

DETAILS OF THE MACHINE

Sl. No	Specification			A/U	Qty
(a)	(b)			(c)	(d)
	CNC Cylindrical Grinding Machine with all standard and additional accessories as per specificaiton below :			No	1
	Brand & Model : To be mentioned				
1.	<u>Specification:</u>				
	<u>Table :</u>				
a.	Distance between centers	mm	700 ~ 1000		
b.	Swivel (Clock wise + Counter Clock wise)	Degree	Minimum 8		
c.	Longitudinal Travel	mm	800 ~ 1200		
d.	Feed Rate	mm/ min	Minimum 0.01 & Maximum not less than 10,000		
e.	Grinding diameter Range	mm	Minimum 5 & maximum not less than 200		
	<u>Wheel Head :</u>				
a.	Spindle Speed	rpm	Minimum 1500		
b.	Swivel of wheel head (Clockwise + Counter clockwise)	Degree	Minimum 180°		
c.	Wheel size	-	To be mentioned		
d.	Travel	mm	220~400		
e.	Feed Rate (minimum & maximum)	mm/ min	To be mentioned		
	Control Resolution	mm	0.0001		
	Maximum work piece weight	Kg	80 ~ 120		
	Automatic Wheel dresser (CNC control)	-	To be provided		
	Control type: FANUC/SIEMENS/HAAS Series with external diagnosis monitor	-	To be mentioned		
	Screen Size	Inch	10.4 Color Screen or bigger		
	Power Supply	-	380-400V, 3ph, 50 Hz (Power supply of BOF is not uninterrupted)		
	Software : Compatible CAD CAM/ Master CAM software with post processor (if necessary) to be supplied along with the machine. Software password/license key with lifetime validity should be provided along with the machine. if the software is updated, the principal manufacturer must provide the updated software at free of cost to BOF.	-	To be mentioned		
2.	Country of Origin	:	Group A		
3.	Country of Manufacture	:	Group A		
4.	Port of Shipment	:	Group A		
5.	Country of Manufacturer of Main Components (Servo Motor, Servo Drive, Spindle Motor, HMI, Control system, Hydraulic Pump, Main body)	:	Group A		
6.	<u>Terms & Conditions :</u>				
a.	Following accessories/tools for each machine must be supplied with the machine:				
(1)	External grinding wheel for HSS and Carbon Tool Steel	Nos	Qty- 6		
(2)	External grinding wheel flange (extra)	Nos	Qty- 2		
(3)	Carbide dead Centre	Nos	Qty- 4		
(4)	Carbide female dead Centre	Nos	Qty- 2		
(5)	Blade Type Diamond Wheel Dresser	Nos	Qty- 15		
(6)	Diaform Diamond Wheel Dresser (Radius 0.5 mm)	Nos	Qty- 15		
(7)	Dock carrier	Nos	Qty- 2		
(8)	Air Gun	Nos	Qty- 1		

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	(9)	Water Gun	Nos	Qty- 1		
	(10)	Wheel Balancer	Nos	Qty- 1		
	(11)	Compatible PC/ Laptop for CAD-CAM programming	Nos	Qty- 1		
	(12)	Tool Box	Set	Qty- 1		
	All standard and special attachment and accessories must be mentioned in the offer and supplied along with the machine to manufacture different types of tools-cutter, gauge, jigs-fixture, die-punch etc. as per sample drawing attached using CAD-CAM. Machine is to be capable of grinding materials of Carbon tool steel, Carbon Structural steel, High speed steel and Alloy steel etc.					
	b.	All additional accessories, attachments supplied with the machine are to be mentioned with price in the financial offer.				
	c.	List of spare parts with price required for 5 (Five) years operation is to be submitted in the financial offer.				
	d.	All optional items with price must be mentioned in the financial offer which will be certified by the manufacturer of the machine not by local agent.				
	e.	Machine installation, trial run, operational and maintenance training is to be provided by the certified engineers of machine manufacturer at BOF site (mentioned at g)				
	f.	Pre-shipment Inspection (PSI) : PSI of the machine will be carried out by 2 (Two) BOF persons for 3 (Three) working days (excluding journey period). All cost of the PSI to be borne by BOF.				
	g.	Installation Requirement at BOF :				
	(1)	It is the responsibility of supplier to fully integrate and commission the machine at BOF's identified site/ room. Machine installation and commissioning is to be provided by the certified engineers of machine manufacturer from same country or at least from same group of countries at BOF site.				
	(2)	BOF shall only provide utility service up to near proximity. All other related equipment, connections and fittings or any related things required for successful installation and running of the machine will be provided by the supplier.				
	(3)	Supplier shall bring all necessary calibration standards and calibration equipment for ensuring the machines accuracy with valid traceability certificates at BOF site.				
	(4)	After installation and commissioning of the machine, trial run, trial production followed by operational and maintenance training of BOF personnel by the certified engineers of machine manufacturer from same country or at least from same group of countries at BOF site to be provided. The training should cover complete operation, application, software usage (if required) in all aspects of measurement and data analysis, part programming for required samples, calibration, basic and preventive maintenance and troubleshooting etc. Following information must be given as below :				
	Ser	Items	Responsible (Supplier/BOF)	Duration		
	(a)	(b)	(c)	(d)		
	1.	Site Preparation	BOF and Supplier	To be mentioned		
	2.	Installation and Commissioning	Supplier	To be mentioned		
	3.	Trial Run	Supplier	To be mentioned		
	4.	Trial Production	Supplier	To be mentioned		
	5.	Local Training	Supplier and Foreign Trainer	To be mentioned (Minimum 7 working days)		
		Repair and Maintenance Training	Supplier and Foreign Trainer	To be mentioned (Minimum 7 working days)		
	Post Installation Requirement at BOF :					
	(1)	It is the responsibility of supplier to fully integrate, erect and commission the machine at BOF's identified site/ room. Machine installation and commissioning is to be provided by the Supplier at BOF site (within 60 days)				

