

## **Webster & Bennett Millennium model 3E- 175/210. High speed 2 Axis elevating crossrail CNC vertical turning lathe Fanuc 18Ti CNC**

**Machine available from existing users factory. Can be viewed  
and tested by arrangement**

**The high quality features of the Millennium design and build are fully described in the  
Millennium technical description document attached.**

### **Features of this machine:-**

- Involute chain drive for very high speeds and very low noise
- 36" diameter Timken cross roller bearing, the ultimate machine tool spindle bearing
- All steel 1750mm dia. 4 jaw chuck accepts standard Webster & Bennett chuck jaws
- 200mm square forged steel ram enabling high accuracy heavy cutting when required
- Automatic tool pick up from the 18 pocket tool magazine
- Full length cross slide with X axis total movement of 3530mm allows for automatic pick up from an optional second 18 tool atc if required, or the use and storage of special tooling, again with auto pick up
- High precision latching and clamping at 200mm pitches of rise and fall cross rail – flexibility without loss of accuracy

**Fanuc 18Ti CNC. Operators control desk. Full CNC specification upon request**

### TABLE & DRIVE

Table Diameter	1750mm
Maximum Turning Diameter	2100mm
Maximum Swing	2150mm
<b>Table Speed Range (infinitely variable)</b>	<b>1 – 400 rpm</b>
Minimum Table Speed at Full Power	24 rpm
Main Drive	54 / 45 kw
Maximum Cutting Force	50kN
Feed Force for Turning - 'X' axis	30kN
Maximum Table Torque	17800 Nm
Maximum Load on 4 jaw chuck	15000 kg
Maximum cutting height above table	1200mm

### CROSS RAIL

Maximum Height under Cross Rail	1325mm
Vertical Travel of Cross Rail	600mm
Cross Rail Precision Latching Increments	200mm
Maximum Cross Rail Positioning Speed	500mm/min

### RAM TOOL SLIDE

Ram section	200 x 200 mm
Z Axis Stroke	1000 mm
Feed Force 'Z'	45 kN
Maximum height admitted under ram	1320 mm
X Axis stroke	Total 3530 mm
	Right of Centre 1765 mm
	Left of Centre 1765 mm
Axis feed rates	0 – 5000 mm/min
Rapid traverse speed	10000 m
<b>Positional Accuracy</b>	
'X' & 'Z' ±	0.0075 / 1000 mm
Repeatability	0.005mm / 1000mm

### AUTOMATIC TOOL CHANGER

Number of positions	18
Maximum individual tool weight	53 kg
Maximum total tool weight in magazine	700 kg
Maximum tool length	450 mm

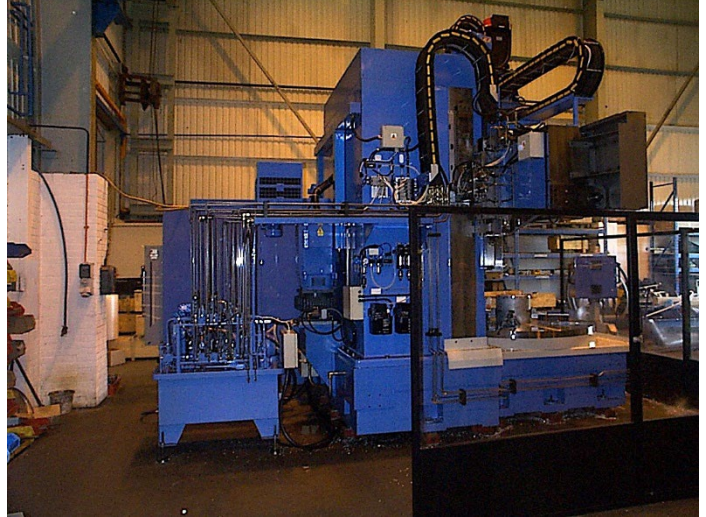
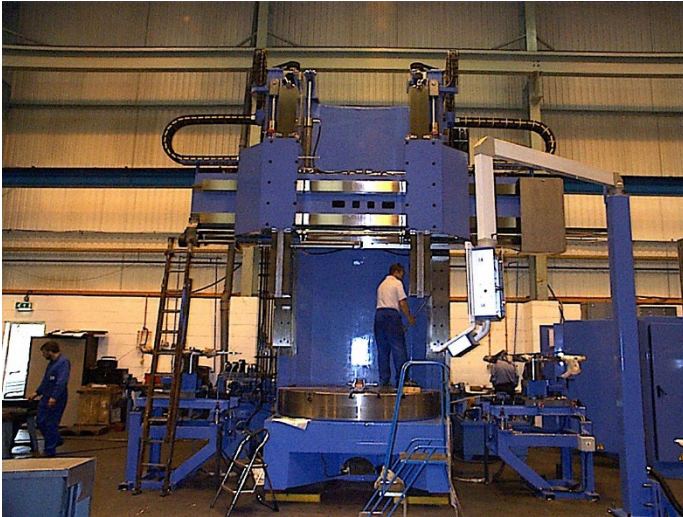
**Substantial chip conveyor with high capacity coolant tank and pump**  
**Original Millennium safety guarding**

