

# ACRA®

## SLANT BED CNC LATHE

Superior Structural design to  
achieve highest stability



■ **ASC-52**



THE LEADER IN QUALITY AND RELIABILITY

~SINCE 1973~

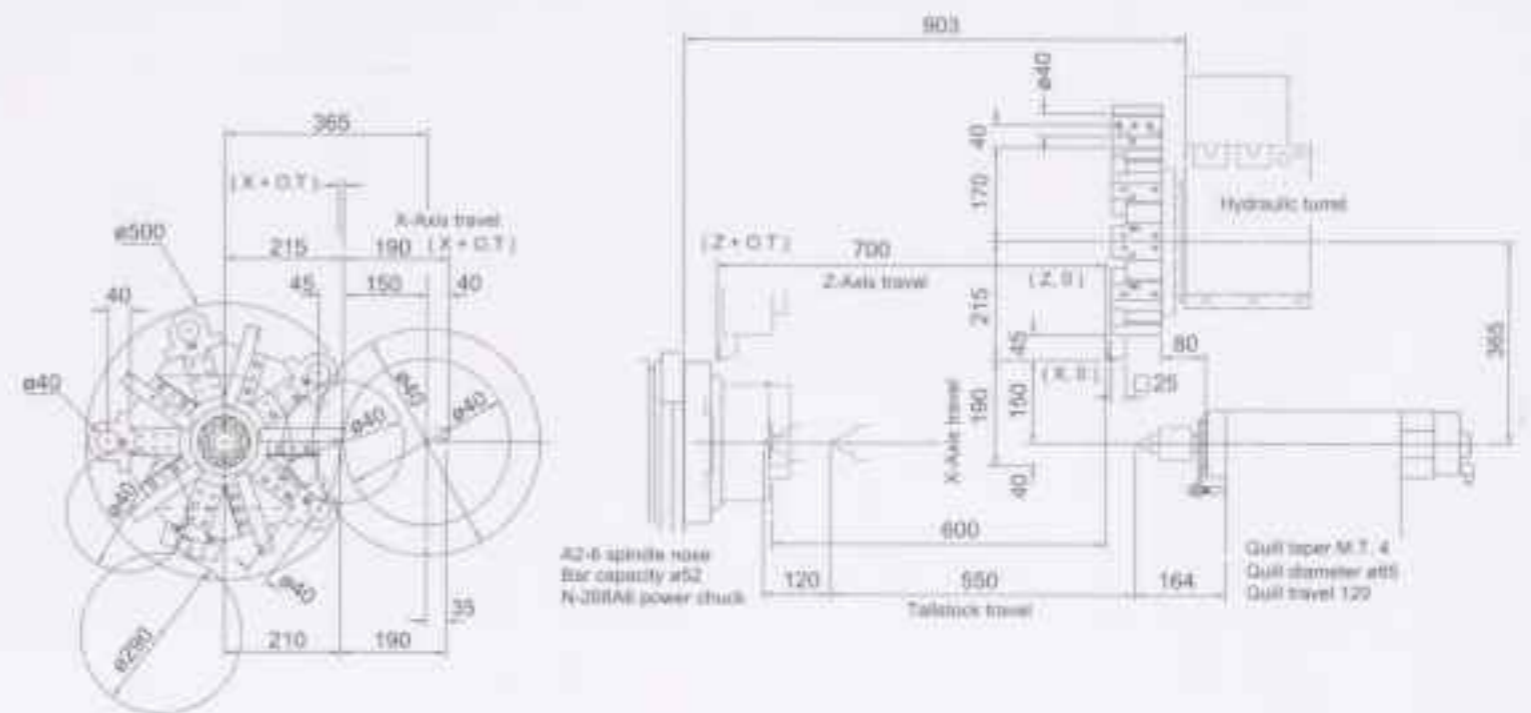


- Box ways on x-, z- axes, way surfaces are hardened, and coated with turcite-B for maximum wear resistance.
- Extra wide slideways on x-, z- axes for increased stability during machining.
- All major structural parts are manufactured from high quality, Meehanite cast iron and tempered to decrease stress for lifetime distortion-free operations.

