

# **VT** *SERIES* *CNC VERTICAL LATHE*



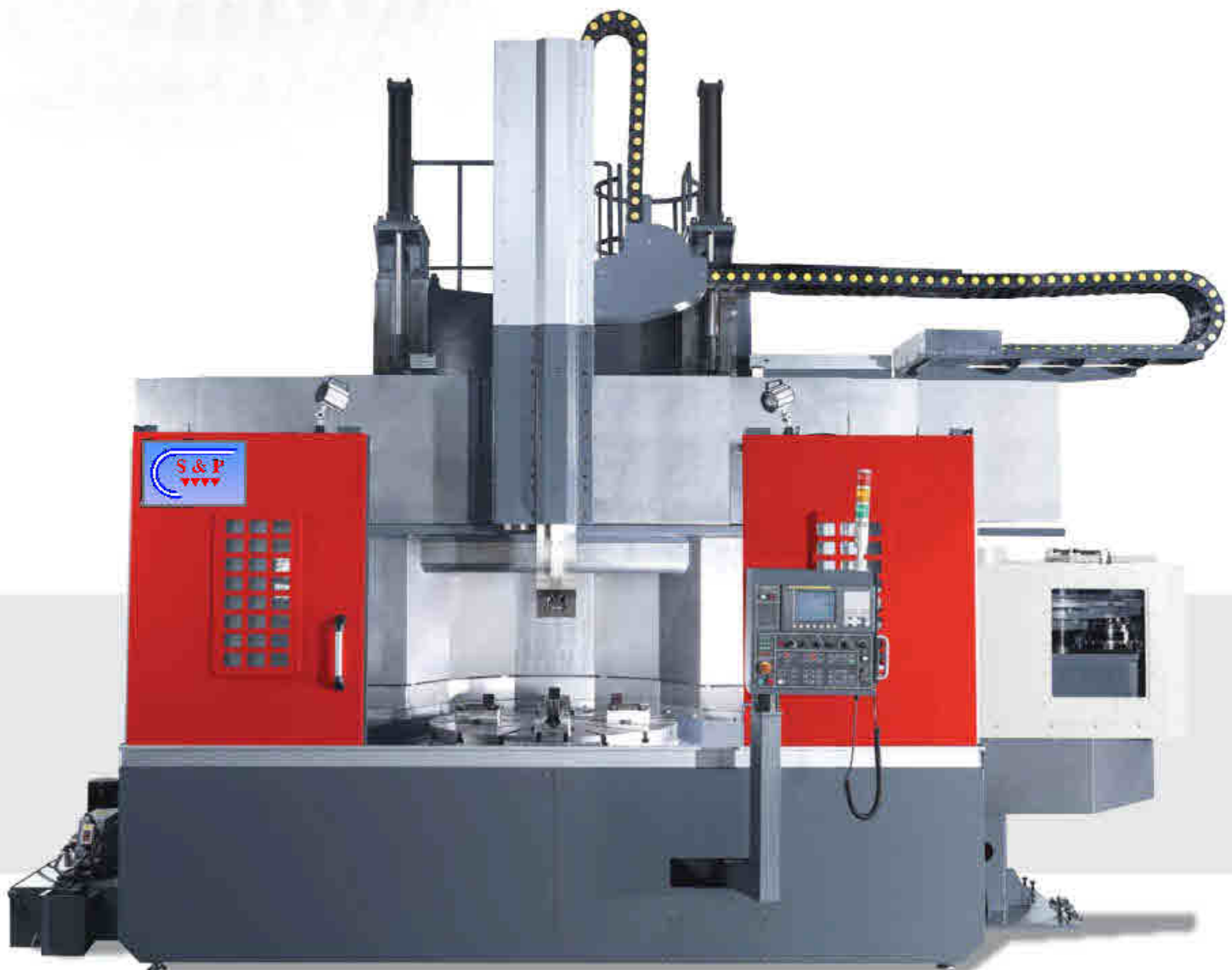


# VT SERIES

## CNC VERTICAL LATHE

### **HIGH PRECISION / EFFICIENCY / STABILITY / RIGIDITY**

- All components are made of Meehanite cast iron and box way constructed which provides high rigidity and stability, suitable for heavy cutting.
- Hardened and Turcite B coated slideways for high precision and low resistance.