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	after receiving machine by BOF.		
	(2) BOF only provides utility service up to near proximity. All other related equipment, connections and fittings or any related things required for successful installation and running of the machine will be provided by the supplier.		
	(3) Supplier shall bring all necessary calibration standards and calibration equipment for ensuring the machine accuracies with valid traceability certificates at BOF site.		
	(4) After installation and commissioning of the machine Trial Production and Trial Run (minimum 5 working days excluding installation and commissioning period) by the Supplier's Technical Team at BOF site to be provided.		
	<p><u>Software and License :</u></p> <p>If any software update, license key is required for the machine, supplier must provide this for machine's lifetime free of cost. Remote or system locking of the machine using software and password is not allowed. If done so, BOF will have the authority to reject the machine.</p>		
h.	2 x operation/ programming manual in English (Hard & Soft copy) must be supplied with the machine.		
j.	2 x maintenance/ repair manual (Hard and Soft copy) with mechanical spare parts list along with circuit diagram and troubleshooting with remedy in English must be supplied with the machine.		
k.	All necessary software to handle & maintain the machine must be supplied along with the machine.		
l.	The supplier must mention whether they have the facilities of providing distance/on line trouble-shooting facilities for the supplied machines or not and If available then the supplier must quote the additional items (if needed) with their prices for this facilities.		
m.	Warranty for 1 (One) year after acceptance should be provided by the manufacturer.		
n.	Automatic wheel dressing system and Automatic wheel balancer system must be in-built in the machine.		
p.	Bidder should submit original Leaflet/ Brochure with the offer.		
q.	The service support with spares for minimum 5 (five) years to be provided by the manufacturer.		
r.	Country of manufacture and assembly should be mentioned in the offer.		
s.	If any component/part of the machine is from the country other than the machine manufacturing country then the name of the country (which also must be of group 'A' country) must be mentioned with the component/part.		
t.	Any other points related to do the required job should be mentioned in the offer.		

General Terms & Conditions :

Supplier must mention their compliance on the following mentioned points :

1. A principal/manufacture can submit **only one offer through one local agent** for any individual item. Offers through multiple local agents by same principle/manufacture will be **treated as rejected**.
2. To ensure unhindered LC handling the principal must provide a certificate to confirm that their LC operating bank has RMA (Relationship Management Agreement) with the local Banks of Bangladesh.
3. Supplier must **clearly mention** (in the technical offer) that as principal/manufacture they poses necessary **export permit** from the concern ministry or any other authority of their country. They must also submit a certificate in this regards as per the attached specimen format at Annex F.
4. Before signing the contract, Performance Guarantee @ 10% of total LC value is to be submitted by the Principal in favour of Commandant, Bangladesh Ordnance Factories, Gazipur Cantonment, Gazipur through any scheduled Bank located in Bangladesh (As per the format at Annex D).
5. A separate **certificate should be provided** by the principal **originally signed** (Computerized or digitally edited signature will not be accepted) stating that they are aware of the requirement of the PG and if the contract

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is awarded they will be bound to provide the PG as per the format at Annex E, otherwise administrative action will be taken against the principal and local agent

6. The stores should be supplied to BOF at **supplier's cost**.
7. On arrival of the stores at BOF, the supplier must complete installation, commissioning, trial run & trial production within 1(One) month (from the date of entry at BOF). Otherwise, penalty will be imposed at the rate of 2% but not less than 1% and will not exceed 10% of the total CFR/LC value (As applicable).
8. If the supplier fails to deliver the stores within the stipulated period, the followings will be applicable:
 - a. Cancel the contract and/or
 - b. Decision at the discretion of BOF.
9. Inspectorate is the authority in all matters pertaining to Inspection. Any verdict by the inspectors regarding rejection, acceptance, and/or deviation of machine involving price reduction will be treated as final and will not be subject to arbitration.
10. The Supplier must submit the following **attested documents** with the schedule :
 - a. **Trade License**
 - b. **Tin Certificate**
 - c. **Up to date VAT Registration certificate.**