### ASC-52 / H10 TOOLING INTERFERENCE

(Hydraulic turret 10 station, tool holder ø40, Tool shank 25x25)

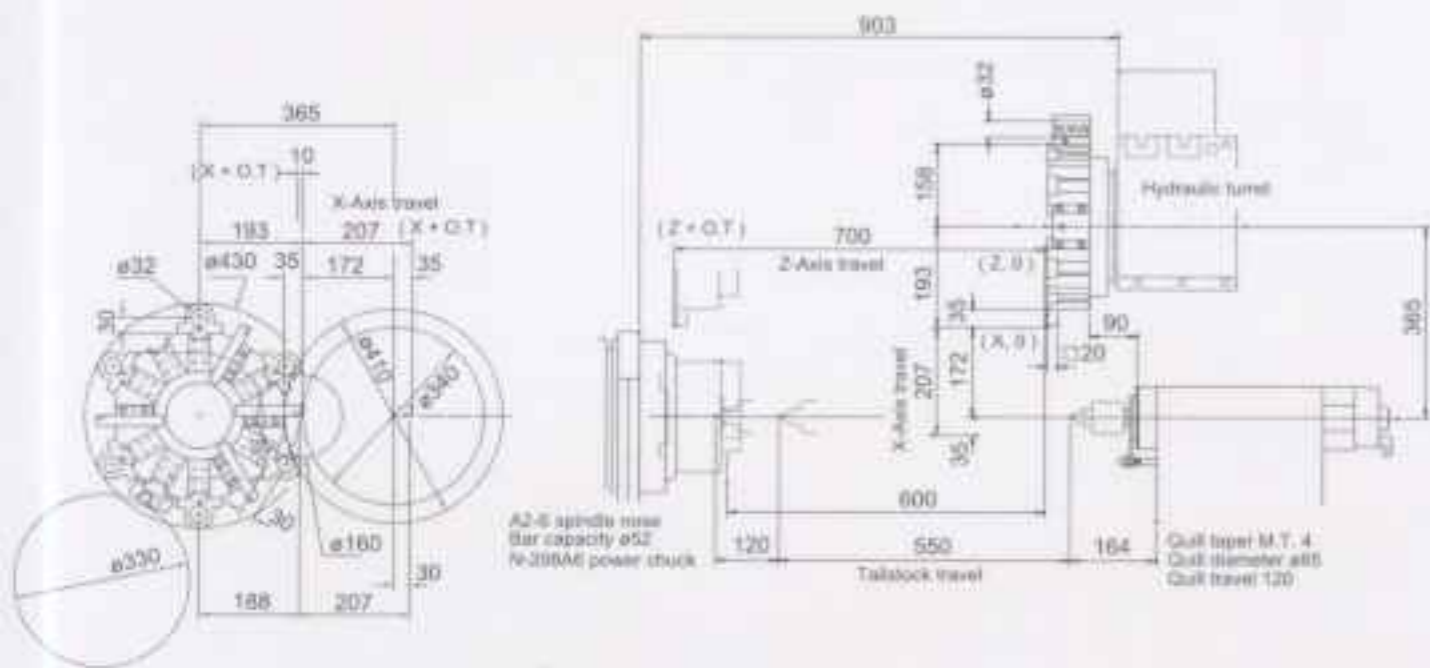
Unit:mm



### ASC-52A / H12 TOOLING INTERFERENCE

(Hydraulic turret 12 station, tool holder ø32, Tool shank 20x20)

