



TENDER DOCUMENT FOR FOREIGN PURCHASE
DOCKYARD & ENGINEERING WORKS LTD
BANGLADESH NAVY
SONAKANDA, BANDAR, NARAYANGANJ
Web: www.dewbn.gov.bd, E-mail- commercial@dewbn.gov.bd

Price of tender document Tk. 1000.00 (Taka One Thousand only) (Non-refundable)

TENDER DOCUMENTS FOR SUPPLY OF FITTINGS MATERIALS (ITEMS SERIAL NO: 01-64)

TENDER ENQUIRY NO- 06.02.6758.165.07.193.25.2171 DATE 09 APRIL 2025

DUE FOR OPENING ON: 24 APRIL 2025; AT TIME: 12:30 PM





DOCKYARD & ENGINEERING WORKS LTD
BANGLADESH NAVY
SONAKANDA, BANDAR, NARAYANGANJ
Phone: 02-7661480, Fax: 02-7661027
E-mail- commercial@dewltd.gov.bd

IMPORTANT POINTS

1. **TENDER NO:** 06.02.6758.165.07.193.25.2171 Dated 09 April 2025.
2. **DUE FOR OPENING ON:** 24 April 2025; AT Time: 12.30 PM.
3. **PRICE OF TENDER DOCUMENTS:** TK 1000.00 (Taka One Thousand only) non-refundable.
4. **EARNEST MONEY:** 1% (one) of the total quoted total value, either in Bangladesh currency or equivalent US\$/ EURO/ GBP etc., favoring Dockyard & Engineering Works Ltd. in the form of Bank Draft/ Pay Order/ Bank Guarantee.
5. **NAME OF THE COMMODITY:** Fittings Materials (Items Serial No: 01-64)
6. **SOURCE OF FINANCE:** Cash.
7. **TERMS OF SUPPLY:** CFR Chattogram/ CPT Hazrat Shahjalal International Airport, Dhaka Bangladesh.
8. **Price:**
 - a) Materials and freight should be shown separately.
 - b) Freight should be shown/ endorsed on bill of lading.
 - c) Freight will be paid at actual against Bill of lading but not exceeding the amount shown in quotation/ offer.
9. **DELIVERY/ SHIPMENT:** 45 (Forty Five) days after receiving Irrevocable Letter of Credit (ILOC).
10. **TENDER SHOULD REMAIN VALID:** 60 (Sixty) days from the date of opening.
11. **THE TENDER DOCUMENTS MUST BE WITH SEAL AND SIGN THEREOF ON EACH PAGE:**

The Dockyard & Engineering Works Ltd, BN, Narayanganj invites quotation in duplicate (Marked as "Original" and "Duplicate") from Manufactures/ Principal Suppliers for Supply of the item(s) described in the attached sheet schedule (Annex-B) on firm CFR Chattogram/ Hazrat Shahjalal International Airport, Bangladesh. Quotations will be received by this office up to **12:15 A.M.** and will be Opened **12:30 AM** in Public on the date specified above.

12. AMENDMENTS TO TENDER DOCUMENTS:

- a. At any time prior to deadline for submission of bids the purchaser may, for any reason, whether of its own initiative or in response to a clarification requested by a prospective bidder, modify the tender documents by the amendment(s).
- b. The amendment(s) will be notified in writing by letter/email or by cable to all prospective bidders who have purchased tender documents and the same will be binding on them.
- c. In order to allow the prospective bidders reasonable time to take the amendment into account in preparing their bids, the purchaser may at its sole discretion extend the deadline for submission of bids.



PREPARATION AND SUBMISSION OF QUOTATION

13. GENERAL :

a. Offers are to be dropped in the tender box provided for the purpose at the office of DOCKYARD & ENGINEERING WORKS LTD, BANGLADESH NAVY, NARAYANGANJ

b. Tender number and opening date as above should be written on the envelope. The envelope containing quotation should be sealed and addressed as follows:

THE MANAGING DIRECTOR
DOCKYARD & ENGINEERING WORKS LTD
BANGLADESH NAVY
SONAKANDA, BANDOR
NARAYANGANJ, BANGLADESH

Tender number opening date as above should be written on the envelope.

c. Tender may be put into the Tender Box kept for this purpose at the above address, but care must be taken to ensure that it reaches this office on the date and time fixed. Late tenders will not be considered. Suppliers may also post the tender to THE MANAGING DIRECTOR, DOCKYARD & ENGINEERING WORKS LTD, BANGLADESH NAVY, SONAKANDA, BANDOR, NARAYANGANJ, BANGLADESH, so, as to reach him on due date and time. No responsibility will be accepted by buyer for late receipt.

d. The Manufacturers/ Principal Suppliers may quote in their own letter head, but it is essential that the tender schedule is also completed and returned, along with original money receipt to the buyer. If the schedule is not accordingly returned the quotation may not be considered.

e. Tenderers may quote price Bangladesh Taka/ US Dollar/ in any International trading currency.

f. Tenderers may quote price for Package or item Wise.

g. Tenders should enclose with the quotation the original proforma Invoice of their principal and the proforma should be based on FIRM CFR PRICE.

h. Quotation should be strictly in accordance with the following:

- (1) Accounting unit prescribed in the tender enquiry.
- (2) Terms of delivery and place of delivery as specified in the tender enquiry.

j. The name of the Manufacturers/ Principal suppliers and country/ countries of origin with port of shipment proposed should invariably be indicated.

k. Tenderers must submit the original proforma Invoice of their principals with the quotation and the proforma Invoice shall clearly indicate detail technical specification, the percentage of commission (if any) included in FOB price for the local agent. Commission is payable to the local agent by the foreign supplier. **Buyers will not pay any extra Commission or otherwise to the local Agent.**

l. No claims on the ground of typographical errors in calculating prices would be entertained later and the tendering firms would be asked under points of penalty and disciplinary action to supply at price they have originally quoted.

m. Indenting agent should also submit along with the tender valid registration certificate issued by the CCI & E and Bangladesh bank permission. In absence of original certificate photo state copy may serve.

n. Tenderers should quote the price as per schedule given in Annex A to this document.

p. Tenderers should submit a certificate along with the offer to the effect that they have gone through the instructions and terms and conditions stipulated in the tender documents and have accepted them into. **As a token of such acceptance each page of this tender documents must be signed by the supplier with their SEAL.** If the tender documents are not received accordingly, the quotation may not be considered. In case of

disagreement on any point this must be stated clearly in a separate sheet. Tenderers must give full and detailed specification of the items they like to offer. Expressing like as per your specifications should be avoided and will be treated as disqualification.

14. **CONTRACT:**

The terms and conditions of the tender document shall form an integral part of the contract/ purchase order document. The tenderer is requested to check this set of tender documents in order to ensure proper compliance and the "Form of Acknowledgement" along with the "Certificate as to **Corporate Principal**" Where applicable, duly filed in be returned along with **tender**.

15. **BID LANGUAGE**

The bid's, all correspondences and documents relating thereto exchanged between the bidders and the purchaser shall be written in English Language.

16. **TERMS OF PAYMENT:**

Necessary LC is to be opened in favour of the principal supplier but payment will be made as per following terms:

- a. 80% of total value is to be paid on the receiving of necessary original shipping documents.
- b. Remaining 20% of LC amount will be paid after received material receiving report (MRR) from our main Store.
- c. Following documents are to be provided for payment:
 - (1) Complete set of original 'Clean on Board' Bill of lading /mentioning the amount of freight on Bill of Lading.
 - (2) Supplier's invoice signed in ink,
 - (3) Supplier's Packing list signed in ink,
 - (4) Authorized inspection agent's certificate (If required)
 - (5) Manufacturer Certificate
 - (6) Fax/E-mail/Swift advice for insurance cover,
 - (7) Country of origin Certificate
 - (8) Certificate showing that the material has been shipped in a non-Israeli vessel,
 - (9) Undertaking regarding supply/re-placement of short supplied and defective materials on free of cost demanded by the buyer.
- d. Bank charges in Bangladesh for opening of LC shall be borne by the buyer. Any Bank Charge for revalidation or amendment of the LC on the request of the supplier shall be exclusively borne by the beneficiaries and not by the DOCKYARD & ENGINEERING WORKS LTD. confirmation of letter of credit by foreign bank will not be entertained.
- e. Bank charge for withdrawal against LC established by buyer will be borne by the beneficiary.
- f. The beneficiary will have to borne the following foreign bank charge:-
 - (1) Negotiation commission.
 - (2) Payment Commission.
 - (3) Postage and Cable charges.
 - (4) LC confirmation charges/ additional (ADD) confirmation charges.
 - (5) LC amendment commission/LC extension commission.
 - (6) LC Cancellation charges.

17. **PACKING AND MARKING:**

- a. The Seller shall be responsible for proper packing and marking the goods for shipment by rail, road and sea. Goods shall be assembled to the maximum extent practical prior to shipment. Goods shall be packed so as to withstand usually rough handling and ensure delivery without loss or damage.



b. Each Bundle must have the following information printed in **BOLD LETTERS** on the outside.

- (1) Name of the consignee and Destination,
- (2) Letter of credit number,
- (3) Gross and net weight,
- (4) Serial number of Bundle and,
- (5) Name and address of seller,

18. **QUANTITY:**

- a. Check of quality, quantity and condition of goods at the discharging port i.e, Chattogram/ Hazrat Shahjalal International Airport will be carried out by the buyer at their cost.
- b. The quotation must be based on firm prices for package. Average prices should not be quoted.
- c. Descriptive catalogue/ literature duly stamped should be furnished along with the Quotation.
- d. The approximate weight of each Bundle should be shown separately on quotation.
- e. The DOCKYARD & ENGINEERING WORKS LTD, reserves the right of awarding contracts for individual technically acceptable items on the lowest acceptable prices. Firms quoting on an average basis for joint items do so at their own risk. DOCKYARD AND ENGINEERING WORKS LTD, will not make any allowances for this action of the tendering firms when awarding contracts for individual items which if and when refused by tendering firms any lead to disciplinary action.

SPECIALLY CLAUSES:

19. **INSPECTION:** The buyer reserves the right to have the stores inspected before shipment by any agency of their choice. In that case inspection charges will be borne by the buyer. The name of the Inspector will be intimated at the time of placement of purchase order. The supplier will be liable to pay any expenses of rejected stores and also for such inspection, which will become payable to the inspector due to multiple intervention/ visits and or fruitless visits at the call of and to suit the convenience of the supplier. The Inspector should be provided with all facilities to carry out their job smoothly and without interference. The provision laid down above does not restrain the buyer, from a detailed inspection of quality and quantity of the cargo on arrival of the same at the port of discharge.

20. **INSURANCE:** Insurance of the consignment after shipment to destination port/ place (up to the buyer's premises) will be arranged by buyer. Quotation should, therefore, be exclusive of the insurance charges.

21. **LATE DELIVERY AND LIQUIDATED DAMAGES:** Liquidity damage equivalent to half percent per week or part thereof on the value of the undelivered goods may be realized from the supplier/ contractor.

In specific case where delay in delivery is likely to cause dislocation of work and financial loss, a higher rate of liquidity damage, not over one percent's per week or part thereof on the value of the undelivered goods may be charged.

In case of delay in delivery beyond one hundred days for importable item(s), purchase order/ contract may be cancelled in which case the performance guarantee shall be forfeited. On genuine reasons/ grounds beyond the control of the suppliers/contractor, extension of delivery period may, however, be granted by the purchase approving authority without realization of any liquidated damage provided validity of their performance guarantee cover such extension.

22. **GENUINENESS OF THE PRINCIPAL SUPPLIERS:**

The Principal supplier shall have to submit a certificate from the supplier's bankers regarding the bonafide and standing of the supplier.

AND/OR

Certificate from the chamber of Commerce and Industry from the supplier's country regarding its standing as an exporter/manufacturer along with the proforma invoice.

23. **QUALITY CERTIFICATE:** Tenderers should furnish guarantee from the original Manufacturers/ Suppliers/ Sole Agent to the effect that the goods will be of exact specification as laid down in the tender and in the event of placing order with the tenderers the Manufacturers/ Suppliers or their Sole agents will supply materials to them (Tenderers) for supply of the same against their tender. Tenderers for all purposes shall be responsible for the acts of omission and commission of their principal.

24. **EARNEST MONEY:** All bidders must submit earnest money for an amount equivalent to 01% (one percent) of the actual quoted CFR value of the stores either by Bangladesh currency or equivalent to any International Trading currencies favoring the Dockyard & Engineering Works Ltd, in bank draft/pay order /bank guarantee/ which will be issued by any scheduled bank of Bangladesh (Not applicable to enlisted suppliers). In case bank guarantee is submitted, the same should remain valid for 60 days from the date of opening of the tender. Neither any inland cheque for a cheque/ guarantee issue by bank of foreign countries will be entertained. Earnest money is liable to forfeiture if the bidder for any reason whatsoever withdraws or modifies its offer or violets the terms after opening of the tender and before expiry of the validity of the offer, or fails to furnish the required performance bond with in the stipulated time after issuance of letter of intent. Bid bond/ earnest money of unsuccessful tenderer would be returned once a decision of the tender is made. A tender not accompanied by earnest money/ bid bond would be rejected as non-responsive. Bid bond of the successful bidder shall be returned after furnishing performance bond. A specimen copy of bid bond is enclosed herewith as annex-C.

25. **PERFORMANCE BOND:** The successful tenderer will be required to furnish performance bond to the extent 05% of the total CFR value either in the form of pay order/ bank draft/ bank guarantee for the satisfactory execution of the order. The performance bond should be given by any Bangladesh Commercial Bank under their (Bank) full risk in liabilities. If the same is submitted by bank guarantee it must remain valid material receiving report (MRR) from our main Store. Performance bond must be furnished within 10(ten) days from the date of letter of intent. It will be liable for forfeiture if the supplier fails to supply the goods within the specified time or commits any breach of contract. A specimen copy of performance bond is enclosed herewith Annex-D.

26. **WARRANTY:** 18 (Eighteen) Months warranty from the date of acceptance is to be provided. Total 05% of contract price is to be cut as security money which will be paid after the end of warranty period or Bank Guarantee against the same amount is to be provided until the end of warranty period.

