



**Your Total Solution  
For CNC Machine Tools**

For nearly a 100 years, Clausing has been a leader in the Metalworking Industry. Today, Clausing offers the best valued and technologically advanced CNC Machine Tools available in the market place...



## **TORNADO** Advanced Turning Technology

Tornado CNC Turning Centers provide greater consistency and accuracy because they are built using Colchester-Harrison's unique "Duo-Stable" advanced machine tool construction which provides thermal and dynamic stability up to 300% greater than cast iron.



### **Automated Turning**

TORNADO turning centers can be configured with work scheduling and tool management to provide true 24-7 unmanned automation



### **2-Axes Turning**

The ideal machines for producing two axis parts.

- Small footprint
- Patented Duo-Stable construction

### **3-Axes Turning & Milling**

Have a fully programmable 'C' axis and power driven tools for radial and axial milling, drilling, boring and tapping.

### **5-Axes Sub Spindle Turning**

Enables the full benefit of 'single-hit' machining. By transferring the work piece to the sub-spindle for additional turning and milling, all six sides of a component can be machined in a single set-up.

### **6-Axes Y Axis Machining**

The addition of the Y-axis allows you to take full advantage of the machine's milling capability by providing "off center line" machining. Y-axis travels of  $\pm 1.57"$  (40mm) are available



## **ALPHA** The Ultimate CNC Combination Lathes

**The Alpha Series** – offers the widest variety of control levels from manual through full ISO on one machine. Tailored to optimize the skill level of the machine operator, the Alpha Series offers a large machine envelope for the efficient production of a wide variety of components in small to medium size batches.



### **ALPHAXT**

The Alpha XT comes with the latest FANUC Oi Mate-TC control coupled with the Turnmate i conversational programming package.

### **ALPHAMT**

The Alpha MT is equipped with the latest generation FANUC Oi TC control with Manual Guide i, ideal for first time CNC users.

### **ALPHAXS**

The XS offers the new generation FANUC 21i TB control with touch screen, Manual Guide i and custom software systems.

### **ALPHAXM**

The Alpha XM has all the features of the XS with the additional capacity for high precision full C - axis milling as well as turning.

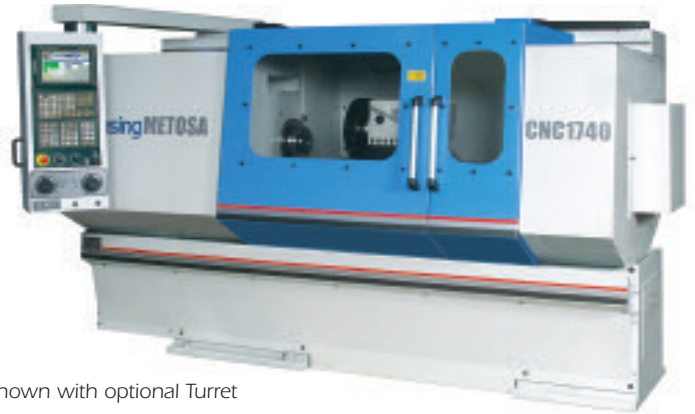
## SmartLathe<sup>II</sup> CNC Lathes



The Clausing/Metosa **SmartLathe<sup>II</sup>** is equipped with the latest G.E. Fanuc Oi Mate-TC Control with Fanuc TurnMate *i* conversational programming system and full CNC G-code programming and over 200 standard features including Custom Macro B, Rigid Tapping and 256K Part Programming Memory.

- The operation cycle is selected using graphic icons on the touch screen
- Manual operation is easy with the use of the electronic hand wheels for the X and Z axes. Travel limits are shown on the touch screen
- Up to 24" swing and 120" center distance, 24" swing models available with 6.1" spindle bore
- Horizontal 4-way indexing power Turret
- Heavy-duty construction with cast iron base
- Carriage cross slides and bed ways are hardened and ground for long life and high-speed positioning accuracy

## Clausing **METOSA** CNC Lathes



Shown with optional Turret

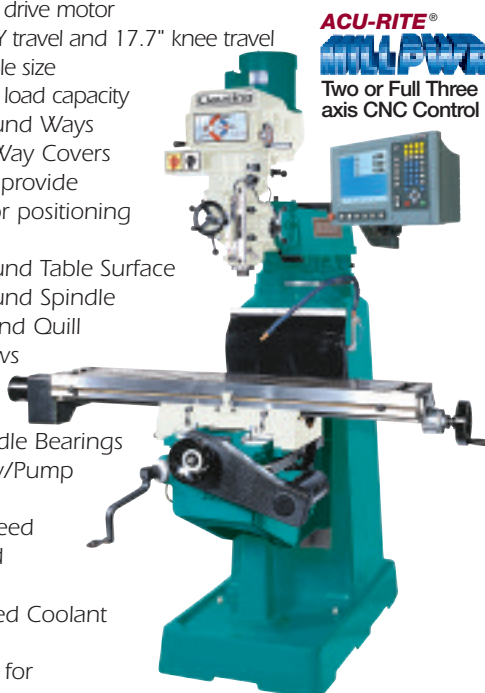
Equipped the 'new generation' GE Fanuc 21*i* T CNC Control with 'Manual Guide' software. The 21*i* T control allows the operator to generate part programs quickly and efficiently through easy to understand conversational style cycle prompts.