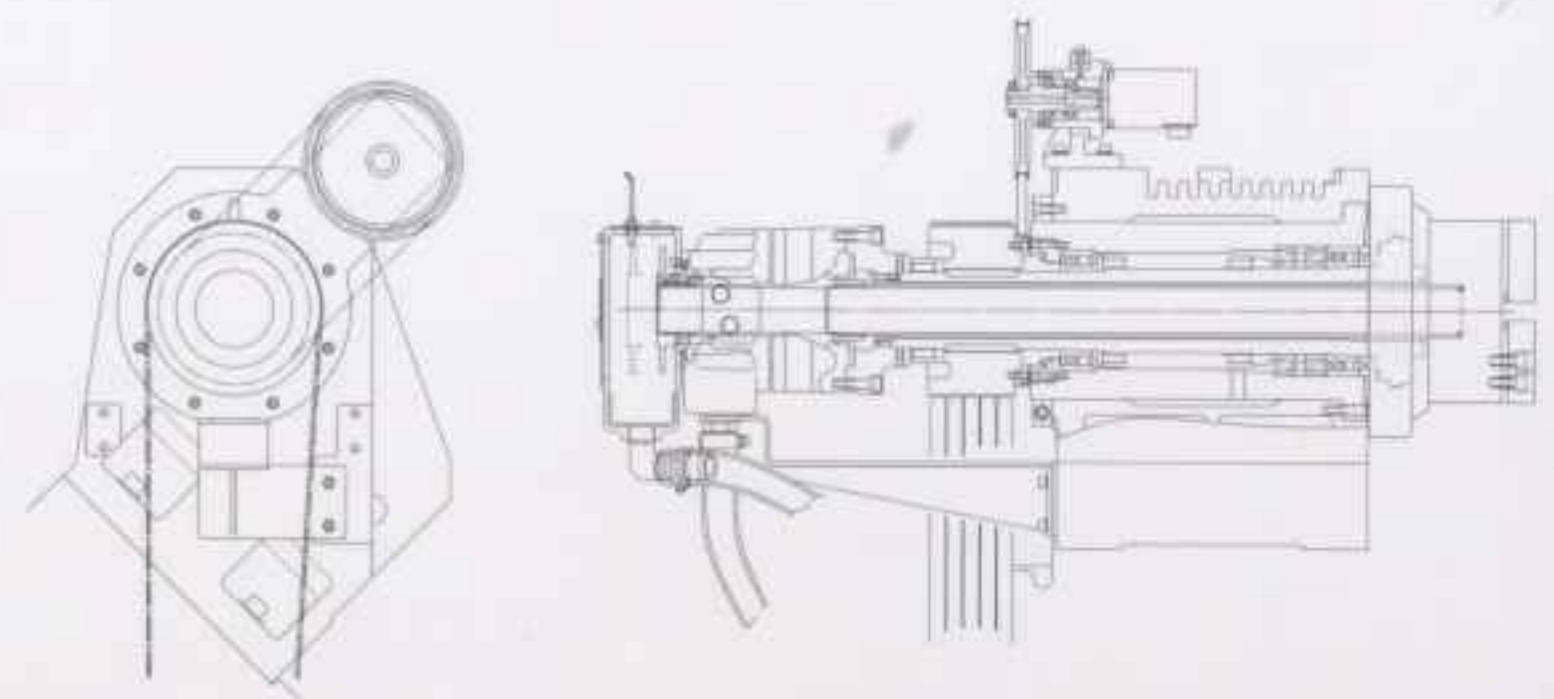
Unit:mm



### ASC-52 SPINDLE STRUCTURE

