



# WERKZEUGMASCHINEN GMBH

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Item	Description
<u>CNC Vertical Lathe with Standard Accessories</u>	
Model : <u>YS-VL-1000ATC</u>	
<b>A. Main Specification</b>	
Max. Swing Diameter	:1350 mm
Max. Turning Diameter	:1150 mm
Max. Turning Height	:1070 mm
Table Diameter	:1000 mm
Max. Load on table	: 4,000 kg
FANUC Control System	: 0iTD
<b>B . RPM</b>	
Low Speed	: 2 -140 RPM
High Speed	: 141-600 RPM
<b>C . Travel Stroke</b>	
X Axis	: 1,350 mm
Z Axis	: 800 mm (Option 1100 mm)
<b>D . Feedrate</b>	
X Axis Rapid Feedrate	: 12,000 mm/min
Z Axis Rapid Feedrate	: 10,000 mm/min
Cutting Feedrate	: 0.01-50 mm / rev
Manual Feedrate	: 0-1,260 mm / min
<b>E . Motor</b>	
Spindle Motor	: 37/45kw
X axis	: AC 7.0 KW
Z axis	: AC 7.0 KW
<b>F . Cross-Section size in Ram</b>	
	: 250 x 250mm -- High Rigidity
<b>G . Torque</b>	
Standard	: 10,000 Nm
Gear Box For Spindle Motor	: ZF 2K-300 1: 5.5 Made in Germany
<b>H . Navigation and Positioning System in Crossrail</b>	
Total travel	: 500 mm
Locking Stage	: 3
<b>I . Auto Tool Change(Ground Type)</b>	
Tool Station	: 12 stations
Max Single tool weight	: 50 kg
Max Single tool length	: 500 mm
Max total loading	: 360 kg

- J . Chiller**  
Cooling System for Gear Box : HBO-750PS 2600/3000 KCAL/H
- K . Coolant System**  
Coolant Pressure : 7 Bar (option : 20bar , 40bar , 70bar)  
Coolant Tank : 700 liter
- L . Guide Way**  
Hardness : HRC 56 (high-frequency induction hardening)  
Thickness of heat treatment : 2 ~ 3 mm  
Width in X axis : 140 mm + 190 mm  
Width in Z axis : 240 mm
- M . Ball Screw Diameter**  
X axis : Ø 63 mm, Pitch 10 mm  
Z axis : Ø 50 mm, Pitch 10 mm
- N . Accuracy**  
Positioning : ± 0.006 mm  
Repeatability : ± 0.005 mm
- O . Power Consumption**  
Max loading Requirement : 75 KVA  
Normal Running Requirement : 30 KVA  
Air Volumn : 22 CFM
- P . Machine Size**  
Height : 5330 mm  
Floor Space(L\*W) : 4600 x 5500 mm  
Weight : 25,000 Kg
- R . Standard Accessories**  
Chips Conveyor & Coolant Tank  
Oil/Water Separator  
Machine Cover (High guarding)  
Heat exchanger For Electrical Cabinet  
Auto Lubrication in Guide way  
4 Jaw Manual Chuck 1000mm  
Hydraulic Unit  
BT50 Tool Connection in RAM  
Metal frame and case in machine shipment packing(Wooden packing with metal base)  
3 colors Warning Tower Light  
Chamber light  
Anti- Dropping in Z axis -- Auto Motor Brake System

**Option Installed**

- (1.) Air Conditioner For Electrical Box  
(6.) Coolant Through Spindle  
(7.) Filter Of Coolant Water  
(27.) CE Mark  
(29.) Transformer
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**Optional Accessories :**