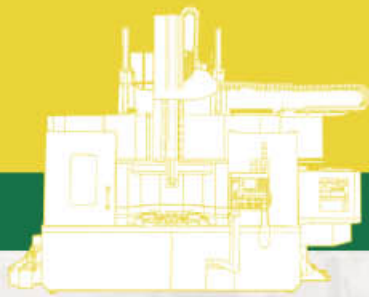


■ **ARC TYPE COLUMNS  
AND CROSS RAIL**



■ **ONE-PIECE BASE**



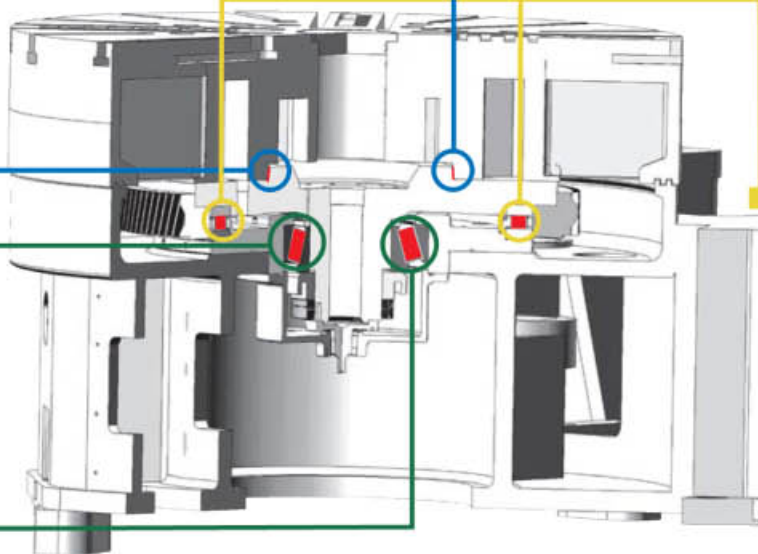


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### SHORTENED TAPER MOUNTING

Chuck mounted into a short-nose spindle for the stability and high centering accuracy.



THRUST ROLLER BEARING



TAPER ROLLER BEARING

# T-SLOT TABLE 4 - JAW CHUCK



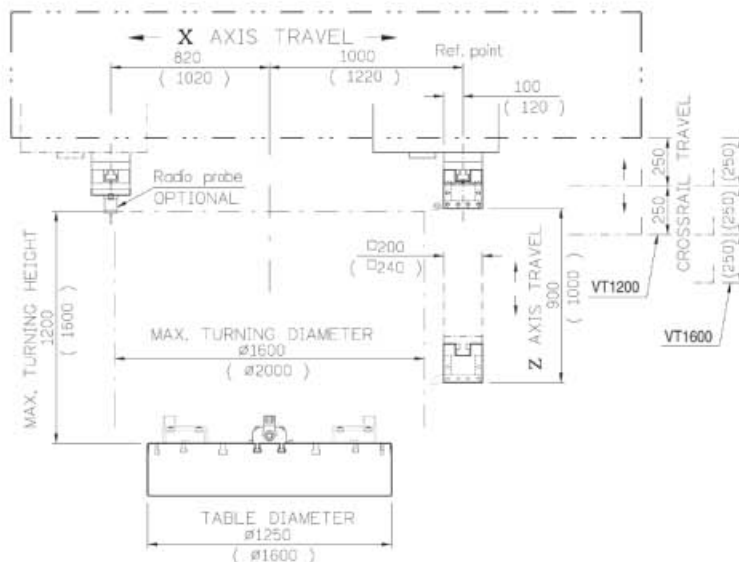
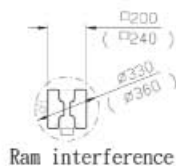
## ■ TABLE DRIVING GEAR

Table rotation transmits through the heavy pitch gear which is made of nickel-chrome molybdenum alloy steel and heat treated, fine finished for high accuracy.