**Approximate machine weight 33,000gs**

**PRICE as seen and tested ex users factory £140,000, including dismantling and loading to transport**

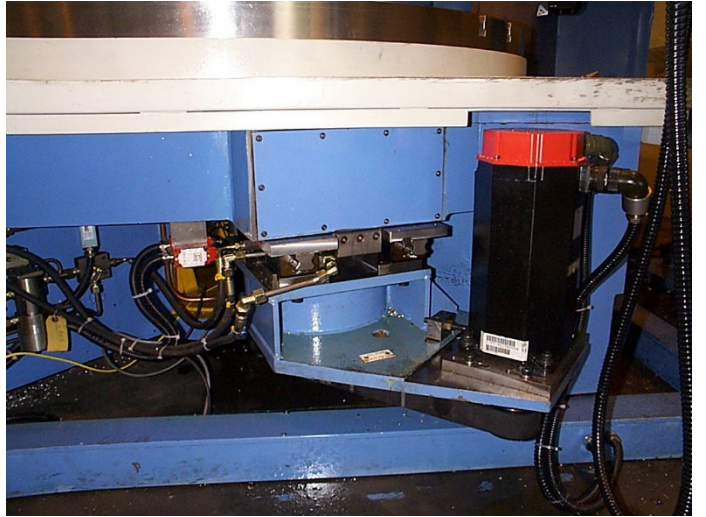
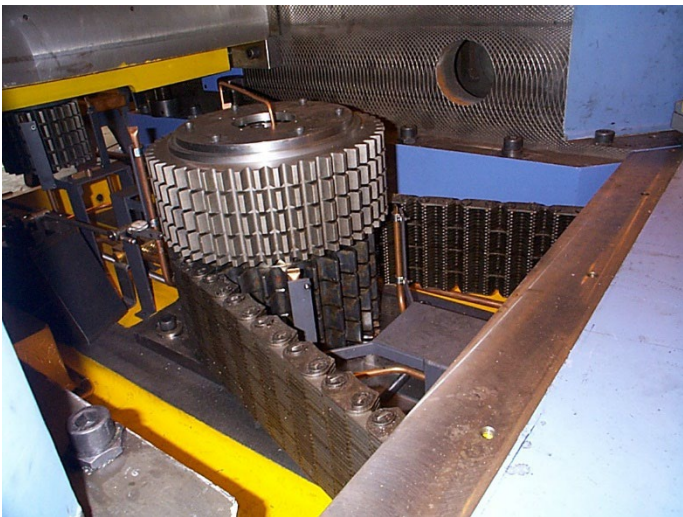


**VTT-WB Limited are very experienced in installing, commissioning and fully supporting these machines and will be happy to quote for whatever assistance the purchaser requires**



## **WEBSTER & BENNETT MILLENNIUM VERTICAL TURNING LATHES AND VERTICAL TURNING & MILLING CENTRES**

Conceived, designed and built with innovative world leading features that won multiple orders from world leading companies in demanding industries - aero engine manufacture and repair, missiles, compressors, turbines, oil and gas, rail and submarine transmissions, locomotive turbo chargers, space rockets, military tank drives, Cranes, Medical body scanners, Crushers – *components ranging from light cutting with super precision to heavy duty cutting with precision*



**Two innovations** in particular made these machines unique

- **the involute chain drive** from the motor to the table enabled very high speeds with a noise level <80db, way below the current norm
- **the C axis drive** was very powerful and backlash free enabling precision rotary contour milling at metal removal rates not seen before on C axis VTL's

**20 years later** these machines still provide these world class features. **6 years ago** we refurbished a machine that had been in storage because of a factory move. Very little updating was required. The user is one of the world's foremost engineering companies. Since we commissioned it the machine has been producing very high precision components. *This can be seen in a short film on our web site*

