TENDER No.: UCSL/CC/T/W/002 Dt 02nd November 2023

TENDER FOR PIPE SPOOL FABRICATION ON 3800 DWT GENERAL CARGO VESSEL

UDUPI COCHIN SHIPYARD LIMITED

UDUPI COCHIN SHIPYARD LIMITED
MALPE, UDUPI 576108

TENDER NOTICE

Tender No. & date	UCSL/CC/T/W/002 Dt.02 November 2023
Name of work	Tender For Pipe Spool Fabrication In 3800 Dwt General Cargo Vessel
Pre-Bid Meeting	16th November 2023 (Thursday), 11:00 Hrs.
Last date & time of receipt of tender	22nd November 2023 (Wednesday), 15:00 Hrs.
Date & time of opening of Technical Bid (Part-I)	22nd November 2023 (Wednesday), 15:00 Hrs.
Tentative date & Time of opening of Price Bid (Part - II)	27th November 2023 (Monday), 15:30 Hrs.

1. Password protected quotations in the prescribed form is invited from bidders for the work specified above, subject to the terms and conditions as mentioned in the annexure to the tender enquiry so as to reach the undersigned by email mentioned on or before the date and time as stipulated.
2. Interested bidders should participate in the pre-bid meeting and the bidders attending pre-bid meeting will only be considered for submitting their bids.

3. **The following shall be submitted along with the quote: -**

PART- I: TECHNICAL BID

a. **Tender document duly signed on all pages** - Including Terms & conditions and scope of work and indicative quantum of work placed at Annexure I, II and III respectively.

b. **The Techno commercial Check List** at Annexure VI to be filled up completely and duly signed.

c. Duly filled form at Annexure - IV and VII

d. **Unpriced Price bid** (Price bid without price and marked as "QUOTED") to be submitted along with Part-I.

PART-II: PRICE BID

a. The price bids shall be prepared based on the price bid format at Annexure V.

4. **Mode of Submission of Quote:**

i. Bid shall be submitted as **Password Protected Zip File** in two parts.
Part I: Technical Bid - with all enclosures and annexures as mentioned in Para 3 above
Part II: Price Bid.

ii. The files are to be forwarded as **Two (2) separate password protected Zip files** to contractcell@udupicsl.com

iii. **Part I and Part II are to be protected with separate and distinctly different passwords.**

iv. The Bids will be opened on online mode during which the bidder will be advised to share the password through SMS with which the technical bid will be opened.

v. The price bids will be opened after technical evaluation and **only the technically qualified bidders will be invited for opening of price bids** which shall also be conducted on online mode as above.

vi. However, subject to travel restrictions, the bidders can also attend the bid opening physically at Udupi Cochin Shipyard Limited, Baputhotta Ware house complex office.

vii. The contractors can also submit the quotations in sealed covers (Two-Bid) - as separate sealed covers for Technical Bid and Price bid, both enclosed in a common sealed cover to reach the below mentioned address before the stipulated time.

5. The bidders shall ensure the receipt of bids at contractcell@udupicsl.com An acknowledgement mail shall be sent to the bidders on receipt of bids. UCSL takes no responsibility for delay, loss or non-receipt of tenders by mail by the stipulated time.

6. The tender should be addressed to the **Assistant General Manager (Materials & Contract Cell), Udupi Cochin Shipyard Limited, Malpe Harbor Complex, Malpe, Udupi 576 108, Karnataka, India.**

7. No deviations on the tender conditions will be accepted, and bids with deviations will be considered technically disqualified. The acceptance of a tender or part thereof will rest with the Assistant General Manager (Materials & Contract Cell), Udupi Cochin Shipyard Limited and the authority reserves the right to reject the tender received without assigning any reason.

8. Contact Person: Mr. Ambalavanan M, DGM (Operations) (Mob: 9341322542)/ Mr. Ram Mohan Baliga, AGM (Design & PMG) (Mob: +91 9895765889).

Assistant General Manager (Material & Contract Cell)

सोणि क्लेमेन्ट टी एम
SONY CLEMENT T M
सहायक महाप्रबंधक/ASSISTANT GENERAL MANAGER
उडुपि कोचीन शिपयार्ड लिमिटेड
UDUPI COCHIN SHIPYARD LIMITED
माल्पे, कर्नाटक/MALPE, KARNATAKA-576 108

Encl:

1. Terms & Conditions - Annexure I
2. Scope of Work - Annexure II
3. Indicative Quantum of items - Annexure III
4. Power of Attorney - Annexure IV
5. Price Bid - Annexure V
6. Techno-Commercial check List - Annexure VI
7. Unconditional Acceptance Letter - Annexure VII

उडुपि कोचीन शिपयार्ड लिमिटेड * UDUPI COCHIN SHIPYARD LIMITED * अनुबंध कक्ष CONTRACT CELL

TERMS AND CONDITIONS

TENDER FOR PIPE SPOOL FABRICATION ON 3800 DWT GENERAL CARGO VESSEL

1. DESCRIPTION OF WORK

1.1. This tender enquiry pertains to the awarding of contract for pipe spool fabrication of 06 numbers of 3800 DWT General Cargo Vessel to be built at **Udupi Cochin Shipyard Limited (UCSL)**, Hangarkatta/Malpe, Karnataka.

1.2. The scope of work includes purchase of material by vendor, fabrication at vendor premises, transportation to yard (UCSL) and elimination of any imperfection or deficiency of the works until the project is completed. The Contractor shall execute the work as per the specifications / drawings issued and to the satisfaction of UCSL.

