

TENDER SPECIFICATION OF DIESEL AIR COMPRESSOR

1. **Name of the Equipment.** Diesel Air Compressor.
2. **Purpose.** The air compressor will be used to provide compressed air for starting DG and charging air bottle.
3. **Quantity.** 01 (One) in number.
4. **Manufacturer/ Brands.** BN Standardized Brands {Reavell (USA), Gardner Denver (UK), Bauer (Germany), Quincy (USA), Deno Compressors (Netherlands)}.
5. **Year of Manufacturing.** 2023 or later.
6. **Country of Origin.** In accordance with paragraph 4.
7. **Manufacturing Country.** In accordance with paragraph 4.

Operating Environment of Compressor. The environment under which the compressor will be operated and their performances will be measured is as under:

a. **Ambient Condition.**

(1)	Air temperature	05°C to 45°C
(2)	Sea water temperature	05°C to 40°C
(3)	Relative humidity	Up to 95%

b. **Intake Air.** The compressor will take intake air from the atmosphere/machinery compartment where it will be installed.

9. **Certificate/Document of Authentication.** The local supplier must provide following original certificate(s)/document(s) with the offer/quotation of items as regard to the genuinity of source and item(s) in order to establish chain of links from the original source to supply items:

- 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).

10. **Standard.** The Diesel Air Compressor is to be designed and constructed fulfilling their requirement of international standards (class certificate, ISO etc).

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

- a. Main item (01 x Diesel Air Compressor with motor and starter etc), 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).
- b. Optional items (as per paragraph 14).
- c. Tools (as per paragraph 15).



- d. Spare Parts (as per paragraph 16).
- e. Documents (instruction manual, parts catalogue & repair manual, circuit diagram, test certificates etc, as applicable) (as per paragraph 17 and 18).
- f. Installation, Test/ Trial, Acceptance and Training (as per paragraph 19 to 21)
- g. Warranty and Guarantee (as per paragraph 22 and 23).
- h. Any other issue relevant (if any).

12. Technical Specification.

a. Air Compressor.

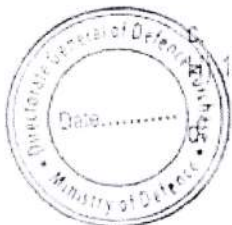
(1)	Type	Marine Diesel Air Compressor
(2)	Model	To be mentioned
(3)	Brand	BN Standardized Brands {(Reavell/Gardner Denver (USA/ UK), Bauer (Germany), Quincy (USA), Deno Compressors (Netherlands)}
(4)	Max working pressure	Working pressure 30 bar
(5)	Free Air Delivery (min)	Not less than 600 Ltr/min (36 m ³ /hr)
(6)	No of stage	To be mentioned.
(7)	Number of cylinder	To be mentioned.
(8)	RPM	To be mentioned (preferably 1450 to 1750 rpm).
(9)	Cooling arrangement	Air Cooled
(10)	Inlet condition	Atmospheric
(11)	Coupling type	To be mentioned.
(12)	Drive	Diesel Engine driven
(13)	Charging hose type	To be mentioned (Existing- Metallic).
(14)	Lubrication system	To be mentioned
(15)	Compressor oil	Grade and name of commercial equivalents to be mentioned

b. Diesel Engine (For Compressor):

(1)	Type	4 - Stroke diesel engine with direct injection
(2)	Model	To be mentioned
(3)	Maker	To be mentioned
(4)	No of Cylinder	To be mentioned
(5)	Speed control (Lowest ideal speed rpm)	To be mentioned
(6)	Starter	12V - 2.7 Kw - 24V - 4.0 Kw
(7)	Battery capacity (min/ max Ah)	12V - 88/ 143 Ah - 24V - 55/ 100 Ah

Overall Dimension To be mentioned. Available space for installation of compressor is (L X B X H) 1270 mm x 640 mm x 970 mm

Overall Weight. To be mentioned (Light weight is preferable) (Existing 510 Kg).



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e. **Mounting.** The compressor with all skid mounting accessories is to be mounted on a steel base frame with built in anti-vibration and shock mounting.

f. **Control Panel/ Devices.** The control panel for the compressor with additional manual arrangement (On/Off) is to be supplied and which will include start/stop arrangement, necessary valves, pressure gauge, drain valve, safety valve, safety trips/indication etc.

13. **Standard Accessories.** Any other standard accessories which are essential to install and operate the required functionalities shall be supplied whether or not those are mentioned in the specification. The price of standard accessories is to be included in FOB value. However, item wise price list of standard accessories is to be provided with the offer for reference value only.

