



You Ji Machine Industrial Company Limited

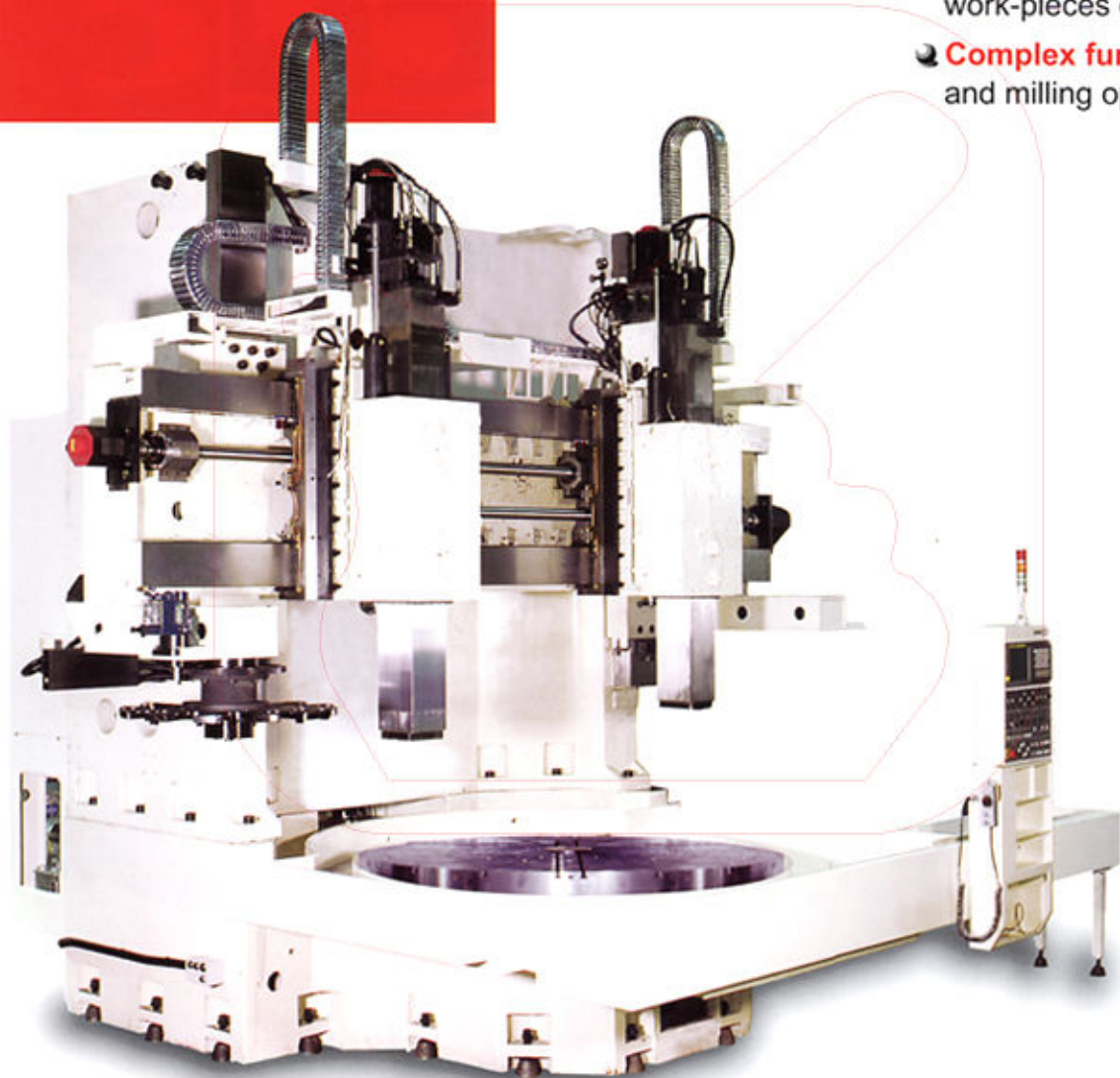
CNC Vertical Turning Lathe

Leader of Vertical Turning Center

- VTL-2000ATC-2R
- VTL-2500ATC-2R
- VTL-3000ATC-2R
- VTL-4000ATC-2R



VERTICAL TURNING LATHE (2 RAM Series)



Features of 2 RAM

- ❏ **High efficiency** : 2 RAM ma
- ❏ **Occupy minimum floor spa**
- ❏ **Easy operation** : 2 RAM ma
- ❏ **Low machining cost** : The & machining cost.
- ❏ **Quick delivery for large siz** work-pieces quickly. It is also
- ❏ **Complex function** : 2 RAM and milling operations and er

VTL-2000~2500

- ❏ The machine column is made of one piece cast iron and is designed for high rigidity, high precision, and high stability.
- ❏ The X-axis box structure is designed for wide span & strong slideways and absorbs the cutting resistant of 2 RAM. It also ensures high precision for large size bearings machining.