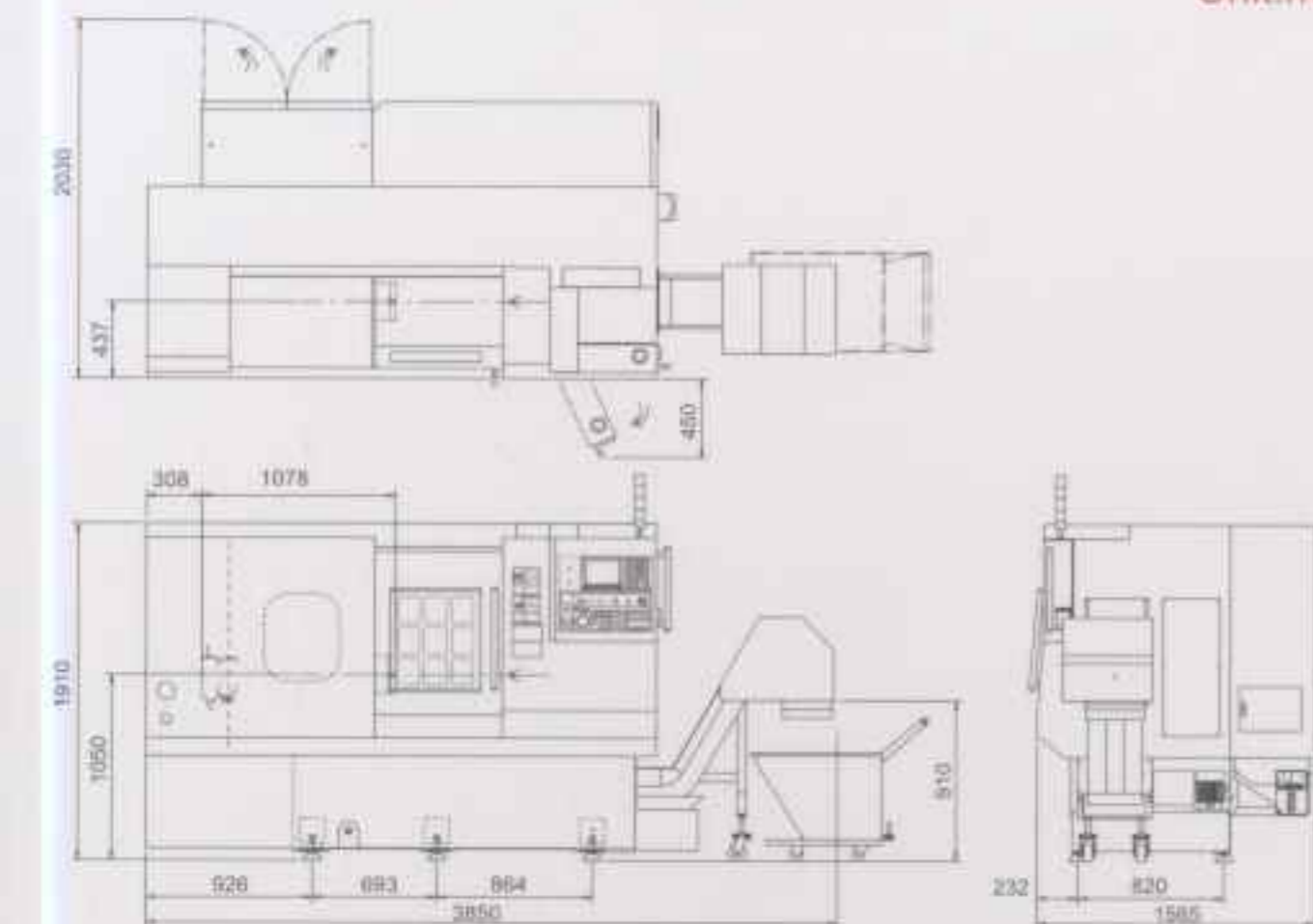
(A2-6 Spindle nose, Bar capacity ø52, N-208A6 power chuck)