- (2.) Customer color option
- (3.) Coolant High Pressure Pump (Pressure 20 bar, 30L/ Min)
- (4.) Coolant High Pressure Pump (Pressure 40 bar)
- (5.) Coolant High Pressure Pump (Pressure 70 bar)
- (8.) Renishaw Tool Measuring Probe System
- (9.) Renishaw Measuring System for Workpiece
- (10.) FANUC controller 32i
- (11.) SIEMENS 828
- (12.) SIEMENS 840D-SL
- (13.) 10.4" TFT Screen Upgrade
- (14.) Manual Guide Oi upgrade to Manual Guide I
- (15.) Linear Scale Precision 0.005 (X Axis)
- (16.) Linear Scale Precision 0.005 (Z Axis)
- (17.) ATC standard upgrade to 16(BT50 System)
- (18.) ATC standard upgrade to 32(BT50 System)
- (19.) ATC in Hirth Coupling System
- (20.) Vertical Column 300mm riser(Max. Turning Height)
- (21.) Vertical Column 400mm riser(Max. Turning Height)
- (22.) 300mm Z axis travel extension
- (23.) X and Z axes gear box 1:3 (30Nm upgrade to 90Nm)
- (24.) Chiller for gearbox upgrade to 1000 PS
- (25.) Chiller for gearbox upgrade to 3RPS
- (26.) Chiller for gearbox upgrade to 4RPS
- (28.) Spindle Motor upgrade to 60/75 kw (Voltage: 380V) + AMP  
Change Design Of The Machine Struction  
Gear Box upgrade to ZF ZK801 + Chiller
- (30.) Hydraulic Power Chuck x 4 Jaw(item 30.31 need to select together)
- (31.) Rotary Cyclinder Dia. 250
- (32.) Dual pressure For Hydraulic chuck
- (33.) Auto Pallet Change

**Remark :**

- (1.) The above price excluded Installation & Trial- run in Buyer's factory, Air round-trip ticket, Local transportation, Hotel, and Meal expense as well as Daily Engineer's Salary /day/person at customer's account.
- (2.) The cutting tool Holder and fixtures / jigs are not included in this quotation.
- (3.) Warranty:
  - A- All our mechanical parts, system and AC Motors are one year free Guarantee.
  - B- FANUC control system is free Guarantee within two years after Machine on approval in buyer site.
  - C- We Guarantee our machines will have stable and superior perofrmance under you follow the regular operation and maintenance schedule of the manual.
  - D- Any damages caused by the Nature Disaster are out of our Guarantee.
- (4.) Tool holder ( BT 50/ Hirth coupling ) will be extra charge
- (5.) In respect of International Wassenaar Arrangement do not allow any Dual-Use Goods & Equipments be used in Weapons of Mass Destruction & prevent the Weapons Proliferation. All machines of Yu Shine prohibited to be re-sold to the countries of Iran, North Korea, Cuba & Syria. Your company should bear full responsibility for the errors and negligence if you was in violation of Wassenaar Arrangement

## Standard Specification

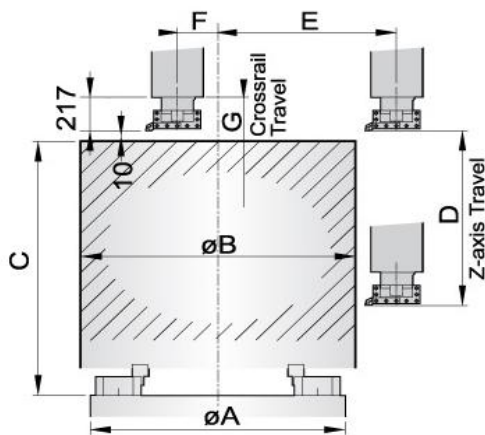
### 1. Capacity



### 2. ATC System

No. of Tools	: 12 Positions
Type of Tool Shank	: BT 50
Max Tool Size	: 150T x 500L (250T option)
Max. Tool Weight	: 50 kg
Max. Tools total Weight	: 360 kg
Tool Change Time	: 30 second

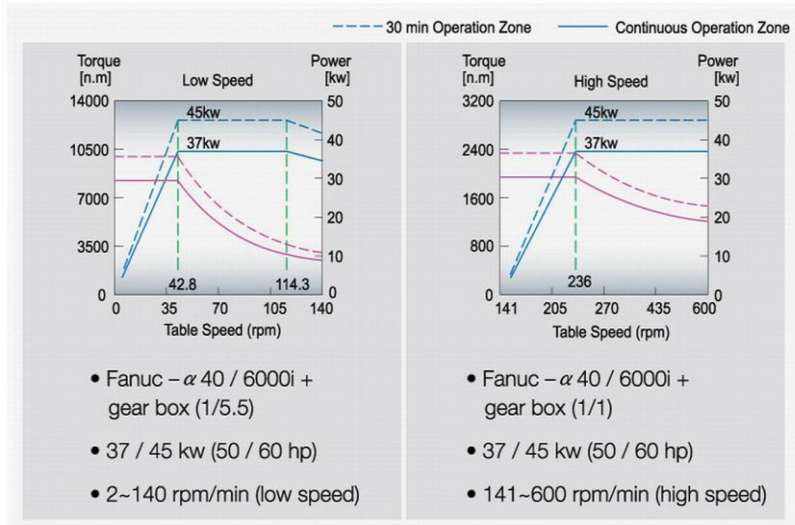
### 3. Axis Travel Diagram



	A	B	C	D	E	F	G
VL-1000	1000	1150	1070	800	775	220	500

#### 4. Motor

Motor of Main Spindle	: 37/ 45 Kw
Motor of C axis Spindle	: 7.5 / 11 Kw
X axis servo motor	: 7.0 Kw
Z axis servo motor	: 7.0 Kw
CF axis servo motor	: 7.0 Kw



