Quantity  Spindle Taper Spindle Coolant Nozzles Diameter of Spindle Spindle Ar Curtain(air blast through spindle) Coolant JETS around Spindle Spindle Bearing Max Spindle speed  X-Axis Travel Z-Axis Travel Z-Axis Travel Table Loading Capacity Table T slot Distance b/w spindle nose to table surface Table Size  AC Spindle Motor	Financial Proposal  CNC Vertical Machining Center (High speed/Die/Mould series)  Tender Specifications  Make  Model  Country of Origin  '01 Set (Complete in all Aspects)  Spindle  BT-40  Shall be Included  Ø 65 mm  Shall be Included  Minimum 4 nos  FAG Japan, Preferably SKF/NTN/NSK or Equivalent  8,000 ~10,000 R.P.M  Travel  700-850 mm  450-600 mm  450-600 mm  450-600 mm  Table  Min 400 KG	Supplier Specifications & Details  Spindle Details  Travel Details
Quantity  Spindle Taper Spindle Coolant Nozzles Diameter of spindle Spindle Air Curtain(air blast through spindle) Coolant JETs around Spindle Spindle Bearing Max Spindle speed  X-Axis Travel Y-Axis Travel Z-Axis Travel Table Loading Capacity Table T slot Distance b/w spindle nose to table surface Table Size	Tender Specifications  Make Model Country of Origin OI Set (Complete in all Aspects) Spindle  BT-40 Shall be included Ø 65 mm Shall be included Minimum 4 nos FAG Japan, Preferably SKF/NTN/NSK or Equivalent 8,000 ~10,000 R.P.M Travel 700-850 mm 450-600 mm 450-600 mm	Spindle Details
Quantity  Spindle Taper  Spindle Coolant Nozzles  Diameter of spindle  Spindle Air Curtain(air blast through spindle)  Coolant ETs around Spindle  Spindle Bearing  Max Spindle speed  X-Axis Travel  Y-Axis Travel  Z-Axis Travel  Table Loading Capacity  Table T slot  Distance b/w spindle nose to table surface  Table Size	Make Model Country of Origin  101 Set (Complete in all Aspects) Spindle  BT-40 Shall be Included Ø 65 mm Shall be Included Minimum 4 nos FAG Japan, Preferably SKF/NTN/NSK or Equivalent 8,000~10,000 R.P.M Travel 700-850 mm 450-600 mm 450-600 mm	Spindle Details
Spindle Taper Spindle Coolant Nozzles Diameter of spindle Spindle Air Curtain(air blast through spindle) Coolant JETs around Spindle Spindle Bearing Max Spindle speed  X-Axis Travel Y-Axis Travel Z-Axis Travel Table Loading Capacity Table T slot Distance b/w spindle nose to table surface Table Size	Model Country of Origin OI Set (Complete in all Aspects) Spindle BT-40 Shall be included Ø 65 mm Shall be included Minimum 4 nos FAG Japan, Preferably SKF/NTN/NSK or Equivalent 8,000 =10,000 R.P.M Travel 700-850 mm 450-600 mm 450-600 mm	
Spindle Taper Spindle Coolant Nozzles Diameter of spindle Spindle Air Curtain(air blast through spindle) Coolant JETs around Spindle Spindle Bearing Max Spindle speed  X-Axis Travel Y-Axis Travel Z-Axis Travel Table Loading Capacity Table T slot Distance b/w spindle nose to table surface Table Size	### 10 Set (Complete in all Aspects)    Spindle	
Spindle Taper Spindle Coolant Nozzles Diameter of spindle Spindle Air Curtain(air blast through spindle) Coolant JETs around Spindle Spindle Bearing Max Spindle speed  X-Axis Travel Y-Axis Travel  Z-Axis Travel  Table Loading Capacity Table T slot Distance b/w spindle nose to table surface Table Size	Spindle  BT-40  Shall be Included  Ø 65 mm  Shall be Included  Minimum 4 nos  FAG Japan, Preferably SKF/NTN/NSK or Equivalent  8,000 ~10,000 R.P.M  Travel  700-850 mm  450-600 mm  450-600 mm	
