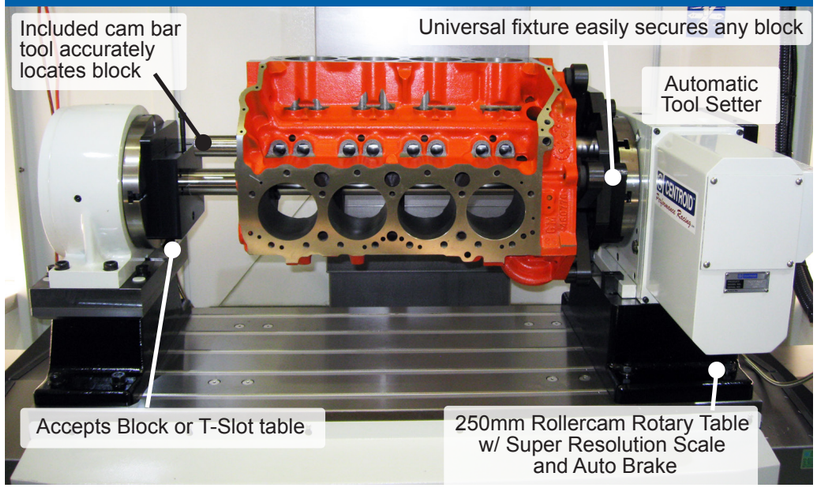
Specifications	B4250
Table Size:	20" x 49.5" (508x1257 mm)
Longitudinal travel (X):	42" (1067 mm)
Cross travel (Y):	24" (610 mm)
Vertical travel (Z):	37" (950 mm)
Spindle nose to table top:	4.7" - 41" (120-1041 mm)
Spindle center to column:	22" (559 mm)
Maximum table load:	2200 lbs (998 kg)
Spindle power:	20 HP / (15 kW)
Spindle speed:	10,000 RPM
Spindle Taper	CAT 40
Opitonal Spindle taper:	BT-40, short pull stud style (Optional)
Automatic Tool Changer:	24 Position Swing Arm (7kg/15.4lb. Max Tool Weight)
Rapid feed rates (X, Y, Z):	X,Y 1000 IPM, Z 800 IPM
Accuracy:	0.0005" (0.0127 mm)
Repeatability:	0.0002" (0.006 mm)
Axis drive motors (X, Y, Z):	Yaskawa AC Brushless Servos X,Y 2.9 kW Z 4.4kW
Axis way design:	Heavy Duty Linear guideways
Lifter Boring Diameter Range:	0.787" – 1.220" (20–31 mm), .984" - 1.575" (25-40 mm)
Cylinder Boring Ranges:	2.68" – 5.91" (68 – 151 mm)*, Max Depth 9.5" (242 mm)*
Coolant Pump	80 PSI, 85 Gallon Capacity
Machine Footprint:	L 130" (3300 mm), W 100" (2540 mm), Max H126" (3200 mm)
Weight:	Machine: 16,500 lbs (7500 kg)

Precision Universal Block Fixture



Warranty

One year warranty for parts, labor and technical support.

M400 CNC Control Features

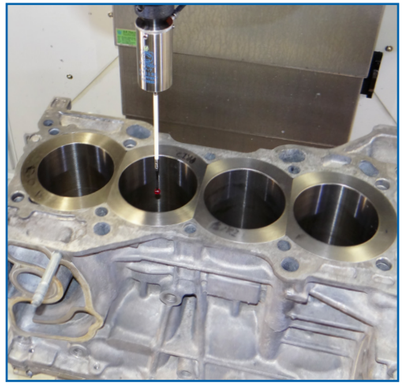
Standout CNC Features Include: Windows 10 OS, Touch screen, Intercon conversational software with Engine Block interface, auto digitizing and probing cycles, graphical program preview, automatic tool measurement, sub-programs and macros, rigid tapping, extensive canned cycles including threadmilling, cutter radius compensation, pockets, drilling, tapping, part scaling and mirroring and much more. Create your own program for any block in minutes!

Copyright © 2009-2023 CENTROID. B4250 rev15 11-7-23 *Additional tooling also available. All specifications and features subject to change.

Standard Tooling Package

Included Standard Tooling Package*:

- Cylinder Boring Tool
- Tool Setting Micrometer
- 12" Deck Surfacing Tool
- Lifter Boring Tool and Lifter Spot Facing Tool
- Cylinder Bore Chamfering Tool
- CENTROID Digitizing Touch Probe.