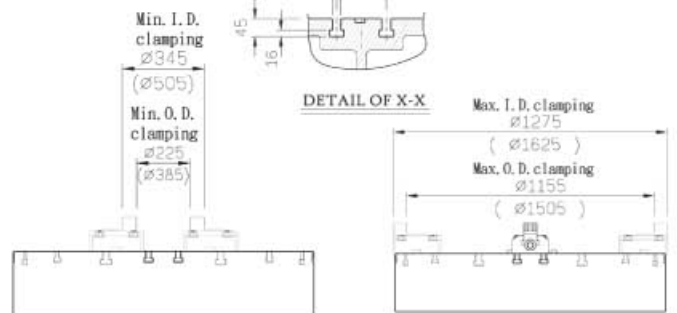
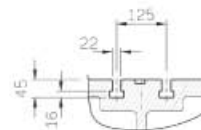
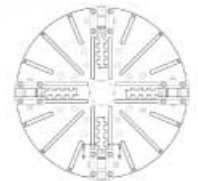
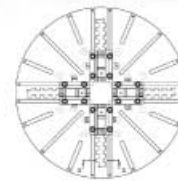
## ■ WORKING CAPACITY

Model: RIC-VT1200 (VT1600)

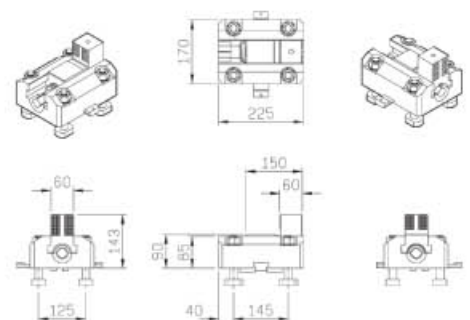


## ■ WORKPIECE CLAMPING

Model: RIC-VT1200 (VT1600)



## ■ INDEPENDENT JAW





# VT SERIES

## CNC VERTICAL LATHE

### AIR CONDITIONER



### ELECTRIC CABINET UNIT



### GEAR / BEARING LUBRICATION & OIL COOLER CONTROL



### GEARBOX DRIVEN TABLE

- Table driven by gear-box with high/low speed
- Powerful circular lubrication system for gear lubricating



Oil level readout for coolant (OPT)

Pumps for chip flush system for base (OPT)

Pump for coolant through toolholder (STD)



Oil Skimmer (OPT)



### LINEAR SCALE (OPT.)

It can be equipped with Linear Scale on X & Z axes for closed loop feedback control.

### HYDRAULIC-DRIVE ON CROSS RAIL

Two hydraulic cylinders for cross rail



### Z AXIS

- Turite B on all surfaces of Z axis
- Lubrication system works automatically 30 mins after power on.



### BEAM POSITIONING RACK

3 stops, dogs on columns, hydraulic clamping, secure the accuracy and the stability.



