



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

\*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 maximum speed.

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