

TENDER SPECIFICATION OF VALVE GRINDING MACHINE

1. **Name of the Equipment.** Valve Grinding Machine.
2. **Purpose.** The machine will be used for valve face re-facing/grinding of Diesel Engines to restore the surface and angle of worn valve face to improve efficiency.
3. **Quantity.** 01 (One) complete set.
4. **Manufacturer, Principal Supplier & Local Agent.** Name and full address to be mentioned.

1.	Manufacturer/ Brand	To be mentioned
2.	Principal Supplier	To be mentioned
3.	Local Agent	To be mentioned

5. **Year of Manufacturing.** 2025 or later.
6. **Country of Origin.** USA, UK, EU Countries, Switzerland, Norway, Canada, Japan, Australia, South Korea, New Zealand and Turkiye.
7. **Manufacturing Country.** USA, UK, EU Countries, Switzerland, Norway, Canada, Japan, Australia, South Korea, New Zealand and Turkiye.
8. **Certificate/Document of Authentication.** The local agent must provide following certificate(s)/ document(s) with the offer/quotation as regard to the genuineness of source and item(s) in order to establish chain of links from the original source to supply:

- a. One certificate/document by the manufacturer in favour of the supplier (in case of manufacturer as direct source).
- b. Two certificates/documents, one by the manufacturer to authorized agent and other by the authorized agent to supplier (in case of authorized agent as immediate source).
- c. Three certificates/documents, first one by the manufacturer to authorized agent, second one by authorized agent to sub-agent and third one by sub-agent to supplier (in case sub-agent as immediate source). If the supplier is unable to obtain the first certificate (by manufacturer to authorized agent), then it has to produce relevant document to prove agency-ship of its claimed agent of the recognized manufacturer.

9. **Standard.** The Valve Grinding Machine is to be designed and constructed fulfilling the requirement of international standard. The standard to which the quoted Valve Grinding Machine complies with is to be specified (ISO or similar).

10. **Operating Environment of Machine.** The environment under which the machine will be operated and their performances will be measured is as under:

1.	Air temperature	+05°C to +45°C.
2.	Relative humidity	Up to 95% (non-condensing)
3.	Location	Close to the sea



11. **Scope of Supply.** The scope of supply is to include the followings:

- Main item (01 x Valve Grinding Machine) complete with all items necessary for immediate operation without the requirement of any other items (attachments, accessories, consumables, etc) (as per paragraph 12 and 13).
- Tools & Special tools (as per paragraph 14 & 15).
- Document and certificates (as per paragraph 16 and 17).
- Installation (as per paragraph 18).
- Test, trial & acceptance and Training (as per paragraph 19 and 20).
- Warranty (as per paragraph 21).
- Any other issue relevant (if any).

12. **Technical Specification.**

Ser	Description	
a.	Type	Electric driven
b.	Model	To be mentioned
c.	Maker	To be mentioned
d.	Valve stem diameter range	06-40 mm
e.	Grinding angle	20°-60°
f.	Maximum valve head diameter	180-200 mm
g.	Grinding wheel rotation speed	2500-3000 rpm
h.	Valve spindle rotation speed	20-50 rpm
j.	Cooling system	Built in cooling system
k.	Weight of machine	To be mentioned
l.	Dimension (L×W×H)	To be mentioned (Preferably compact)
m.	Electric power supply	400V, 50 HZ, Three Phase. (The motor will have the tolerance of $\pm 10\%$ voltage fluctuation)
n.	Essential accessories	(1) 2×Grinding wheel dresser (2) 2×Dressing diamond (3) 1×Extra fine corundum grinding wheel (4) 1×Silicon carbide grinding wheel (5) 1×Titanium grinding wheel (6) 2× Standard corundum grinding wheel (7) 1×Additional 40 liter coolant in suitable jar/can (8) 1×Universal Bevel protector

13. **Standard Accessories.** The list of standard accessories must include all items and accessories which are essential to operate the Valve Grinding Machine, whether those are mentioned in the specification or not are also to be submitted. The price of standard accessories is to be included in the FOB value. However, an itemised price list of standard accessories is to be provided with the offer for reference value only.

