

Pulsar Stepper (Servo Axes Optional)



Pulsar Bed Mill

WE HAVE DESIGNED AN ENTIRELY NEW BED MILL FROM THE GROUND UP, WITH MODULAR SYSTEMS FOR EASY ACCESSIBILITY FOR INSPECTION AND REPAIRS.

The PULSAR is a robust entry level bed mill with a lot of power. With optional upgrades such as the 4th axis rotary table, Automatic Tool Changer (ATC) and the full cabinet enclosure; you will have an industrial work horse at a fraction of the price.

Here are the improved capabilities of the PULSAR:

- **1811 cubic inches of work space:** The 15.75" (X) x 9.2" (Y) x 12.5" (Z) travels give plenty of working space for most jobs.
- **Lever Draw Bar (LDB) comes standard:** The built in draw bar uses the TTS style holders for easy and rapid tool changes. With a pull of the lever, tools can be swapped out for the next operation. No more fussing with manually tightening tools.
- **Rigid Tapping:** Standard with each mill. The servo spindle motor and driver utilize high power three phase technology to precisely control spindle rotation and depth of cut. Under coordinated control of spindle rotation and Z axis feed, tapping with standard taps can be performed with precision.
- **Upgraded Coolant System:** Standard to the PULSAR is an integrated stand that provides incredible flow of used coolant through a drainage system the filters it through a chip draw collection system which empties into a large 7 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 move onto the 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.

Coming soon-

- **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 will be the Power Draw Bar (PDB) accessory.
- **Full 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. There is no overhead bar 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	1.2 KW AC Servo
RPM	1-4500 RPM
Spindle Homing	Yes- (depends on model)
Spindle Type	R8
Rigid Tapping	Yes, Standard
Spindle to Table	2" to 14.24"

TABLE

Travel Dimensions	15.75" x 9.5" x 12.5"
Table Size	7.8" x 23.6"
T-Slots	4 @ 7/16"

AXES

Ball screw	5mm pitch x 20mm Diameter
Ball Nut Backlash	< .0005"
Accumulative Backlash	<.0013"
Steps per inch-Stepper Motor	10163 (Programmable)
Servo Encoder Resolution (Servo Version)	2500 PPR

CHASSIS

Shipping Weight	970 pounds (440 Kgm)
Dimensions	66" x 76" x 44"

COMPUTER (Purchased Separately)

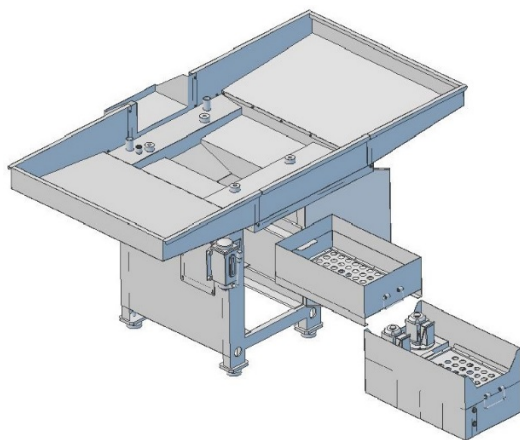
Mother board	Micro ATX with Pentium Processor Typical
Windows OS	Installed
Hard Drive	Solid State
RAM	4GB DDR3
Ethernet Smooth Stepper (ESS)	For communication between PC and Break out Board (BOB)

RESERVOIR

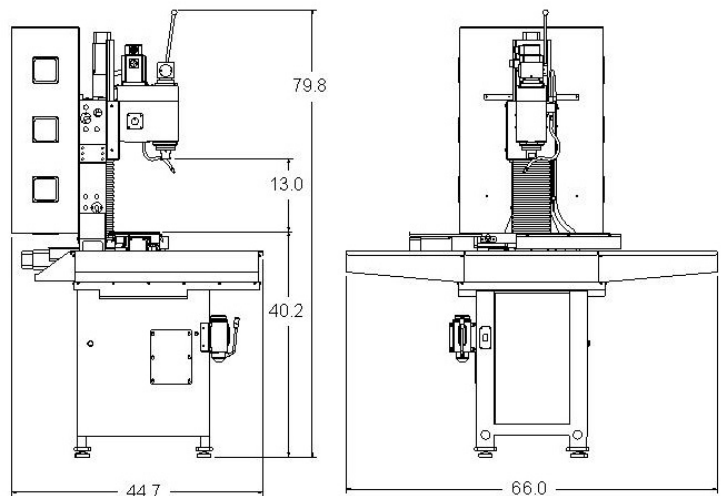
Volume	7 Gallons
Filtration	Ultra fine mesh, drawer and tank
Pumps	2 x 90 Watt centrifugal
Clean Up Spray Nozzle	Yes (Hand Operated)

FEATURES

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



Coolant/Chip Collection



System Dimensions