Centroid's DP7 Digitizing Touch Probe. is specifically designed for long stylus operation, which yields ultra precise Block measurements.

Optional Features

- Coolant Through Spindle (CTS)
- BT40 Spindle taper
- Mastercam CAD/CAM software
- Quick swap T-Slot Table
- Main Cap Conversion Tooling

QR code B4250 webpage link

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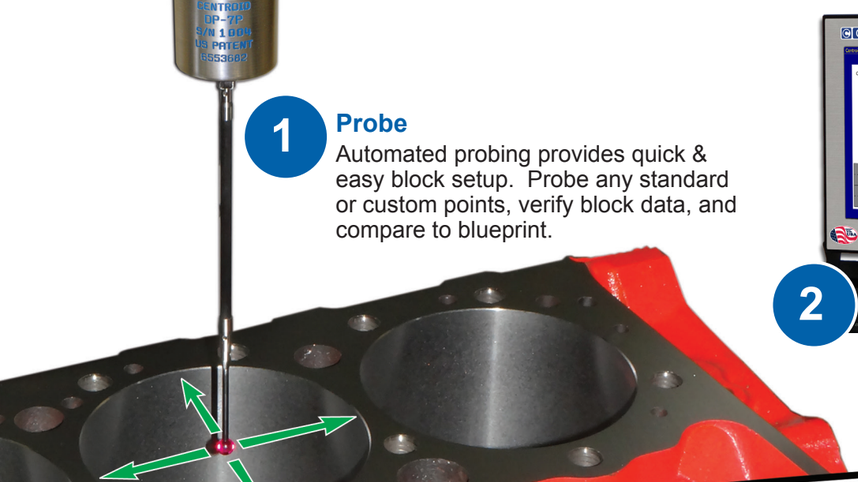
www.**centroidcnc**.com

CENTROID™

B4250
CNC Block Machining Center

MADE IN USA

CNC Blocks and Parts with the Same Machine



1 Probe

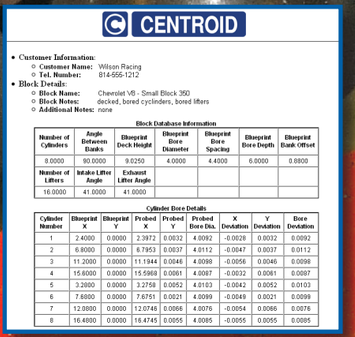
Automated probing provides quick & easy block setup. Probe any standard or custom points, verify block data, and compare to blueprint.

2 Select Program

Load existing or create new programs using digitized, blueprint, or custom data. No G-code required!

3 Machine the Block

The selected operations are performed with the push of a button.

