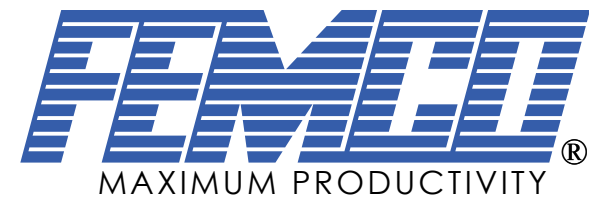
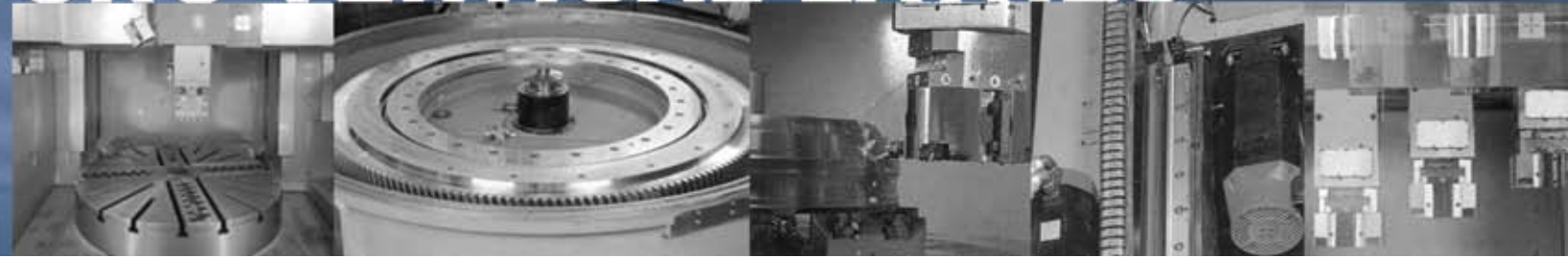


CNC VERTICAL LATHES



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VL Series

- Housing type machine structure achieves maximum rigidity and stability
- The machine frame is manufactured from Meehanite cast iron, tempered to relieve stress for maximum durability
- The double racks are precision ground to ensure high positioning accuracy of the cross rail
- The cross rail features an anti-loose function, which is unaffected by accidental power failure
- The rapid feed rate for the cross rail is up to 400mm/min.

- The Z-axis linear scale produces closed loop feedback control for long term accuracy
- The automatic tool changer holds 8 interchangeable tools
- A pendant controller with counter balance weights provides convenient and comfortable operation
- An optional automatic measuring probe can be fitted to conveniently measure parts on the machine



General Features



Table

The table is manufactured from high tensile Meehanite cast iron. The parts clamp plates are manufactured from ductile iron. The table runs on crossed roller bearings, preloaded to resist heavy duty cutting loads in any direction.

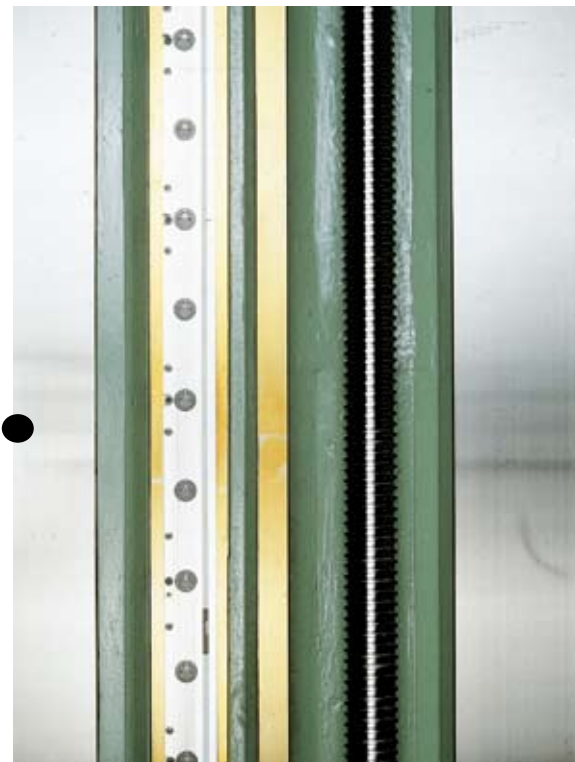


CNC Controller

The pendant controller is movable for convenience of operation. It is equipped with a movable MPG for easy setups on the machine. A FANUC 0iTC controller is standard.