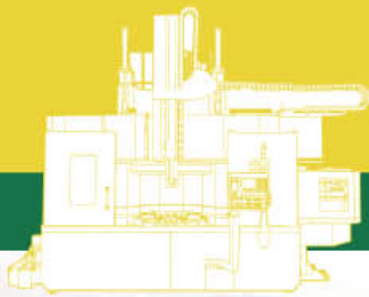
### AUTOMATIC TOOL CHANGE

- 12 tools
- Servo motor driving
- Bi-directional tool changing



### HYDRAULIC LUBRICATING UNIT

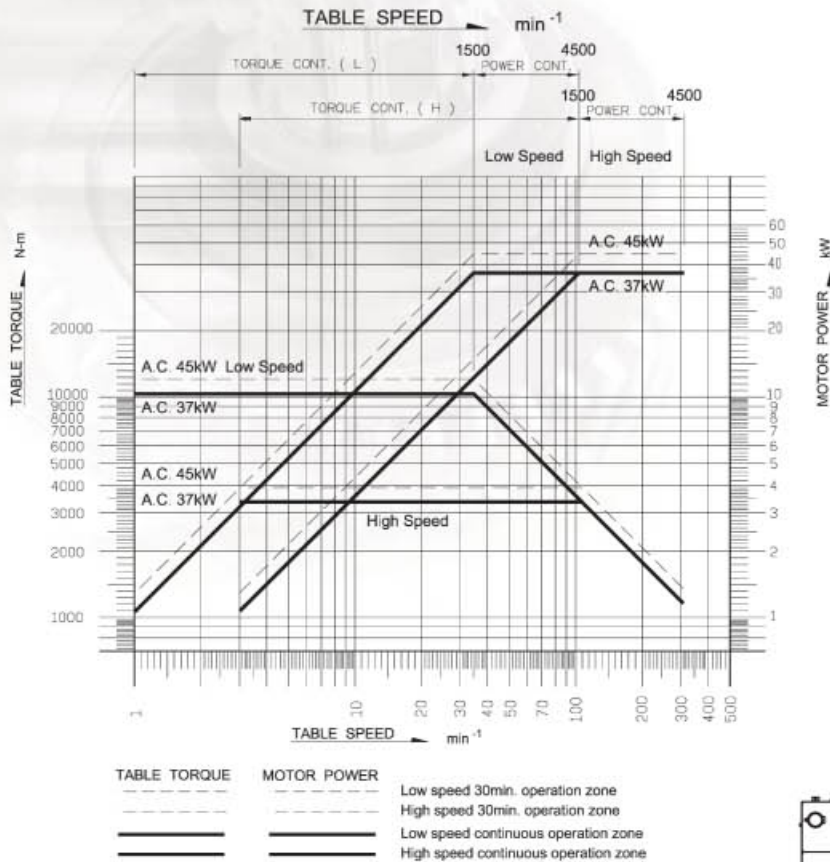




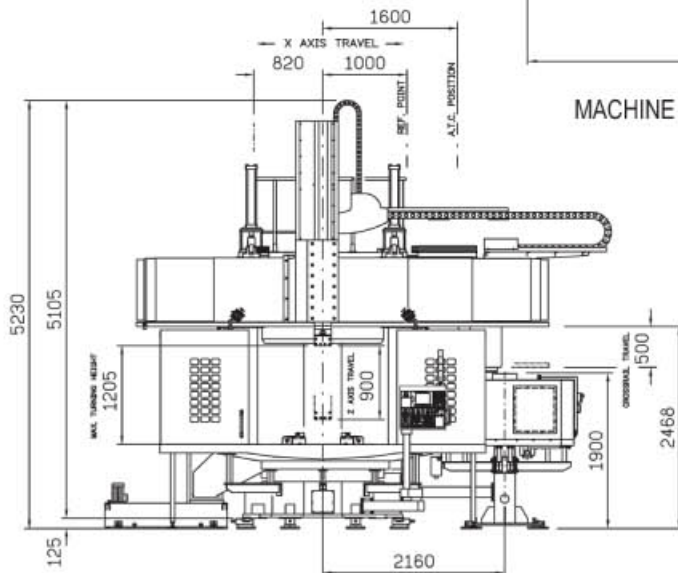
# VT SERIES

## CNC VERTICAL LATHE

### VT1200

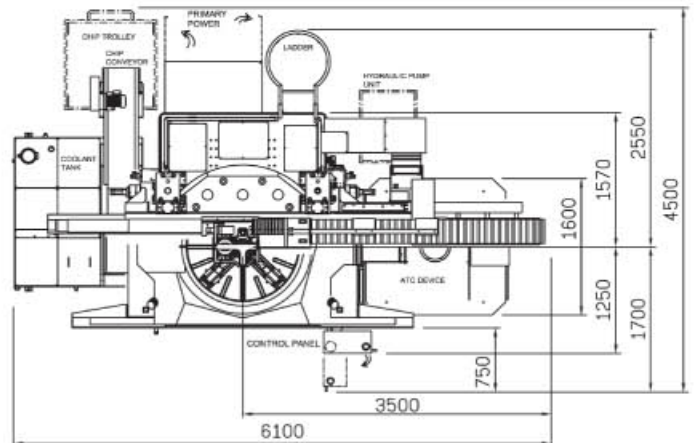


UNITS: mm

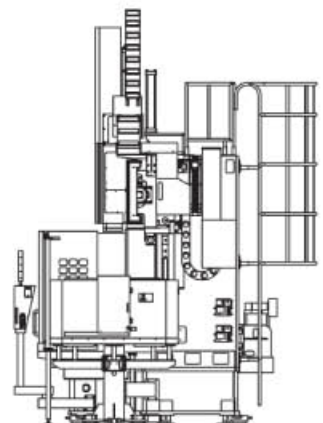


### STANDARD ACCESSORIES

1. Complete splash guard
2. Hydraulic unit
3. Manual 4-jaw independent chuck
4. Automatic lubrication system
5. Work light
6. Alarm light
7. Workpiece counter (FANUC standard)
8. Coolant through tool holder
9. Heat exchanger for electrical cabinet
10. Gear/Bearing lubrication and oil cooler control
11. Tool box & tools
12. Leveling adjustable block & seat pads (W/OJ type bolts)
13. Chip conveyer
14. Chip trolley
15. Toolholder (one piece type)
  - a. O.D./ facing toolholder (1 PC)
  - b. Cylinder toolholder (1 PC)
16. Toolholder base for two pieces tool holder type (3 PCS)
17. Moveable vertical crossrail and mechanism
18. Coolant system with tank (3 bar)

