

**TENDER SPECIFICATION OF DOCK CRANE (CAPACITY: 3-5 TON) FOR CSD ORGANISATION**

1. **Name of the Equipment.** Dock Crane (Capacity: 3-5 tons).
2. **Purpose.** The Dock crane is intended to replace one existing rail travelling portal mounted slewing jib tower crane, operating on the stbd tower of the floating dock. The deck crane is used to prepare the dock bed for docking-undocking as well as to shift the heavy loads required for carrying out repair work.
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 regard to the genuinity 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 Dock Crane is to be designed and constructed according to international standards. The standard to which the quoted Dock Crane complies is to be specified in detail (ISO/BV/ABS/Class NK/DNV/LR or any other equivalent global standard).

10. **Ambient Condition.**

Ser	Description	Remarks
a.	Air Temperature	5°C to 50°C
b.	Relative Humidity (RH)	Up to 95% (non-condensing)
c.	Location	Close to the seashore



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

- a. 01 x Dock Crane, with all items necessary for immediate operation without the requirement of any other items (attachments, accessories, consumables, etc) (as per paragraphs 12 to 16).
- b. Standard Tools and Special Tools (as per paragraphs 17 and 18).
- c. Optional Items (as per paragraph 19).
- d. Spare parts (as per paragraph 20).
- e. Documents (user manual, maintenance manual, spare parts catalogue, drawings, etc, as applicable) and Certificates (as per paragraphs 21 and 22).
- f. Installation, Test, Trial and Acceptance (as per paragraph 23).
- g. Training (as per paragraph 25).
- h. Pre-Shipment Inspection (PSI) and Factory Acceptance Test (FAT) (as per paragraph 26).
- j. Warranty and Guarantee (as per paragraphs 29 and 30).
- k. Any other relevant issue (if any).

12. **Technical Specification.**

Ser	Description	Remarks
a.	Type	Dock Crane (Capacity: 3-5 ton)
b.	Model	To be mentioned
c.	Capacity	3 ton (Max Outreach)
d.	Rail Gauge	3.0 m
e.	Wheel Base	3.0 m
f.	Tower Deck to Sower Sheaves Height	13.042 m
g.	Free Wheeling Boggie to Boggie Distance	3.0 m
h.	Four Legged Portal to Portal Distance	4.110 m
j.	Maximum Load Distance (Tower Deck to Hook)	16.350 m
k.	Min Outreach	4.5 m
l.	Max Outreach	11 m
m.	Lifting Height Above Rail	14 m
n.	Lifting Height Below Rail	8 m
p.	Slewing Angle	360°
q.	<b>Main Power Supply</b>	
	(1) Operating Voltage	415V AC, 50Hz, 3Phase
	(2) Auxiliary Voltage	220V, 50Hz
	(3) Lighting	220V, 24V, 50Hz
r.	Cable Drum Designed for Max. of	To cover 115m length at least
s.	Dimension of the Cable	As per required design & operation
t.	Main Cable Length	At least 115 m ( for operation & securing)



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Ser	Description	Remarks
u.	<b>Operational Speed</b>	
	(1) Inching for all speeds	To be mentioned
	(2) Lifting V=approx	Not less than 1-20/1-10 m/min
	(3) Luffing V=approx	Not less than 10 m/min
	(4) Slewing v=approx	Variable speed from 0 to 2.5 rpm
	(5) Crane travelling v=approx	Not less than 30 m/min
v.	<b>Motor Output at a Temperature of 45°C, Voltage 380-440V AC, 50Hz, 3Phase</b>	
	(1) Hoist	To be mentioned
	(2) Luffing	To be mentioned
	(3) Slewing	To be mentioned
	(4) Travelling	To be mentioned
	(5) Total Connected Load	To be mentioned
w.	<b>Weights</b>	
	(1) Crane Structure	To be mentioned
	(2) Counter Ballast	To be mentioned
	(3) Total Crane with Max Load	Not more than 32.5 ton
x.	<b>Securing Arrangement</b>	
	Securing Crane for Storm Wind and Rough Weather	To be mentioned

y. **Fittings/Attachment.** All necessary fittings/attachments including the following will be provided with Dock Crane:

S No	Description	Qty
(1)	Navigation light and audible alarm	01 set
(2)	Common light fitting front, rear etc	As required
(3)	Buzzer for travelling	01 set
(4)	Operator's cabin glasses wipers	As required
(5)	Fitted load chart at operators cabin	As required
(6)	Hazard beacon light	As required
(7)	Easy operator's view/inspection arrangement and dashboard gauges	As per required design
(8)	Emergency stop push buttons	Not less than 04 in number
(9)	Operator joystick	As required
(10)	Wind direction device	1 set
(11)	Working radius indicator	As per required design
(12)	Communication system (VHF set) among operator, signal men and ship	To be mentioned
(13)	Operator's cabin to be air conditioned	To be mentioned
(14)	Exhaust blower/Air conditioner for control panel/ machinery room	To be mentioned
(15)	Travelling limit sensor with indication	Required
(16)	Radius limit sensor with indication	Required
(17)	Load limit sensor with indication	Required



