

EDU Mill With 3D Printer

Model Number: EDU MILL W-3D

Equipped with Mitsubishi Electric's E80 CNC, this entry-level machine is effectively two machines in one; a 3-axis CNC mill combined with a 3D printer. The EDU MILL W-3D has everything you need to teach a student the fundamentals of CNC milling while exploring the concept of 3D-print processing. The machining center allows for configuration of both subtractive machining (removal of material) or additive manufacturing (AM) for printing plastic parts.

PURPOSE

Ideal for the classroom environment, the EDU MILL W-3D fits through a standard doorway. Designed with a 24,000 rpm spindle and ball screws on each axis, this machine will produce accurate parts using traditional block metal or powder plastic. When in 3D printing mode, students can take advantage of utilizing the dual extruder to produce parts using different colored materials. The machining and printing operations are programmed using the same CNC, and use the same standard G-code system that is prevalent in the automation industry. To allow for faster set-up, this machine comes standard with a tool probing system that enables students to gain the added skill of setting tools with a "pre-setter" which automatically calculates tool offsets just as any standard CNC machine would do.

Standard Options

- FDM 3D print system with dual printing head
- 8.4" LED screen
- Steel enclosure
- Steel stand with lockable casters
- USB and SD card interface
- Ethernet access port
- 512kb memory (upgradeable to 32GB with simple SD card)
- Data server
- Canned cycles for drilling applications
- Front door safety interlock
- EDU MILL starter package includes:
 - ✓ 3" vice
 - ✓ Assorted carbide end mills, cobalt drill bits and acrylic blanks)
- Navi-Mill conversational programming
- Interactive cycle insertion (Icon-based programming)
- Made in the USA

Additional Options

- M80A touchscreen control



SPECIFICATIONS

X Axis Travel	7" (178 mm)
Y Axis Travel	10.5" (266 mm)
Z Axis Travel	5" (127 mm)
Spindle	100–24,000rpm, 2.2KW
Rapid Feedrate	400 ipm (10,200 mm/min)
Cutting Feedrate	240 ipm (6,120 mm/min)
Tooling Type	ER-20
Tool Storage	0
Resolution	0.00004" (0.001mm)
Repeatability	0.0002" (0.005mm)
Accuracy	0.0004" (0.01mm)
Dimensions (H x W x D) in	70.5 x 27.5 x 33.5
Weight (lbs)	300 (136 kg)
Power Source	110–220VAC (15A)

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