

**BobCad V21 CAD/CAM software is included.**



## 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>                        | <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>                                 | 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 9,000 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 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 warranty and a 30 day return period with no restocking fee. BobCad V21 CAD.CAM software is included. Please call 818-363-6070 or visit our website at WWW.ACTmachines.com.**