V120
Industrial CNC

- Over 52 Years Dedicated to the Engine Rebuilding Industry
- Experienced personal customer service
- Always innovating not copying
- Guaranteed turn key packages
- Distributing the industry Best-
  Robbi, Milltronics, Nikken, Marposs, Big Kaiser
- Custom fixturing and application specialists
- Honest Business, Fair Pricing, Quality Products

RMC-V120 CNC
Shown with 3516 CAT® Block

800.248.5062 | www.rmcengine.com
The V80 and V120 are true simultaneous 3 axis, PC based CNC controlled machining centers equipped to handle precision diesel engine rebuilding. All of RMC’s CNC based machines employ simple conversational menu driven programming as well as conventional “G” coding capabilities. RMC’s factory trained support team will be with you every step of the way to make sure your RMC solution is a complete success.

RMC’s Diesel line boring option offers a one step process for machining line bore diameters accurately and efficiently.

The RMC V80 and 120 Industrial offers quick, easy and accurate setup for performance block machining. The fixture maintains crankshaft to fire deck relationship for correct alignment of machined surfaces.

RMC’s unique Probe System functions like an automated coordinate measuring device, eliminating many tedious and time consuming manual measurements and guaranteeing faster and more accurate data input.

On the V80 or V120, RMC’s diesel milling packages make milling or decking the block or head surface fast, easy and accurate. Time after time, you can depend on maximum results with minimum hassle.

The RMC V80 and 120 Industrial offers quick, easy and accurate setup for performance block machining. The fixture maintains crankshaft to fire deck relationship for correct alignment of machined surfaces.

RMC’s unique Probe System functions like an automated coordinate measuring device, eliminating many tedious and time consuming manual measurements and guaranteeing faster and more accurate data input.

On the V80 or V120, RMC’s diesel milling packages make milling or decking the block or head surface fast, easy and accurate. Time after time, you can depend on maximum results with minimum hassle.
The V80 and V120 are true simultaneous 3 axis, PC based CNC controlled machining centers equipped to handle precision diesel engine rebuilding. All of RMC's CNC based machines employ simple conversational menu driven programming as well as conventional "G" coding capabilities. RMC's factory trained support team will be with you every step of the way to make sure your RMC solution is a complete success.

RMC's Diesel line boring option offers a one step process for machining line bore diameters accurately and efficiently.

The RMC V80 and 120 Industrial offers quick, easy and accurate setup for performance block machining. The fixture maintains crankshaft to fire deck relationship for correct alignment of machined surfaces.

RMC's unique Probe System functions like an automated coordinate measuring device, eliminating many tedious and time consuming manual measurements and guaranteeing faster and more accurate data input.

On the V80 or V120, RMC's diesel milling packages make milling or decking the block or head surface fast, easy and accurate. Time after time, you can depend on maximum results with minimum hassle.

RMC's Three piece Adjustable Industrial Block Holding Fixture can make quick work of the largest diesel block decks. Accuracy and superior finish surfaces make the V80 and V120 the ideal choice for all large diesel shops and rebuilders.

**Standard Features**
- Cat 50 Taper, 4,000rpm, 24/15 hp spindle motor
- Ultra bright, active matrix display
- Heavy duty spindle with (5) 90mm diam. bearings
- 50mm diameter double nut table ball screw
- PC based, menu driven, conversational programming
- Rigid tapping and spindle orientation
- Coolant system with chip washdown
- Portable media drive for program transfer
- Setup and operator training by RMC technician
- Rigid ways & fixed head design
- Graphic program verification
- 24hp Wye/Delta 2 speed spindle motor
- Probe ready with macros
- AC digital servos 2300lb XYZ axes
- Heavy duty steel way covers & chip pans
- Toolbox and parts manual
- 230 volt 3 phase 60 hz
- Lifting device for tool changing