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(18)	Comfortable and adjustable seat	Required
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13. **Cables.** Electric cable 4 core, Multi Strand, 60Amps 415-440V, 50 Hz, rubber insulated or better.
14. **Standard Accessories.** Standard accessories must include all items and accessories essential to operating the Dock Crane, whether mentioned in the specification or not. The price of standard accessories is to be included in the FOB value. However, item wise price list of standard accessories is to be provided with the offer for reference value only.
- a. Lightning protection.
  - b. Windscreen wipers.
  - c. Safety belt.
  - d. Air conditioning for operator's cabin.
  - e. Hazard beacon light.
  - f. Rear view camera with monitor fitted in the operator's cabin.
15. **Fire Fighting Facility.** Following fire fighting equipment to be supplied:
- a. 3 x CO<sub>2</sub> Fire extinguisher (Machinery room & Operator's cabin).
  - b. 3 x ABC Dry Powder (Machinery room & Operator's cabin).
  - c. Any other items if necessary are to be mentioned.
16. **Additional Accessories.** To smoothly perform the followings additional accessories to be needed for new dock crane (capacity: 03 ton).
- a. Grease gun with an appropriate greasing nozzle with the hose.
  - b. Safety harness (Qty: 04)
17. **Standard Tools.** 01 (one) set of standard tools for the maintenance of the Dock Crane is to be provided. The price of standard tools is to be included in the FOB value. However, an itemised price list of standard tools is to be supplied with the offer for reference value only.
18. **Special Tools.** A recommended list of special tools required for carrying out maintenance of the Dock Crane 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 Dock Crane. 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 prices of the suppliers:

S NO	Description	Deno	Qty
a.	Hoist rope	No	01
b.	Luffing rope	No	01
c.	Jib pulley	No	02
d.	Brake shoe (Hoist drum)	Set	02
e.	Brake shoe (Luffing drum)	Set	02
f.	Brake shoe (Slewing drum)	Set	02
g.	Brake shoe (Travelling drum)	Set	04



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h.	Joystick set assembly	Set	01
j.	Windscreen wiper assembly	No	02
k.	To cover 115 meter tower length power cable	No	01
l.	All magnetic contactors	Set	01
m.	All relay	Set	01
n.	All timer	Set	01
p.	All fuse	Set	05
q.	Travelling motor	No	02
r.	Cable reel motor	No	01

21. **Documents.** 2 (two) sets of the following documents in English are to be supplied with Dock Crane (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. **Certificates.** The manufacturer must give a certificate, which will form a part of the contract, stating that all the mechanical, electrical, and electronic components of the crane and its control system are currently in production. The following certificates should be provided with the crane as per international standards:

- a. Load certificates, rope certificates, and certificates for hook's load.
- b. Safety certificate.
- c. Other certificates as per standard practice and classification rules

23. **Installation, Test, Trial and Acceptance.** The supplier's representative will carry out the installation, test/trial and commissioning of the item at the purchaser's premises in Chattogram in the presence of the purchaser's representative and hand over the item in fully operational condition to the purchaser. During the test and trial of the crane, a full load test is to be carried out. If the trial is satisfactory, an acceptance certificate will be signed jointly between the supplier's and buyer's representatives.

24. **Record of Sales.** Record of sales of the quoted model of the Dock Crane indicating years and buyer with full address is to be submitted with the quotation.

25. **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 dock crane is tested, trialed, 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.

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, schedule, and procedure of PSI and FAT at least 8 (eight) weeks prior to 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 2 (two) 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 officer 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.



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27. **Site Visit.** Interested bidders may visit the installation site at their arrangement for a better understanding of the job. BN will arrange necessary permission/security clearance upon request by bidders. The request should be given two weeks prior to such a visit to enable BN to process necessary permission/security clearance.

28. **Supply Assurance Certificate.** The bidder should submit the necessary governmental license for the concerned components/items that are free for sale with the obligation to supply spare parts, technical advice, etc., in future.

29. **Warranty.** The principal/manufacture will give a warranty for trouble-free operation for at least one year from the date of acceptance by the buyer. During the warranty period, if the Dock Crane remains non-operational due to any action pending by the supplier, the warranty will be extended for the same period. The warranty covers all parts and labour (including the cost of the service engineer) throughout the warranty period.

30. **Guarantee.** The manufacturer will guarantee the supply of the spare parts for at least 5 (five) years at a reasonable price. The annual increase in the price of spares should not be more than 5% of the price list provided with the quotation.

31. **Shipment.**

- a. The supplier will arrange the shipment of all items by sea to Chittagong Port, Bangladesh.
- b. All items are to be delivered in sea-worthy packing to ensure safe transportation by sea.
- c. All packages must have detailed packing notes showing their contents, and they must be marked with the consignee's name, address, and 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. In case of shipment through any port of the manufacturer's authorised dealer, the relevant manufacturer's certificate is to be provided as proof of the genuineness of the offered item.

32. **Delivery.**

- a. The items are to be delivered within 9 (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 Port to NSD Chattogram at the cost and risk of the supplier.

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

34. **Currency.** Foreign Currency.

35. **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.



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

36. **Condition for Acceptance of Quotation.** The quotation has to have supporting documents (booklets, leaflets, catalogues, brochures, etc.) with details about Dock Crane. If detailed information regarding specifications, maker's books and catalogue for the quoted model of the Dock Crane, spare parts, accessories, scope of supply, etc, are not provided; the quotation will not be accepted.

37. **Compliance Statement.** A compliance statement fulfilling all the requirements of the tender is to be submitted with the offer for evaluation of 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 Dock Crane, the deviation must be spelt out clearly.