

Turnkey Systems

Protopulsion offers highly configurable Benchtop CNC Milling centers. With options including forth axes rotary tables, tool changing spindles, and full enclosures; these cost effective systems fit needs from prototype to production.

A unique blend of affordability, power, and precision, the ProtoPulsion line of Benchtop CNC Milling centers have the flexibility and reliability to meet your machining needs.

The Protopulsion Professional Series prototyping and production mills are perfect for the professional prototyping lab or the light production facility. Their large beds make it easy to fixture a variety of parts and materials. Their precision ball screws, and gantry-style axes give you the speed, strength and flexibility to create quick precision parts out of a wide variety of materials. They all come with a full enclosure to keep the chips and noise away from your workspace.

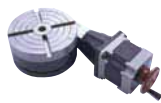


Professional Series MC2000	Professional Series MC3000	Professional Series MC4000
<p>Specifications: Voltage requirements = 110V Travel: X = 7.87" (200mm) Y = 6.88" (175mm) Z = 3.54" (90mm) Bridge Clearance = 3.5" (90mm) Size: W=20 -1/4" D=22 -7/8" H=24 -1/4" Weight = 156lbs Repeatability = .0004" Positioning Accuracy = +/- .002 Spindle: 1/2HP, 8-22K RPM, 1/8 and 1/4" collets provided. Table surface = Aluminum t-slot 9.8" (250mm) x 16.7" (425mm) Connects to computer via RS232 connection</p>	<p>Specifications: Voltage requirements = 110V Travel: X = 11.6" (295mm) Y = 7.87" (200mm) Z = 5.12" (130mm) Bridge Clearance = 4.5" (115mm) Size: W=24.0" D=25 -3/4" H=27 -3/4" Weight = 167lbs Repeatability = .0004" Positioning Accuracy = +/- .002 Spindle: 1/2HP, 8-22K RPM, 1/8 and 1/4" collets provided. Table surface = Aluminum t-slot 9.8" (250mm) x 19.7" (500mm) Connects to computer via RS232 connection <u>Note:</u> Optional 4th axis rotary table available for this unit.</p>	<p>Specifications: Voltage requirements = 110V Travel: X = 15.5" (395mm) Y = 11.8" (300mm) Z = 5.5" (140mm) Bridge Clearance = 4.5" (160mm) Size: W=28.0" D=32.5" H=30" Weight = 180lbs Repeatability = .0004" Positioning Accuracy = +/- .002 Spindle: 1/2HP, 8-22K RPM, 1/8 and 1/4" collets provided. Table surface = Aluminum t-slot 9.8" (250mm) x 19.7" (500mm) Connects to computer via RS232 connection <u>Note:</u> Optional 4th axis rotary table available for this unit.</p>

Accessories



Threading/Spindle Speed I/O Expansion Card
 Adds 24 inputs, 24 outputs, analog input, two 0-10V analog outputs for spindle speed control and an encoder input for spindle speed monitoring and threading applications.



CNC Rotary Tables
 4th axis drive, motor and miniature rotary table for indexing or 3D contouring.



Relay Boxes
 We have a variety of relay boxes using solid state or dry contact relays for controlling devices such as spindles, clamps and plasma torches.



Limit/Home Switch Kits
 A wiring harness and set of switches for sensing a home position or end of travel limits.



Pendant
 Allows you to control your machine from where ever you need to be. Included functions are jog, point moves, setting zero, program control, homing and output control.



Touch Probe
 Gives your 3 axis machine tool the capability to become a 3-D scanner.