

**TENDER SPECIFICATION OF CNC HYDRAULIC 4 ROLL PLATE BENDING MACHINE
(BENDING CAPACITY: 05-25 MM) FOR CSD**

1. **Name of the Equipment.** CNC Hydraulic 4 Roll Bending Machine (Bending Capacity: 05-25 mm).
2. **Purpose.** CNC Hydraulic 4 Roll Bending Machine will be used in the dockyard to bend various plates of different profiles for the ship's hull repair and maintenance.
3. **Quantity.** 1 (one).
4. **Manufacturer, Principal Supplier & Local Supplier.** Names and full addresses are to be mentioned in the following table.

Ser	Description	Remarks
a.	Brand/Manufacture	To be mentioned
b.	Principal Supplier	To be mentioned
c.	Local Supplier	To be mentioned

5. **Year of Manufacture.** 2024 or later. The item should be brand new and original.
6. **Country of Origin.** USA, UK, EU Countries, Japan, Canada, Australia, South Korea, Türkiye and New Zealand.
7. **Manufacturing Country.** Same as the Country of Origin.
8. **Certificate/Document of Authentication.** The local supplier must provide the following original certificate(s)/ document(s) with the offer/quotation of items as regards to the genuineness of the source and item(s) to establish a chain of links from the original source to supply:
 - a. One certificate/ document from the manufacturer in favour of the supplier (in the case of the manufacturer as the direct source).
 - b. Two certificates/ documents, one from the manufacturer to the authorised agent and the other from the authorised agent to the supplier (in case the authorised agent is the immediate source).
 - c. Three certificates/ documents, first one by the manufacturer to the authorised agent, second one by the authorised agent to the sub-agent and third one by the sub-agent to the supplier (in case of the sub-agent as immediate source). If the supplier is unable to obtain the first certificate (by the manufacturer to an authorised agent), then relevant documents to prove the agency-ship of its claimed agent of the recognised manufacturer need to be produced.
9. **Standard.** The CNC Hydraulic 4 Roll Bending Machine is to be designed and constructed according to international standards. The standard to which the quoted CNC Hydraulic 4 Roll Bending Machine complies is to be specified in detail (ISO/ABS/BV/LR/DNV/GL or any other equivalent global standard).



10. **Ambient Condition.**

Ser	Description	Remarks
a.	Air Temperature	5°C to 45°C
b.	Relative Humidity (RH)	Up to 95%(non-condensing)
c.	Location	Close to the seashore or hilly area

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

- a. 01 x CNC Hydraulic 4 Roll Bending Machine, with all items necessary for immediate operation without the requirement of any other items (attachments, accessories, consumables, etc) (as per paragraphs 12 to 15).
- b. Standard, Cutting, and Special Tools (as per paragraphs 16 to 18).
- c. Optional items (as per paragraph 19).
- d. Spare parts (as per paragraph 20).
- e. Documents (Instruction, Operation, Maintenance Manual, Spare Parts Catalogue, Certificates, etc., as applicable) (as per paragraphs 21 and 22).
- f. Test, Trial & Acceptance and Training (as per paragraphs 23 and 24).
- g. Pre-Shipment Inspection (PSI) and Factory Acceptance Test (FAT) (as per paragraph 26).
- h. Warranty and Guarantee (as per paragraphs 27 and 28).
- j. Any other issue relevant (if any).

12. **Technical Specification.** Detail technical and operational data of the CNC Hydraulic 4 Roll Bending Machine are to be provided as follows:

Ser	Description	
a.	Type	To be mentioned.
b.	Brand	To be mentioned.
c.	Model	To be mentioned.
d.	Bending capacity (plate thickness)	5 – 25 mm
e.	Pre-bending capacity	(13 - 15 mm) To be mentioned.
f.	Number of rolls	4 pcs
g.	Rolls working length	3000 mm - 3200 mm
h.	Top roll diameter (changeable)	150, 250, 330 mm
j.	Bottom roll diameter	(300 mm) To be mentioned.
k.	Side rolls diameter	(240 - 330 mm) To be mentioned.
l.	Conical Bend	1.5 times of top roll (minimum)
m.	Bending speed	To be mentioned



Ser	Description	
a.	Type	To be mentioned.
n.	Metal for processing	Ferrous and Non-ferrous metal plates
p.	Feeding rolls	To be mentioned
q.	Rolls positioning	To be mentioned
r.	Power supply	400V, 50 Hz, 3 Phase. The machine should have a tolerance of $\pm 10\%$ voltage fluctuation.
s.	Motor power	To be mentioned
t.	Oil tank capacity	To be mentioned
u.	Working height	To be mentioned

13. **Special requirements/ Features.** Following systems are required to be incorporated with the machine:

Ser	Description
a.	Hydraulic & Electrical systems auto shut off when overloading.
b.	Emergency stop wire around the machine.
c.	Automatic fault indicator system.
d.	Automatic and manual roll calibration system.
e.	Variable speed control of all axis.
f.	Automatic centralized lubrication system.
g.	Numerical control system.
h.	Plate feeding platform with alignment unit.

14. **Safety Devices.** The machine shall be provided with mechanical and electrical safety devices to avoid accidents to the operator and damage to the machine.

15. **Standard Accessories.** Standard accessories must include all items and accessories essential to operating the CNC Hydraulic 4 Roll Bending Machine, whether mentioned in the specification or not. 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.

16. **Standard Tools.** 1 (one) set of standard tools for maintenance of CNC Hydraulic 4 Roll Bending Machine is to be provided. The price of standard tools is to be included in FOB value. However, an itemised price list of standard tools is to be provided with the offer for reference value only.

