Affordable, Extra Heavy-Duty, Large Capacity, CNC Bed Mills with Real Cutting Power

- Two CNC Control Options
- Available with Programmable Spindle Speeds (on specific models)
- Up To 2,000 lbs Table Load Capacity
3-Axis CNC Bed Mills with ACU-RITE MILLPWR G2 Control

Machine Standard Features

- Powerful 5 Hp spindle drive motor
- Mechanical variable speed drive with 2 speed ranges
- Hardened and ground spindle with NT40 taper
- Hardened and chromed quill with 5" travel
- CP4 ABEC7 angular contact spindle bearings
- C7 double nut X/Y/Z axes, 1.26" diameter ballscrew
- Hardened and ground table surface
- Ground T-slots to provide accurate reference edge
- Hardened and ground, square X/Y ways
- Turcite B coating on saddle X/Y axes ways
- Meehanite castings for superior rigidity and wear resistance
- Telescopic Z axis ballscrew cover
- Z axis accordion way cover
- Stainless steel front Y axis way cover
- Rubber rear Y/Z axes way covers
- Heavy-duty overhead control arm
- X/Y axes handwheels
- Coolant system with pump
- Automatic lubrication with alarm
- Heavy-duty chip tray and rear splash guard
- Table guarding
- Transformer
- Long arm halogen work light
- Tools, toolbox and parts
- Air power drawbar

Optional Equipment

- Coolant skimmer
- Table guard with interlock

3-Axis Super CNC Bed Mills with Fagor 8055i MC CNC Control

Machine Standard Features

- Powerful 5 Hp spindle motor on SUP4BVS & SUP6BVS
- 7.5 Hp spindle motor on SUP8BVS
- Inverter variable speed drive with 2 speed ranges
- Hardened and ground spindle with NT40 taper
- Hardened and chromed quill with 5" travel
- CP4 ABEC7 angular contact spindle bearings
- C7 double nut X/Y/Z axes 1.26" diameter ballscrew
- Hardened and ground table surface
- Ground T-slots to provide accurate reference edge
- Hardened and ground, square X/Y ways
- Turcite B coating on saddle X/Y axes ways
- Meehanite castings for superior rigidity and wear resistance
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- Z axis accordion way cover
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- Rubber rear Y/Z axes way covers
- Heavy-duty overhead control arm
- X/Y axes handwheels
- Coolant system with pump
- Automatic lubrication with alarm
- Heavy-duty chip tray, rear splash guard and table guarding
- Transformer
- Long arm halogen work light
- Tools, toolbox and parts
- Air power drawbar