**Optional packages**
- Work specific operations
  - Finish boring range - 2.6” - 15.08”
  - Rough boring range - 2.6” - 15.08”
  - CBN Milling head 14 or 16”
  - Tool setting fixture w/micrometer
  - Medium Diesel Block Machining Package
  - Large Diesel Block Mach Package
  - Special Diesel Block Line Bore Package
- Digital probe measuring system
- 360° rotary block fixture
- 35 hp Spindle Motor Upgrade
- Full chip & coolant enclosure
- 32-40 place auto tool changer

**Canned cycles for:**
- Upper & lower sleeve repair
- Line Boring of mains
- Wireless probing for bore & deck locations
- Water hole repairs
- Tapping, reaming, multi pass decking
- Circular interpolation of holes
- Thrust facing
RMC Industrial Engine Machining Centers...

We’ve applied RMC’s 50 years of experience and engineering in the engine rebuilding equipment industry within a series of large scale CNC machines and combined that with RMC’s own fixturing and tooling systems specifically designed for the diesel engine rebuilding industry.

Inverter drive, ball screws on all axis, servo feed motors, turcite coated ways, metal guards, chip guards and automatic tool changers have all been incorporated into the design. Probe systems, tooling packages and pre-programmed engine machining operations for specific applications means you are up and running quickly and efficiently.

Not only can you handle the requirements of diesel engine component machining, you can perform a wide variety of other conventional CNC milling, drilling, tapping operations as well.

<table>
<thead>
<tr>
<th>Specifications</th>
<th>V80cnc</th>
<th>V120cnc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boring range (various tooling)</td>
<td>0.98 - 15”</td>
<td>0.98 - 15”</td>
</tr>
<tr>
<td>Max boring depth (various tooling)</td>
<td>16”</td>
<td>16”</td>
</tr>
<tr>
<td>X axis Traverse</td>
<td>78”</td>
<td>120”</td>
</tr>
<tr>
<td>Y axis Traverse</td>
<td>33”</td>
<td>35”</td>
</tr>
<tr>
<td>Z axis Traverse</td>
<td>28”</td>
<td>30”</td>
</tr>
<tr>
<td>Spindle nose to table height</td>
<td>48”</td>
<td>54”</td>
</tr>
<tr>
<td>Spindle center to column</td>
<td>34”</td>
<td>34”</td>
</tr>
<tr>
<td>Rapid traverse (X-Y &amp; Z axis)</td>
<td>0-300 ipm</td>
<td>400 ipm</td>
</tr>
<tr>
<td>Feed rate range</td>
<td>0-300 ipm</td>
<td>0-300 ipm</td>
</tr>
<tr>
<td>Accuracy:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positioning</td>
<td>± .0004”</td>
<td>± .0004”</td>
</tr>
<tr>
<td>Repeatability</td>
<td>± .0002”</td>
<td>± .0002”</td>
</tr>
<tr>
<td>Table size (l x w)</td>
<td>86 x 32”</td>
<td>126 x 32”</td>
</tr>
<tr>
<td>Max weight on table</td>
<td>3,500 lbs</td>
<td>5,000 lbs</td>
</tr>
<tr>
<td>Main spindle motor vector drive</td>
<td>24/15 hp</td>
<td>24/15 hp</td>
</tr>
<tr>
<td>Spindle taper</td>
<td>Cat 50</td>
<td>Cat 50</td>
</tr>
<tr>
<td>Spindle speed in rpm</td>
<td>40 - 4,000 rpm</td>
<td>50 - 4,000 rpm</td>
</tr>
<tr>
<td>Floor space requirements</td>
<td>222 x 130 x 140”</td>
<td>302 x 110 x 140”</td>
</tr>
<tr>
<td>Net weight (w/o fixturing)</td>
<td>16,000 lbs</td>
<td>42,600 lbs</td>
</tr>
<tr>
<td>Electrical Requirements</td>
<td>220 volt</td>
<td>220 volt</td>
</tr>
<tr>
<td>Electrical Requirements</td>
<td>3 phase</td>
<td>3 phase</td>
</tr>
</tbody>
</table>

In order to bring you the most advanced features as soon as possible, all features, descriptions and technical specifications are subject to change.