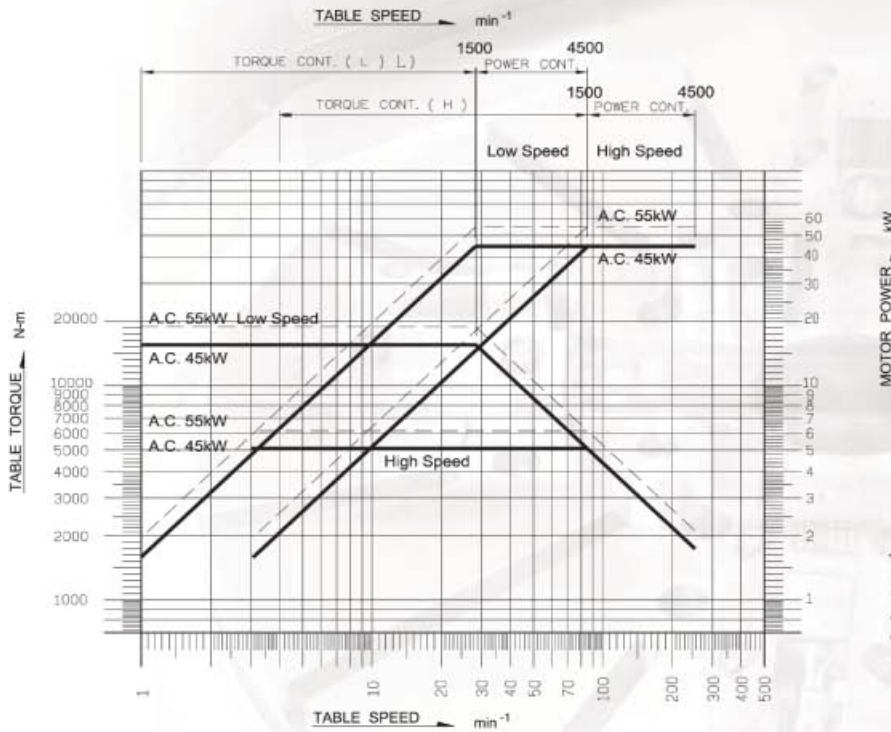


MACHINE DIMENSIONS



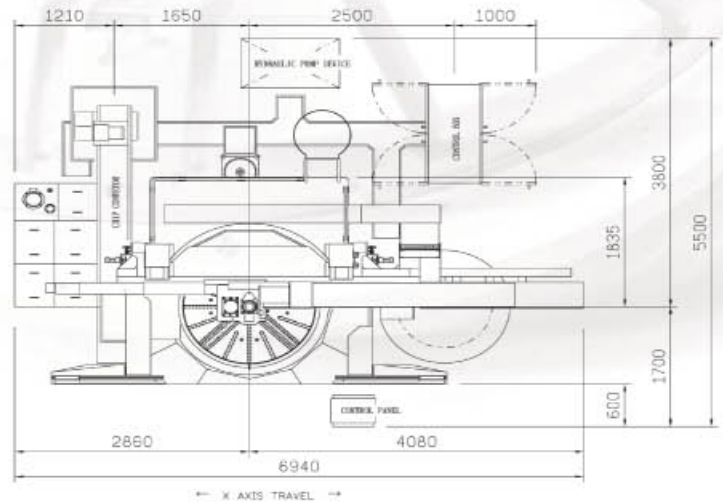
**VT1600**

UNITS: mm

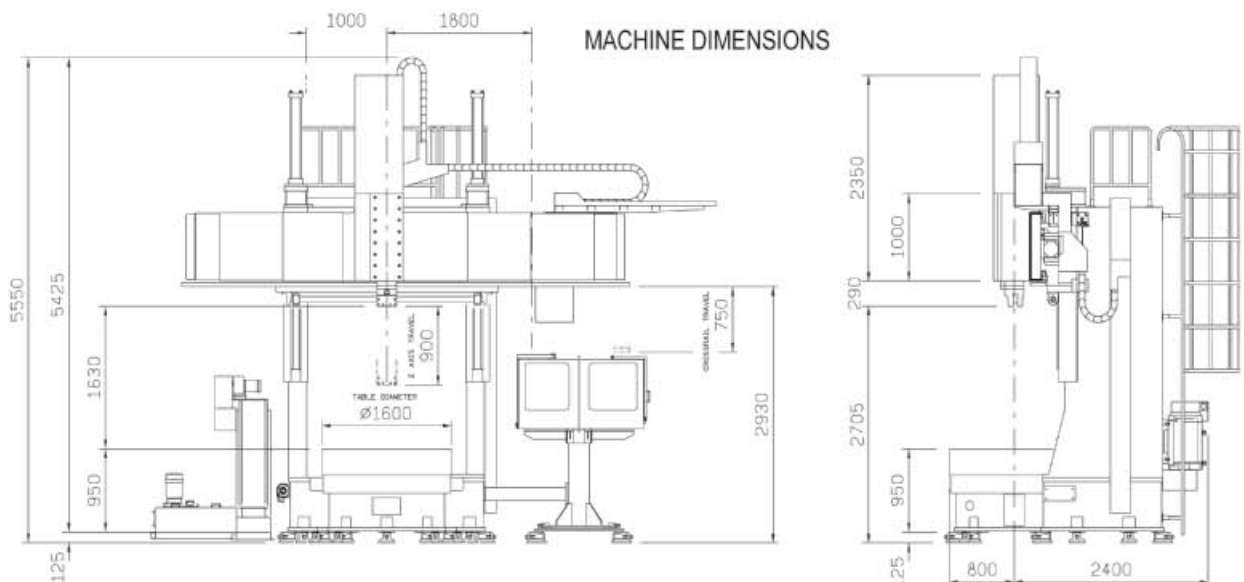


## OPTIONAL ACCESSORIES

1. Transformer
2. Air conditioner
3. Chip flush system for base
4. CE electrical & mechanical configuration & EMC filter
5. Oil skimmer
6. Oil level readout for coolant tank
7. Tool presetter
8. Workpiece probe
9. Linear scale for X & Z axis
10. Splash guard of auto. door