27. **INDEMNITY:** The supplier have to indemnity the buyer against all claims which may be made in respect of the stores for infringement of any right protected by patent, registration of design etc and shall take all risk of accident or damage which may cause failure of the supply from whatever cause arising and take entire responsibility for the sufficiency of the means used by the supplier for the fulfillment of the contract.

28. **INCREASE OR DECREASE IN QUANTITY OF CONTRACT:** The buyer reserves the right at the time of award of contract, with no adjustment in unit price (bid) to increase or decrease the quantity tendered. The buyer also reserves the right to accept or reject any or all the tenders or to waive any informality, minor deviation or omission.

Award would be made to the bidder whose responsive bid determined to be the lowest evaluated bid who meets specification and other terms and conditions of the tender document.

29. The buyer has the option to place orders either on CFR Chattogram/ CPT Hazrat Shahjalal International Airport Bangladesh.

30. Should the suppliers be adjudged insolvent, the buyer shall have the power to terminate the contract.

31. **DISQUALIFICATION OF OFFER :**

a. Telex/ E-mail/ Swift/ Fax offer may be considered provided signed copy of proforma invoice is received within 24 (twenty four) hours from the opening of the tender.

b. Any addition or alternator to the specification or rate quoted by a firm in the tender after not only be ignored but should also render the firms liable to disqualification.

c. Any tender received late and not strictly confirming to terms and conditions prescribed in the tender documents not accompanied with the requisite earnest money and the money receipt of tender price and registration certificate may be liable for rejection.

32. **SPECIFIC EXPERIENCE:** The principal supplier must have experience of supply of similar goods in Bangladesh and understand the Letter of Credit (LC) process of Bangladesh. The supplier must provide at least 2 letter of credit (LC) references of previous supply record to Bangladesh Buyer to prove its business relation and reliability in Bangladesh market.



33. **TAXES AND OTHER CHARGES:**

- a. All duties, taxes and other charges levied on the goods by authorities in buyer's country shall be borne by the buyer and shall not be included in the bid price.
- b. Charges of such nature in seller's country or in any country other than the buyer country shall be borne by the seller's.

34. **BREACH OF CONTRACT:** On any breach of contract by the seller, the buyer may recover the actual loss suffered and the amount may be realized by encasing the performance guarantee.

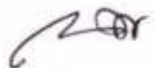
35. **UNDER TAKING:** The Manufacture/ Suppliers shall issue a certificate to be effect that they have shipped the goods strictly conforming to the quality and quantity stipulated in the purchase order and that they will replace defective materials and replenish the short supplied quantity free of charge on demand by the buyers. Such certificate shall form and integral part of the original shipping documents required to be submitted to the bank for drawing of payment against letter of credit by the supplier.

36. **APPLICABLE LAW:** The purchase order shall be interpreted in accordance with the law of the buyer's country.

37. **FORCE MAJEURE:** Should any circumstance arise preventing either of the contracting parties from wholly or partly carrying its obligation under the present contract, namely natural calamities, Strikes, Riots, fire, acts of God, war, Military operation of any Nature, blockades any unforeseen event which is beyond human control, the period stipulated for the performance of this contract shall be extended for as long as the circumstances prevail. Provided that in the even of these circumstances continuing for more than 30(thirty) days, either party shall have the right to refuse to fulfill its obligation under these contract and in such case neither party shall be entitled to indemnification of any loss it may sustain. The party unable to carry out its obligation under this contract shall immediately advise the other party of the commencement and the termination of the circumstances preventing the performance of the contract. A certificate issued by the Chamber of Commerce of the sellers of the buyer's country shall be sufficient proof of the existence and duration of such circumstances.

38. **ARBITRATION:** In the event any dispute or difference arising out of the terms and conditions as specified above, the same shall be referred to the award of a sole Arbitrator appointed by the parties on mutual agreement, failing which it shall be referred to the award of the two arbitrators, from each side (buyer and seller) or in the case of disagreement between the two arbitrators to the award of an umpire to be appointed by the two arbitrators in writing before proceeding on the reference of the decision of the sole arbitrator or of two Arbitrators in the writing before proceeding on the reference of the decision of the sole arbitrator or the umpire as the case may be shall final, conclusive and binding upon the parties. The provisions of the arbitration Act 2001 and rules thereunder and any statutory modification thereof shall apply to the said arbitration. The place of arbitration shall be Dhaka, Bangladesh any statutory modification enactment thereof for the time being in force in Bangladesh shall apply to the arbitration proceeding. The above terms and conditions are not absolute, the Dockyard & Engineering works Ltd, Bangladesh Navy, reserves the right to incorporate additional terms and condition, if necessary. The Dockyard Engineering & works Ltd, BN also is not bound to accept the lowest tender and reserves the right to reject any or all tenders without assigning any reason whatsoever.

Yours faithfully


MOSTOFA KAMAL
Commander BN
For Managing Director

Enclosures:

- | | |
|--|------------|
| A. Format of price Schedule (Annex - A) | - 12 pages |
| B. Technical Specification (Annex-B) | - 10 Pages |
| C. Design and Drawing | - 18 pages |
| D. Format of Bank Guarantee in Lieu of Earnest money (Annex-C) | - 01 page |
| F. Format of performance Bank guarantee (Annex-D) | - 01 page |

DOCKYARD & ENGINEERING WORKS LTD
BANGLADESH NAVY
SONAKANDA, BANDAR, NARAYANGANJ

SCHEDULE TO TENDER ENQUIRY NO: 06.02.6758.165.07.193.25.2171 DATED 09 APRIL 2025 DUE FOR RETURN BY 24 APRIL 2025 AT 12.15 HOURS

SL No	DESCRIPTION OF GOODS	Unit	QTY	Unit Price	TOTAL PRICE
1.	Adaptor Flange Pressure Rating: PN6 Size/ Dimension: DN50 Material: ST37 DIN Standard (As per technical specification -Annex-B)	Nos	15		
2.	Adaptor Flange Pressure Rating: PN6 Size/ Dimension: DN100 Material: ST37 DIN Standard (As per technical specification -Annex-B)	Nos	15		
3.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN16 Size/ Dimension: DN50 Material: CuNi10Fe1.6Mn DIN Standard 86037 (As per technical specification -Annex-B)	Nos	60		
4.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN16 Size/ Dimension: DN65 Material: CuNi10Fe1.6Mn DIN Standard 86037 (As per technical specification -Annex-B)	Nos	15		
5.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN10 Size/ Dimension: DN50 Material: CuNi10Fe1.6Mn DIN Standard 86037 (As per technical specification -Annex-B)	Nos	15		
6.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN10 Size/ Dimension: DN65 Material: CuNi10Fe1.6Mn DIN Standard 86037 (As per technical specification -Annex-B)	Nos	10		



7.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN16 Size/ Dimension: DN65 Material: CuNi10Fe1.6Mn DIN Standard 86037 (As per technical specification -Annex-B)	Nos	50	
8.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN16 Size/ Dimension: DN200 Material: CuNi10Fe1.6Mn DIN Standard 86037 (As per technical specification -Annex-B)	Nos	05	
9.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN16 Size/ Dimension: DN250 Material: CuNi10Fe1.6Mn DIN Standard 86037 (As per technical specification -Annex-B)	Nos	10	
10.	Special (Set-On) Flange Pressure Rating: PN6 Size/ Dimension: DN50 Material: ST37 DIN Standard 86041 (As per technical specification -Annex-B)	Nos	05	
11.	Special (Set-On) Flange Pressure Rating: PN6 Size/ Dimension: DN125 Material: ST37 DIN Standard 86041 (As per technical specification -Annex-B)	Nos	05	
12.	Special (Set-On) Flange Pressure Rating: PN6 Size/ Dimension: DN200 Material: ST37 DIN Standard 86041 (As per technical specification -Annex-B)	Nos	10	
13.	Special (Set-On) Flange Pressure Rating: PN16 Size/ Dimension: DN15 Material: ST37 DIN Standard 86041 (As per technical specification -Annex-B)	Nos	05	



14.	Special (Set-On) Flange Pressure Rating: PN16 Size/ Dimension: DN50 Material: ST37 DIN Standard 86041 (As per technical specification -Annex-B)	Nos	05		
15.	Special (Set-On) Flange Pressure Rating: PN16 Size/ Dimension: DN65 Material: ST37 DIN Standard 86041 (As per technical specification -Annex-B)	Nos	10		
16.	Special (Set-On) Flange Pressure Rating: PN16 Size/ Dimension: DN80 Material: ST37 DIN Standard 86041 (As per technical specification -Annex-B)	Nos	10		
17.	Special (Set-On) Flange Pressure Rating: PN16 Size/ Dimension: DN200 Material: ST37 DIN Standard 86041 (As per technical specification -Annex-B)	Nos	05		
18.	Special (Set-On) Flange Pressure Rating: PN16 Size/ Dimension: DN 250 Material: ST37 DIN Standard 86041 (As per technical specification -Annex-B)	Nos	05		
19.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 40 Material: ST37 DIN Standard 2573 (As per technical specification -Annex-B)	Nos	05		
20.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 50 Material: ST37 DIN Standard 2573 (As per technical specification -Annex-B)	Nos	15		



21.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 65 Material: ST37 DIN Standard 2573 (As per technical specification -Annex-B)	Nos	05		
22.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 80 Material: ST37 DIN Standard 2573 (As per technical specification -Annex-B)	Nos	10		
23.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 100 Material: ST37 DIN Standard 2573 (As per technical specification -Annex-B)	Nos	10		
24.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 125 Material: ST37 DIN Standard 2573 (As per technical specification -Annex-B)	Nos	100		
25.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 200 Material: ST37 DIN Standard 2573 (As per technical specification -Annex-B)	Nos	60		
26.	Slip-On Flange Pressure Rating: PN10 Size/ Dimension: DN 50 Material: ST37 DIN Standard 2576 (As per technical specification -Annex-B)	Nos	15		
27.	Slip-On Flange Pressure Rating: PN10 Size/ Dimension: DN 65 Material: ST37 DIN Standard 2576 (As per technical specification -Annex-B)	Nos	10		



28.	Slip-On Flange Pressure Rating: PN10 Size/ Dimension: DN 100 Material: ST37 DIN Standard 2576 (As per technical specification -Annex-B)	Nos	20	
29.	Slip-On Flange Pressure Rating: PN10 Size/ Dimension: DN 125 Material: ST37 DIN Standard 2576 (As per technical specification -Annex-B)	Nos	05	
30.	Slip-On Flange Pressure Rating: PN10 Size/ Dimension: DN 150 Material: ST37 DIN Standard 2576 (As per technical specification -Annex-B)	Nos	15	
31.	Slip-On Flange Pressure Rating: PN10 Size/ Dimension: DN 200 Material: ST37 DIN Standard 2576 (As per technical specification -Annex-B)	Nos	05	
32.	MARPOL Flange Pressure Rating: PN6 Size/ Dimension: DN 50 Material: ST37 System: Sanitary Discharge System (As per technical specification -Annex-B)	Nos	05	
33.	Spectacle Flange Pressure Rating: PN6 Size/ Dimension: DN 50 Material: Steel DIN Standard (As per technical specification -Annex-B)	Nos	05	
34.	Spectacle Flange Pressure Rating: PN10 Size/ Dimension: DN 50 Material: Steel DIN Standard (As per technical specification -Annex-B)	Nos	05	



35.	Elbow Long radius: 1.5D Angle: 90° Size/ Dimension: 60.3×4.5 Material: ST37 Connection: Seamless & welded DIN Standard 2605 (As per technical specification -Annex-B)	Nos	20	
36.	Elbow Long radius: 1.5D Angle: 90° Size/ Dimension: 76.1×4.5 Material: ST37 Connection: Seamless & welded DIN Standard 2605 (As per technical specification -Annex-B)	Nos	05	
37.	Elbow Long radius: 1.5D Angle: 90° Size/ Dimension: 114.3×4.5 Material: ST37 Connection: Seamless & welded DIN Standard 2605 (As per technical specification -Annex-B)	Nos	40	
38.	Elbow Long radius: 1.5D Angle: 90° Size/ Dimension: 139.7×4.5 Material: ST37 Connection: Seamless & welded DIN Standard 2605 (As per technical specification -Annex-B)	Nos	65	
39.	Elbow Long radius: 1.5D Angle: 90° Size/ Dimension: 168.3×8.8 Material: ST37 Connection: Seamless & welded DIN Standard 2605 (As per technical specification -Annex-B)	Nos	15	
40.	Elbow Long radius: 1.5D Angle: 90° Size/ Dimension: 219.1×5.9	Nos	15	



	Material: ST37 Connection: Seamless & welded DIN Standard 2605 (As per technical specification -Annex-B)				
41.	Elbow - CUNI Long radius: 1.5D Angle: 90° Size/ Dimension: 57.0×1.5 Material: CuNi10Fe1.6Mn Connection: Seamless & welded DIN Standard 86090 (As per technical specification -Annex-B)	Nos	05		
42.	Elbow - CUNI Long radius: 1.5D Angle: 90° Size/ Dimension: 76.0×2.0 Material: CuNi10Fe1.6Mn Connection: Seamless & welded DIN Standard 86090 (As per technical specification -Annex-B)	Nos	05		
43.	Elbow - CUNI Long radius: 1.5D Angle: 90° Size/ Dimension: 219.1×5.9 Material: CuNi10Fe1.6Mn Connection: Seamless & welded DIN Standard 86090 (As per technical specification -Annex-B)	Nos	05		
44.	Reducer Concentric Size/ Dimension: 60.3×4.5/ 48.3×4.5 Material: ST37 Connection: Butt welding DIN Standard 2616 (As per technical specification -Annex-B)	Nos	05		
45.	Reducer Concentric Size/ Dimension: 88.9×4.5/ 76.1×4.5 Material: ST37 Connection: Butt welding DIN Standard 2616 (As per technical specification -Annex-B)	Nos	05		