Unit:mm

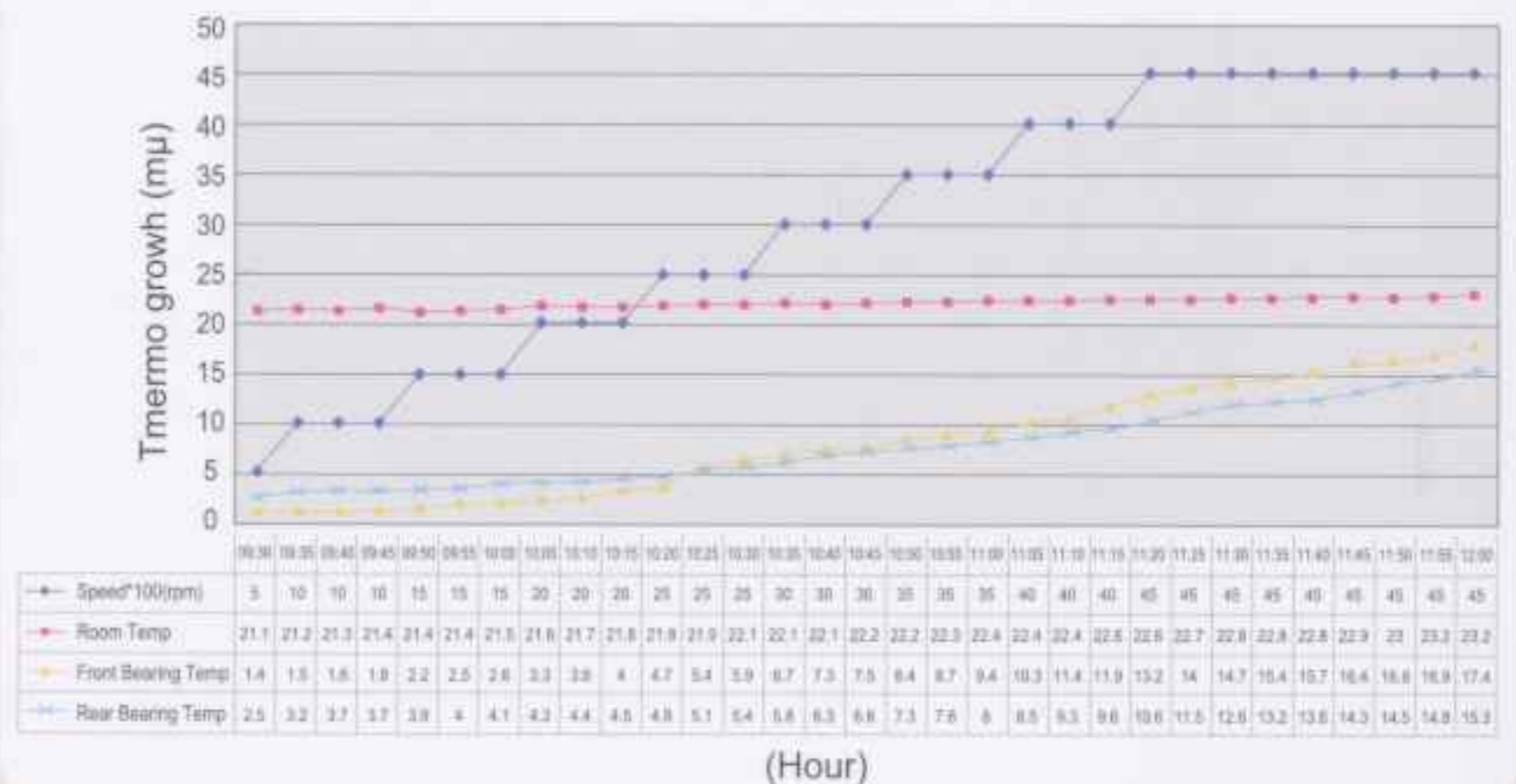


### ASC-52 Machine outline dimension

Unit:mm



### 2610000#7 Thermal growth compensation



- 45° Slant bed design assures solid support of turret and efficient chip removal.
- The base construction, combined with the advanced honey-comb rib reinforcement design, minimizes vibration while increasing structural rigidity and stability.
- The entire machine construction is heavier than competitive models for exceptional stability.



**10-Position turret (ASC-52)  
12-Position turret (ASC-52A)**

- The turret is compact and combined with bi-directional random tool selection for quick tool change.
- Tool time change is done quickly in only 0.6 seconds.
- The 10-position turret accommodates 25x25mm O.D tools and 40mm I.D tools.
- The 12-position turret accommodates 20x20mm O.D tools and 32mm I.D tools.



**Powerful Spindle Drive**

- The spindle is driven by a powerful 11kw (15HP) motor, thus providing great horsepower output for heavy duty machining.
- upon request, 11kw~18.5kw (15HP~25HP) motors are available.



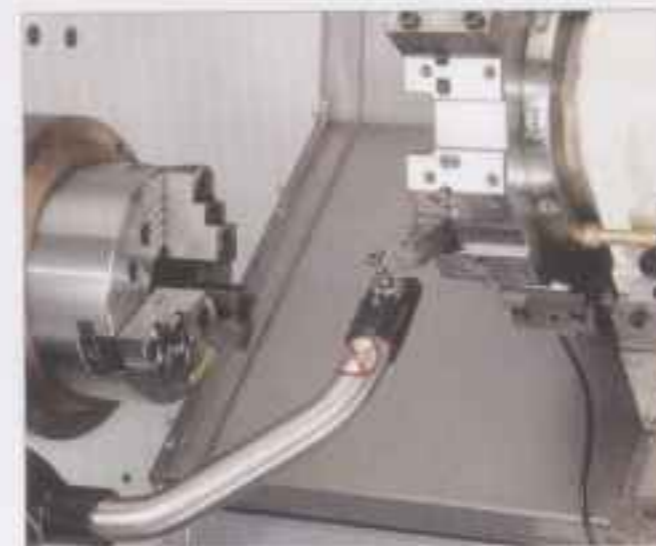
**Swiveling Control Panel**

- The 45° swiveling control box provides added operational convenience.



**Programmable Tailstock**

- The programmable tailstock and quill movement can be controlled on the control panel for easy set up and accurate positioning. Tailstock movement is driven by turret slide.



**Tool Pre-Setter**

- The tool pre-setter efficiently reduces cutting tests while saving machine time. This is used for measuring the tool diameter and length. The tool adjustment arm is powered and program controlled.



**Complete Oil Fluid Separation**

- In addition to the fluid separation design on the x-and z-axes, the cutting fluid tank is designed with a compartment to fully exhaust the floating oil. This function makes sure that there is no oil in the cutting fluid. Double fillers in the fluid tank ensure a clean recirculated fluid.



**ø8" Hydraulic Chuck and Turret**

- The CNC lathe is furnished with a ø8" hydraulic chuck as standard equipment.
- The hydraulic chuck is controlled by foot switch for efficient chucking of workpieces.
- Larger chuck diameters are available upon request (optional).



**High Speed Through Hole Rotary Hydraulic Cylinder**

- The hydraulic chuck is controlled by a high speed through-hole rotary cylinder. This high quality feature is compact and light weight to reduce the burden of machinery, while ensuring stability at high speeds.