Optional Equipment

- X/Y/Z linear scale
- 4th axis package
- Remote MPG unit
- Coolant skimmer
- Table guard with interlock
## Machine Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>4BVSCNC40</th>
<th>SUP4BVSCNC</th>
<th>6BVSCNC40</th>
<th>SUP6BVSCNC</th>
<th>SUP8BVSCNC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table Size</td>
<td>10&quot; x 54&quot; (254 x 1371mm)</td>
<td>10&quot; x 54&quot; (254 x 1371mm)</td>
<td>15&quot; x 60&quot; (380 x 1524mm)</td>
<td>15&quot; x 60&quot; (380 x 1524mm)</td>
<td>16.75&quot; x 62&quot; (425 x 1575mm)</td>
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<tr>
<td>Table Load Capacity</td>
<td>1,500 lbs. (680kg)</td>
<td>1,500 lbs. (680kg)</td>
<td>1,800 lbs. (817kg)</td>
<td>1,800 lbs. (817kg)</td>
<td>2,000 lbs. (907kg)</td>
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<tr>
<td>Number of T-Slots</td>
<td>3</td>
<td>3</td>
<td>3</td>
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<td>4</td>
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<tr>
<td>T-Slot Width</td>
<td>.63&quot; (16mm)</td>
<td>.63&quot; (16mm)</td>
<td>.709&quot; (18mm)</td>
<td>.709&quot; (18mm)</td>
<td>.709&quot; (18mm)</td>
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<td>T-Slot Center Distance</td>
<td>2.48&quot; (63mm)</td>
<td>2.48&quot; (63mm)</td>
<td>3.15&quot; (80mm)</td>
<td>3.15&quot; (80mm)</td>
<td>3.15&quot; (80mm)</td>
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<tr>
<td>Table Ways (X Axis)</td>
<td>Dovetail</td>
<td>Dovetail</td>
<td>Dovetail</td>
<td>Dovetail</td>
<td>Dovetail</td>
</tr>
<tr>
<td>Bed Ways (Y Axis)</td>
<td>Square</td>
<td>Square</td>
<td>Square</td>
<td>Square</td>
<td>Square</td>
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<tr>
<td>Column Ways (Z Axis)</td>
<td>Dovetail</td>
<td>Dovetail</td>
<td>Dovetail</td>
<td>Dovetail</td>
<td>Dovetail</td>
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<tr>
<td><strong>TRAVELS</strong></td>
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<tr>
<td>Longitudinal (X Axis)</td>
<td>29.8&quot; (759mm)</td>
<td>29.8&quot; (759mm)</td>
<td>40.37&quot; (1025mm)</td>
<td>40.37&quot; (1025mm)</td>
<td>46.6&quot; (1183mm)</td>
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<tr>
<td>Cross (Y Axis)</td>
<td>19.6&quot; (498mm)</td>
<td>19.6&quot; (498mm)</td>
<td>18.25&quot; (463mm)</td>
<td>18.25&quot; (463mm)</td>
<td>22.25&quot; (565mm)</td>
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<tr>
<td>Vertical (Z Axis)</td>
<td>18.5&quot; (470mm)</td>
<td>18.5&quot; (470mm)</td>
<td>21.00&quot; (5330mm)</td>
<td>21.00&quot; (5330mm)</td>
<td>20.57&quot; (522mm)</td>
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<tr>
<td>Quill Diameter</td>
<td>4.13&quot; (105mm)</td>
<td>4.13&quot; (105mm)</td>
<td>4.13&quot; (105mm)</td>
<td>4.13&quot; (105mm)</td>
<td>4.33&quot; (103mm)</td>
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<tr>
<td>Quill Travel</td>
<td>5&quot; (127mm)</td>
<td>5&quot; (127mm)</td>
<td>5&quot; (127mm)</td>
<td>5&quot; (127mm)</td>
<td>6&quot; (152mm)</td>
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<tr>
<td>Head Tilt (left or right)</td>
<td>90°</td>
<td>90°</td>
<td>90°</td>
<td>90°</td>
<td>90°</td>
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<tr>
<td>Rapid Traverse Rate X &amp; Y</td>
<td>100'/min (2540mm/min)</td>
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<td>Rapid Traverse Rate Z</td>
<td>75'/min (1905mm/min)</td>
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<tr>
<td>Programmable Feedrate X &amp; Y</td>
<td>0-100'/min (0-2540mm/min)</td>
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<tr>
<td>Programmable Feedrate Z</td>
<td>0-75'/min (0-1905mm/min)</td>
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<tr>
<td>Feedrate Override (5% increments)</td>
<td>5%-150%</td>
<td>5%-150%</td>
<td>5%-150%</td>
<td>5%-150%</td>
<td>5%-150%</td>
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<td><strong>SPINDLE</strong></td>
<td></td>
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<tr>
<td>Motor</td>
<td>5 Hp</td>
<td>5 Hp</td>
<td>5 Hp</td>
<td>5 Hp</td>
<td>7.5 Hp</td>
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<tr>