46.	Reducer Concentric Size/ Dimension: 114.3×4.5/ 88.9×4.5 Material: ST37 Connection: Butt welding DIN Standard 2616 (As per technical specification -Annex-B)	Nos	10		
47.	Reducer Concentric Size/ Dimension: 219.1×5.9/ 114.3×4.5 Material: ST37 Connection: Butt welding DIN Standard 2616 (As per technical specification -Annex-B)	Nos	10		
48.	Reducer Concentric - CUNI Size/ Dimension: 76.0×2.0/ 57.0×1.5 Material: CuNi10Fe1.6Mn Connection: Butt welding DIN Standard 86089 (As per technical specification -Annex-B)	Nos	10		
49.	STUB-IN Size/ Dimension: 50/50 Material: ST37 DIN Standard 2615 (As per technical specification -Annex-B)	Nos	25		
50.	STUB-IN Size/ Dimension: 50/80 Material: ST37 DIN Standard 2615 (As per technical specification -Annex-B)	Nos	05		
51.	STUB-IN Size/ Dimension: 65/80 Material: ST37 DIN Standard 2615 (As per technical specification -Annex-B)	Nos	05		
52.	STUB-IN Size/ Dimension: 80/80 Material: ST37 DIN Standard 2615 (As per technical specification -Annex-B)	Nos	05		
53.	STUB-IN Size/ Dimension: 80/100 Material: ST37 DIN Standard 2615 (As per technical specification -Annex-B)	Nos	05		



54.	STUB-IN Size/ Dimension: 100/100 Material: ST37 DIN Standard 2615 (As per technical specification -Annex-B)	Nos	10		
55.	STUB-IN Size/ Dimension: 125/125 Material: ST37 DIN Standard 2615 (As per technical specification -Annex-B)	Nos	05		
56.	STUB-IN Size/ Dimension: 100/200 Material: ST37 DIN Standard 2615 (As per technical specification -Annex-B)	Nos	10		
57.	STUB-IN Size/ Dimension: 125/200 Material: ST37 DIN Standard 2615 (As per technical specification -Annex-B)	Nos	20		
58.	STUB-IN Size/ Dimension: 200/200 Material: ST37 DIN Standard 2615 (As per technical specification -Annex-B)	Nos	20		
59.	STUB-IN Size/ Dimension: 50/50 Material: CuNi10Fe1.6Mn DIN Standard 86088 (As per technical specification -Annex-B)	Nos	05		
60.	STUB-IN Size/ Dimension: 50/65 Material: CuNi10Fe1.6Mn DIN Standard 86088 (As per technical specification -Annex-B)	Nos	20		
61.	STUB-IN Size/ Dimension: 65/65 Material: CuNi10Fe1.6Mn DIN Standard 86088 (As per technical specification -Annex-B)	Nos	20		



62.	STUB-IN Size/ Dimension: 50/250 Material: CuNi10Fe1.6Mn DIN Standard 86088 (As per technical specification -Annex-B)	Nos	05		
63.	STUB-IN Size/ Dimension: 65/250 Material: CuNi10Fe1.6Mn DIN Standard 86088 (As per technical specification -Annex-B)	Nos	10		
64.	STUB-IN Size/ Dimension: 200/250 Material: CuNi10Fe1.6Mn DIN Standard 86088 (As per technical specification -Annex-B)	Nos	05		
FOB including local agent commission as per manufacture/ principal/ supplier/ quotation/ profarma in voice					
Freight Cost					
TOTAL PRICE CFR (CTG)/ CPT (HAZRAT SHAHJALAL INTERNATIONAL AIRPORT)					

In wards:

Form of application:

91	Name and Address of Applicant's	To be mentioned
92	Country of Manufacture	To be mentioned
93	Authorization of Manufacturer	To be mentioned
94	Name and Address of Principal	To be mentioned
95	Authorization of Principal	To be mentioned
96	Name and Address of Local Agent	To be mentioned
97	Part or shipment	To be mentioned
98	Destination Port	To be mentioned
99	Country of origin	To be mentioned
100	Offer validity	(a) (b) (c) days from the date of opening
101	Warranty	18 (Eighteen) Months
102	U.S. Code	To be mentioned
103	Transportation	Allowed
104	Packing Shipment	Not Allowed
105	Original Product Invoice	To be provided
106	Export Voucher	To be provided

17	Shipment / Delivery	45 (Forty Five) days after receiving Irrevocable Letter of Credit (ILOC)	
18	Certificate	To be provided as per Technical Specification.	
19	Payment	a. 80% of total Letter of Credit (LC)/ CFR value is to be paid on production of necessary shipping documents. b. Remaining 20% of Letter of Credit (LC) amount will be paid after received material receiving report from our main Store.	
20	All other terms and conditions as laid down in tender documents to be followed.		



Your quotation No:

the tenderer:

Date:

Signature, name and address

TECHNICAL SPECIFICATION OF PUMPS

SL No	Technical Description, Specification and standard required	Unit	Qty	Specification offered by Bidder
1.	Adaptor Flange Pressure Rating: PN6 Size/ Dimension: DN50 Material: ST37 DIN Standard Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	15	
2.	Adaptor Flange Pressure Rating: PN6 Size/ Dimension: DN100 Material: ST37 DIN Standard Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	15	
3.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN16 Size/ Dimension: DN50 Material: CuNi10Fe1.6Mn DIN Standard 86037 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	60	
4.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN16 Size/ Dimension: DN65 Material: CuNi10Fe1.6Mn DIN Standard 86037 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	15	
5.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN10 Size/ Dimension: DN50 Material: CuNi10Fe1.6Mn DIN Standard 86037 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	15	
6.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN10 Size/ Dimension: DN65 Material: CuNi10Fe1.6Mn DIN Standard 86037 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	10	

7.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN16 Size/ Dimension: DN65 Material: CuNi10Fe1.6Mn DIN Standard 86037 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	50	
8.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN16 Size/ Dimension: DN200 Material: CuNi10Fe1.6Mn DIN Standard 86037 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
9.	CUNI Collar Lap-Joint with Galvanized Steel Flange Pressure Rating: PN16 Size/ Dimension: DN250 Material: CuNi10Fe1.6Mn DIN Standard 86037 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	10	
10.	Special (Set-On) Flange Pressure Rating: PN6 Size/ Dimension: DN50 Material: ST37 DIN Standard 86041 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
11.	Special (Set-On) Flange Pressure Rating: PN6 Size/ Dimension: DN125 Material: ST37 DIN Standard 86041 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
12.	Special (Set-On) Flange Pressure Rating: PN6 Size/ Dimension: DN200 Material: ST37 DIN Standard 86041 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: manufacturer Certificate	Nos	10	
13.	Special (Set-On) Flange Pressure Rating: PN16 Size/ Dimension: DN15 Material: ST37 DIN Standard 86041 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: manufacturer Certificate	Nos	05	

14.	Special (Set-On) Flange Pressure Rating: PN16 Size/ Dimension: DN50 Material: ST37 DIN Standard 86041 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
15.	Special (Set-On) Flange Pressure Rating: PN16 Size/ Dimension: DN65 Material: ST37 DIN Standard 86041 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	10	
16.	Special (Set-On) Flange Pressure Rating: PN16 Size/ Dimension: DN80 Material: ST37 DIN Standard 86041 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	10	
17.	Special (Set-On) Flange Pressure Rating: PN16 Size/ Dimension: DN200 Material: ST37 DIN Standard 86041 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
18.	Special (Set-On) Flange Pressure Rating: PN16 Size/ Dimension: DN 250 Material: ST37 DIN Standard 86041 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
19.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 40 Material: ST37 DIN Standard 2573 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
20.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 50 Material: ST37 DIN Standard 2573 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	15	

21.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 65 Material: ST37 DIN Standard 2573 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
22.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 80 Material: ST37 DIN Standard 2573 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	10	
23.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 100 Material: ST37 DIN Standard 2573 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	10	
24.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 125 Material: ST37 DIN Standard 2573 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	100	
25.	Slip-On Flange Pressure Rating: PN6 Size/ Dimension: DN 200 Material: ST37 DIN Standard 2573 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	60	
26.	Slip-On Flange Pressure Rating: PN10 Size/ Dimension: DN 50 Material: ST37 DIN Standard 2576 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	15	
27.	Slip-On Flange Pressure Rating: PN10 Size/ Dimension: DN 65 Material: ST37 DIN Standard 2576 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	10	

28.	Slip-On Flange Pressure Rating: PN10 Size/ Dimension: DN 100 Material: ST37 DIN Standard 2576 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	20	
29.	Slip-On Flange Pressure Rating: PN10 Size/ Dimension: DN 125 Material: ST37 DIN Standard 2576 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
30.	Slip-On Flange Pressure Rating: PN10 Size/ Dimension: DN 150 Material: ST37 DIN Standard 2576 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	15	
31.	Slip-On Flange Pressure Rating: PN10 Size/ Dimension: DN 200 Material: ST37 DIN Standard 2576 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
32.	MARPOL Flange Pressure Rating: PN6 Size/ Dimension: DN 50 Material: ST37 System: Sanitary Discharge System Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
33.	Spectacle Flange Pressure Rating: PN6 Size/ Dimension: DN 50 Material: Steel DIN Standard Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
34.	Spectacle Flange Pressure Rating: PN10 Size/ Dimension: DN 50 Material: Steel DIN Standard Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	

35.	Elbow Long radius: 1.5D Angle: 90° Size/ Dimension: 60.3×4.5 Material: ST37 Connection: Seamless & welded DIN Standard 2605 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	20	
36.	Elbow Long radius: 1.5D Angle: 90° Size/ Dimension: 76.1×4.5 Material: ST37 Connection: Seamless & welded DIN Standard 2605 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
37.	Elbow Long radius: 1.5D Angle: 90° Size/ Dimension: 114.3×4.5 Material: ST37 Connection: Seamless & welded DIN Standard 2605 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	40	
38.	Elbow Long radius: 1.5D Angle: 90° Size/ Dimension: 139.7×4.5 Material: ST37 Connection: Seamless & welded DIN Standard 2605 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	65	
39.	Elbow Long radius: 1.5D Angle: 90° Size/ Dimension: 168.3×8.8 Material: ST37 Connection: Seamless & welded DIN Standard 2605 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	15	
40.	Elbow Long radius: 1.5D Angle: 90° Size/ Dimension: 219.1×5.9 Material: ST37 Connection: Seamless & welded DIN Standard 2605	Nos	15	

	Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate			
41.	Elbow - CUNI Long radius: 1.5D Angle: 90° Size/ Dimension: 57.0×1.5 Material: CuNi10Fe1.6Mn Connection: Seamless & welded DIN Standard 86090 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
42.	Elbow - CUNI Long radius: 1.5D Angle: 90° Size/ Dimension: 76.0×2.0 Material: CuNi10Fe1.6Mn Connection: Seamless & welded DIN Standard 86090 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
43.	Elbow - CUNI Long radius: 1.5D Angle: 90° Size/ Dimension: 219.1×5.9 Material: CuNi10Fe1.6Mn Connection: Seamless & welded DIN Standard 86090 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
44.	Reducer Concentric Size/ Dimension: 60.3×4.5/ 48.3×4.5 Material: ST37 Connection: Butt welding DIN Standard 2616 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
45.	Reducer Concentric Size/ Dimension: 88.9×4.5/ 76.1×4.5 Material: ST37 Connection: Butt welding DIN Standard 2616 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
46.	Reducer Concentric Size/ Dimension: 114.3×4.5/ 88.9×4.5 Material: ST37 Connection: Butt welding DIN Standard 2616 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	10	



47.	Reducer Concentric Size/ Dimension: 219.1×5.9/ 114.3×4.5 Material: ST37 Connection: Butt welding DIN Standard 2616 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	10	
48.	Reducer Concentric - CUNI Size/ Dimension: 76.0×2.0/ 57.0×1.5 Material: CuNi10Fe1.6Mn Connection: Butt welding DIN Standard 86089 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	10	
49.	STUB-IN Size/ Dimension: 50/50 Material: ST37 DIN Standard 2615 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	25	
50.	STUB-IN Size/ Dimension: 50/80 Material: ST37 DIN Standard 2615 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
51.	STUB-IN Size/ Dimension: 65/80 Material: ST37 DIN Standard 2615 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
52.	STUB-IN Size/ Dimension: 80/80 Material: ST37 DIN Standard 2615 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
53.	STUB-IN Size/ Dimension: 80/100 Material: ST37 DIN Standard 2615 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
54.	STUB-IN Size/ Dimension: 100/100 Material: ST37 DIN Standard 2615 Country of Origin: To be mentioned	Nos	10	

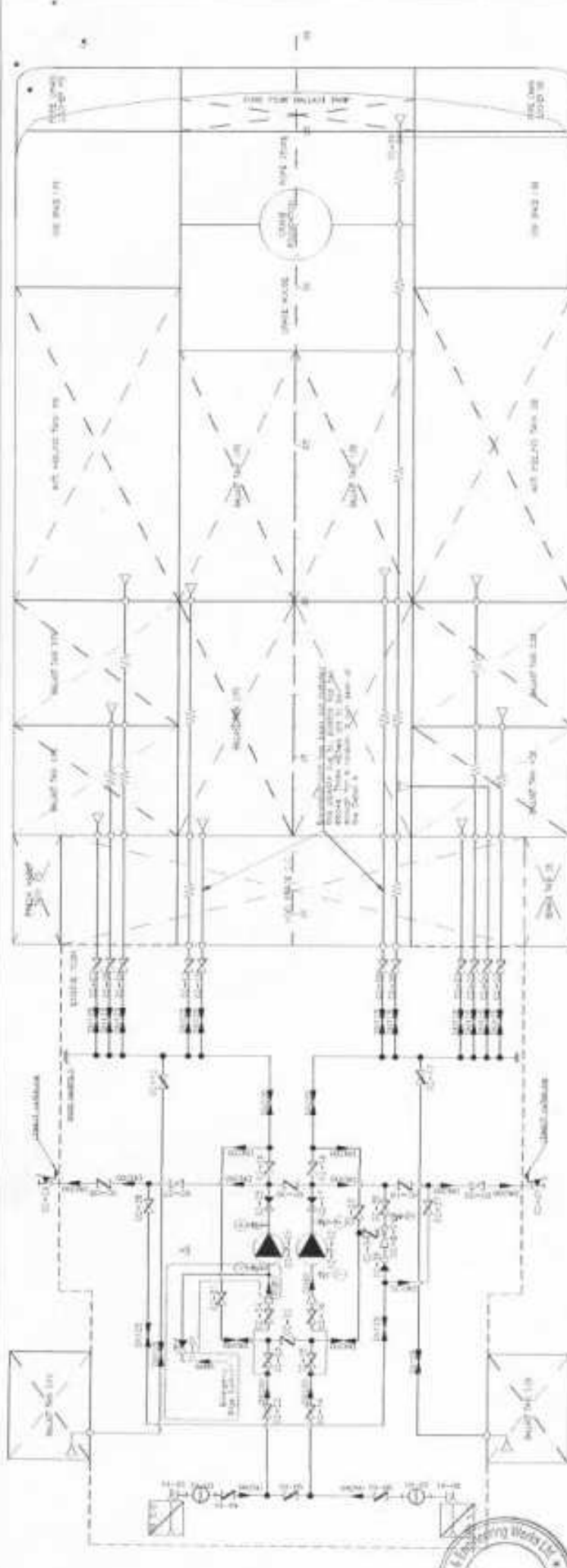
	Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate			
55.	STUB-IN Size/ Dimension: 125/125 Material: ST37 DIN Standard 2615 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
56.	STUB-IN Size/ Dimension: 100/200 Material: ST37 DIN Standard 2615 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	10	
57.	STUB-IN Size/ Dimension: 125/200 Material: ST37 DIN Standard 2615 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	20	
58.	STUB-IN Size/ Dimension: 200/200 Material: ST37 DIN Standard 2615 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	20	
59.	STUB-IN Size/ Dimension: 50/50 Material: CuNi10Fe1.6Mn DIN Standard 86088 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
60.	STUB-IN Size/ Dimension: 50/65 Material: CuNi10Fe1.6Mn DIN Standard 86088 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	20	
61.	STUB-IN Size/ Dimension: 65/65 Material: CuNi10Fe1.6Mn DIN Standard 86088 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	20	