High Efficiency ○ High Quality ○ High Precision

RAM machine

Machine to do the machining simultaneously and save cutting time & non-cutting time.

Space : 2 RAM machine occupies half floor space at the same productivity.

Machine is fitted to double system of controller and easy for operation.

Productivity of 2 RAM machine is similar to 2 sets of 1 RAM machine and reduces investment cost

Large work-piece : 2 RAM machine can be increased the competitive nature and deliver large size
and reduced the cost of material storage.

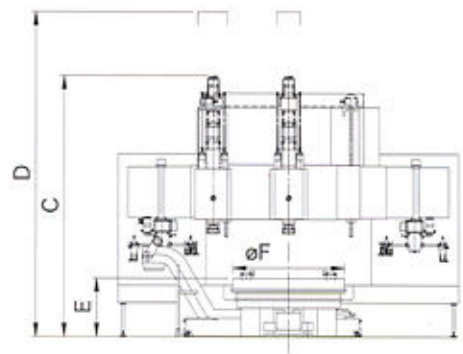
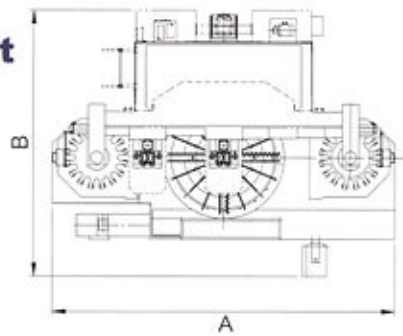
Machine is fitted to C-axis gearbox giving the multiple function such as, turning, drilling, tapping,
ensures high efficiency, space saving, and lower cost.



VTL-3000~4000

- The double column design is made of cast iron and enhances stability of the machine.
- 4 slideways of the column provides high precision and high stability structure.
- It is available to be fitted to Siemens 840D controller and high torque spindle motor (150HP) or larger spindle motor.

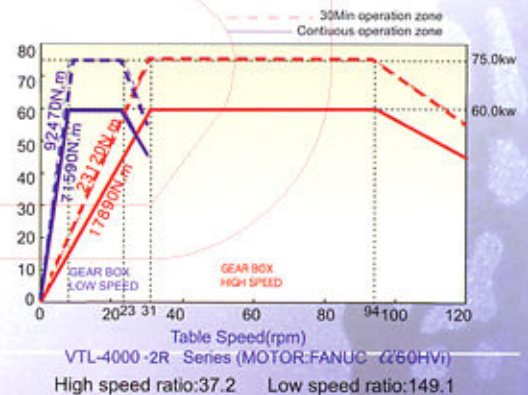
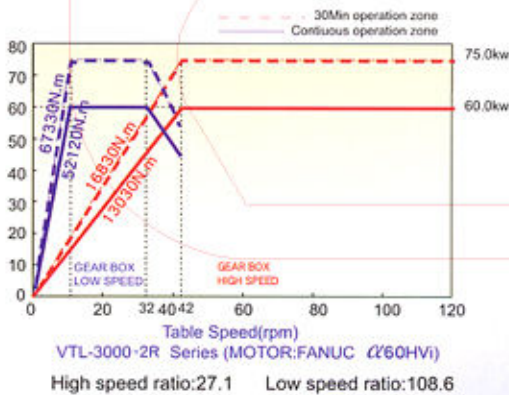
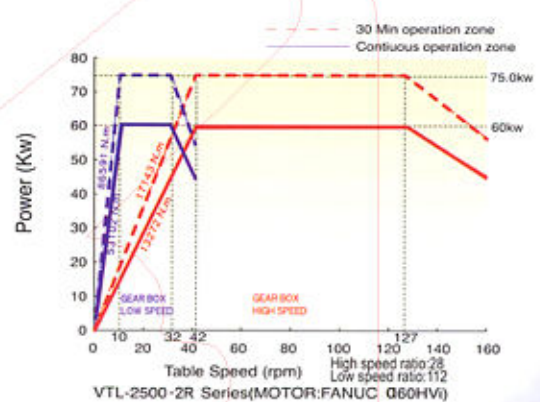
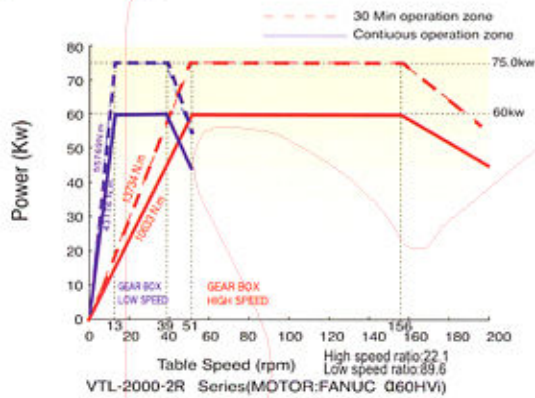
Machine layout dimension