Spindle Coolant Nozzles Diameter of spindle Spindle Air Curtain(air blast through spindle) Coolant JETs around Spindle Spindle Bearing Max Spindle speed  X-Axis Travel Y-Axis Travel Z-Axis Travel Table Loading Capacity Table T slot Distance b/w spindle nose to table surface Table Size	BT-40 Shall be Included Ø 65 mm Shall be Included Minimum 4 nos FAG Japan, Preferably SKF/NTN/NSK or Equivalent 8,000 ~10,000 R.P.M Travel 700-850 mm 450-600 mm 450-600 mm	
Spindle Coolant Nozzles Diameter of spindle Spindle Air Curtain(air blast through spindle) Coolant JETs around Spindle Spindle Bearing Max Spindle speed  X-Axis Travel Y-Axis Travel Z-Axis Travel Table Loading Capacity Table T slot Distance b/w spindle nose to table surface Table Size	Shall be Included  Ø 65 mm  Shall be Included  Minimum 4 nos  FAG Japan, Preferably SKF/NTN/NSK or Equivalent  8,000 ~10,000 R.P.M  Travel  700-850 mm  450-600 mm  450-600 mm  Table	Travel Details
Diameter of spindle  Spindle Air Curtain(air blast through spindle)  Coolant JETs around Spindle  Spindle Bearing  Max Spindle speed  X-Axis Travel  Y-Axis Travel  Z-Axis Travel  Table Loading Capacity  Table T slot  Distance b/w spindle nose to table surface  Table Size	Ø 65 mm  Shall be Included  Minimum 4 nos  FAG Japan, Preferably SKF/NTN/NSK or Equivalent  8,00° 10,000 R.P.M  Travel  700-850 mm  450-600 mm  Table	Travel Details
Spindle Air Curtain(air blast through spindle) Coolant JETs around Spindle Spindle Bearing Max Spindle speed  X-Axis Travel Y-Axis Travel Z-Axis Travel Table Loading Capacity Table T slot Distance b/w spindle nose to table surface Table Size	Shall be Included  Minimum 4 nos  FAG Japan, Preferably SKF/NTN/NSK or Equivalent 8,000 "10,000 R.P.M  Travel  700-850 mm  450-600 mm  Table	Travel Details
Coolant JETs around Spindle  Spindle Bearing  Max Spindle speed  X-Axis Travel  Y-Axis Travel  Z-Axis Travel  Table Loading Capacity  Table T slot  Distance b/w spindle nose to table surface  Table Size	Minimum 4 nos  FAG Japan, Preferably SKF/NTN/NSK or Equivalent  8,000 *10,000 R.P.M  Travel  700-850 mm  450-600 mm  Table	Travel Details
Spindle Bearing  Max Spindle speed  X-Axis Travel  Y-Axis Travel  Z-Axis Travel  Table Loading Capacity  Table T slot  Distance b/w spindle nose to table surface  Table Size	FAG Japan, Preferably SKF/NTN/NSK or Equivalent  8,000 "10,000 R.P.M  Travel  700-850 mm  450-600 mm  Table	Travel Details
Max Spindle speed  X-Axis Travel Y-Axis Travel Z-Axis Travel  Table Loading Capacity Table T slot Distance b/w spindle nose to table surface Table Size	8,000 ~10,000 R.P.M  Travel  700-850 mm  450-600 mm  Table	Travel Details
X-Axis Travel Y-Axis Travel 2-Axis Travel  Table Loading Capacity Table T slot Distance b/w spindle nose to table surface Table Size	Travel 700-850 mm 450-600 mm 450-600 mm Table	Travel Details
Y-Axis Travel  Z-Axis Travel  Table Loading Capacity  Table T slot  Distance b/w spindle nose to table surface  Table Size	700-850 mm 450-600 mm 450-600 mm Table	Travel Details
Y-Axis Travel  Z-Axis Travel  Table Loading Capacity  Table T slot  Distance b/w spindle nose to table surface  Table Size	450-600 mm 450-600 mm Table	