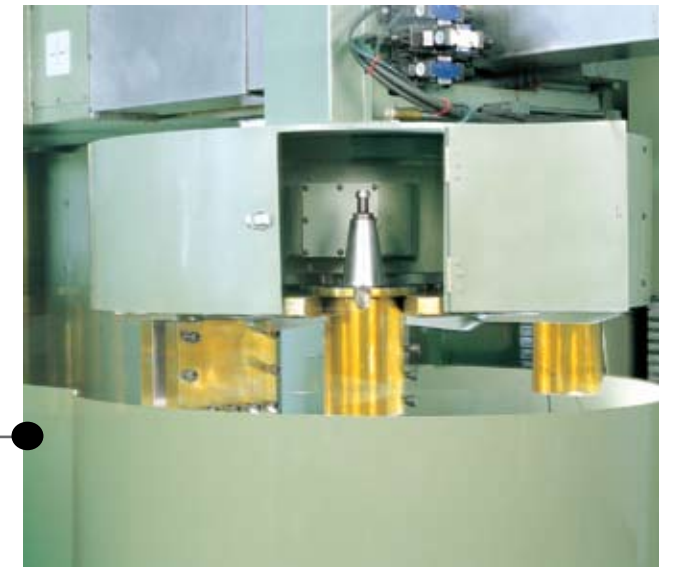
Column

The housing structure consists of double heavy columns. Box type columns offer high rigidity. Slideways on columns are precision ground.



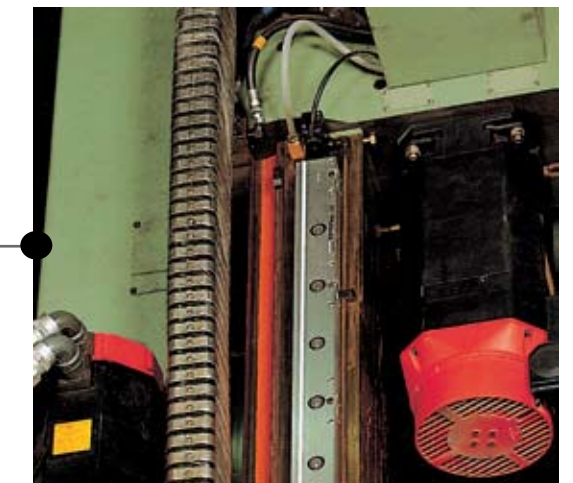
Automatic Tool Changer

The automatic tool changer employs the CT-50 tooling system, consisting of 8 tool holders. Tool selection is bi-directional and by shortest route.



Closed Loop Feedback System

The linear scales are provided on the X and Y axes to create a closed loop feedback control system. This prevents machining accuracy from being affected by thermal strain and inertia from the transmission system. Long term machining accuracy is assured.



Cross Rail Positioning Hook Mechanical Anti-loose System

Once the hook is positioned, the anti-loose system actuates to provide positive positioning of the cross rail without being affected by sudden power failures.



General Features



Turning Spindle Motor

The motor provides an output of 49.6HP[37kW](continuous rating), and 60.3[45kW](30min rating). The motor features high torque output, making the machine capable of machining all types of material.



Precision Positioning Racks

The positioning racks are precision ground to ensure superior leveling accuracy between the positioning hooks and racks. The cross rail elevates in 100mm increments to achieve high squareness between the ram and the cross rail.

