



## Professional Desktop CNC Mill Machine DMC-III Specifications

<b>Travel Distance X, Y, Z</b>	<b>12" x 8" x 6" (300mm x 200mm x 150mm)</b>
<b>T slot table Size W x D</b>	22" x 20"
<b>T slot width</b>	7/16"
<b>Number of T slots</b>	5
<b>Machine Dimension W x D x H</b>	27" x 23" x 28"
<b>Bridge clearance from table</b>	6.25"
<b>Motion support</b>	HIWIN 20mm linear guide rail with double blocks and final machining in pairs for each axis
<b>Driver Screw</b>	Preload 20mm ball screw with no notable backlash
<b>Motor driver</b>	Micro step motor with ACT optimal digital controller *1
<b>Motion resolution</b>	0.00008" or 2 microns
<b>Machine repeatability</b>	0.0001"
<b>Position accuracy in the entire machining area</b>	0.001" Alignment for 3 axes in the entire working area
<b>Slew rate X, Y, Z</b>	60"/m, 60"/m, 50"/m
<b>Spindle</b>	Standard ER11 or ER16 with 7mm or 10mm dia. (1/4" or 3/8") max milling bits
<b>Spindle driver motor</b>	1/3 HP variable speed brushless digital motor
<b>Spindle speed</b>	Smoothly variable from 1,500 to 12,000 rpm directly controlled by CNC program *2
<b>Spindle motor to spindle</b>	Pulley with timing belt with minimum vibrations
<b>Coolant system</b>	Ready can be controlled by CNC program
<b>4<sup>th</sup> rotation axis</b>	Optional comes with driver, motor, and tailstock *3
<b>Total weight</b>	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 24,000 RPM speed and NSK spindle with 50,000 RPM.

\*3 Our 4<sup>th</sup> 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 collets, cables, clamp sets, tool box and compact desktop computer (without monitor) plus 1 years warranty and a 30 day return policy with no restocking fee. Please call 818-363-6070 or visit our website at WWW.ACTmachines.com.**