62.	STUB-IN Size/ Dimension: 50/250 Material: CuNi10Fe1.6Mn DIN Standard 86088 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	
63.	STUB-IN Size/ Dimension: 65/250 Material: CuNi10Fe1.6Mn DIN Standard 86088 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	10	
64.	STUB-IN Size/ Dimension: 200/250 Material: CuNi10Fe1.6Mn DIN Standard 86088 Country of Origin: To be mentioned Country of manufacturer: To be mentioned H S Code: To be mentioned Certification: Manufacturer Certificate	Nos	05	



Compliance Statement. A compliance statement (in a tabular format) fulfilling all the requirement of the tender is to be submitted for evaluation of the quotations. Stating mere 'Yes' or 'No' or 'Complied' will not suffice and detailed 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 offered laser guided alignment machine, the deviation has to be spelt out clearly.

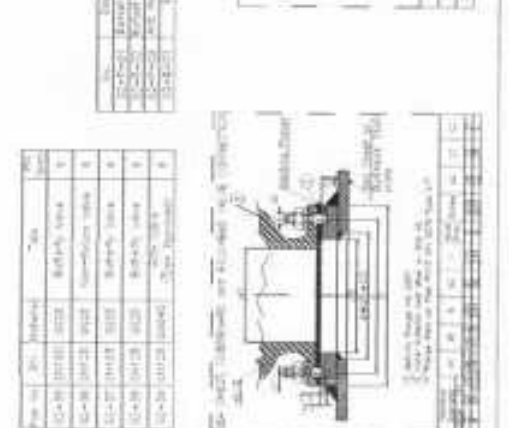


Notes:
 1. All piping shall be 1/2 inch or larger.
 2. All valves shall be 1/2 inch or larger.
 3. All piping shall be 1/2 inch or larger.
 4. All valves shall be 1/2 inch or larger.
 5. All piping shall be 1/2 inch or larger.
 6. All valves shall be 1/2 inch or larger.
 7. All piping shall be 1/2 inch or larger.
 8. All valves shall be 1/2 inch or larger.
 9. All piping shall be 1/2 inch or larger.
 10. All valves shall be 1/2 inch or larger.

70 ton SELF PROPELLER CRANE BARGE
 TBN-SPCB-04

Item	Description	Quantity
1	1/2 inch valve	1
2	1/2 inch valve	1
3	1/2 inch valve	1
4	1/2 inch valve	1
5	1/2 inch valve	1
6	1/2 inch valve	1
7	1/2 inch valve	1
8	1/2 inch valve	1
9	1/2 inch valve	1
10	1/2 inch valve	1

Item	Description	Quantity
1	1/2 inch valve	1
2	1/2 inch valve	1
3	1/2 inch valve	1
4	1/2 inch valve	1
5	1/2 inch valve	1
6	1/2 inch valve	1
7	1/2 inch valve	1
8	1/2 inch valve	1
9	1/2 inch valve	1
10	1/2 inch valve	1



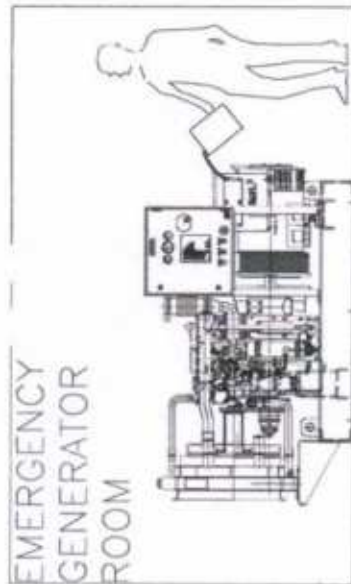
Item	Description	Quantity
1	1/2 inch valve	1
2	1/2 inch valve	1
3	1/2 inch valve	1
4	1/2 inch valve	1
5	1/2 inch valve	1
6	1/2 inch valve	1
7	1/2 inch valve	1
8	1/2 inch valve	1
9	1/2 inch valve	1
10	1/2 inch valve	1

- [illegible]

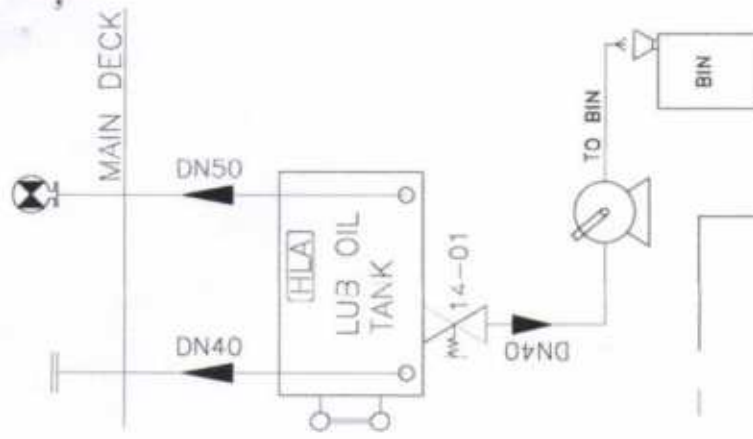
Pos No.	DN	Material	Type
14-01	DN40	GGG40	Self Closing Valve
14-02	DN50	STEEL	Air Pipe Head with Flame Arrestor (Type Approved)

Pipe Scentlings		
Nominal Diameter	Outer Dia. & Wall Thickness	Material
1 1/2" DN40	48.3x2.3	Seamless Steel
2" DN50	60.3x4.5	

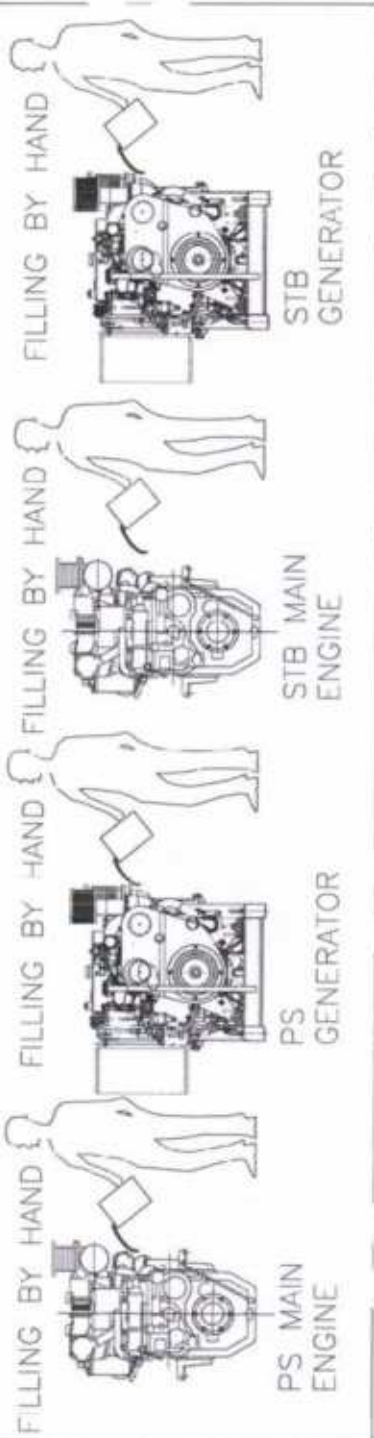
DESCRIPTION	SYMBOL
HAND PUMP	
HIGH LEVEL ALARM	
SELF CLOSING VALVE	
AIR PIPE HEAD WITH FLAME ARRESTER	
LEVEL TUBE	



EMERGENCY GEN.



ENGINE ROOM

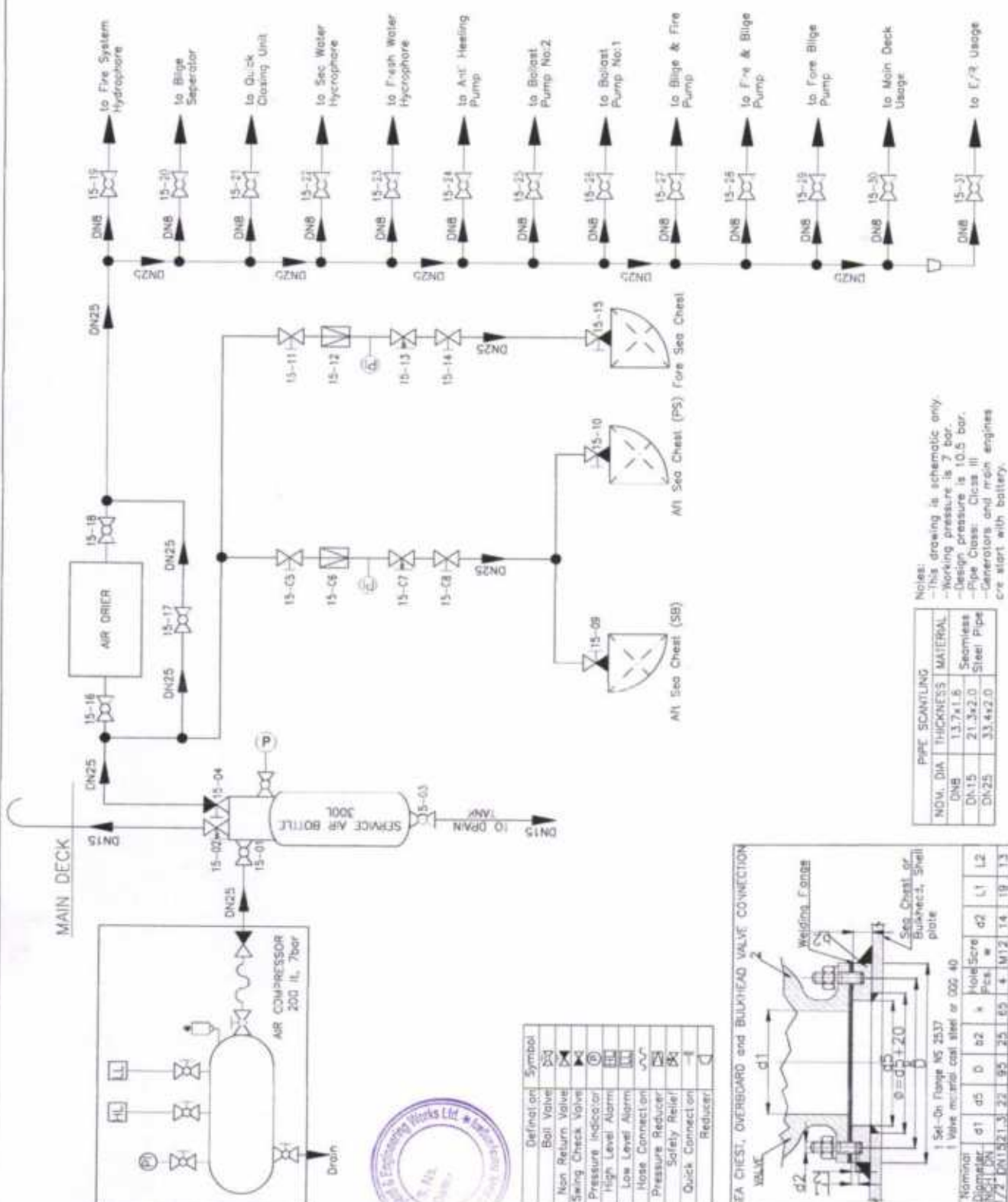


TBN-SPCB-04

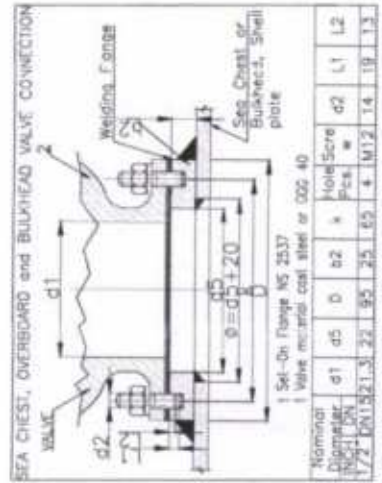
LUBRICATION OIL SYSTEM

DESIGN		SHIPYARD		REVISION No	
Drawn	Ismail Can YILMAZ	Dockyard&Engineering Work Ltd.	Hull No	BV / 48464F	00
Control	Ahmet Burak KABASAKAL	Owner	Project No	NB 252	1/1
Approved		Bangladesh Navy	Drawing No	SPCB-04	Issue Date
				P-12	23.01.2025
					Scale
					1/50





Definition	Symbol
Ball Valve	⊗
Non Return Valve	⊗
Swing Check Valve	⊗
Pressure Indicator	⊗
High Level Alarm	⊗
Low Level Alarm	⊗
Hose Connection	⊗
Pressure Reducer	⊗
Safety Relief	⊗
Quick Connection	⊗
Reducer	⊗



PIPE SCAANTLING	MATERIAL
NOM. DIA	THICKNESS
DNB	13.7x1.6
DN15	21.3x2.0
DN25	33.4x2.0

Notes:
-This drawing is schematic only.
-Working pressure is 7 bar.
-Design pressure is 10.5 bar.
-Pipe Class: Class II
-Generators and main engines c/e start with battery.

Pos No.	DN	Material	Type	PN (bar)
15-01	DN25	G025	Ball Valve	16
15-02	DN25	G025	Ball Valve	16
15-03	DN15	G025	Ball Valve	16
15-04	DN25	G025	Non-Return Stop Valve	16
15-05	DN25	G025	Stop Valve	16
15-06	DN25	G025	Air Reducing Valve (7bar to 2bar)	16
15-07	DN25	G025	Relief Valve (set press. 2.2 bar)	16
15-08	DN25	G025	Stop Valve	16
15-09	DN25	G025	Non-Return Stop Valve	16
15-10	DN25	G025	Non-Return Stop Valve	16
15-11	DN25	G025	Stop Valve	16
15-12	DN25	G025	Air Reducing Valve (7bar to 2bar)	16
15-13	DN25	G025	Relief Valve (set press. 2.2 bar)	16
15-14	DN25	G025	Stop Valve	16
15-15	DN25	G025	Non-Return Stop Valve	16
15-16	DN25	G025	Ball Valve	16
15-17	DN25	G025	Ball Valve	16
15-18	DN25	G025	Ball Valve	16
15-19	DN8	G025	Ball Valve	16
15-20	DN8	G025	Ball Valve	16
15-21	DN8	G025	Ball Valve	16
15-22	DN8	G025	Ball Valve	16
15-23	DN8	G025	Ball Valve	16
15-24	DN8	G025	Ball Valve	16
15-25	DN8	G025	Ball Valve	16
15-26	DN8	G025	Ball Valve	16
15-27	DN8	G025	Ball Valve	16
15-28	DN8	G025	Ball Valve	16
15-29	DN8	G025	Ball Valve	16
15-30	DN8	G025	Ball Valve	16
15-31	DN8	G025	Ball Valve	16



TBN-SPCB-04 COMPRESSED AIR SYSTEM

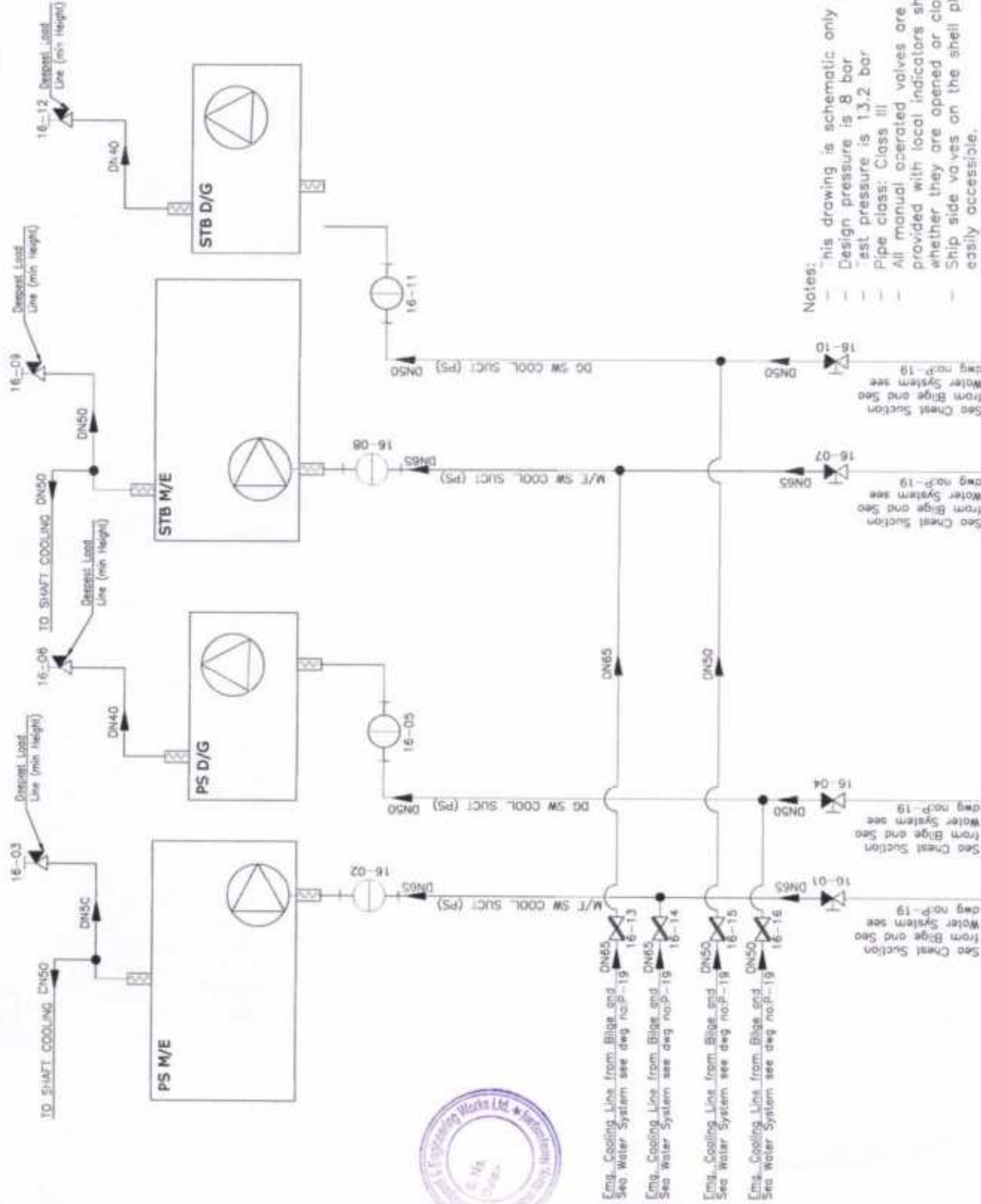
Design	Teoman TOMBAK	Class	BV / 48464F	Revision No	00
Drawn	Ismail Can Yilmaz	Hull No	NB 252	Page	1/1
Control	Ahmet Burak KABASAKAL	Project No	SPCB-04	Issue Date	12.09.2024
Approved		Drawing No	P-15	Scale	1/75
		Shipyard	Dockyard/Engineering Work Ltd.		
		Owner	Bangladesh Navy		

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Pos No.	DN	Material	Type	PN (Bar)
16-01	DN65	GG25	Non-Return Stop Valve	16
16-02	DN65	Steel	Filter	16
16-03	DN50	GG240	Angle Non-Return Stop Valve (Type Approved)	16
16-04	DN50	GG25	Non-Return Stop Valve	16
16-05	DN50	Steel	Filter	16
16-06	DN40	GG240	Angle Non-Return Stop Valve (Type Approved)	16
16-07	DN65	GG25	Non-Return Stop Valve	16
16-08	DN65	Steel	Filter	16
16-09	DN50	GG240	Angle Non-Return Stop Valve (Type Approved)	16
16-10	DN50	GG25	Non-Return Stop Valve	16
16-11	DN50	Steel	Filter	16
16-12	DN40	GG240	Angle Non-Return Stop Valve (Type Approved)	16
16-13	DN65	GG25	Butterfly Valve	16
16-14	DN65	GG25	Butterfly Valve	16
16-15	DN50	GG25	Butterfly Valve	16
16-16	DN50	GG25	Butterfly Valve	16

PIPE SCANTINGS		
NOMINAL DIAMETER	OUTER DIAMETER	WALL THICKNESS
1 1/2" DN40	44.5	1.2
2" DN50	57	1.5
2 1/2" DN65	76.1	1.5
MATERIAL		
Copper		
Nickel		
70/30		
Pipe		

Symbol	Description
	Butterfly Valve
	Stop Check Valve
	Angle Non-Return Stop Valve
	Flow Direction
	Pump
	Exp. Joint
	Filter



Notes:

- This drawing is schematic only
- Design pressure is 8 bar
- Test pressure is 13.2 bar
- Pipe class: Class III
- All manual operated valves are to be provided with local indicators showing whether they are opened or closed
- Ship side valves on the shell plating shall be easily accessible.
- All pipes are hot galvanized after fabrication.

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TBN-SPCB-04

M/E & GENERATOR COOLING WATER SYSTEM

Design
Drawn
Control
Approved

Teoman TOMBAK
Ismail Can YILMAZ
Ahmet Burak KABASAKAL
Owner

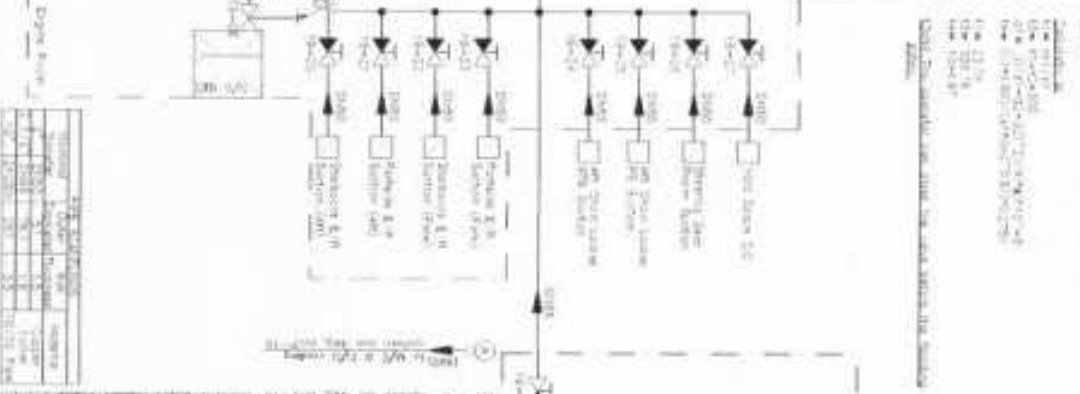
Shipyard
Dockyard & Engineering Work Ltd.

Revision No 00
Page 1/1
Issue Date 10.01.2024
Scale 1/75

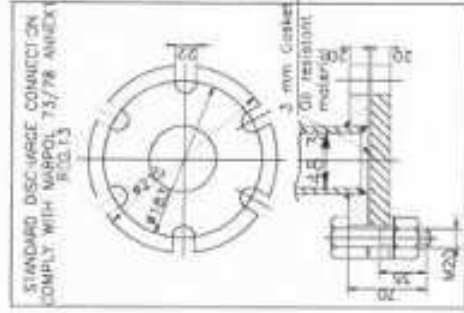
Fig. 1. Schematic diagram of the test rig for the study.



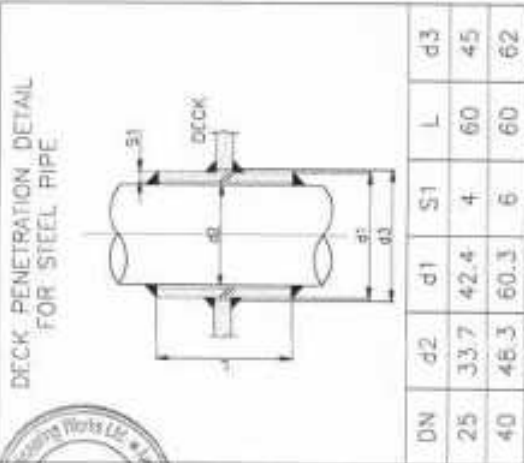
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1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	



Pos No.	DN	Material	Type	PN (bar)
20-01	DN25	Steel	Strum Box	-
20-02	DN25	GG25	Non-return Stop Valve	6
20-03	DN25	Steel	Strum Box	-
20-04	DN25	GG20	Non-return Stop Valve	6
20-05	DN25	Steel	Strum Box	-
20-06	DN25	GG25	Non-return Stop Valve	6
20-07	DN25	Steel	Strum Box	-
20-08	DN25	GG25	Non-return Stop Valve	6
20-09	DN25	Steel	Strum Box	-
20-10	DN25	GG25	Non-return Stop Valve	6
20-11	DN25	GG25	Non-return Stop Valve	6
20-12	DN25	GG25	Non-return Stop Valve	6
20-13	DN25	GG25	Non-return Stop Valve	6
20-14	DN25	GG25	Non-return Stop Valve	6
20-15	DN25	GG25	Non-return Stop Valve	6
20-16	DN25	GG25	Non-return Stop Valve	6
20-17	DN25	GG25	Non-return Stop Valve	6
20-18	DN40	GG25	Stop Valve	6



- Notes:
- This drawing is schematic only
 - Design pressure is 3 bar
 - Test pressure is 4.5 bar
 - Pipe class: Class II
 - All pipes are not galvanized after fabrication
 - For air venting details please see drawing no. P-05
 - For tank locations details please see drawing no. P-07
 - Discharge connection will be located suitable place near the superstructure

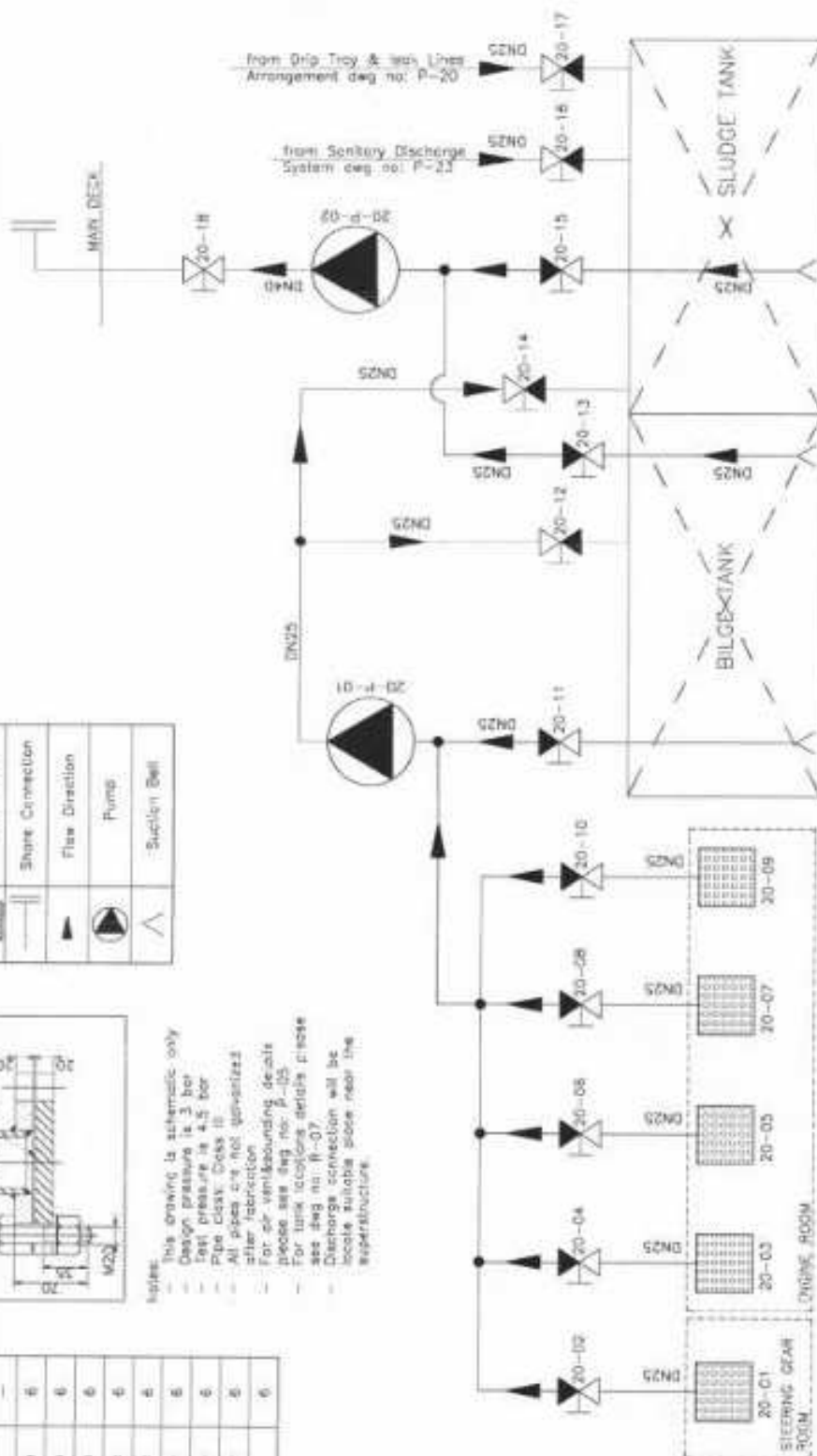


Nominal Diameter	Outer Dia. & Wall Thickness	Material
1"	DN25 33.7x3.2	Seamless Steel Pipe
1 1/2"	DN40 48.3x3.6	

Symbol	Description
	Non Return Stop Valve
	Stop Valve
	Strum Box
	Shore Connection
	Flow Direction
	Pump
	Suction Bell

No.	Designation	Type	Capacity
20-P-01	Bilge Collection Pump	Gear Type	3 m ³ /h, 3 bar
20-P-02	Bilge Transfer Pump	Gear Type	3 m ³ /h, 3 bar

BILGE TANK CAPACITY CALCULATION
 MARPOL Annex 1 Reg.12
 Required Capacity according to
 MFCU/Circ.642
 V = 1000m³
 K = 0.005
 C = 8.977m³/day
 D = 30 days
 P = 1004kW
 V = 1.046m³
 Required Capacity = 0.04/250
 = 4.318m³
 Actual Capacity = 4.75m³



TBN-SPCB-04

OILY WATER & SLUDGE SYSTEM

Tomay
oiling engineering solutions

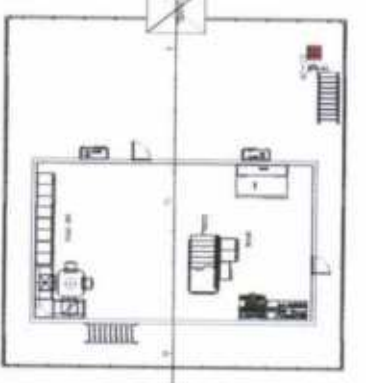
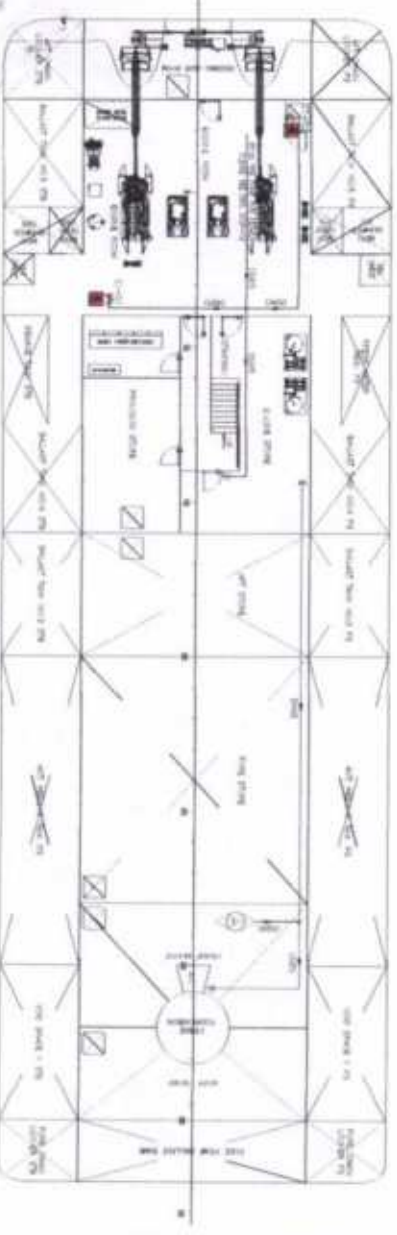
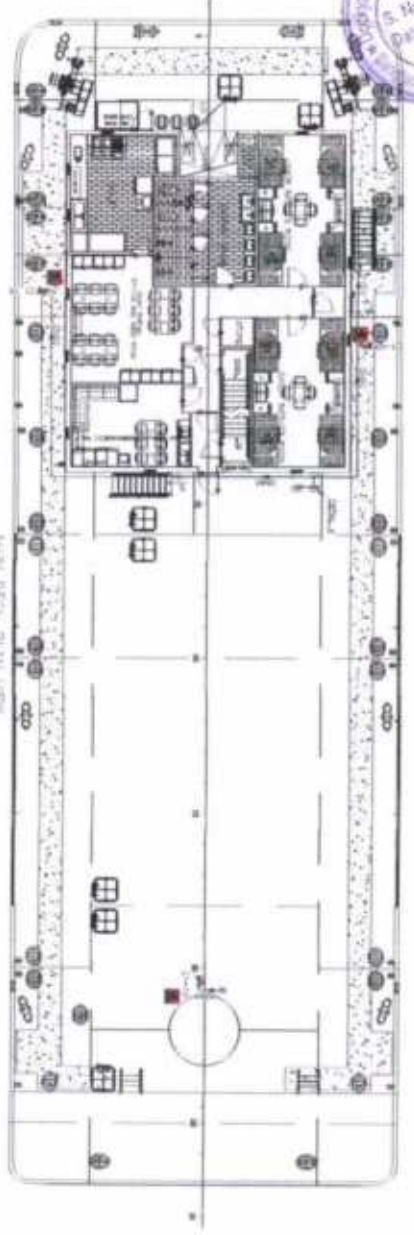
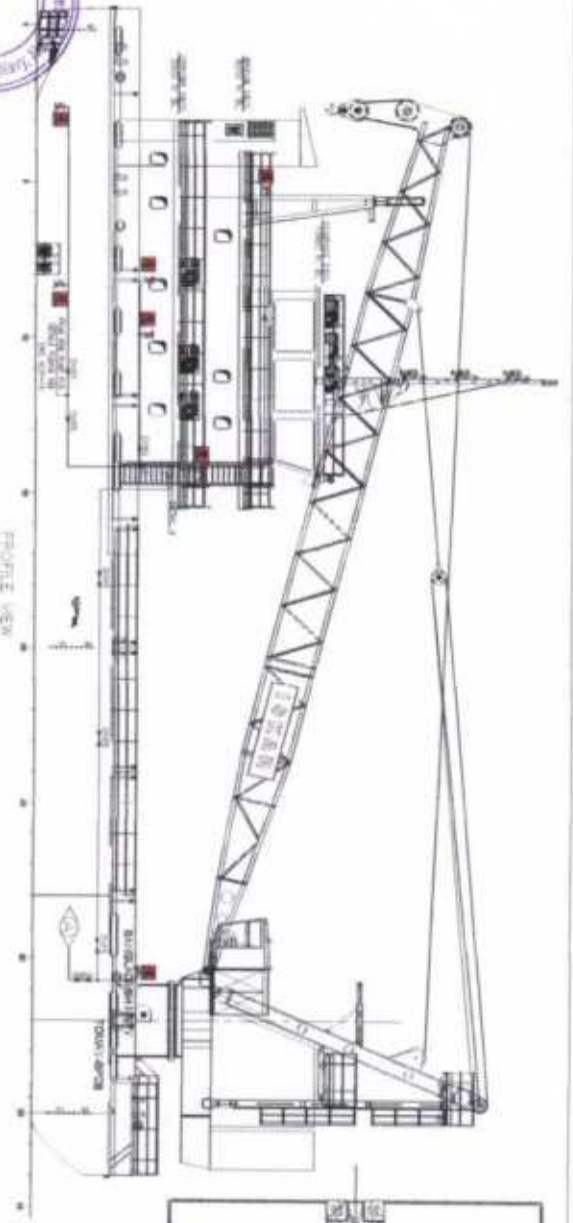
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Design	Drawn	Control	Approved
Teoman TONBAK	Ismail Can YILMAZ	Ahmet Burek KABASAKAL	Bangladesh Navy

Class	Hull No	Project No	Drawing No
Shipyard	Dockyard/Engineering Work Ltd.	Owner	Bangladesh Navy

Revision No	Page	Issue Date	Scale
00	1/1	19.09.2024	1/50

S. No. _____
Date: _____
Project No. _____



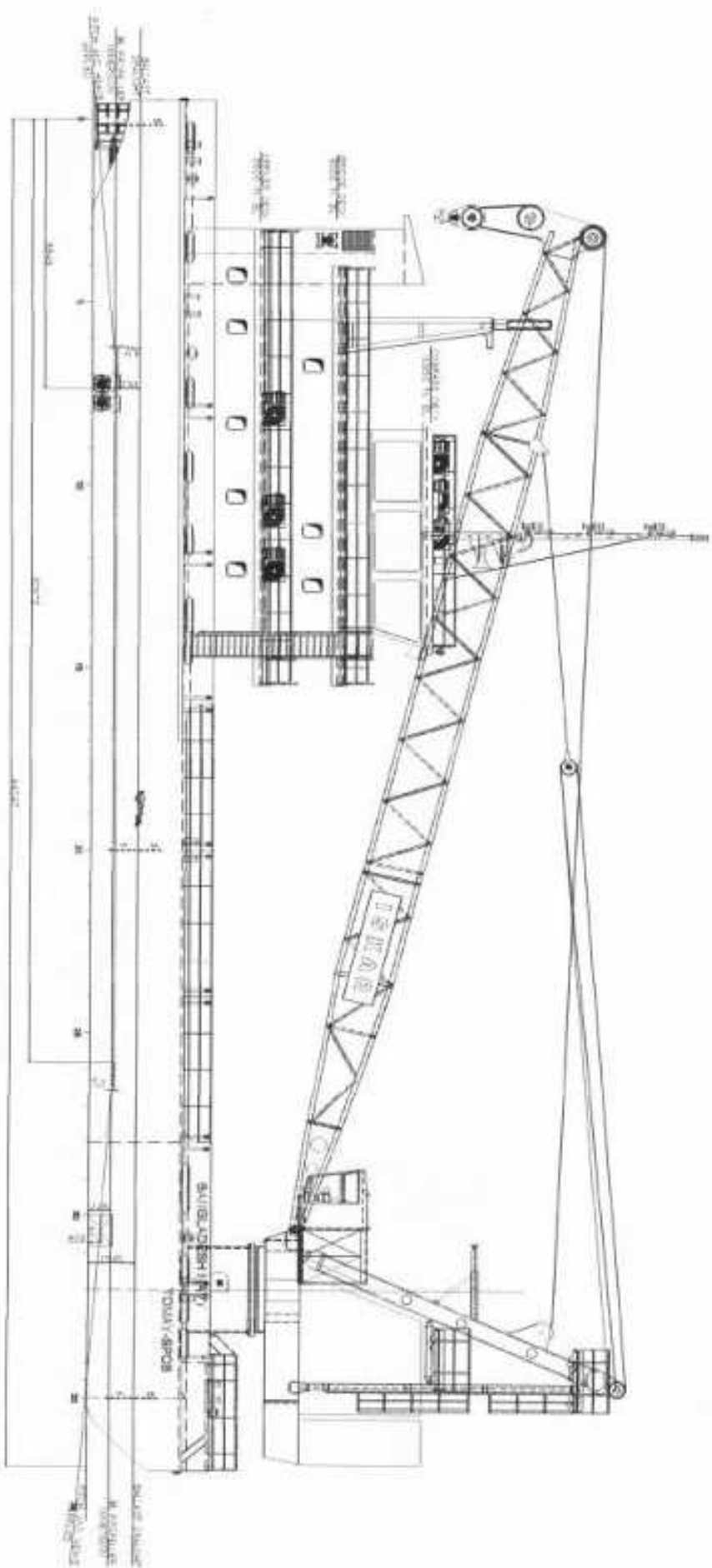
NO.	REVISION	DATE	BY	DESCRIPTION
1	ISSUED FOR CONSTRUCTION	27.06.2024	_____	_____

REVIEWED
Checked by _____
Reviewed by _____
Approved by _____



NOTES:
1. All dimensions are in meters unless otherwise specified.
2. All materials shall be as per specification unless otherwise specified.
3. All work shall be done in accordance with the latest edition of the relevant standards.
4. All work shall be done in accordance with the latest edition of the relevant standards.
5. All work shall be done in accordance with the latest edition of the relevant standards.

