

1.0	CNC Lathe Machine (Horizontal) along with standard accessories	01 Set
1.1	<u>Capacity</u> • Max turning $\phi = 370\text{mm}$ • Max turning length: 500mm • X-axis travel = +200mm (above spindle center) • X-axis travel = -30mm (below spindle center) • Z-axis travel = 550 mm • Bed Slant Angle = 30° or 45°	
1.2	<u>NC Control</u> Fanuc Oi-TF or Equivalent (Preferably Fanuc), with all basic functions and macro programming & with Manual Guide i	
1.3	<u>Main Spindle</u> • Spindle speed = 10-3000Rpm (step less) • Spindle motor power = 18.5/22 kW • Spindle bore $\phi = 86\text{mm}$ • 3 jaw self-centering hydraulic chuck ($\phi=250\text{mm}$) with adjustable pressure (2 bar to 30 bar) Note: Spindle motor & axis servo motors should be of Fanuc.	
1.4	<u>Turret (Hydraulic or Electric)</u> • Type = BMT • Tool stations = 12 Nos. • External tool size = $25 \times 25\text{ mm}$ • Boring bar holder, I.D = 40 mm	
1.5	<u>Tail stock</u> • Hydraulically operated quill with live center • Quill $\phi = 80\text{mm}$ • Quill Stroke = 100mm • Taper = MT#4 • Programmable Powered Movement	
1.6	<u>Accuracy</u> Positioning = $\pm 0.005\text{ mm}/300\text{mm}$ Repeatability = $\pm 0.003\text{ mm}$	
1.7	<u>Electric power supply input</u> Machine must be designed according to our power supply input i.e. 3-phase, 380V, 50 Hz (Transformer to be provided if required)	
1.8	<u>Auto Lubrication system (Installed)</u>	
1.9	<u>Tool Presetter (Installed)</u>	
1.10	<u>Make</u> = Taiwan, China (European standard)	

2.0	Accessories	
2.1	10" hydraulic 3-jaw chuck	01 No.
2.2	Hard Jaws for above mentioned chuck	02 set
2.3	Soft jaws for above mentioned chuck	05 sets
2.4	OD Tool Clampers for Turret	06 sets
2.5	Facing Tool Holders for Turret	06 sets
2.6	Boring Bar Holders for Turret ($\phi D = 40mm$)	06 sets
2.7	Sleeves for boring bars, $OD = 40mm$, $ID = 8, 10, 12, 16, 20, 25, 32mm$	04 each
2.8	Standard Working Light	01 No.
2.9	Precision Leveling Plate for Turret	01 No.
2.10	Leveling Pads	01 set
2.11	Air Conditioner for electrical cabinet (if required)	01 set
2.12	Coolant Tank & Motor (High Pressure)	01 set
2.13	Tool Kit	01 set
3.0	Additional Spares	
3.1	Filters for Hydraulic Pumps	02 Nos.
3.2	Machine Lamp	06 Nos.
3.3	Solenoid Valves (for chuck, turret, tail stock)	02 each

3.0	Additional Spares	02 Nos.
3.4	Position Encoder for X-axis	02 Nos.
3.5	Position Encoder for Z-axis	02 Nos.
3.6	Position Encoder for Spindle	01 No.
3.7	Control Power Supply Card	01 No.
3.8	Servo Motor X/Z card	01 No.
3.9	Spindle drive card	02 Nos.
3.10	Key pads for operator panel	01 set
3.11	Other Spares for 5-year operation as recommended by the manufacturer	
4.0	Documents /Manuals	01 set
	Complete set of machine manual/documents and Fanuc control manuals in English (including Operation, Maintenance & Parameter Manuals, Parameter List, Electrical Diagram, Inspection Certificate)	
5.0	Pre-shipment Inspection and training	
	Pre-shipment Inspection and training of two Officials for one week (excluding travelling time) approx. at Manufacturer premises.	