- a. Mountings.
- b. Pressure gauges.
- c. Safety Devices

- (1) Low lubricating oil pressure alarm.
- (2) Low lubricating oil pressure shut off.
- (3) High air pressure shut off.
- (4) Safety valves at all stages.

- d. Pressure switch for auto cut off.
- e. Delivery air pressure gauge.
- f. Air inlet filter.
- g. Required HP air pipe and stop valves.
- h. Pressure maintaining valve.
- j. Non - return valve.
- k. Any other items necessary for smooth operation of the HP air compressor.

14. **Optional Items.** A list of optional items (if any) is to be provided with the quotation indicating item wise price for HP Diesel Air Compressor. Only the prices of selected items by BN will be added with total price while evaluating the comparative price of the suppliers.

15. **Tools.** 01 (one) set of standard tools for maintenance of HP Diesel Air Compressor is to be provided indicating item wise price. Quantity and size of these tools are to be mentioned in the quotation. That price will be added with total price while evaluating the comparative price of the suppliers.

16. **Spare Parts.** A recommended list of spare parts required for 05 years or 5000 hrs satisfactory operation of HP Air Compressor is to be provided indicating item wise price. Only the prices of selected items by BN will be added with total price while evaluating the comparative price of the suppliers.

17. **Documents.** 02 (two) sets of following documents in English language is to be supplied with HP Air Compressor (free of cost).

- a. Instruction manual including technical specification, installation, operation maintenance and workshop manual.
- b. Spare parts catalogue with internationally recognized part. No.
- c. Circuit diagram etc (if any).
- d. Factory test certificate/ performance certificate.

18. **Quality Assurance Certificate.** Quality assurance certificate in respect of the associated equipment in to its manufacturing and performance is to be provided at the time of delivery of the items.



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19. **Installation.** The buyer will install the HP Air Compressor. However, the supplier/ manufacturer will provide necessary drawings and instructions. All necessary installation materials are to be supplied with the complete sets.

20. **Test, trial and Acceptance.** The buyer will carry out the test and trial of the HP Air Compressor in presence of supplier's representative. After satisfactory test, trial and necessary training programme an acceptance certificate will be signed jointly by the supplier's representative and the representative of buyer.

21. **Training.** At least Three (03) days user and maintenance training is to be provided to 06 BN personnel by the supplier in the installation site where the compressor will be installed. Cost of training is to be borne by the supplier.

22. **Warranty.** Warranty for trouble free operation is to be given by the principal/manufacturer for a period at least 01 year from the date of acceptance by the buyer. During the warranty period, if the HP Air Compressor remains non-operational for any action pending by supplier, the warranty period will be extended for the same period. The warranty covers all parts and labor (including service engineer's cost) throughout the warranty period.

23. **Guarantee.** The manufacturer will guarantee to supply the spares for at least 05 years with reasonable price. Yearly increase of price of spares should not be more than 5% of the price list for spares to be supplied with the quotation.

24. **Shipment.**

a. The supplier will arrange shipment of all items by sea to any sea port of Bangladesh.

b. All items are to be delivered in sea-worthy packing to ensure safe transportation by sea.

c. 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 details and marked with the name and address of the consignee with gross weight.

d. The supplier will arrange transportation of all supplied items to the Naval Stores Depot, Chattogram.

e. **Port of Shipment.** Any port of the manufacturing country. If port of shipment is other than manufacturing country due to some unavoidable reason, then a certificate from OEM is to be provided to prove genuinity of the equipment.

25. **Delivery.** The supplied 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

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

27. **Currency.** Foreign Currency.

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

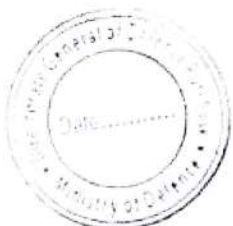
a. 80% of total CFR value will be paid on delivery of the items described under the scope of supply and on production of necessary shipping documents.

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



29. **Condition for Acceptance of Quotation.** Quotation has to have supporting documents (booklets, leaflet, catalogue, brochure etc) having detail particulars of the offered HP Air Compressor. If detail information regarding specifications, maker's books and catalogues about the same model of the HP Air Compressor is quoted, but spare parts, accessories, scope of supply, etc are not provided, the quotation will not be accepted.

30. **Compliance Statement.** A compliance statement fulfilling all the requirement of the tender is to be submitted for evaluation of the quotations. Stating mere 'Yes' or 'No' will not suffice and detail description/ information as required is to be given. An incomplete compliance statement may attribute to cancellation of the offer. If any clause of this specification does not commensurate with the offered HP Air Compressor, the deviation has to be spelt out clearly.



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