Z-Axis Travel  Table Loading Capacity  Table T slot  Distance b/w spindle nose to table surface  Table Size	450-600 mm  Table	
Table Loading Capacity Table T slot Distance b/w spindle nose to table surface Table Size	Table	
Table T slot  Distance b/w spindle nose to table surface  Table Size		
Table T slot Distance b/w spindle nose to table surface Table Size	Min 400 KG	Table Details
Distance b/w spindle nose to table surface Table Size		
Table Size	18x3x100 mm	
Table Size	100 mm - 600 mm or Nearest	
	(900-1000) x (450-600) mm	
AC Spindle Motor	Power & Motor	Power & Motor Details
	Fanuc α 8 (7.5 KW cont./11 KW 30 min) or Equivalent	
AC Servo Motors	A22i, 4 KW for X/Y / A22 B, 2.5KW for Z Axis or Equivalent	
	Feed	Feed Details
Rapid Traverse ( X/Y/Z Axis)	Minimum 30/30/24 m/min	
Max Cutting Feed Rate	1~10 m/min or Better	
	ATC System	ATC System Details
Туре	Umbrella/Armless (Minimum 16 T Or Equivalent)	Are system Details
· ipc	Control & Drives	Control & Drives Details
Control	Fanuc 0i-MF 8.4"/10.4 " LCD Color Display or Equivalent	Control & Drives Details
Power Module	Fanuc A068-6140-H026 or Equivalent	
Spindle Drive	Fanuc A068-6220-H600 or Equivalent	
Tool Path Graphic Display	Fanuc or Equivalent	
Servo Drive	For X, Y & Z Axis Fanuc A068-6117-H209 or Equivalent  Cooling System	Caaling System Dataile
Contract Tout		Cooling System Details
Coolant Tank	Capacity Min. 100 Litres	
Handy Coolant Gun	Shall be Included	Characterist Assessment - Date lle
	Standard Accessories	Standard Accessories Details
Leveling Block & Plates	Shall be Included	
Slides Lubrication Unit	Automatic Type for X,Y,Z Axis	
Oil Water Separator	Shall be Included	
Coolant Blast Through Spindle	Shall be Included	
Cooling Unit	Oil Cooling Unit for Spindle (Habor) or Equivalent	
Splash Guard	Fully Enclosed	
Work Lamp	Shall be Included	
Manuals (English)	Hard & Soft Including Operation & Maintenance Manuals & Drawings	
Interface	RS-232 Interface, LAN and CF Card or U.S.B.	
Transformer	Primary Input Voltage 415 / 380 ( 50 Hz 3 Phase) Yeon or Equivalent	
Spindle Lock Function	Shall be Included	
	Safety Features Detail	Safety Features Detail
Lubrication Safety		
Air Pressure Safety		
Spindle Over Heat Safety		
Spindle Over Load Safety		
Axis Motor Safety		
Door Safety		
Emergency Stop Function		
Safety Instructions		
Tool Unclamp & Clamp Safety		
Dust & Oil Protection		
Overloads & Fuse Box		
Alarm Indication Buzzer & Lights		
Machine Alarm Indications & Remedies		
	General	Values/Details
Machine Weight	Minimum 5000 KG	
Spindle Bearing Assembly	Runout & Life Value	
Pretension Ball Screw	Minimum Pre-Tensioned Ball Screw on X/Y/Z Axis Hiwin Taiwan or Equivalent	
Positioning Accuracy	0.005 mm per 300 mm or Better	
Repeatable Accuracy	(+/-) 0.003 mm or Better	
	THK or Equivalent	
Linear Guides Ways	Minimum 3 Months with Manufacturer Certification	
Linear Guides Ways  Aging Time of Casting Structure	12 Months from Date of Commissioning of Machine	
Aging Time of Casting Structure		
Aging Time of Casting Structure Standard Warranty	Ø 65 mm or Better	
Aging Time of Casting Structure Standard Warranty Diameter of Spindle	Ø 65 mm or Better  Min 10 Years	
Aging Time of Casting Structure Standard Warranty		