## MACHINE DIMENSIONS

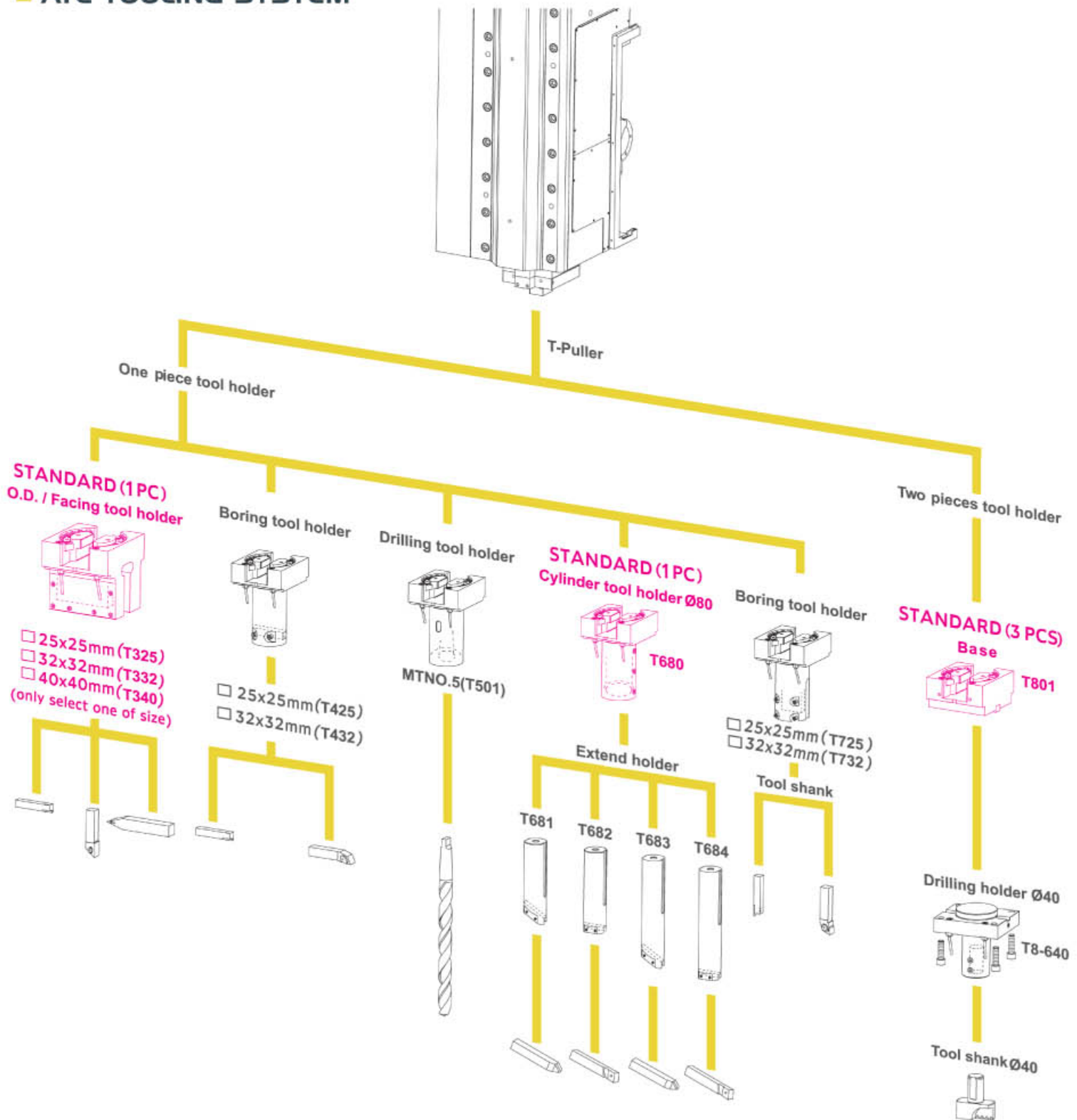






# VT SERIES CNC VERTICAL LATHE

## ■ ATC TOOLING SYSTEM

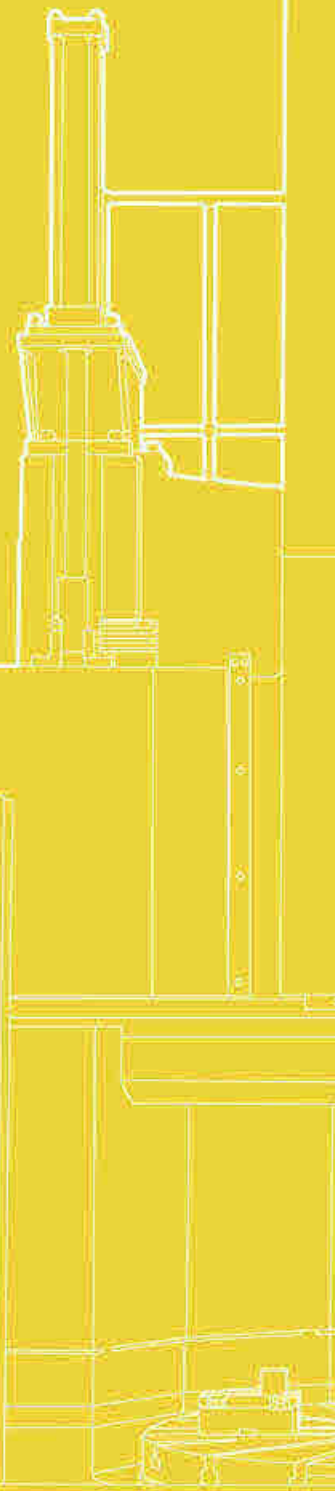


## SPECIFICATION

MODEL		Unit	RIC-VT1200	RIC-VT1600
<b>CAPACITY</b>	Max. swing diameter	mm	∅1,600	∅2,000
	Max. turning diameter	mm	∅1,600	∅2,000
	Distance from bite holder end to table surface	mm	0 ~ 1,205	0 ~ 1,630
	Max. turning height	mm	1,200	1,600
	Max. workpiece weight	kg	8,000	10,000
<b>TABLE</b>	Table diameter (Manual chuck)	mm	∅1,250	∅1,600
	Range of table speed (Low)	rpm	1 ~ 103	22 ~ 85
	Range of table speed (High)	rpm	104 ~ 312	65 ~ 255
	Change gear speed	steps	2	2
	Max of table torque	N.m	12,400	18,400
<b>ATC</b>	ATC (Automatic Tool Change)	set	1 (12 pocket)	1 (12 pocket)
	Number of position	ea	12 ( random )	12 ( random )
	Tool type	mm	T-Puller	T-Puller
	Tool size	mm	<input type="checkbox"/> 25 <input type="checkbox"/> 32 <input type="checkbox"/> 40	<input type="checkbox"/> 25 <input type="checkbox"/> 32 <input type="checkbox"/> 40
	Tool change (Tool to tool)	sec	1	1
	Cross-section of ram	mm	200 x 200	240 x 240
<b>TRAVEL</b>	Horizontal travel (X-axis)	mm	-820+1,000 (Ref. point)	-1,020+1,220 (Ref. point)