MODEL	A	B	C	D	E	øF
VTL-2000ATC-2R	6100	4800	4700	5900	1050	2000
VTL-2500ATC-2R	6600	5100	4800	6000	1050	2500
VTL-3000ATC-2R	7150	5900	5800	7200	1140	3000
VTL-4000ATC-2R	8380	7250	6000	7400	1140	4000

UNIT : mm

Torque Diagram



Standard accessories :

- Fanuc 18i-T controller
- VTL-2000~2500 : 4 jaws independent manual chuck
- VTL-3000~4000 : 8 jaws independent manual chuck
- Coolant unit
- Pressure relief automatic lubrication system
- Air conditioner for electrical cabinet
- Chip conveyor and chip bucket
- Working lamp
- Tool kit
- Operation manual

Optional accessories :

- Tool presetter
- X-axis and Z-axis linear scale
- Drilling & Milling (C-axis) function
- Work-piece probe
- Paper filter
- Grinding function
- Oil skimmer
- Transformer
- Siemens 840D controller
- **ATC series tool holder :**
 - * ST132, ST140, ST132-60, ST140-60
 - * BB225, BB325, BB225-60, BB325-60
 - * BT225, BT325, BT225-60, BT325-60
- **ATC+C series turning tool holder :**
 - * MST132, MST140
 - * MBB225, MBB325
 - * MBT225, MBT325

ATC+C series driven tool :

- * BT50-TER16, BT50-TER40
- * BT50-ER20-100, BT50-ER32-100, BT50-ER40-100
- * BT50-SLA20-105, BT50-SLA25-105, BT50-SLA32-105, BT50-SLA40-105, BT50-SLA50.8-105.
- * BT-50FMA25.4-105, BT50FMA31.75-105, BT50-FMA38.1-75, BT50-FMA50.8-75
- * BT-BSA62-300, BT-BSA72-320, BT50-BSA105-195

