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Creative Evolution CNC  
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## M6 SPECIFICATIONS

<b>Table</b>	650mm x 400mm (25.59" x 15.75") Capacity: 400kgs (880lbs)
<b>Axis Travels</b>	X Axis: 580mm (22.80") Y Axis: 375mm (14.75") Z Axis: 400mm (15.74")
<b>Spindle Nose to Table</b>	150mm (5.9") - 550mm (21.65")
<b>Standard Spindle</b>	Cells-Tec HCS-120G spindle: Max Spindle Speed: 30,000rpm Power Rating: 10HP (7.5kW) continuous at 12,000rpm Taper: HSK-40E  <i>Additional spindle options are available upon request</i>
<b>Tool Changer</b>	24+1 Position exchange arm type tool changer
<b>Rapid Traverse (G0)</b>	20 meters/min (800 inches/min)
<b>Cutting Feed rate (G1)</b>	15 meters/min (600 inches/min)
<b>Axis Servo Motors</b>	Yaskawa Sigma-V, 2.0kW 3,000rpm motors ( <i>Z axis motor utilizes servo brake</i> )
<b>Ball Screws</b>	X/Y/Z Axes: 32mm Diameter, 10mm pitch, C3 grade
<b>Guide Ways</b>	X Axis: 2x 30mm Hiwin roller type guide way Y Axis: 2x 35mm Hiwin roller type guide way Z Axis: 2x 35mm Hiwin roller type guide way
<b>Lubrication</b>	Axis Lubricator using ISO VG68 lubricating oil (Mobil Vactra2) Injector controlled lubrication flow Low oil level fault detection Oil cycle completion fault detection
<b>Spindle Cooling</b>	Habor HWK Series Water refrigeration unit with fault detection Motorex Cool-Core water solution for coolant (33% concentration)
<b>Coolant</b>	M8 - Flood coolant pump with Loc-Line nozzle and ball valve near spindle M10 - Air Blast nozzle with flow control valve  <i>M7 - MQL Systems are available as optional equipment</i>



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<b>Dust Collection</b>	<p>Preconfigured for up to a 8" tubing system on the top of the machine Recommended air flow of Dust Collector System: 1000CFM+</p> <p><i>Donaldson Torit dust collector model DF2-2 is recommended for use with connection of a single machining center and is available as optional equipment with machine purchase (M14 ON, M15 OFF). Larger dust collector systems are available upon request from Donaldson Torit, and A.C.T. Dust Collectors.</i></p>
<b>Manual Hand Control</b>	<p>Axes Jog push buttons (X+, X-, Y+, Y-, Z+, Z-, A+, A-) Cycle Start and Feed Hold push buttons Feed Rate Override rotary switch (0-110%) Jog Increment rotary switch (8 positions)</p>
<b>Sealing</b>	<p>Protective covers and seals on thrust bearings Telescopic covers on all ball screws Metal way covers with lip seals on X, Y and Z axes Positive pressure air purge on spindle, laser probe and scales</p>
<b>Display</b>	17" TFT Flat screen
<b>Control panel</b>	Sealed, backlit keys with indicator lights
<b>ASCII computer keyboard</b>	Texas Industrial® 114key siliconized rubber keyboard
<b>Computer/Control System</b>	<p>Creative Evolution CNC high speed control software Industrial PC with Intel® Celeron 1.0GHz processor, 256MB RAM, built on USB controller, 4GB flash "hard disk drive," Super VGA graphics adapter, 10/100BaseT Ethernet adapter (RJ45) MS-DOS 6.22 Operating System</p>
<b>Electrical Requirements</b>	<p>Machine is supplied with isolation transformer and can work with: 208 - 240 Volts AC, 80 Amps, 3 phase, 60Hz 480 Volts AC, 40 Amps, 3 phase, 60Hz</p>
<b>Overall size</b>	<p>Height 2185mm – 2565mm (86" – 101") Width 2180mm (86") Depth 1825mm (72") + pendant and chiller</p>
<b>Weight</b>	4,800kgs (10560lbs)
<b>Accuracy and Safety Standards</b>	<p>Exceeds JIS B 6338 standards, verified by Renishaw laser inspection and Renishaw ballbar testing in all axes. Conforms to relevant CE and EMC regulations. Positioning within +/-0.005mm (+/-0.0002") Repeatability within +/-0.002mm (+/-0.00008")</p>

*Listed specifications are subject to change*

