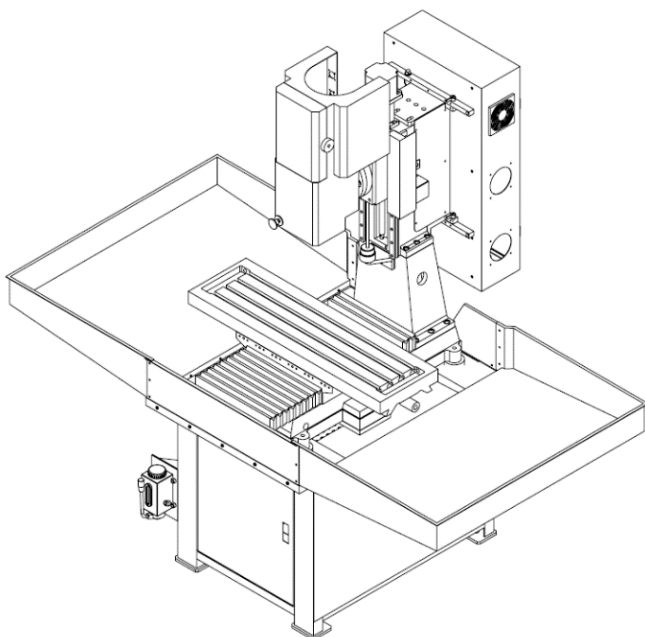
Power	1.5 KW AC 3 Phase
RPM	6000 RPM
Spindle Type	R8
Spindle to Table	5.25" to 16.75"

TABLE

Travel Dimensions	24" x 15" x 11.5"
Table Size	12" x 40"
T-Slots	3 @ 5/8"

AXES

Ball screw	5mm pitch x 20mm Diameter
Ball Nut Backlash	< .0005"
Accumulative Backlash	<.0013"
Steps per inch (Stepper Motor Option)	10163 (Default, Programmable)
Servo Encoder Resolution (Servo Option)	2500 PPR, Travel speeds up to 500 IPM



CHASSIS

Shipping Weight	Crate 1: 1433 Pounds Crate 2 : 660 Pounds
Dimensions	Crate 1: 55" x 48" x 60" Crate 2: 32" x 45" x 46"

COMPUTER (Purchased Separately)

Mother board	Micro ATX with Pentium Processor Typical
Windows OS	Installed
Hard Drive	Solid State
RAM	4GB DDR3
Ethernet Smooth Stepper (ESS)	For communication between PC and Break out Board (BOB)

RESERVOIR

Volume	29 Gallons
Filtration	Ultra fine mesh, drawer and tank
Pumps	2 x 90 Watt centrifugal
Clean Up Spray Nozzle	Yes (Hand Operated)

FEATURES

Limit Switches	Solid State
Oil Pump	Single Shot
Casting Preparation	Heat Treated/Sand Blasted
Sheet Metal Finish	Powder Coated