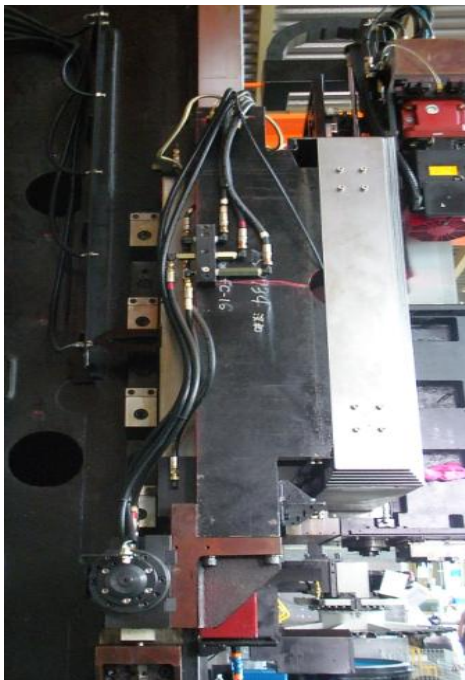
#### 5. Ambient Temperature

Room Temperature	: 5°C - 45°C
Humidity	: 75 % below

#### 6. Ball Screw Diameter

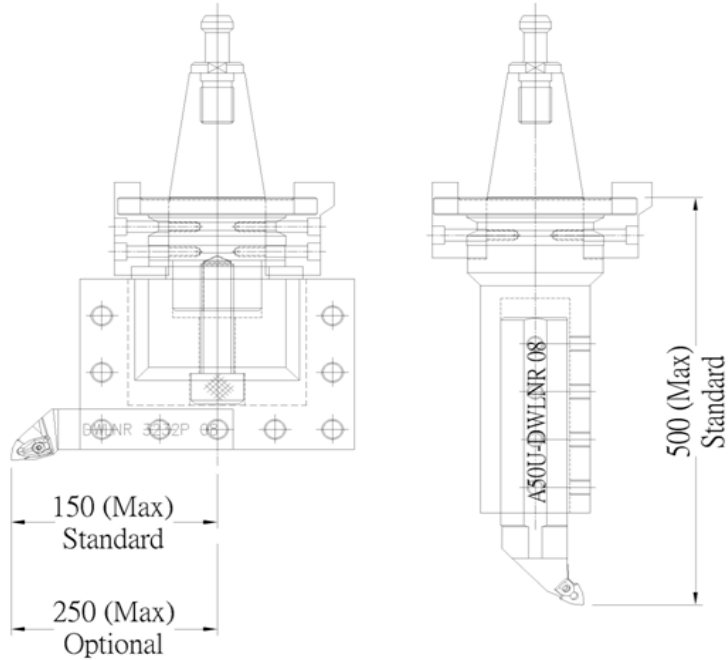
X axis	: Ø 63 mm
Z axis	: Ø 50 mm

#### 7 . Navigation & Position Locking of Cross Rail



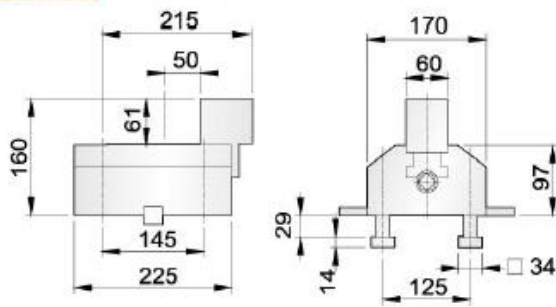
## 8 . ATC System

No. of Tools	: 12 Positions
Type of Tool Shank	: BT 50 7/24 Taper
Max Tool Size	: 150T x 500L (250T option)
Max. Tool Weight	: 50 kg
Max. Tools total Weight	: 360 kg
Tool Change Time	: 30 second
Square Tool Size	: 32x32 or 25x25
Roundness Tool Size	: Ø 63 or Ø 50



## 9. Drawing of Standard Hard Jaw:

VL-1000



10. Floor Planning:

