

TENDER SPECIFICATION OF FUEL OIL SEPARATOR (CENTRIFUGE)

1. **Name of the Equipment.** Fuel Oil Separator (Centrifuge).
2. **Purpose.** The Fuel Oil Separator is to be used both for the separation of oil-water mixtures (oil purification) and clarification of water-free oil, which will be used on board ship to supply fuel oil from storage tank to RU tank for operation of main engines and diesel generators etc.
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
1.	Brand/Manufacturer	To be mentioned.
2.	Principal Supplier	To be mentioned.
3.	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, Canada, Japan, Australia, South Korea, Turkey 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 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 cannot 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 Fuel Oil Separator is to be designed and constructed fulfilling the requirement of International standard. The standard to which the quoted Fuel Oil Separator with Accessories complies with is to be specified (class certificate, ISO etc).

10. **Ambient Condition.**

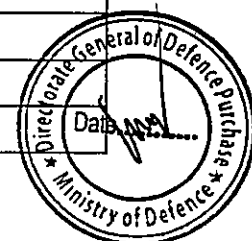
Ser	Description	Remarks
1.	Air temperature	+05°C to +45°C
2.	Relative Humidity	Up to 95% (non-condensing)
3.	Location	At sea

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

- a. 01 x Fuel Oil Separator (Centrifuge) with accessories with all items necessary for immediate operation without requiring any other items (attachments, accessories, consumables, etc) (as per paragraphs 12 to 14).
- b. Optional items (as per paragraph 15).
- c. Special tools (as per paragraph 16).
- d. Documents and certificates (as per paragraph 17 and 18).
- e. Installation, Test, Trial & Acceptance and Training (as per paragraph 19, 20 and 21).
- f. Warranty (as per paragraph 22).
- g. Any other issue relevant (if any).

12. **Technical Specification.**

Ser	Description
1.	Type Centrifuge type.
2.	Model To be mentioned.
3.	Maker To be mentioned.
4.	Capacity (Output delivery) Not less than 1100 ltr/hr.
5.	Bowl speed To be mentioned.
6.	Feed temperature range To be mentioned.
7.	Inlet pressure 0.4 bar (approximately)
8.	Outlet pressure 3 bar (approximately)
9.	Motor power supply 440V AC, 60 Hz, Three Phase. The unit should have the tolerance of $\pm 10\%$ voltage fluctuation.
10.	Control power supply 220V AC, 60 Hz, Single Phase.
11.	Motor power 0.75 kW (approximately)
12.	Motor speed To be mentioned.



13.	Material of the Pump Components	Suitable for marine use (stainless steel, brass, bronze etc)
14.	Overall Dimension	To be mentioned.
15.	Weight	To be mentioned.
16.	Safety	Safety alarm

13. **Cables.** Standard Cable for connection of the machine is to be provided.

14. **Standard Accessories.** Standard accessories must include all items and accessories essential for operating the Fuel Oil Separator, 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.

15. **Optional Items.** The quotation should include a list of optional items (if any) required to operate Fuel Oil Separator. When evaluating the comparative prices of the suppliers, only the prices of selected items by BN will be added to the total price.

16. **Special Tools.** 01 (one) set of special tools (if required) for maintenance of the Fuel Oil Separator is to be provided, indicating the itemised price. The quantity and size of these tools are to be mentioned in the quotation. The price will be added to the total cost while evaluating the comparative price of the suppliers.

17. **Documents.** 2 (two) Sets of the following documents in the English language are to be supplied with Fuel Oil Separator (free of cost):

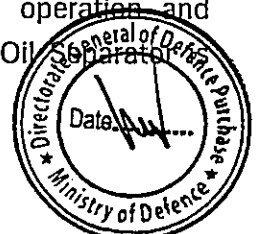
- a. The instruction manual including technical specifications, installation, operation, and maintenance (up to workshop level).
- b. Spare parts catalogue.
- c. Factory test certificate/performance certificate.
- d. Electrical diagram, fault finding flow chart etc.

18. **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.

19. **Installation.** The item will be installed on board BNS SHAIBAL by the buyer. However, the supplier will provide technical supervision to install the Fuel Oil Separator. All necessary installation materials are to be supplied with the complete set without additional cost.

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

21. **Training.** The supplier's/maker's installation engineer will provide operation and maintenance training in Bangladesh to the operators for 5 (five) days after the Fuel Oil Separator



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.

22. **Warranty.** The principal/manufacture will provide an warranty for trouble-free operation for at least one year from the date of acceptance by the buyer. If the Fuel Oil Separator remains non-operational during the warranty period 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.

23. **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.

24. **Shipment.**

a. The supplier will arrange the shipment of all items by sea/air to the respective port of 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 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.

25. **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, NSD 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.

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 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.

29. **Condition for Acceptance of Quotation.** Quotation has to have supporting documents (booklets, leaflet, catalogue, brochure etc) having detail particulars of the offered Fuel Oil Separator. If detail 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.

30. **Compliance Statement.** A compliance statement fulfilling all the requirement 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 description/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 Fuel Oil Separator, the deviation has to be spelt out clearly.

Enclosure:

- 1. Figure of sample Fuel Oil Separator (Centrifuge) - 01 (One) page.



SAMPLE FUEL OIL SEPARATOR (CENTRIFUGE)

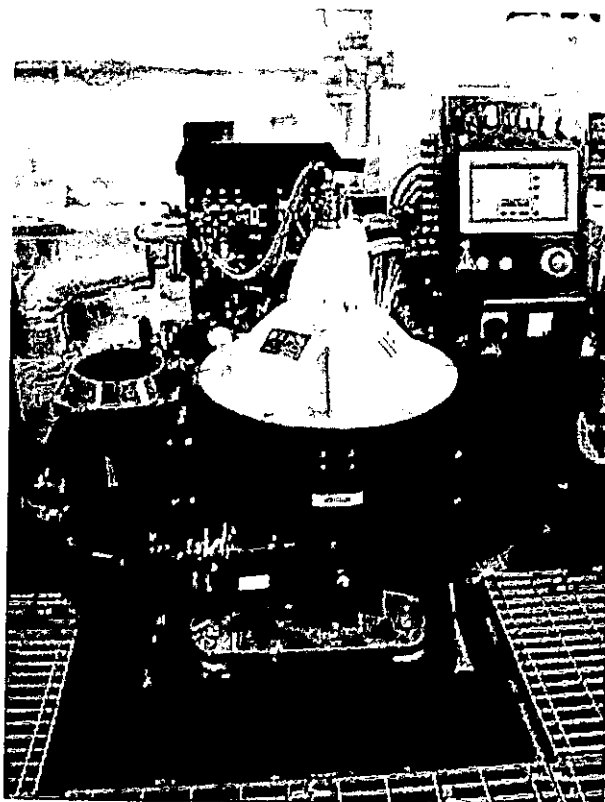


Fig: Fuel Oil Separator (Centrifuge)
(Not as reference, for general idea only)