	Vertical travel (Z-axis)	mm	900	1,000
	Cross-rail travel	mm	500 ( 2 steps , 3 positions )	750 ( 3 steps , 4 positions )
<b>FEED RATES</b>	Rapid rate (X-axis)	M / min	10	10
	Rapid rate (Z-axis)	M / min	10	10
	Cutting feed rate	mm / rev	0.001 ~ 50	0.001 ~ 50
	Feed override	%	0 - 150	0 - 150
<b>MOTOR</b>	Table main motor	KW	AC37 / 45 ( α 40)	AC45 / 55 ( α 50)
	Feed servo motor (X-axis)	KW	AC7 ( α 30i) torque : 30 N.m	AC7 ( α 30i) torque : 30 N.m
	Feed servo motor (Z-axis)	KW	α 30 / 3,000i (7kw)	α 30 / 3,000i (7kw)
	Coolant tank motor	KW	1.27	1.27
<b>ACCURACY</b>	X/Z Repeatability accuracy	mm	±0.01 / 1,000	±0.01 / 1,000
	X/Z Position accuracy	mm	±0.005	±0.005
<b>MISCELLANEOUS</b>	Power requirement	KW	92	112
	Hydraulic tank capacity	L	250	250
	Coolant tank capacity	L	500	500
	Lubrication tank capacity	L	3ℓ x 2 sets	3ℓ x 2 sets
	Floor space (L x W)	mm	6,230 x 4,875	6,940 x 5,500
	Machine max. height (H)	mm	5,078	5,550
	Machine net. weight	kg	22,000	28,000

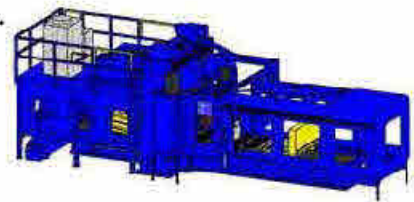
All specification, design and characteristics shown on this catalogue are subject to change without prior notice.

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