<td>Spindle Speeds (Ininitely Variable)</td>
<td>70-4300 rpm</td>
<td>65-5160 rpm</td>
<td>70-4300 rpm</td>
<td>65-5160 rpm</td>
<td>65-5160 rpm</td>
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<td>No. of Speed Ranges</td>
<td>2</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Low Gear Range</td>
<td>70-500 rpm</td>
<td>65-590 rpm</td>
<td>70-500 rpm</td>
<td>65-590 rpm</td>
<td>65-590 rpm</td>
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<tr>
<td>High Gear Range</td>
<td>570-4300 rpm</td>
<td>575-5160 rpm</td>
<td>570-4300 rpm</td>
<td>575-5160 rpm</td>
<td>575-5160 rpm</td>
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<tr>
<td>Spindle Taper</td>
<td>NT 40</td>
<td>NT 40</td>
<td>NT 40</td>
<td>NT 40</td>
<td>NT 40</td>
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<td>Quill feed</td>
<td>.0016&quot;/.003&quot;/.006&quot;/rev (0.04/0.08/0.15mm/rev)</td>
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<tr>
<td><strong>CONSTRUCTION</strong></td>
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<tr>
<td>Height</td>
<td>78.74&quot; (2000mm)</td>
<td>78.74&quot; (2000mm)</td>
<td>85.43&quot; (2170mm)</td>
<td>85.43&quot; (2170mm)</td>
<td>84.65&quot; (2150mm)</td>
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<tr>
<td>Width</td>
<td>71.46&quot; (1815mm)</td>
<td>71.46&quot; (1815mm)</td>
<td>92.91&quot; (2360mm)</td>
<td>92.91&quot; (2360mm)</td>
<td>98.03&quot; (2490mm)</td>
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<tr>
<td>Depth</td>
<td>66.14&quot; (1680mm)</td>
<td>66.14&quot; (1680mm)</td>
<td>76.77&quot; (1950mm)</td>
<td>76.77&quot; (1950mm)</td>
<td>80.71&quot; (2050mm)</td>
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<tr>
<td>Working Width</td>
<td>100&quot; (2540mm)</td>
<td>100&quot; (2540mm)</td>
<td>131&quot; (3327mm)</td>
<td>131&quot; (3327mm)</td>
<td>140&quot; (3556mm)</td>
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<tr>
<td>Working Depth</td>
<td>74&quot; (1880mm)</td>
<td>74&quot; (1880mm)</td>
<td>90&quot; (2286mm)</td>
<td>90&quot; (2286mm)</td>
<td>100&quot; (2540mm)</td>
</tr>
<tr>
<td>Width Across Column Ways</td>
<td>11.73&quot; (420mm)</td>
<td>11.73&quot; (420mm)</td>
<td>11.73&quot; (420mm)</td>
<td>11.73&quot; (420mm)</td>
<td>11.73&quot; (420mm)</td>
</tr>
<tr>
<td>Length of Saddle on Bed</td>
<td>25.98&quot; (660mm)</td>
<td>25.98&quot; (660mm)</td>
<td>47.24&quot; (1200mm)</td>
<td>47.24&quot; (1200mm)</td>
<td>53.15&quot; (1350mm)</td>
</tr>
<tr>
<td>Width Across Bed Ways</td>
<td>16.53&quot; (420mm)</td>
<td>16.53&quot; (420mm)</td>
<td>20.47&quot; (520mm)</td>
<td>20.47&quot; (520mm)</td>
<td>22.83&quot; (580mm)</td>
</tr>
<tr>
<td>Center of Spindle to Column ways</td>
<td>17.32&quot; (440mm)</td>
<td>17.32&quot; (440mm)</td>
<td>20.47&quot; (520mm)</td>
<td>20.47&quot; (520mm)</td>
<td>23.62&quot; (600mm)</td>
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<tr>
<td>Floor to Table Surface</td>
<td>36.2&quot; (920mm)</td>
<td>36.2&quot; (920mm)</td>
<td>37&quot; (940mm)</td>
<td>37&quot; (940mm)</td>
<td>34.3&quot; (871mm)</td>
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<tr>
<td>Table to Column Ways</td>
<td>3.15&quot;-.20.87&quot; (80-530mm)</td>
<td>3.15&quot;-.20.87&quot; (80-530mm)</td>
<td>2.05&quot;-.21.73&quot; (52-552mm)</td>
<td>2.05&quot;-.21.73&quot; (52-552mm)</td>
<td>.79&quot;-.23.62&quot; (20-600mm)</td>
</tr>
<tr>
<td>Ball Screw Dia.</td>
<td>1.26/.2 (32/5mm)</td>
<td>1.26/.2 (32/5mm)</td>
<td>1.26/.2 (32/5mm)</td>
<td>1.26/.2 (32/5mm)</td>
<td>1.26/.2 (32/5mm)</td>
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<tr>
<td>Ball Screw Class</td>
<td>C7</td>
<td>C7</td>
<td>C7</td>
<td>C7</td>
<td>C7</td>
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<tr>
<td>Spindle Nose to Table</td>
<td>3.15&quot;-.22.83&quot; (80-580mm)</td>
<td>3.15&quot;-.22.83&quot; (80-580mm)</td>
<td>3.93&quot;-.27.55&quot; (100-700mm)</td>
<td>3.93&quot;-.27.55&quot; (100-700mm)</td>
<td>3.93&quot;-.27.55&quot; (100-700mm)</td>
</tr>
<tr>
<td>Gross Weight (approximately)</td>
<td>4,400 lbs (2000kg)</td>
<td>4,400 lbs (2000kg)</td>
<td>6,600 lbs (3000kg)</td>
<td>6,600 lbs (3000kg)</td>
<td>7,260 lbs (3300kg)</td>
</tr>
</tbody>
</table>