TOMRAY		800 DWT	
TBN-SPCB-04		OIL PRODUCT TANKER	
FIRE SYSTEM			
Design	Tamman TOMRAY	Shipyard/Company	_____
Client	Tamman TOMRAY	Owner	_____
Contract	Atmel Bank TELAZ	Manager	_____
Approval	_____	Scale	1/15
Issue	27.06.2024	Issue	27.06.2024



6. a. Length between midlines of the bottom: 44.236
inches

[illegible]

2007 - Member in the civil ballot collection. (see MS57/2007-2008 12.2)

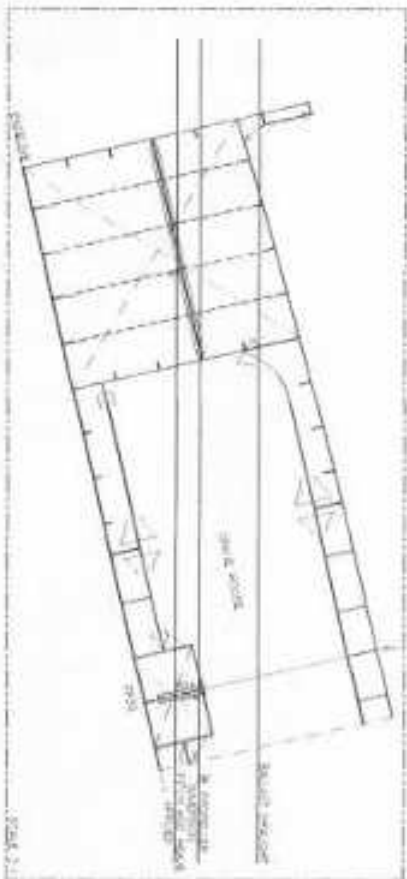
Drought MS 1.436 m

1998).¹ A number of small, hedge-fund-like pools have taken into account (see WSC/OFI 1998 [11]).

member of the product, it was 100.0% (95% CI 1.23-1.21).

Plywood thickness $t = 0.27$ m

sec of transfer = 0.015 W. sec



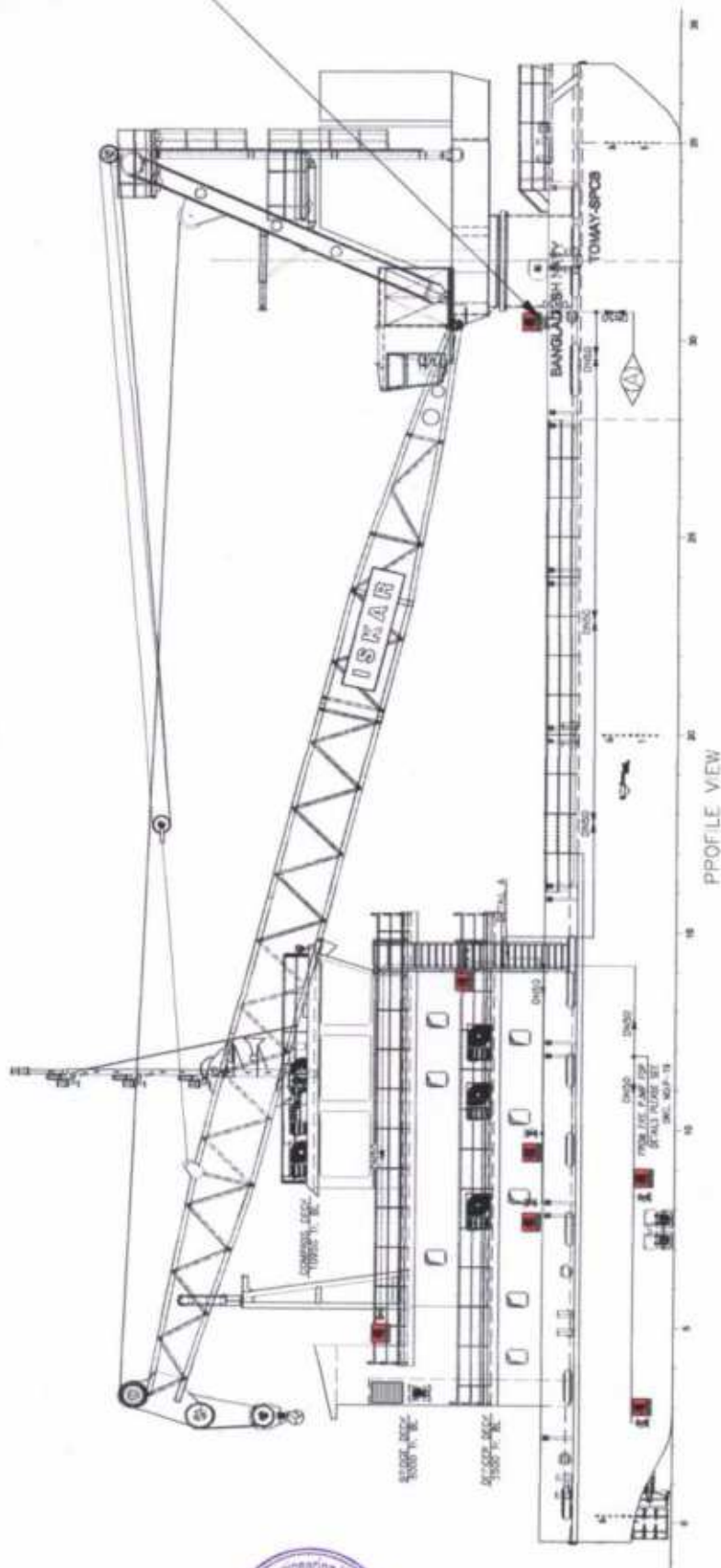
Net Date	Rev. by	Revision	
Design: normal tank Owner: United Co. TANK Contract: 1000000000 Approved: [Signature] 800 DWT OIL PRODUCT TANKER TBN-SPCB-04 FIRE SYSTEM Blowdown/degassing work let down Design: 81 / detail Rev: 001 Project No: 1000000000 Issued by: 1000000000 Date: 1000000000			



TOMAY
design engineering consultancy

TBN-SPCB-04 FIRE SYSTEM

OUTERMOST HYDRANT



	PIPE NOMINAL DIAMETER	DN65	DN50	TOTAL	
	TOTAL PIPE LENGTH (L)	40.83	1.5	-	m
h_F	TOTAL PIPE HEAD LOSS	9.214	0.077	9.291	m
	TOTAL FITTING CONSTANTS	4.49	2.4	-	
h_L	TOTAL FITTING LOSS	2.086	0.334	2.42	m
V	SPEED	3.019	1.653	-	m/s
h_Z	ELEVATION DIFFERENCE (PUMP TO OUTERMOST HYDRANT)			3.2	m
This calculation has been calculated according to Hazen-Williams equation.				14.911	m
$h_F = (10.67 \cdot L \cdot Q^{1.852}) / (C^{1.852} \cdot D^{4.87})$ $C=120$ (C is the Hazen-Williams coefficient (dimensionless) 120 for steel)		PUMP INFORMATION		TOTAL HEAD LOSS	1.462 bar
$h_L = K(V^2/2g)$		FLOW RATE (Q): 25	m^3/h	2.538	bar
$h_{Total} = h_Z + h_L + h_F$		PRESSURE: 4	bar	PRESSURE AT OUTERMOST HYDRANT	0.254 MPa



FOR DN65 LINE			
NAME	VALUE (K)	TOTAL	TOTAL VALUE
RESTR. 1A	0.13	0	0
RESTR. 1B	0.16	0	0
RESTR. 1C	0.20	12	2.4
RESTR. 2A	0.15	0	0
RESTR. 2B	0.20	0	0
RESTR. 2C	0.25	0	0
RESTR. 3	0.50	0	0
RESTR. 4	0.75	0	0
RESTR. 5	1.00	0	0
RESTR. 6	3.00	0	0
RESTR. 7	1.50	0	0
RESTR. 8	1.00	1	1
RESTR. 9	0.90	0	0
RESTR. 10	0.04	6	0.24
RESTR. 11	0.35	0	0
RESTR. 12	0.10	0	0
RESTR. 13A	0.02	0	0
RESTR. 13B	0.40	0	0
RESTR. 14A	0.30	0	0
RESTR. 14B	0.60	0	0
RESTR. 14C	1.25	0	0
RESTR. 15	2.50	0	0
RESTR. 16	5.00	0	0
RESTR. 17	0.25	0	0
RESTR. 18	0.05	0	0
RESTR. 19	0.70	0	0
RESTR. 20	0.25	2	0.5
RESTR. 21	0.35	1	0.35
RESTR. 22	2.00	0	0
RESTR. 23	0.01	0	0
TOTAL			4.49

FOR DN50 LINE			
NAME	VALUE	TOTAL	TOTAL VALUE
RESTR. 1A	0.13	0	0
RESTR. 1B	0.16	0	0
RESTR. 1C	0.20	2	0.4
RESTR. 2A	0.15	0	0
RESTR. 2B	0.20	0	0
RESTR. 2C	0.25	0	0
RESTR. 3	0.50	0	0
RESTR. 4	0.75	0	0
RESTR. 5	1.00	0	0
RESTR. 6	3.00	0	0
RESTR. 7	1.50	0	0
RESTR. 8	1.00	0	0
RESTR. 9	0.90	0	0
RESTR. 10	0.04	0	0
RESTR. 11	0.35	0	0
RESTR. 12	0.10	0	0
RESTR. 13A	0.02	0	0
RESTR. 13B	0.40	0	0
RESTR. 14A	0.30	0	0
RESTR. 14B	0.60	0	0
RESTR. 14C	1.25	0	0
RESTR. 15	2.50	0	0
RESTR. 16	5.00	0	0
RESTR. 17	0.25	0	0
RESTR. 18	0.05	0	0
RESTR. 19	0.70	0	0
RESTR. 20	0.20	0	0
RESTR. 21	0.35	0	0
RESTR. 22	2.00	1	2
RESTR. 23	0.01	0	0
TOTAL			2.4

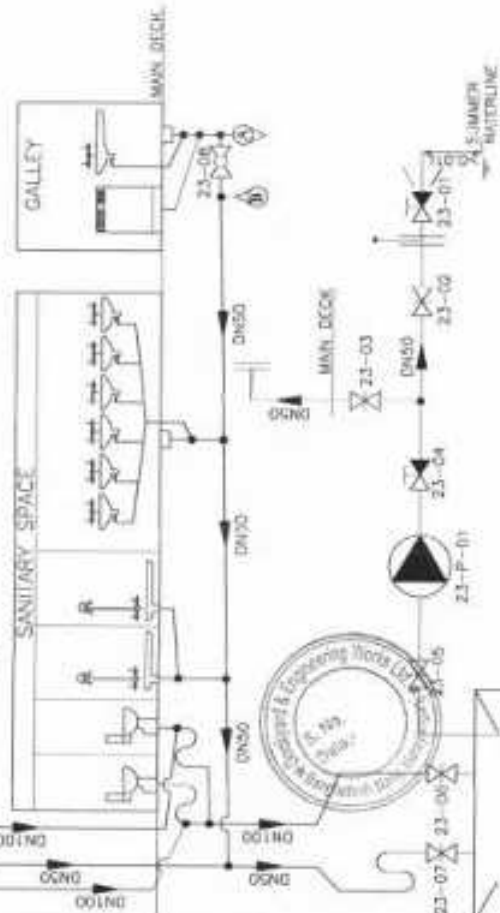
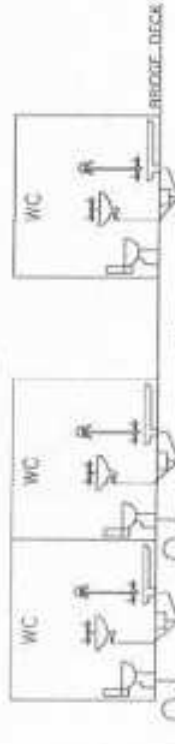
RESISTANCE OF VALVES AND FITTINGS TO FLOW OF FLUIDS

1		A		B		C	
		45°	0,13	60°	0,16	90°	0,20
2		A		B		C	
		45°	0,15	60°	0,20	90°	0,25
3		90° BENDS IN SERIES					0,5
4		90° BENDS IN SERIES					0,75
5		90° BENDS IN SERIES					1
6		CONFLUENCE IN TEE PIPE					3
7		ANGLE FLOW IN TEE PIPE					1,5
8		SEPARATION OF FLOW IN TEE PIPE					1
9		ANGLE FLOW IN TEE PIPE					0,9
10		STRAIGHT FLOW IN TEE PIPE					0,04
11		BRANCH PIPE (CONFLUENCE)		$Q_a=0,5Q$			
				$Z_d=0,35$	$Z_a=0,35$		
12		BRANCH PIPE (CONFLUENCE)		$Q_a=0,5Q$			
				$Z_d=0,1$	$Z_a=0,1$		
13		SEP. OF FLOW		$\frac{Q_a}{Q_b}$	A		B
					$Z_d=0,02$	$Z_a=0,4$	
14		MITRE BENDS		A		B	
				45°	0,3	60°	0,6
15		COMBINATIONS WITH 90° PIPE ELBOWS					2,5
16		COMBINATIONS WITH 90° PIPE ELBOWS					5
17		INLET					0,25
18		INLET					0,05
19		INLET					0,7
20		BUTTERFLY VALVE					0,25
21		DISCO CHECK VALVE					0,35
22		FIRE HYDRANT					2
23		SEP. OF FLOW		$\frac{Q_a}{Q_b}$	A		B
					$Z_d=0,01$	$Z_a=0,9$	



Speed (knots)	4	5	6	7	8	9
Drain (m)	0.556	0.695	0.833	0.972	1.111	1.25
1	0.687	0.833	1.000	1.167	1.333	1.500
2	0.780	0.972	1.167	1.361	1.556	1.750
3	0.833	1.042	1.250	1.448	1.667	1.875
4	0.889	1.111	1.333	1.556	1.778	2.000
5	0.944	1.181	1.417	1.653	1.889	2.125
6	1.000	1.250	1.500	1.750	2.000	2.250