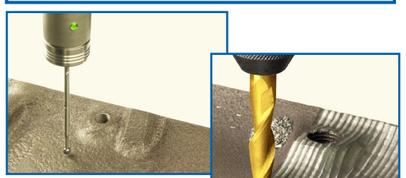


4 Generate Report

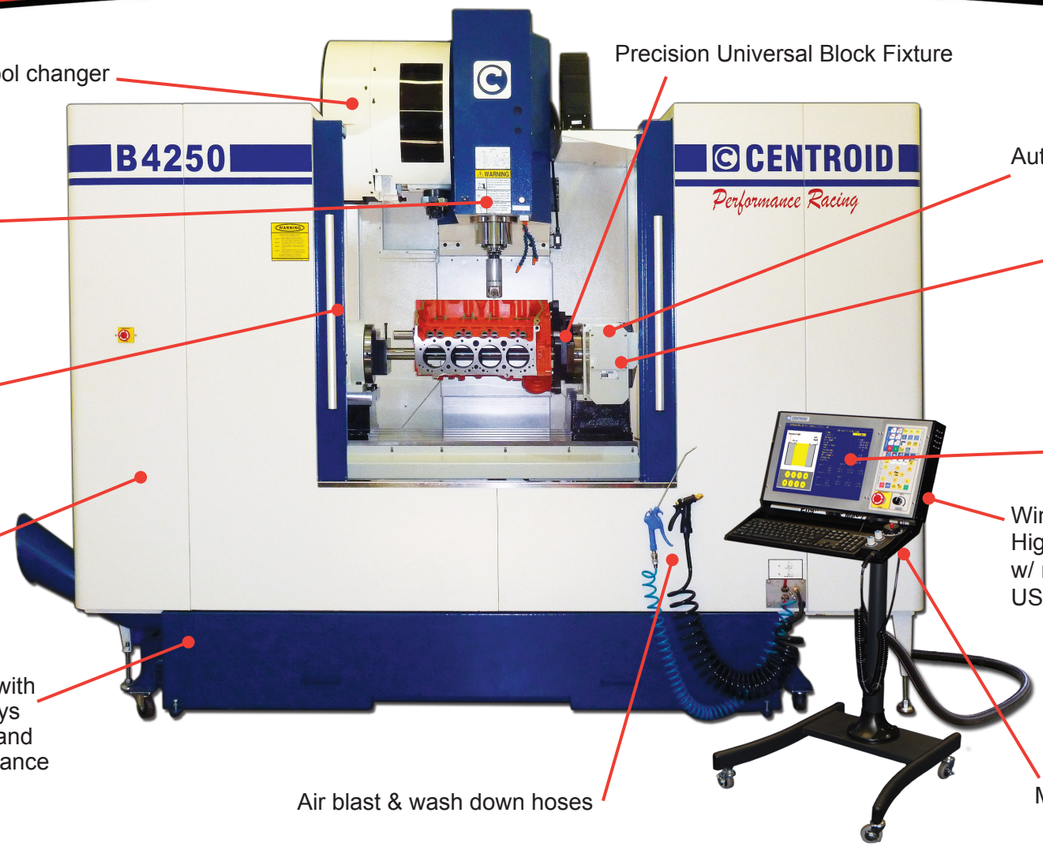
Create detailed reports including blueprint data and deviations. Even add your own custom logo.

Turnkey System Includes

- 4-Axis machining center
- M400 CNC control
- Precision Universal block fixture
- Conversational block software
- On-site personalized training
- Standard tooling package
- Digitizing probe
- Auto tool length setter
- 24-position ATC
- MPG electronic handwheel



Digitize block profiles for use in lightening with the included probe and software. Copy and cut nearly any 3D shape, and reproduce hard-to-find or unavailable parts!



24-position automatic tool changer

Precision Universal Block Fixture

20HP 10,000 RPM programmable spindle

Auto tool length setter

250mm Rollercam Rotary Table w/ High Resolution Digital Scale and Auto Brake

Easy access sliding doors with windows

Windows 10, Touch screen, High end CNC computer w/ multi core CPU, SSD, Wifi, USB

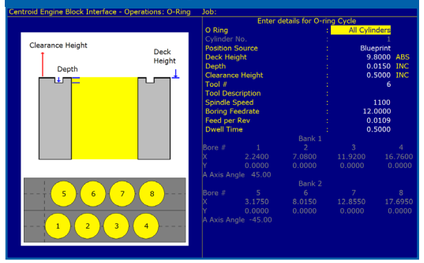
Fully enclosed cabinet with flood coolant & chip auger

Heavy-duty cast iron frame with a wide saddle and linear ways provides superior accuracy and rigidity with reduced maintenance

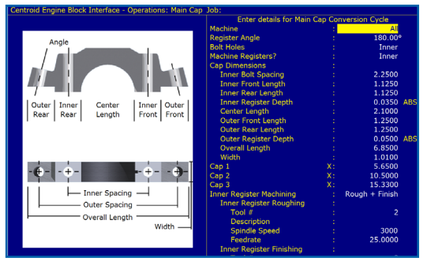
Air blast & wash down hoses

MPG electronic handwheel

Flexible, Easy-to-use Software

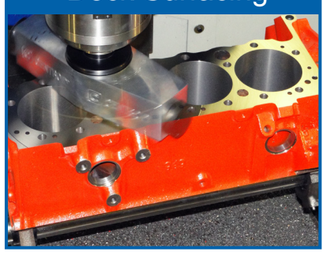


CENTROID's innovative conversational block-machining software allows you to quickly create or modify programs for any block right at the machine. No G-code knowledge required.

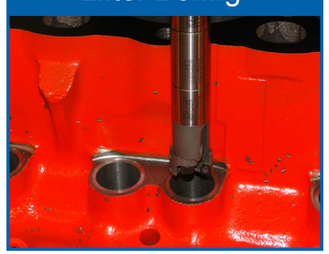


Cylinder Boring

Deck Surfacing



Lifter Boring



Main Cap Conversion

Threadmilling

Head Stud Conversion

Engraving

Additional capabilities: O-ring Grooving, Chamfering, Spot Facing, Rigid Tapping, Block Sleeving, Drilling, Pocketing, Lightening, & General Part Machining