- Up to 24" swing and 80" center distance
- Heavy-duty construction with cast iron base
- Carriage cross slides and bed ways are hardened and ground for long life and high-speed positioning accuracy
- The special headstock design guarantees quiet operation, a high chip removal rate and excellent quality finish on machined pieces
- An innovative, highly advanced system of automatic speed change ranges
- Maintenance free AC motors used to drive the main spindle and screws
- Automatic lubrication of all slideways and moving parts
- Completely enclosed guarding allowing a high rate of chip removal

## Clausing CNC Vertical Knee Mills

Affordable 2 or 3 axes CNC Vertical Mill with features found on higher priced machines.

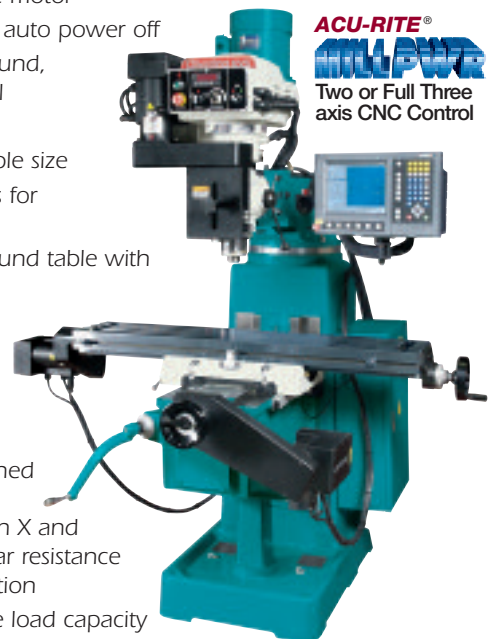
- Infinitely variable spindle speeds (60-4300 rpm)
- Precision ground and hardened ballscrews
- Up to 5 Hp spindle drive motor
- Up to 33" x 16" X, Y travel and 17.7" knee travel
- Up to 10" x 54" table size
- Up to 990 lbs table load capacity
- Hardened & Ground Ways
- Column & Knee Way Covers
- Ground T-slots to provide reference edge for positioning workpiece
- Hardened & Ground Table Surface
- Hardened & Ground Spindle
- Chromed & Ground Quill
- Ground Ball Screws & Chromed Motor Shaft
- ABEC 7/CP4 Spindle Bearings
- Coolant System w/Pump & Switch
- Chromed Cross Feed Screw Covers and One-piece Wiper
- Flexible Segmented Coolant Nozzle
- Articulating Head for Compound Angles



## Clausing CNC EVS Knee Mills

Electronic Variable Speed (EVS) CNC Milling Machines

- Manual operation with DRO, semi-automatic operation or two or three axes CNC operation
- Totally enclosed electrics with Yaskawa A.C. inverter variable speed drive
- Up to 4 Hp spindle motor
- Spindle brake with auto power off
- Hardened and ground, chrome plated quill
- Coolant system
- Up to 11" x 58" table size
- Meehanite castings for superior rigidity
- Hardened and ground table with 3 ground T-slots
- Up to 35.5" X axis travel, 16" Y axis travel, 17.7" knee travel and 4.75" quill travel
- All ways are hardened and ground with Turcite B coating on X and Y axis ways for wear resistance and smooth operation
- Up to 990 lbs table load capacity





# STORM CNC Vertical Machining Centers

## Best Valued VMC in the Market Today...

Storm CNC Vertical Machining Centers are designed and built heavier with more standard features than any VMC in its size and price range...

### VMC500L

- Linear Ways ▪ 23.6" x 12.6" Table ▪ 8,000 rpm Spindle
- 20"x16"x18" X/Y/Z Travel ▪ 10/7.5 hp Spindle Motor

### VMC610L/S

- Linear or Square Ways ▪ 31.5" x 17.7" Table
- 10,000 rpm Spindle ▪ 24"x18"x20" X/Y/Z Travel
- 10/7.5 hp Spindle Motor

### VMC850L/S

- Linear or Square Ways ▪ 39.37" x 19.68" Table
- 10,000 rpm Spindle ▪ 33.5"x20"x22" X/Y/Z Travel
- 15/10 hp Spindle Motor

### VMC1020L/S

- Linear or Square Ways ▪ 47.24" x 19.68" Table
- 10,000 rpm Spindle ▪ 40"x20"x22" X/Y/Z Travel
- 20/15 hp Spindle Motor

### VMC1300S

- Square Ways ▪ 55.23" x 23.62" Table ▪ 10,000 rpm Spindle
- 51"x25.5"x28" X/Y/Z Travel ▪ 20/15 hp Spindle Motor

### VMC1600S

- Square Ways ▪ 66.93" x 32.08" Table
- 5,000 rpm Spindle ▪ 63"x31.5"x27" X/Y/Z Travel
- 20/15 hp Spindle Motor ▪ CAT #50