Electrical Cabinet

A heat exchanger is provided in the control cabinet to maintain normal temperature at all times. This assures sensitive control performance and a long service life of the electronic components.



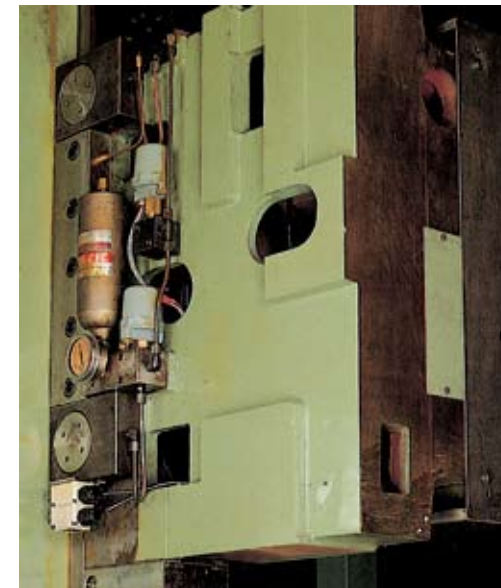
Cross Rail

The box type cross rail is manufactured from high tensile Meehanite cast iron for maximum resistance to static, dynamic, torsional, and bending stress. Slideways are high frequency heat treated and precision ground. The saddle slideways are coated with Turcite-B with a consistent friction coefficient at high/low feed rates, ensuring smooth traverse and accurate positioning control.



Cross Rail Fastening Accumulator

The accumulator prevents the cross rail from dropping in case of a sudden power failure. If power failure occurs, the accumulator actuates instantly to provide hydraulic pressure to the cross rail clamping mechanism to ensure positioning accuracy and fastening force.



Specifications

VL-12

Capacity

Max. Swing Diameter	62.99"(1600mm)
Max. Working Height	49.61"(1260mm)
Max. Turning Height	43.31"(1100mm)
Max. Loading Capacity	10000lbs(5tons)
Max. Torque	10850lbsf/ft(1500kgf/m)

Table

Diameter	49.21"(1250mm)
Speed	2.8-280 rpm stepless

RAM

X-Axis Horizontal Traverse	51.18"(1300mm)
Z-Axis Horizontal Traverse	41.73"(1060mm)
X-Axis Rapid Traverse Rate	393.7"(10m/min)
Z-Axis Rapid Traverse Rate	393.7"(10m/min)
Sectional Area	8.66" x 8.66" (220mm x 220mm)

Cross Rail

Vertical Traverse	39.37"(1000mm)
Elevation Speed	15.75"(400mm/min)

Automatic Tool Changer (ATC)

Turning Tool	1" / 1.25"
Max. Number of Tool Holders	8

Motor

Table	49.6/60.3HP(AC 37/45 kW)
Cross Rail Elevation	4.9HP(AC 3.7kW)
Hydraulic Power	4.9HP(AC 3.7kW)
Table Lubrication	.49HP(AC .37kW)
Slideway Lubrication	.13 HP(AC .1kW)

Machine Weight

39,690lbs(18tons)

Machine Dimensions

LxW	207.87" x 146.85"(5280mm x 3730mm)
Machine Height	205.51"(5220mm)

