



Professional Desktop CNC Mill Machine DMC-III Specifications

Travel Distance X, Y, Z	12" x 8" x 6" (300mm x 200mm x 150mm)
T slot table Size W x D	22" x 20"
T slot width	7/16"
Number of T slots	5
Machine Dimension W x D x H	27" x 23" x 28"
Bridge clearance from table	6.25"
Motion support	HIWIN 20mm linear guide rail with double blocks and final machining in pairs for each axis
Driver Screw	Preload 20mm ball screw with zero backlash
Motor driver	Micro step motor with ACT optimal digital controller *1
Motion resolution	0.00008" or 2 microns
Machine repeatability	0.0001"
Position accuracy in the entire machining area	0.001" Alignment for 3 axes in the entire working area
Slew rate X, Y, Z	60"/m, 60"/m, 50"/m
Spindle	Standard ER16 with 10mm dia. (13/32") max milling bit
Spindle driver motor	1/3 HP variable speed brushless digital motor
Spindle speed	Smoothly variable from 1,500 to 9,000 rpm directly controlled by CNC program *2
Spindle motor to spindle	Pulley with timing belt isolates any motor vibration to the spindle
Coolant system	Ready can be controlled by CNC program
4th rotation axis	Optional comes with driver, motor, and tailstock *3
Total weight	260 lb (400 lbs shipping weight includes PC and toolbox)

*1 This micro-stepping controller was developed by ACT. We guarantee no lost-step errors in normal operation. We have tested these machines at full speed (rapids rate) in all axes continuously for many hours at a time; the motors did not get hot at all, nor was there any loss of position. There are 5 processors in each controller: one for each of the three axes, one for the spindle motor control and one for the coordination of all motions. The electronic system is thoroughly tested to eliminate over-temperature and vibrations for reliability and long life. Please see the "technologies" page of our website for more details.

*2 Optionally, you can choose an ER11 spindle with smaller motor to provide 24,000 RPM maximum speed.

*3 Our 4th axis rotary table is a high-precision optional accessory with zero backlash and 7.2 arc-sec (0.002 degree) resolution.

We offer a complete turnkey system with CNC software, collets, cables, clamp sets, tool box and compact desktop computer (without monitor) plus 2 years extended warranty and a 30 day return period with no restocking fee. Please call 818-363-6070 or visit our website at WWW.ACTmachines.com.