17. **Cutting Tools.** The bidder will supply a complete package including all types of cutting tools (gear, groove, key, keyway, hexagonal, square, slid, slot, surface, drilling, boring), sleeves, inserts, adapters, etc., for all types of operations mentioned in the specifications. A list of cutting tools with specifications and quantities are to be submitted with the offer.

18. **Special Tools.** A recommended list of special tools required for carrying out maintenance of Truck Crane Mobile 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.



19. **Optional Items.** The quotation should include a list of optional items (if any) required to operate the CNC Hydraulic 4 Roll Bending Machine. When evaluating the comparative prices of the suppliers, only the prices of selected items by BN will be added to the total price.

20. **Spare Parts.** A recommended list of spare parts required for 05 years of satisfactory operation must be provided, indicating the itemised price. Only the prices of selected items by BN will be added to the total price while evaluating the comparative price of the suppliers.

21. **Documents.** 2 (two) sets of the following documents in English are to be supplied with the CNC Hydraulic 4 Roll Bending Machine (free of cost):

- a. The instruction manual includes technical specifications, installation, operation, and maintenance.
- b. Spare parts catalogue and its components.
- c. Factory test certificate/performance certificate.

22. **Quality Assurance Certificate.** Quality Assurance Certificate regarding the associated equipment in regard to its manufacturing and performance is to be provided at the time of delivery of the items.

23. **Test, Trial, and Acceptance.** The buyer will conduct tests and trials of the item at Chattogram in the presence of the supplier's representative. After a satisfactory test and trial, an acceptance certificate will be signed jointly by the supplier's representative and the buyer's representative.

24. **Training.** The supplier's/manufacturer's installation engineer will provide operation and maintenance training in Bangladesh to the operators for 5 (five) days after the CNC Hydraulic 4 Roll Bending Machine mobile is tested, trialled, and commissioned. The bidder will quote the cost of training separately in their financial offer. The supplier will bear the cost of the trainers' air ticket, internal transportation, accommodation, food, medical support, etc.

25. **Record of Sales.** Record of sales of the quoted model of the CNC Hydraulic 4 Roll Bending Machine indicating years and buyer with full address is to be submitted with the quotation.

26. **Pre-Shipment Inspection (PSI) and Factory Acceptance Test (FAT).**

a. Pre-shipment Inspection (PSI) and Factory Acceptance Test (FAT) will be carried out by 2 (two) BN officers for 3 (three) days, excluding the journey period, at the buyer's expense. The supplier should inform the buyer about the date and schedule of PSI and FAT at least 8 (eight) weeks before the commencement of the said PSI and FAT. After inspection, a joint inspection report will be prepared and signed by both the seller and buyer's representatives.

b. On return from the country of supplier, the BN officers will submit a report to DNE. DNE, through DTS, will, in turn, forward the final decision along with the PSI and FAT report within 02 weeks, based on which DGDP will render clearance for the shipment of stores to



the supplier concerned. The supplier will not ship any item of the contract without clearance from the DGDP.

c. All types of movement/ transportation (air, sea, road, rail) of the BN officers within the manufacturer/ supplier's country, reception and arrangement for entry into the country/ concerned area for the PSI and FAT are to be borne by the supplier

27. **Warranty.** Warranty for trouble-free operation is to be given by the supplier/ manufacturer for all the supplied items for a period of 12 months from the date of acceptance by the buyer. During the warranty period, if the CNC Hydraulic 4 Roll Bending 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 the service engineer's cost) throughout the warranty period. For warranty repair/ replacement, the supplier will collect the defective item from NSD Chattogram/ NSSD Dhaka (as applicable) and re-supply the same to the collecting place after warranty repair or for replacement.

28. **Guarantee.** The manufacturer will guarantee the supply of the spares for at least 10 years at a reasonable price. The yearly increase in the price of spares should not be more than 5% of the price provided in the quotation.

29. **Shipment.**

- a. The supplier will arrange shipment of all items by sea to any seaport of Bangladesh
- b. All items are to be delivered in sea-worthy packing to ensure safe transportation by sea. All packages should have packing notes showing their contents in detail and marked with the name and address of the consignee with gross weight.
- c. All packages should have packing notes showing their contents in detail and marked with the name and address of the consignee with gross weight.
- d. The supplier will arrange transportation of all supplied items from Chittagong port to the NSD Chattogram.
- e. **Port of Shipment.** Any port of the manufacturing country. If the port of shipment is other than the manufacturing country due to some unavoidable reason, then a certificate from OEM is to be provided to prove the genuinity of the offered item.

30. **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.



c. The supplier will carry the items from Chittagong Seaport to NSD Chattogram at the cost and risk of the supplier.

31. **Validity of Offer.** The offer should remain valid until 180 days from the tender opening date.

32. **Currency.** Foreign Currency.

33. **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 items described under the scope of supply and on production of necessary shipping documents.

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

34. **Condition for Acceptance of Quotation.** The quotation has to have supporting documents (booklets, leaflets, catalogues, brochures, etc.) with details about the CNC Hydraulic 4 Roll Bending Machine. The quotation will not be accepted if detailed information regarding specifications, maker's books and catalogue for the quoted model of the CNC Hydraulic 4 Roll Bending Machine, spare parts, accessories, scope of supply, etc, are not provided.

35. **Compliance Statement.** A compliance statement fulfilling all the tender requirements is to be submitted with the offer to evaluate the quotations. Merely stating 'Yes' or 'No' will not suffice; rather, detailed descriptions/information as required are to be provided. An incomplete compliance statement may contribute to the cancellation of the offer. If any clause of this specification is not commensurate with the offered CNC Hydraulic 4 Roll Bending Machine, the deviation must be spelt out clearly.