*Machine Control, Design and Specification are subject to change without notice.*
ACU-RITE® MILLPWRG²

Full Three axes* CNC Control *(in G Code only)

Hardware Features
- Precision Ground and Hardened Ball Screws
- Powerful AC Servo Motors Assemblies
- Closed Loop Feedback using ACU-RITE Precision Glass Scales with (1µm/.00004 Resolution)
- 10" Flat Panel, Color, LCD Display
- Large Internal Part Program Storage Capacity
- RS-232 Port for Downloading from an Offline Source
- Remote Stop/Go Switch • USB and Ethernet
- Maximum Table Feedrate of 100 IPM

Features and Benefits
- 3 axes Control/4-axes Readout Optional
- Conversational Menu-prompted Programming
- Position-Trac™/Find Home: Quickly find workpiece zero after power loss • 3-D, Tactile-Feel, Color Keypad
- ACU-RITE Precision Glass Scales for better accuracy, repeatability, high resolution, closed loop feedback and proven reliability
- Jog Control: One axis or two axes simultaneously
- Remote Stop/Go Switch, with hand-held switch
- Travel Limits: With software
- Engrave: Alphanumeric references into parts
- Tool Offset Compensation • Tool Library
- Hard Key Milling Functions: Select routine functions (lines, arcs, rectangles, circles, etc.)
- Bolthole Calculations: Calculate full & partial circles • Linear row/column • Rectangle frame
- Rectangle array • Mirror/Repeat/Rotate
- Custom Pocket • Skew: Save time aligning parts
- Bend • Explode • Feed Rate Override • DXF File Input
- Teach Position • Edit Capabilities • Reference Tables
- Math Functions: Standard • Trigometry • Geometry • rpm

Icon Conversational Programming
- 26 canned cycles... Slot Milling, Profile Milling, Multiple Drilling cycles, Boring cycles, Reaming cycles, Arc bolt hole cycles, Random position cycles, Grid Pattern position cycles and more
- Mirror Imaging • Automatic chamfer blending
- Arc defined by three points • Automatic radius blending
- Part Scaling (in part or whole)
- Programming in absolute arc center coordinates
- Main plane selection • Individual plane selections
- Definition of lower work area limits
- Zero offsets and auto-deletion of offsets referencing
- Automatic machine home sequence
- Preset of coordinate values • Preset of polar origin

G Code Programming
- DNC (RS232) • Geometric help • Execution mode
- MDI mode (Manual Data Input) • Teach-in mode
- Play back mode • Single block mode • Manual mode
- Background editing mode • Mid program start
- Automatic tool calibration mode
- Tool inspection mode with auto-return
- Programmable spindle speed (SUP models)
- Number of main programs: 999,999 *3
- Repeat of sections of program
- Part zero offsets • Number of nesting levels: 15
- Feedrate: 0.00001 to 7900 inches/min.
- Machining canned cycles in all planes
- User defined canned cycles • On board graphic editor
- Override control for feed rate and spindle

The Fagor 8055i MC Control System is one of the most versatile CNC in existence due to its Dual Operating System. In one mode, it is a very powerful ISO G-code control System and in the other mode Icon conversational programming with highly interactive graphics.
## Clausing CNC Bed Mill Control Options