**Direct Drive on x-, z- axes**

- The x-, z- axes ball screws are directly driven by servomotors. The high precision ball screws, combined with pre-loaded nuts and rigid coupling, assure high positioning and repeatability accuracy.

## SPECIFICATIONS

MODEL		ASC-52 / H10	ASC-52A / H12
Capacity	No. of control axis	2 Axis	
	Swing over bed	ø630mm (24.8")	
	Max. turning dia.	ø300mm (11.81")	ø340mm (13.38")
	Work length	600mm (23.62")	
Headstock and Main spindle	Spindle nose, Internal taper	A2-6, ø69 Taper 1/20	
	Spindle bore	ø65mm (2.56")	
	Bar capacity	ø52mm (2.04")	
	Hydraulic power chuck	ø210mm (8")	
	Range of spindle speed	45-4500 R.P.M. Infinitely variable	
	Front bearing ID. of spindle	ø100mm (3.937")	
Cross slide (X-axis) and Carriage (Z-axis)	Longitudinal travel (Z-axis)	700mm (27.56")	
	Cross slide travel (X-axis)	190mm (7.48")	207mm (8.15")
	AC servo motor (X-axis)	1.6 kw 8N.m~FANUC α8B/3000i	
	AC servo motor (Z-axis)	3.0 kw 12N.m~FANUC α12/3000i	
	Dia. of ball screw (X-axis)	ø32mm(1.26") P5 C3	
	Dia of ball screw (Z-axis)	ø40mm(1.57") P10 C3	
	Rapid traverse speed (X-axis)	15 m/min (590 ipm)	
	Rapid traverse speed (Z-axis)	20 m/min (787 ipm)	
Hydraulic turret	Cutting feed rate (Both axis)	0.001-500 mm/rev.	
	Tool station (Random)	10 tools	12 tools
	Size of external turning tool	<input type="checkbox"/> 25mm	<input type="checkbox"/> 20mm
Programmable tailstock	Boring bar diameter	ø40mm (1.575")	ø32mm (1.26")
	Quill diameter	ø85mm (3.346")	
	Quill travel	120mm (4.72")	
	Taper of center	MT. No.4	
Motor	Tailstock travel	550mm (21.65")	
	Main spindle (continuous)	AC11kw (15HP)	
	Main spindle (30 min. rating)	AC15kw (20HP)	
	Hydraulic oil pump	2.2kw (3HP)	
Tank capacity	Coolant pump	375w (0.5HP)	
	Hydraulic Tank	65 Litre (14.3 gal.)	
Measurement	Coolant Tank	180 Litre (39.6gal.)	
	Weight (Net / Gross) Approx	5200kgs / 5700kgs	
	Packing sizes	4000mm (157.5") Width 1890mm (74.41") x Height 2230mm (87.8")	

\*\* Specification subject to change without notice \*\*

### STANDARD ACCESSORIES :

1. CNC controller :
2. Boring bar holder.....2sets.
3. O.D./facing tool holder....2sets.
4. U drill holder.....1set.
5. Boring socket : For CNE-20 / H10  
ø12 ø16 ø20 ø25 ø32... 1piece for each  
Drilling socket MT.3 x ø40.... 1piece
6. Boring socket : For CNE-20 / H12  
ø12 ø16 ø20 ø25.... 1piece for each  
Drilling socket MT.2 x ø32.... 1piece
7. Chip conveyor & chip bucket cart.
8. Pedal switch for chuck open & close.
9. Hydraulic hollow chuck with rotary cylinder.
10. Programmable tailstock with hydraulic clamp system.
11. Hydraulic system with tank for power chuck, turret & tailstock quill.
12. Work light.
13. Coolant system.
14. Heat exchanger.
15. Rotating center MT.4... 1set
16. Machining finishing lamp.
17. Auto lubrication system.
18. Soft jaws & hard jaws  
..... 1sets for each.
19. Level pads .....6pcs.
20. Toolset & Box.
21. Operation manual.
22. Maintenance manual.

### OPTIONAL ACCESSORIES :

1. Auto door.
2. Transformer.
3. Collet chuck.
4. Parts catcher.
5. Tool pre-setter.
6. CE configuration.
7. Part cut off detection.
8. Auto bar feeder.
9. Auto bar feeder interface.
10. High pressure coolant pump.
11. Air blow system for cleaning chuck.
12. VDI 30 x 12 tools electronic type turret.
13. Cs axis control & function with break system.



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