

RMC

V40/V50 CNC Engine Machining Centers



www.rmceengine.com

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. 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.



The V40cnc Machine Center

RMC's most flexible CNC engine machining center is shown with the optional 4th axis rotary fixture and 16 place tool changer.



RMC's 360° 4th Axis Rotary Table and block fixture allows specific angle positioning of the block for lifter bore machining, splayed caps, block lightening and a variety of other 4th axis operations.



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



The RMC Block True Blueprinting 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

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



MC's V40cnc standard configuration includes a 24 position tool hanger.



The new 8200 CNC high speed machining control featuring powerful solid model graphics with conversational visual aid help screens. This new control offers expanded connectivity capabilities using USB, Ethernet and MT Connect.

The RMC High Production Fixturing System provides the V40cnc 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.



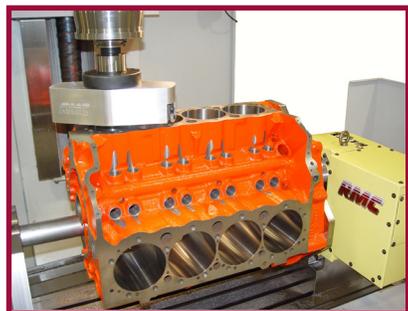
Convert your V40 to a V40HP Head Porting System ... with RMC's entry level Head Porting System. It combines RMC's existing Porting System experience, fixtures, tooling and programming into the V40 Machine Centers. Check out the V40HP Head Porting Brochure for more information.

The V50 cnc Machine Center
One of RMC's top of the line machining centers, the V50cnc with full enclosure and chip removal system is the ideal choice for high production shops.





Boring



Milling



Probing



Lifter Boring



Line Boring

RMC Engine Component Machining Center ...

We've applied RMC's 56 years of experience and engineering in the engine rebuilding equipment industry within a series of CNC machines and combined that with RMC's own fixturing and tooling systems specifically designed for the engine rebuilding industry.

Inverter 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.

Specifications	V40cnc	V50cnc
Boring range (various tooling)	0.98" - 6"	0.98" - 6"
Max boring depth (various tooling)	10.43"	12.5"
Table traverse (X-axis)	40"	50"
Cross traverse (Y-axis)	20"	25"
Vertical head travel (Z-axis)	26"	24"
Spindle nose to table height	35"	35"
Spindle center to column	21.5"	25"
Rapid traverse (X-Y axis)	1,000 ipm	1,000 ipm
(Z-axis)	1,000 ipm	1,000 ipm
Feed rate range	0.1 - 200 ipm	0.1 - 1,000 ipm
Accuracy: Positioning	± .0002"	± .0002"
Repeatability	± .00015"	± .00015"
Table size (l x w)	45 x 20"	54" x 24"
Max weight on table	2,000 lbs	3,500 lbs
Main spindle motor (Int/constant)	24 / 15 hp	24 / 15 hp
Spindle speed - rpm	50 - 8000	50 - 8,000
Spindle taper	Cat 40	Cat 40
Net weight (w/o fixtures)	11,000 lbs	20,000 lbs
Work space required (w x d x h)	112 x 110 x 120"	144 x 125 x 126"
Electrical requirements	220 volt 3phase	220 volt 3phase



Misc. Shell Milling



Machining for splayed caps

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



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