## Clausing Super CNC Bed Mills

- Series 5000M is a user-friendly control, with integrated CAM programming or icon-based programming.
- Teach-in mode
- Draw graphics mode
- Canned cycles
- Up to 7.5 Hp spindle motor
- Inverter variable speed drive with 2 speed ranges
- 65 - 5160 rpm spindle speeds
- Up to 16.75" x 62" table
- Up to 2000 lbs table load capacity
- Up to 42.24" x 22.83" x 23.62" X, Y, Z travel
- Hardened and ground, square X and Y axes ways

### ANILAM 5000M CNC Control



## Clausing CNC Bed Mills

### 3-Axes CNC Bed Mills

- 3 axes Control/4-axes Readout
- 10" Flat Panel, Color, LCD Display
- Conversational Menu-prompt Programming
- Up to 41.3" x 19.6" x 23.6" X, Y, Z travel
- Up to 15" x 60" table size
- Up to 1800 lbs table load capacity
- Powerful 5 Hp spindle drive motor
- 70-4300 infinitely variable spindle speeds
- Hardened and ground table surface
- Ground T-slots for accurate reference edge

### ACU-RITE® MILL-POWER Two or Full Three axis CNC Control





**The Alpha Series** – offers a wide variety of control levels from manual through full ISO on one machine. Tailored to optimize the skill level of the machine operator, the Alpha Series offers a large machine envelope for the efficient production of a wide variety of parts.



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**TORNADO T-series:**

CNC Slant Bed Lathes offer Chucker, Bar and "Lights Out" models, with a Fanuc 21i control on 2 axes and 3 axes with live tooling models, and Fanuc 18i control on 5 & 6 axes sub-spindle models. Equipped with 12 station bi-direction turret.

*Your Single Source  
Distributor for the  
Full Line of Quality  
Clausing Machine Tools...*

**Your Sales Message  
in 1 or 2 colors**

*This is a sample set-up, however... The right imprint area can be set-up with any information you would like, such as, branch locations, tooling packages, etc.*

**Clausing** Large Swing CNC Lathes  
600Group



**Clausing offers Four Series of CNC Large Swing Lathes in a wide range of Swings, Spindle Bores, Centers and Spindle Drives...**

**CL Series**

- Swing over bed: 35" 40" 45" 50"
- Swing over long cross slide: 20" 25" 30" 35"
- Center height over bed 17.5" 20" 22.5" 25"
- Center height from floor 44.27" 46.77" 49.27" 51.77"
- Center distance: 62" to 476"
- Max. weight between centers: 11,000 lbs
- Max. weight between centers with steady rest: 13,200 lbs
- Max. unsupported weight in chuck: 5,500 lbs
- Small closed steady rest capacity (optional): 1.18" to 15.75"
- Large closed steady rest capacity (optional): 13.8" to 27.56"

**CB Series**

- Swing over bed: 45" 50" 60" 70"
- Swing over long cross slide: 28" 33" 43" 53"
- Center height over bed 22.5" 25" 30" 35"
- Center height from floor 49.27" 51.77" 56.77" 61.11"
- Center distance: 70" to 488"
- Max. weight between centers: 14,300 lbs
- Max. weight between centers with steady rest: 16,500 lbs
- Max. unsupported weight in chuck: 6,600 lbs
- Small closed steady rest capacity (optional): 1.18" to 15.75"
- Large closed steady rest capacity (optional): 13.8" to 27.56"

**CK Series**

- Swing over bed: 50" 60" 70" 80"
- Swing over long cross slide: 29" 39" 50" 60"
- Center height over bed 25" 30" 35" 40"
- Center height from floor 55" 60" 65" 70"
- Center distance: 82" to 476"
- Max. weight between centers: 33,000 lbs
- Max. weight between centers with steady rest: 37,400 lbs
- Max. unsupported weight in chuck: 19,800 lbs
- Small closed steady rest capacity (optional): 1.18" to 15.75"
- Small open steady rest capacity (optional): 1.18" to 15.75"
- Large closed steady rest capacity (optional): 13.8" to 27.56"
- Large open steady rest capacity (optional): 13.8" to 27.56"

**CC Series**

- Swing over bed: 35" 40" 45" 50"
- Swing over long cross slide: 26" 27" 32" 37"
- Center height over bed 17.5" 20" 22.5" 25"
- Center height from floor 44.27" 46.77" 49.27" 51.77"
- Center distance: 94" to 488"
- Max. weight between centers: 22,000 lbs
- Max. weight between centers with steady rest: 26,400 lbs
- Max. unsupported weight in chuck: 9,900 lbs
- Small closed steady rest capacity (optional): 1.18" to 15.75"
- Small open steady rest capacity (optional): 1.18" to 15.75"
- Large closed steady rest capacity (optional): 13.8" to 27.56"
- Large open steady rest capacity (optional): 13.8" to 27.56"

**Designed and built to meet your turning application... Extra heavy-duty, large swing, big bore, precision flat bed CNC lathes.**

Product lines, machine design and specifications are subject to change without notice