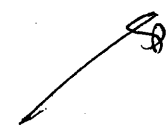


**SPECIFICATIONS FOR STANDARDIZATION OF 3 AXIS CNC MACHINING CENTER (SMALL TYPE)**  
(Small Arms Factory)

Ser.	Parameters	BOF Requirement
(a)	(b)	(c)
1.	Name of Machine	To be mentioned
2.	Model No.	To be mentioned
3.	Purposes/uses of Machine	To be described (video will be provided if available)
4.	Country of Origin	To be mentioned
5.	Country of Manufacturer	To be mentioned
6.	Name of Manufacturer	To be mentioned
7.	Country of assembling	To be mentioned
8.	Name of the Principal	To be mentioned
9.	Name of the Local Agent	To be mentioned
10.	Country of Major Components (All Servo motors, Spindle Motor, Control system including servo drives, Hydraulic Pump, Lead Screw, Main body, Tool Magazine, Pneumatic actuators, Vector drive if available and electronics PCB cards)	To be mentioned
11.	Percentage (%) of spares other than the machine manufacturing country with their list and country of origin	To be mentioned
12.	Port of Shipment	To be mentioned
	<b>Specifications:</b>	
	<b>a. Table Size:</b>	
	(1) Minimum Length (L) 900 mm	To be mentioned
	(2) Minimum Wide (W) 350 mm	To be mentioned
	(3) Maximum Length (L) in mm	To be mentioned
	(4) Maximum Wide (W) in mm	To be mentioned
	<b>b. Table travel:</b>	
	(1) Minimum Longitudinal Travel (X axis) 750 mm	To be mentioned
	(2) Minimum Transverse Travel (Y axis) 400 mm	To be mentioned
	(3) Minimum Vertical Travel (Z axis) 500 mm	To be mentioned
	(4) Maximum Longitudinal Travel (X axis) in mm	To be mentioned
	(5) Maximum Transverse Travel (Y axis) in mm	To be mentioned
	(6) Maximum Vertical Travel (Z axis) in mm	To be mentioned
	c. Control axis (X, Y & Z) (Available or not)	To be mentioned
	d. Type of spindle taper hole	To be mentioned
	e. Spindle speed in rpm	To be mentioned
	f. Spindle motor power in KW	To be mentioned
	g. Minimum distance from spindle nose to surface of table	To be mentioned
	h. Maximum distance from spindle nose to surface of table	To be mentioned
	j. Minimum cutting speed in mm/min	To be mentioned
	k. Maximum cutting speed in mm/min	To be mentioned
	l. Tool diameter (full magazine & empty magazine) in mm	To be mentioned
	m. Maximum tool length in mm	To be mentioned
	n. Minimum Rapid traverse in m/min	To be mentioned
	o. Type of control system	To be mentioned
	<b>p. Display monitor:</b>	
	(1) Screen size	To be mentioned
	(2) Adjustable operator panel (Available or not)	To be mentioned
	(3) Adjustable angle (Available or not)	To be mentioned
	(4) Adjustable position (Available or not)	To be mentioned
	q. Minimum Memory capacity in Gigabyte (GB)	To be mentioned
	r. Magazine Capacity (Automatic tool changing system) (Available or not)	To be mentioned
	<b>s. Power Supply:</b>	
	(1) Voltage	To be mentioned



Ser.	Parameters	BOF Requirement
(a)	(b)	(c)
	(2) No of Phase	To be mentioned
	(3) Frequency	To be mentioned
	t. Tool measuring probe (Automatic or manual)	To be mentioned
	u. Automatic Voltage Regulator (Integral or Separate)	To be mentioned
	v. On line diagnosis and troubleshooting option (Remote maintenance)	To be confirmed
	<b>w. Items inbuilt with the machine:</b>	
	(1) Tool Changing Arm (Available or not)	To be confirmed
	(2) Draw Bar Collette (Available or not)	To be confirmed
	(3) Water gun (Available or not)	To be confirmed
	(4) Type of Pneumatic Tail Stock with live center	To be mentioned
	(5) Pull studs as per spindle taper	To be mentioned
	(6) Type of Multi auger Chip Conveyor System	To be mentioned
	(7) Control Cabinet cooler (AC Unit for cooling) (Available or not)	To be confirmed
	(8) Air Gun (Available or not)	To be confirmed
13.	<b>Conditions:</b>	
	a. The Machine must be able to perform following operations: (1) Milling, (2) Drilling, (3) Reaming etc.	To be confirmed
	b. List of accessories, attachments, tools, cutters etc required to perform the above mentioned operations with price.	To be mentioned
	c. Manual Work/Tool offset measuring device (Available or not).	To be confirmed
	d. List of standard accessories including cooling, lighting, lubricating & control system.	To be mentioned
	e. All necessary software are needed to operate the Machine (Available or not)	To be confirmed
	f. User/ programming manual in English (Hard & Soft copy).	To be confirmed
	g. Available of Operation, Maintenance and Repair manual (Hard & Soft copy) with parts catalogue and circuit diagram of electrical devices in English. These books must contain the following topics/items:	To be confirmed
	(1) Operation manual: Hydraulic, Pneumatic, Electrical, Electronic and Mechanical operational circuit and component diagrams with their detail working principles & description. Simulation/Animation of major items working/operation to be included in the soft copy.	To be confirmed
	(2) Maintenance and Repair Manual: Detail troubleshooting & repair procedure as well as maintenance and safety system.	To be confirmed
	h. Machine installation, commissioning & trial run is done by the supplier within one month (30 days) from the date of arrival of the machines at BOF.	To be confirmed
	i. Local training facilities (Machine operation, maintenance, trouble shooting and repair training) with following topics:	To be confirmed
	(1) Details operation of electrical, electronics, pneumatic system, hydraulic system and mechanical system with diagrams in details.	To be confirmed
	(2) Control system: program loading and unloading, debugging, editing and servo drive and servo motors interconnecting and parameter setting in details.	To be confirmed
	(3) Troubleshooting artificial problems to be created by removing sensors and changing the parameters of servo drive and servo motors then faults diagnosis and repair procedures.	To be confirmed
	j. Safety procedures.	To be provided
	k. Local training plan (Available or not)	To be mentioned
	l. Available of foreign training at machine manufacturer site (operation and maintenance training).	To be confirmed
	<b>m. Pre-Shipment Inspection :</b>	
	(1) Pre-shipment Inspection (PSI) possible or not	To be mentioned
	(2) Plan of PSI Modus Operandi	To be mentioned
	n. Warranty for one year after acceptance.	To be confirmed
	o. Assurance of Fast and slow moving spares with quoted price including yearly escalation minimum for 10 (ten) years	To be confirmed
	p. Available of Service support for 10 (ten) years after installation of the machines.	To be confirmed

Ser.	Parameters	BOF Requirement
(a)	(b)	(c)
	q. Original brochure and catalogue	To be submitted
	r. Upgraded version of control system with manual guide-i/ equivalent.	To be mentioned
	s. Basic axes X, Y & Z dedicated/ integral to the machines (no additional /optional attachments/ items to be used as any of the basic axes)	To be confirmed
	t. Machine's electrical cabinet equipped with Air condition system (Available or not)	To be mentioned
	u. Air Dryer with Filter and Automatic Voltage Regulator (AVR) (Available or not)	To be mentioned
	v. Tool Box and Chip Conveyor Trolley (Available or not)	To be confirmed
	w. All motors and drives are of same control system.	To be confirmed
	y. Price of the Machine with all standard accessories.	To be mentioned
14.	Any other information deemed necessary for your machine	To be mentioned

