



Engine Rebuilding Equipment

# V40/V50 ENGINE MACHINING CENTERS

***Innovation  
Starts HERE!***



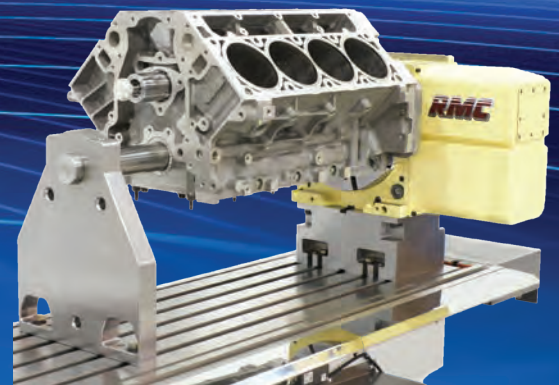


# V40/V50 CNC Engine Machining Centers

The V40 and V50 are true simultaneous 3 axis (with optional 4th & 5th axis) PC based CNC controlled machining centers equipped to handle precision engine blueprinting as well as production rebuilding and precision head porting. All of RMC's CNC based machines employ simple conversational menu driven programming as well as conventional "G" coding capabilities.

## The V40 CNC Machine Center

RMC's most flexible CNC engine machining center is shown with the optional 4th axis rotary fixture and 20 place tool changer.



**RMC's 360° 4th Axis Rotary Table and Block True Blueprinting Fixture** allows specific angle positioning of the block for lifter bore machining, splayed caps, block lightening and a variety of other 4th axis operations. The block true fixture offers quick, easy and accurate setup for performance block machining. The fixture maintains crankshaft to camshaft relationship for correct alignment of all machined surfaces



**RMC's digital probe option** is a one step process for pre-machining block checking of bore diameters, locations and deck heights. Measurements will appear on screen for operator verification.

## Optional tooling packages and work specific fixturing systems

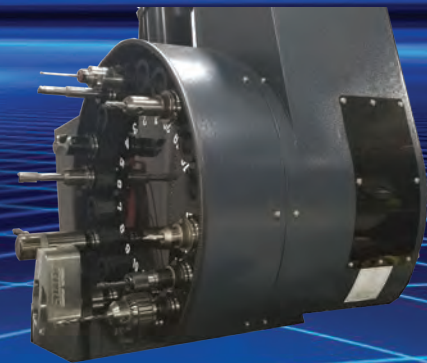
- Finish boring range - 2.6" - 8.00"
- CBN Milling head 10 or 14"
- 4 Bolt cap conversion tooling
- Cylinder head holding fixture
- 4th Axis 360° rotary block fixture
- Right angle head for line boring
- Rough boring range - 2.6" - 8.00"
- Optical Tool setting fixture
- Lifter bore tooling package
- Production head holding fixture
- Main Cap machining fixture
- Digital probe measuring system



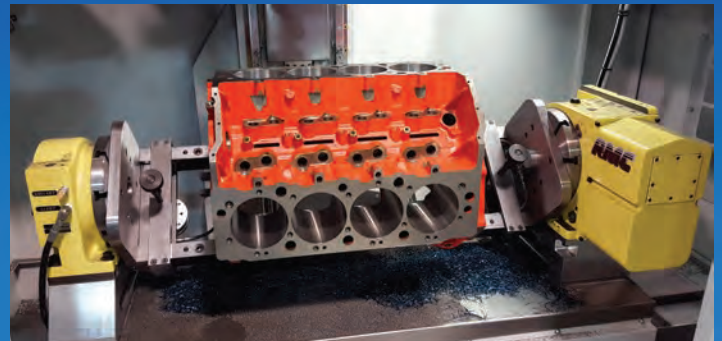
# V40/V50 CNC Engine Machining Centers



The **9000 Series CNC** is our newest and upgraded **control** offered on the RMC CNC Engine Machining Centers. It features 120 GB disk storage, 4GB memory, up to 10-times better graphic performance, mid-travel tactile keys and an enlarged 15" LCD touch screen. It's a Windows®-based platform and offers all the user-friendly features that you have come to love on your RMC CNC machine.



RMC's **V50 CNC** standard configuration includes a 20 position tool changer.



The **RMC High Production Fixturing System** provides the V40 CNC machine with unmatched cycle times - mount, probe, bore, deck and dismount V-6 block's in 8 minutes. Cycle V-8 block's floor to floor in 10 minutes.



## The V50 CNC Machine Center

One of RMC's top of the line machining centers, the V50 CNC with full enclosure and chip removal system is the ideal choice for high production or shops requiring a larger work envelope.



## Convert your V40/V50 to a V40HP/V50HP Head Porting System ...

with RMC's Head Porting System. It combines RMC's existing Porting System experience, fixtures, tooling and programming into the V40/V50 Machining Centers. Check out the V40HP/V50HP Head Porting Brochure for more information.



# Innovation Starts **HERE!**



**Boring**



**Milling**



**Probing**



**Lifter Boring**



**Line Boring**



**Misc. Shell Milling**



**Machining For Splayed Caps**

Specifications	V40HP	V50HP
X Axis Travel	40"	50"
Y Axis Travel	20"	20"
Z Axis Travel	20"	20"
Table size (l x w)	46 x 20"	52 x 20"
Spindle nose to table height	35"	34.25"
Spindle center to column	20.5"	20.5"
Tool Changer	20 pocket	20 pocket
Rapid traverse (X-Y-Z axis)	945 ipm	945 ipm
Maximum cutting feed rate	500 ipm	500 ipm
Accuracy: Positioning	± .0002"	± .0002"
Repeatability	.0002"	.0002"
Max weight on table	2,000 lbs	2,000 lbs
Main spindle motor (intermittent/constant)	20/15 hp	20/15 hp
Standard spindle speed	10,000 rpm	10,000 rpm
Spindle taper	Cat 40 BIG PLUS®	Cat 40 BIG PLUS®
Net weight	11,000 lbs	12,000 lbs
Work space required (wxdxh)	112x110x120"	112x110x120"

## RMC Engine Component Machining Center ...

We've applied RMC's 60 years of experience and engineering in the engine rebuilding equipment industry within a series of CNC machines and combined with RMC's own fixturing and tooling systems specifically designed for the engine rebuilding industry.

Servo drive, ball screws on all axis, servo feed motors, linear bearing ways with metal guards and full metal enclosures have all been incorporated into the design. 360° rotary fixtures, probe systems, tooling packages and software programming for specific applications means you are up and running quickly.

Not only can you handle all the requirements of engine component machining, you can perform a wide variety of other conventional machining center operations as well.



**Engine Rebuilding Equipment**

**US & Canada 800.248.5062**

**5775 Bridgeview Center | Saginaw, MI 48604**

**Phone: 989.754.3611 | Fax: 989.754.1696**

**www.rmcengine.com**

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