Maximum discharge rate shall be 1/300000 of total volume as follows:
 $Q_{max} = 0.00926 (V/D)^{0.8}$
 Q_{max} is maximum permissible rate (m³/h)
 V is ship's average speed (knots) over the period
 D is maximum summer draft (m)
 $V=0.8$ knots $D=1.8$ m $B=15$ m $D_{max}=2.25$ m³/h



from Oil water & Sludge
 System dwg no: P-24
 GASE TRAP

2025 from Domestic Water
 System dwg no: P-24

2025 from Domestic Water
 System dwg no: P-24

2025 from Domestic Water
 System dwg no: P-24

2025 from Domestic Water
 System dwg no: P-24

2025 from Domestic Water
 System dwg no: P-24

2025 from Domestic Water
 System dwg no: P-24

2025 from Domestic Water
 System dwg no: P-24

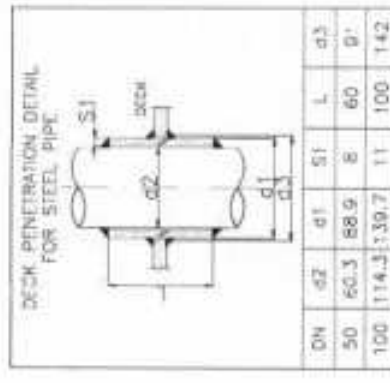
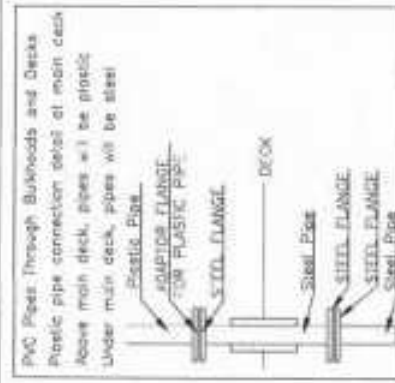
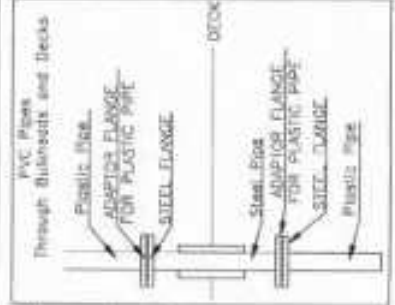
2025 from Domestic Water
 System dwg no: P-24

2025 from Domestic Water
 System dwg no: P-24

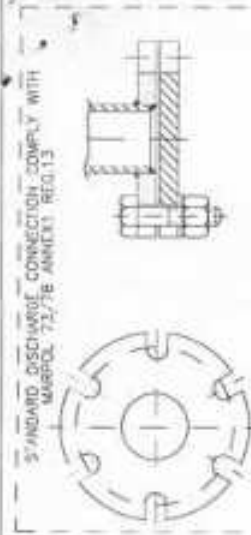
2025 from Domestic Water
 System dwg no: P-24

2025 from Domestic Water
 System dwg no: P-24

2025 from Domestic Water
 System dwg no: P-24



DN	d1	d2	L	d3
50	60.3	88.9	8	60
100	114.3	139.7	11	100
142				



DESCRIPTION	DIMENSION
Outside diameter	215mm
Inside diameter	According to pipe outside diameter
Ball Valve Diameter	18.3mm
Slots in Flange	6 slots, 22mm in diameter spaced equidistantly on a ball circle of the above diameter, located to the flange periphery. The slot width to be 22mm
Flange Thickness	20mm minimum
Balls and Hubs	6, each 20mm diameter and of suitable length

Pos No.	DN	Material	Type	PH (bar)
23-01	DN50	GG40	Non-return Stop Valve (Type Approved)	6
23-02	DN50	GG25	Gate Valve	6
23-03	DN50	GG25	Gate Valve	6
23-04	DN50	GG25	Non-return Stop Valve	6
23-05	DN50	GG25	Gate Valve	6
23-06	DN100	GG25	Gate Valve	6
23-07	DN50	GG25	Gate Valve	6
23-08	DN50	GG25	Gate Valve	6
23-09	DN50	GG25	Ball Valve	6
23-10	DN50	GG25	Ball Valve	6

Pipe Sizing	Outer Dia. & Wall Thickness	Material
1 1/2"	DN25 3.3 4.3 2	Seamless Steel Pipe
2"	DN40 4.8 5.3 6	
3"	DN50 6.0 6.5 7	
4"	DN65 7.1 7.6 8	
5"	DN80 8.2 8.7 9	
6"	DN90 9.3 9.8 10	
8"	DN110 11.4 11.9 12	
10"	DN130 13.5 14.0 15	

Pipe Sizing	Outer Dia. & Wall Thickness	Material
2"	DN50 6.0 6.5 7	UPVC
3"	DN65 7.1 7.6 8	
4"	DN80 8.2 8.7 9	
5"	DN90 9.3 9.8 10	
6"	DN100 10.4 10.9 11	
8"	DN120 12.5 13.0 14	
10"	DN140 14.6 15.1 16	

No.	Designation	Type	Capacity
23-01	Gate Valve	Gate	4 m³/h 3 bar
23-02	Gate Valve	Gate	4 m³/h 3 bar
23-03	Gate Valve	Gate	4 m³/h 3 bar
23-04	Gate Valve	Gate	4 m³/h 3 bar
23-05	Gate Valve	Gate	4 m³/h 3 bar
23-06	Gate Valve	Gate	4 m³/h 3 bar
23-07	Gate Valve	Gate	4 m³/h 3 bar
23-08	Gate Valve	Gate	4 m³/h 3 bar
23-09	Gate Valve	Gate	4 m³/h 3 bar
23-10	Gate Valve	Gate	4 m³/h 3 bar

Tomay
Engineering Solutions

TBN-SPCB-04

SANITARY DISCHARGE SYSTEM

Design: **Teoman TOMBAK**

Drawn: **Israil Can YILMAZ**

Control: **Ahmet Burak KABASAKAL**

Approved: **Bangladesh Navy**

Class: **BV / 48464F**

Hull No: **MB 252**

Project No: **SPCB-04**

Drawing No: **P-23**

Revision No: **00**

Page: **1/1**

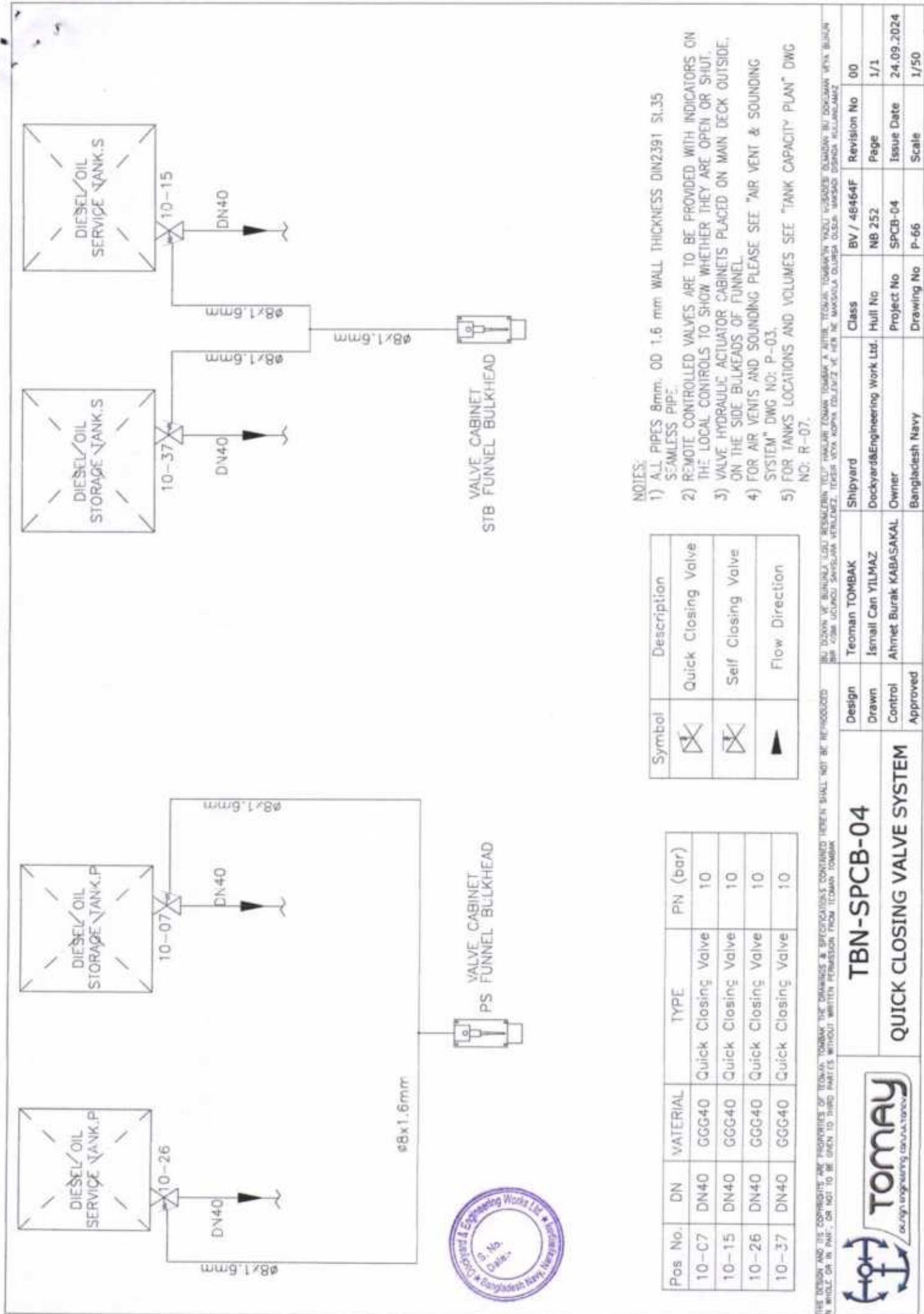
Issue Date: **13.09.2024**

Scale: **1/75**

NOTES:

- This drawing is automatic only
- Pipe class: Class 1
- Design pressure is 4 bar
- Test pressure is 5 bar
- All pipes are not galvanized after fabrication
- Fire integrity of the decks and bulkheads are to be preserved.
- 30mm bore diameter orifice Reduces 4m³/h flow rate to 1.316m³/h
- As storage tanks and sewage holding tanks capacity is adequate, no sewage treatment unit is installed on board.
- For tank locations details please see dwg no: P-07
- For air venting details please see dwg no: P-05
- Accommodation piping material will be UPVC

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Symbol	Description
	Quick Closing Valve
	Self Closing Valve
	Flow Direction

Pos No.	DN	MATERIAL	TYPE	PN (bar)
10-07	DN40	GGG40	Quick Closing Valve	10
10-15	DN40	GGG40	Quick Closing Valve	10
10-26	DN40	GGG40	Quick Closing Valve	10
10-37	DN40	GGG40	Quick Closing Valve	10

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TBN-SPCB-04		QUICK CLOSING VALVE SYSTEM	
Design		Shipyard	
Drawn		Class	
Control		Hull No	
Approved		Project No	
		Drawing No	
		Revision No	
		Page	
		Issue Date	
		Scale	



BANK GUARANTEE IN LIEU OF EARNEST MONEY

Guarantee No _____
 Dated _____
 For (mention amount) _____

Dear Sir,

Whereas (Name of tender floating organization) under tender No-----
 -----dated -----inviting tenders for supplies of (described
 supplies) has agreed to waive the requirement of cash deposit /call deposit of US\$/ £/ Tk-----
 -----being 1%(One percent) of the value of supplies as earnest money by the tender for
 making in accordance with the terms and conditions of the tenderer and the tenderer shall provide a
 bank guarantee for payment for the said amount .

And whereas the tenderer M/S,----- of -----has
 requested us (name of bank) of -----to issue a guarantee for payment of the
 amount of US\$/ £/ Tk-----when called upon.

In consideration of the aforesaid, we (name of bank) of ----- hereby undertake
 and guarantee due performance of the tender by tenderer M/S----- of ----- and
 unconditionally and absolutely bind ourselves :

1. To make payment without any question whatsoever of US\$/ £/ Tk-----to ----
 ----- (name of organisation) or as direct by the organisation immediately on receipt of demand from
 the said , organisation in writing , in the event be tenderer fail to perform the tender , it is expressly
 understood that the organisation shall be the sole judge for deciding whether the tender has
 performed the tender and fulfill the terms and condition of the tender.

2. It is specially stipulated and understood by the bank that any grant of time or indulgence to the
 tenderer without reference to the bank shall not in any manner tent to absolve the bank from its
 liability to make the payment stipulated above under this guarantee.

3. The bank's commitment under this guarantee is limited to and amount of US\$/ £/ Tk-----
 -----(-----) only .

4. The guarantee will remain valid up to -----

Yours faithfully

(seal of the bank)

-----Bank



PERFORMANCE BANK GUARANTEE

Managing Director
Dockyard & Engineering works Ltd
Bangladesh Navy
Sonakanda, Bandor, Narayanganj

Bank Guarantee no _____
Dated _____
For (Mention amount) _____

Dear Sir,

Whereas Dockyard & Engineering works Ltd, Bangladesh Navy, Sonakanda, Bandor, Narayanganj, hereinafter referred to as the buyers proposed to enter in to a contract through a letter of intent/Purchase Order No _____ dated _____ hereinafter called the contract with (name of the sellers) of _____ hereinafter referred to as the sellers for the supply of (described supplies) in accordance with terms and conditions of the contract. And whereas the sellers have requested us (name of the bank) to issue a guarantee for an amount of **US\$/ £/ EURO/ Tk.** _____ Being 5% of the CFR value of the supplies.

In Consideration aforesaid (name of bank) _____ here by undertake and guarantee due observance and performance of the terms and condition of the contract by the sellers and we unconditionally and absolutely bind ourselves.

To make payment on demand, without demur and without reference to the sellers, of US\$/ £/ EURO/ Tk. _____ to the buyers or as directed by the buyers in writing, if the sellers shall fail to perform the contract of fulfill the terms and conditions thereof.

To keep guarantee valid and in force for 4 (four) months beyond the date of shipment but extendable if so required by the buyers.

The guarantee is unconditional and it is expressly understood that the buyers shall be sole judge for deciding whether the sellers have performed the contract and fulfilled the terms and conditions thereof.

It is specifically stipulated and understood by us (name of bank) that any grant of time of indulgence to the sellers without reference to us shall not in any manner tend to absolve us from our liability to make payment as stipulated above under the guarantee.

our commitment under this guarantee is limited to an amount of US\$/£/EURO/Tk. _____ only.

Yours faithfully

(seal of the bank)

-----Bank