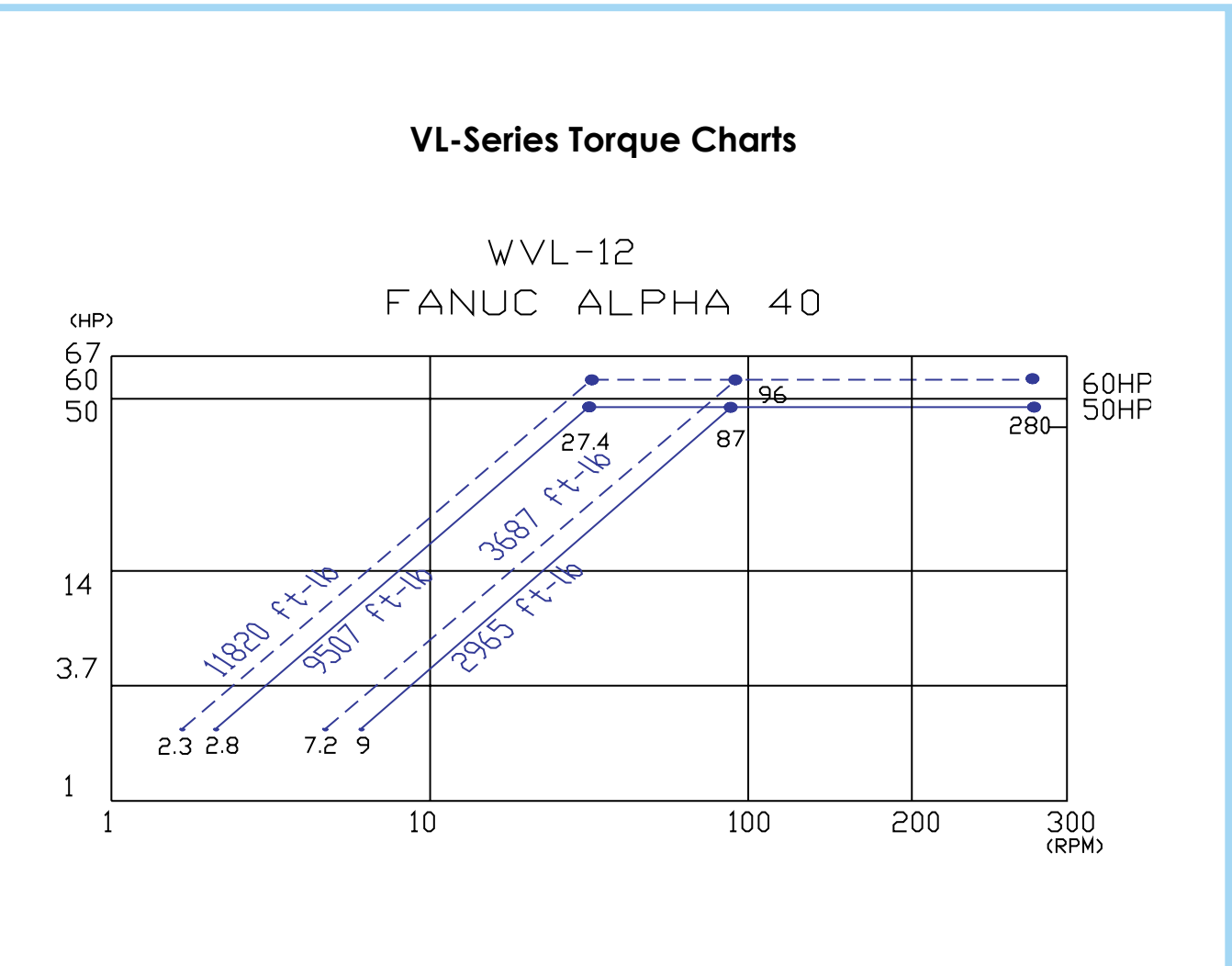
Power Requirements

80kVA

- * Available with optional accessories only.
- Specifications subject to change without notice

Standard Accessories

- 4 jaw manual chuck
- Work light
- Splash guard
- Crossrail slideway cover
- Crossrail elevation pointing device
- FANUC 0iTC CNC controller
- Service Tools
- X, Z-axes linear scale
- Bolts and leveling pads for installation
- Coolant circulation system
- □1" and 1.25" tools shank



Optional Accessories

- 3 jaw hydraulic power chuck
- Automatic measuring probe
- Automatic tool changer
- Tool presetter
- Chip conveyor and bucket