14. **Tools.** 01 (One) set of tools for carrying out maintenance of the Valve Grinding Machine is to be supplied **free of additional cost.**

15. **Special Tools.** A recommended list of special tools (if required) for carrying out maintenance of the Valve Grinding Machine is to be submitted with the quotation indicating the itemised price. That price will be added to the total price while evaluating the comparative price of the suppliers.



16. **Documents.** 02 (Two) sets of following documents in English language are to be supplied with the machine:
- Instruction manual including technical specification, installation, operation and maintenance.
 - Workshop level repair manual.
 - Electrical diagram, fault finding flow chart etc.
 - Spare parts catalogue.
 - Factory test certificate/performance certificate.
17. **Quality Assurance Certificate.** Quality assurance certificate in respect of the associated equipment in regards to its manufacturing and performance is to be provided at the time of delivery of the items.
18. **Installation.** The item will be installed at BN Dockyard (Machine Shop) by the supplier in presence of the representative of the buyer. All necessary installation materials are to be supplied with the complete set without additional cost.
19. **Test, Trial and Acceptance.** Supplier will carry out test and trial of the items at the purchaser's premises in Chattogram in presence of the purchaser's representative and handover the items in fully operational condition to the purchaser. After satisfactory test, trial and necessary training, an acceptance certificate will be signed jointly by the supplier's representative and the representative of buyer.
20. **Training.** The manufacturer's/supplier's installation engineer will provide operation and maintenance training in Bangladesh to 05 (Five) operators for 02 (Two) days after test, trial and commissioning of the Valve Grinding Machine. Training must include operation, watch keeping, periodic inspections, routine maintenance and repairs including replacement and calibrations/tuning/setting to work (STW) of the Equipment. Cost of training is to be borne by the supplier.
21. **Warranty.** Warranty for trouble free operation is to be given by the manufactures for a period of at least 01 (One) year from the date of acceptance by the buyer. During the warranty period, if the machine remains non-operational for any action pending by the supplier, the warranty period will be extended for the same period. The warranty covers all parts and labour (Including OEM or authorized service engineer's cost) throughout the warranty period.
22. **Shipment.**
- The supplier will arrange shipment of all items to any sea/air port of Bangladesh.
 - All items are to be delivered in sea/air worthy packing to ensure safe transit by sea/air.
 - All packages are to have packing notes showing their contents in detail and all packages shall be marked with the name and address of the consignee and gross weight.
 - The supplier will arrange transportation of all supplied items from respective sea/air port to NSD Chattogram.
 - Port of Shipment.** Any port of manufacturing country. In case of shipment through any port of manufacturer's authorized dealer, relevant manufacturer's certificate is to be provided as a proof of genuineness of the offered item.



23. Delivery.

a. The items are to be delivered within 09 (Nine) months from the date of signing the contract to the following consignee:

The Commanding Officer
Naval Stores Depot Chattogram
New Mooring, Chattogram, Bangladesh

b. Place of delivery. NSD Chattogram.

24. Validity of Offer. The offer should remain valid till 06 (Six) months from the date of tender opening.

25. Currency. Foreign Currency.

26. Terms of Payment. L/C for the full purchase amount will be opened in favour of the principal supplier under the following payment terms:

a. 80% of the total CFR value will be paid on delivery of the goods described under the scope of supply and on production of necessary shipping documents.

b. The remaining 20% of the CFR value will be paid upon producing an 'Acceptance Certificate' after satisfactory test and trial jointly carried out by the buyer's and supplier's representatives

27. Condition for Acceptance of Quotation. Quotation has to have supporting documents (booklets, leaflet, catalogue, brochure etc) having detailed particulars of the offered machine. If detailed information regarding specifications, maker's books and catalogues, spare parts, accessories, scope of supply, authentication certificate etc are not provided, the quotation will not be accepted.

28. Compliance Statement. A compliance statement fulfilling all the requirement of the tender is to be submitted for evaluation of the quotations. Merely stating 'Yes' or 'No' will not suffice, rather detail description/information as required is to be provided. An incomplete compliance statement may attribute to cancellation of the offer. If any clause of this specification does not commensurate with offered Valve Grinding Machine, the deviation has to be spelt out clearly.



SAEED AHMAD SADY
Lt Commander BN
Assistant Director Purchase (Navy)
Directorate General Defence Purchase