MACHINE SPECIFICATION

Standard Specification	UNIT	VTL-2000ATC-2R	VTL-2000ATC-2R+C	VTL-2500ATC-2R	VTL-2500ATC-2R+C	VTL-3000ATC-2R	VTL-3000ATC-2R+C	VTL-4000ATC-2R	VTL-4000ATC-2R+C	
Capacity										
Table dimension	mm	Ø2000	Ø2000	Ø2500	Ø2500	Ø3000	Ø3000	Ø4000	Ø4000	
Max. swing diameter	mm	Ø2500	Ø2500	Ø3000	Ø3000	Ø3600	Ø3600	Ø4800	Ø4800	
Max. turning diameter	mm	Ø2300	Ø2300	Ø2800	Ø2800	Ø3400	Ø3400	Ø4500	Ø4500	
Max. turning height	mm	1600	1600	1600	1600	1800	1800	1800	1800	
Max. work-piece weight	kg	10000	10000	15000	15000	20000	20000	20000	20000	
Travel										
Horizontal of rail head (X-axis)	mm	1850	1850	2100	2100	3200	3200	4000	4000	
Vertical travel of ram (Z-axis)	mm	950	950	1200	1200	1500	1500	1500	1500	
Vertical travel of cross-rail	mm	1150	1150	1150	1150	1200	1200	1200	1200	
Spindle										
Spindle speed	LOW	rpm	2~50	2~50	2~40	2~40	2~40	2~30	2~30	
	HIGH	rpm	50~200	50~200	40~160	40~160	40~120	30~100	30~100	
#2 Spindle speed	LOW	rpm		2~1200		2~1200		2~1200	2~1200	
	HIGH	rpm		1200~2400		1200~2400		1200~2400	1200~2400	
Max. table torque	Nm(kg-m)	55500 (5660)	55500 (5660)	68500 (6990)	68500 (6990)	67000 (6830)	67000 (6830)	92000 (9380)	92000 (9380)	
Feed Rate										
Rapid traverse of rail head (X-axis)	m/min	10	10	10	10	10	10	10	10	
Rapid traverse of ram (Z-axis)	m/min	10	10	10	10	10	10	10	10	
Cutting feed rate	mm/min	1~2000	1~2000	1~2000	1~2000	1~2000	1~2000	1~2000	1~2000	
Manual feed rate	m/min	0~6	0~6	0~6	0~6	0~6	0~6	0~6	0~6	
Automatic Tool Changer (ATC)										
Number of tool position		12 tools x 2	16 tools x 2	12 tools x 2	16 tools x 2	16 tools x 2	16 tools x 2	16 tools x 2	16 tools x 2	
Type of tool shank		BT-50	BT-50	BT-50	BT-50	BT-50(BT60)	BT-50	BT-50(BT60)	BT-50	
Max. tool size of ATC	mm	350W x150Tx400L								
Max. tool weight	kg	50	50	50	50	50	50	50	50	
Max. loading weight of ATC	kg	360 (ONE ATC)	360 (ONE ATC)	360 (ONE ATC)	360 (ONE ATC)	360 (ONE ATC)	360 (ONE ATC)	360 (ONE ATC)	360 (ONE ATC)	
Time of tool change	sec	45	45	45	45	45	45	45	45	
Tool shank size	mm	□40 (Ø63)	□40 (Ø63)	□40 (Ø63)	□40 (Ø63)	□40 (Ø63)	□40 (Ø63)	□40 (Ø63)	□40 (Ø63)	
Motor										
Spindle motor	kw	60/75 (α60)	60/75 (α60)	60/75 (α60)	60/75 (α60)	60/75 (α60)	60/75 (α60)	60/75 (α60)	60/75 (α60)	
#2 spindle motor	kw		11/15 (α12)		11/15 (α12)		11/15 (α12)		11/15 (α12)	
X-axis servo motor	kw	4.5x2	4.5x2	4.5x2	4.5x2	5.5x2	5.5x2	5.5x2	5.5x2	
Z-axis servo motor	kw	4.5x2	4.5x2	4.5x2	4.5x2	5.5x2	5.5x2	5.5x2	5.5x2	
CF-axis servo motor	kw		4.5		5.9		5.9		5.9	
Coolant motor	kw	0.75	0.75	0.75	0.75	1	1	1	1	
Tank Capacity										
Hydraulic tank	L	80	80	80	80	100	100	65	65	
Coolant tank	L	500	500	500	500	700	700	600	600	
Lubrication tank	L	4	4	4	4	8	8	4	4	
Power Sources AC400 ±10%, 60 Hz ± 5 Hz										
Power capacity	KVA	100	110	140	150	150	150	140	140	
Floor dimension	mm	6100x4800	6100x4800	6600x5100	6600x5100	7150x5900	7150x5900	5380x7250	5380x7250	
Machine weight	mm	5900	5900	6000	6000	7138	7138	7138	7138	
Position accuracy of X, Z axis	kg	46,000	47,000	55,000	56,000	73,000	74,000	88,000	88,000	
Accuracy	mm	P: ±0.008/500 Ps: ±0.005 (X&Z) P: ±7.5°/360° Ps: ±5° (C-Axis)								

* Specification is subject to change with prior to notice.



Product Range:

- . CNC Vertical Turning Lathe
- . CNC Horizontal Turning Lathe
- . CNC Vertical Machining Center
- . CNC Horizontal Machining Center
- . NC Special Purpose Machine
- Automatic Production Line

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