



Engine Rebuilding Equipment

**Innovation
Starts *HERE!***

V35 CNC OHC 90° Align Boring System



The V35 and all RMC's V-Series CNC are true simultaneous 3 axis (with optional 4th & 5th axis) Industrial PC based CNC controlled machining centers equipped to handle precision engine blueprinting as well as production 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 turn key success.



The V35cnc was the best fit for our 90° OHC Align Boring package... With its fully enclosed compact floor layout, linear ball ways, and 24 pocket tool changer, makes it the best CNC for this turn key application.



RMC's in house engineering and manufacturing... Allows specific fixture, tooling and programming for any customers needs. Shown above is the main table base plate with head specific adapter bars.



The RMC way is attention to detail... RMC offers the quickest, easiest and most accurate setup for boring OHC cylinder heads. All cylinder head mounting bars are engraved and pinned to minimize operator confusion and maximize productivity and accuracy.



RMC's digital diameter tool setting... Is a one step process for pre setting bore diameters. Measurements will appear on the digital dial indicator for operator verification.

Optional tooling packages and work specific fixturing systems

- Head Locating Bar Set- Ford 4.6L 2 & 3 Valve
- Head Locating Bar Set- Chry. 2 Valve
- Right angle head for line boring
- Digital probe measuring system
- Automatic-Laser Tool Dia. and Length Checker



Rmc's operator control has a large lcd screen and full function keypads... This creates a friendly and efficient operator experience.



RMC's V35 comes standard with a 24 position tool changer... This is a side mount swing arm style tool changer which maximizes work envelope.

Rmc V35 probing process to locate cam bores and center automatically before boring...



The OP32 Wireless Probe...

Is one of the key components to the speed and precision of this system. It not only finds the location of the existing cam-bore it will also check critical datum points on each cylinder head as a built in error checking system.



The RMC 90° OHC Boring Head...

Has an integrated mounting location for the optical probe (shown at left). It also includes its own calibration target (shown at right) for a quick check of the probe accuracy and machine positioning.





Tool Setting

RMC Engine Component Machining Center ...

We have applied RMC's 50 + year's of experience and engineering to a select group of CNC machining centers and added RMC's own fixturing and tooling systems to assure the best machines for the engine building industry.

Inverter drives, ball screws on all axis, servo controlled motors, linear ball ways with metal guards and chip guards have all been incorporated into the design of these machines. RMC's 360° rotary tables and fixtures, probe systems, tooling packages and software programming for specific applications means you are up and running quickly.

And, not only can you handle all of your engine machining requirements, your RMC Machining Center can perform a wide variety of other operations that the CNC world allows.

Don't be fooled by the competitions machines, they are not true industry standard CNC Machines. And CNC machining's precision and performance in the engine building industry is here to stay!



Probing



Modular Boring Heads

Specifications	V35 cnc	V40 cnc
Boring range (various tooling)	0.900" - 1.375"	0.98" - 6"
Max boring depth (various tooling)	1.70"	10.43"
Table traverse (X-axis)	30"	40"
Cross traverse (Y-axis)	16"	20"
Vertical head travel (Z-axis)	20"	26"
Spindle nose to table height	24"	35"
Spindle center to column	20"	21.5"
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"
54" x 24"		
Max weight on table	1,500 lbs	1,500 lbs
Main spindle motor (Int/constant)	18 / 12 hp	24 / 15 hp
Spindle speed - rpm	50 - 8000	50 - 8,000
Spindle taper	Cat 40	Cat 40
Net weight (w/o fixtures)	9,000 lbs	11,000 lbs
Work space required (w x d x h)	86x 82 x 110"	112 x 110 x 120"
Electrical requirements	220 volt 3phase	220 volt 3ph



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