<table>
<thead>
<tr>
<th>Model</th>
<th>Control Description &amp; Spindle</th>
</tr>
</thead>
<tbody>
<tr>
<td>4BVSCNC40</td>
<td>3-Axes ACU-RITE MILLPWR and #40 Spindle</td>
</tr>
<tr>
<td>SUP4BVSCNC/MP</td>
<td>3-Axes ACU-RITE MILLPWR and #40 Spindle</td>
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<tr>
<td>SUP4BVSCNCFG</td>
<td>3-Axes w/4th drive Fagor 8055i and #40 Spindle</td>
</tr>
<tr>
<td>6BVSCNC40</td>
<td>3-Axes ACU-RITE MILLPWR and #40 Spindle</td>
</tr>
<tr>
<td>SUP6BVSCNC/MP</td>
<td>3-Axes ACU-RITE MILLPWR and #40 Spindle</td>
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<tr>
<td>SUP6BVSCNCFG</td>
<td>3-Axes w/4th drive Fagor 8055i and #40 Spindle</td>
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<tr>
<td>SUP8BVSCNC/MP</td>
<td>3-Axes ACU-RITE MILLPWR and #40 Spindle</td>
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<tr>
<td>SUP8BVSCNCFG</td>
<td>3-Axes w/4th drive Fagor 8055i and #40 Spindle</td>
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</tbody>
</table>

## Clausing CNC Bed Mill Accessories

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Mill Model</th>
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</thead>
<tbody>
<tr>
<td>2VS010</td>
<td>52 Piece Clamping Kit</td>
<td>All Models</td>
</tr>
<tr>
<td>2VS022</td>
<td>Milling Chuck Kit w/7 Collets NMTB 40 Spindle</td>
<td>All Models</td>
</tr>
<tr>
<td>4VS205</td>
<td>Coolant Oil Skimmer</td>
<td>4BVS &amp; SUP4BVS</td>
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<tr>
<td>4VSCNC5</td>
<td>Table Guard with Interlock</td>
<td>4BVS &amp; SUP4BVS</td>
</tr>
<tr>
<td>6VS205</td>
<td>Coolant Oil Skimmer</td>
<td>6BVS &amp; SUP6BVS</td>
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<tr>
<td>6VSCNC3</td>
<td>4th Axis Hand Wheel</td>
<td>6BVS &amp; SUP6BVS</td>
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<tr>
<td>6VSCNC5</td>
<td>Table Guard with Interlock</td>
<td>6BVS &amp; SUP6BVS</td>
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<tr>
<td>6VSCNC2</td>
<td>7.5 hp Motor/Inverter</td>
<td>SUP6BVS</td>
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<tr>
<td>8VS205</td>
<td>Coolant Oil Skimmer</td>
<td>8BVS &amp; SUP8BVS</td>
</tr>
<tr>
<td>8VSCNC3</td>
<td>4th Axis Hand Wheel</td>
<td>8BVS &amp; SUP8BVS</td>
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<tr>
<td>8VSCNC5</td>
<td>Table Guard with Interlock</td>
<td>8BVS &amp; SUP8BVS</td>
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<tr>
<td>8VS203FG</td>
<td>4th Axis Motor &amp; Cables FAGOR 8055i</td>
<td>SUP4, 6 &amp; 8BVS</td>
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</tbody>
</table>

### Milling Chuck Kit


### Clamping Kit

52 pc. Clamping Kit for all models. Part No. 2VS010
Clausing Precision Drills
- Clausing Belt-drive Drills
- Clausing Geared-head Drills
- Clausing Radial Drills

Clausing Precision Mills
- Clausing Bed Mills
- Clausing CNC Bed Mills
- Clausing Knee Mills
- Clausing EVS Knee Mills
- Clausing Universal Mills

Clausing Precision Lathes
- Clausing/Colchester Geared Head Lathes
- Clausing/Colchester Professional V.S. Lathes
- Clausing/Colchester MAGNUM V.S. Lathes
- Clausing MA/MAV Series Lathes
- Clausing Large Swing Standard vLathes
- Clausing Large Swing CNC Lathes

Clausing Precision Grinders
- Clausing Manual Grinders
- Clausing 2 Axes Hydraulic Grinders
- Clausing 3 Axes Hydraulic Grinders
- Clausing ASDIII Automatic Grinders

Clausing Precision Cutting Machines
- Clausing/Kalamazoo Horizontal Bandsaws
- Clausing/Kalamazoo Vertical Bandsaws
- Clausing/Kalamazoo Tilt Frame Miter Bandsaws
- Clausing/Kalamazoo Cold Saws

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info@clausing-industrial.com

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Call 800-323-0972 for the Clausing Dealer Nearest You
or visit www.clausing-industrial.com

Celebrating Over A Century in the Machine Tool Business

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