1.3. Infrastructure and Consumables: The contractor shall complete the work within their own premises, all consumables, tools & tackles, cranes, laborer's, fabrication and galvanizing facilities etc. to be done at his own expenses. The Contractor shall execute the work as per the specifications / drawings issued and to the satisfaction of UCSL - General Terms and conditions in all respects.

1.4. **You are requested to obtain clarifications, if any, and carefully study the documents and the scope of services and UCSL, before submitting your offer.**

2. SCOPE OF WORK

2.1. The scope of work includes purchase of material by vendor, fabrication at vendor premises, transportation to yard (UCSL) and elimination of any imperfection or deficiency of the works until the project is completed.

2.2. Refer **Annexure II and Annexure III** for detailed scope of work.

2.3. This is a turnkey job and any additional works up to 10% growth of work on the material purchase and spool fabrication to be envisaged and is to be undertaken without any additional price impact.

3. METHOD OF AWARDING CONTRACT

3.1. Contract will be concluded with Bidder qualifying technically, agreeing to Techno-Commercial conditions (Annexure VI) and emerging as L1 based on Annexure - III.

3.2. The bidder shall submit the prices at the Annexure - V and the same rates shall be applied to the for L1 determination.

3.3. Yard intends to award the total scope of work to at least 3 contractors at L1 rate.

3.4. The order of 6 ship would be split between three bidders, UCSL intends to place the scope of work for two ships set on each bidders subjected to matching the L1 rate.

3.5. UCSL reserves the right to award work order on three different contractors for two vessel per bidder. The L1 bidder will be awarded with the scope of work of two vessel each as confirmed and the L2 bidder will be called for negotiation to meet the L1 bidder's rate to award work order for next two vessels. Incase L2 bidder is not willing to match L1 bidder's rate, L3/L4/L5 etc. bidders will be invited for the negotiation to match L1 bidder rate. The same methodology will be adopted for the awarding of remaining two vessels to the third bidder subjected to matching L1 rate.

3.6. If L2/L3/L4/L5 etc. are not willing to match with L1 bidder's rate, hence work order for remaining Four (4) vessel will be placed on L1 bidder based on there performance on the already awarded two (2) vessels and this decision to award balance four (4) vessel will be sole discretion of UCSL.

3.7. In case of the contractor fails to fabricate and deliver the spools at any stage of the project, the yard reserves the right to delink the individual ship fabrication scope and will award the same to alternate contractor. In such cases, the value shall be determined based on Annexure-VI which shall be deduction from the total contract value for payments.

3.8. The contractor shall indicate the fabrication lead time as per the requirement of Annexure-III. However, the schedule as issued by the yard shall be final and binding which shall be reasonable and in line with the overall project schedule.

3.9. UCSL reserves the right to cancel the tender if required.

4. SCHEDULE OF COMPLETION OF VESSELS

4.1. Y-165 & Y-170 3800 DWT General Cargo Vessel, spool fabrication is envisaged to be completed within the date of commencement as indicated below.

FABRICATION STAGES					
Sr No:	Unit Allocation	Lot 1	Lot 2	Lot 3	Final Lot
1	Y 165	Early Feb 2024	Early March 2024	Early April 2024	May - June 2024
2	Y 166	Early March 2024	Early April 2024	Early May 2024	June -July 2024
3	Y 167	Early April 2024	Early May 2024	Early June 2024	Aug-Sept 2024
4	Y 168	Early May 2024	Early June 2024	Early July 2024	Sept - Oct 2024
5	Y 169	Early June 2024	Early July 2024	Early August 2024	Oct-Nov 2024
6	Y 170	Early July 2024	Early August 2024	Early Sept 2024	Nov-Dec 2024

Note: The above pipe spool fabrication schedule is indicative and for planning the mobilization of resources. The final schedule and the monthly loading will be provided by planning department based on availability of drawings, and materials, which shall be binding and will be considered for determination of delay, if any.

5. VALIDITY

5.1. The offer shall be valid for a period of 01 year and no escalation in rate shall be allowed by UCSL on whatsoever reason.

6. RATE

6.1. Rates are to be quoted in the Price Bid Format at Annexure-V attached herewith.

7. PAYMENT TERMS

7.1. Payment will be made in Five (5) stages.

Stage I: 25 % of contracted value per ship, on Lot 1 fabrication

Deliverables: Completion of pipe fabrication and delivery to yard UCSL as per above schedule.

Stage II: 20 % of contracted value per ship on Lot 2 fabrication

Deliverables: Completion of pipe fabrication and delivery to yard UCSL as per above schedule.

Stage III: 20 % of contracted value per ship on Lot 3 fabrication

Deliverables: Completion of pipe fabrication and delivery to yard UCSL as per above schedule.

Stage IV: 20 % of contracted value per ship on Final Lot fabrication

Deliverables: Completion of pipe fabrication and delivery to yard UCSL as per above schedule.

Stage V: 15% of Total contracted value post completion of per ship

Deliverables: Completion of scope awarded to the contractor subject to clearance of all surveys, inspections and pressure testing onboard by Class, Owner representative, UCSL representative.

7.2. Payment shall be made on the basis of certification by UCSL Quality Control Representative for quality and quantity of work on actuals.

7.3. The payment shall be made within 30days from submission of invoice along with the work completion certificate.

7.4. All claims for payment for the work/additional work shall be submitted by the contractor within one month of completion of work.

7.5. Payment will be made by RTGS/NEFT to the account of Contractor. The name of the bank, branch, A/C No., IFSC code & other particulars shall be furnished by the Contractor in the proforma of UCSL.

8. TAXES & DUTIES

8.1. GST shall be applicable extra on the prescribed work. You are requested to furnish the following details in the invoice/Bill.

- Applicable rate of GST/SAC Code
- Firms GST Reg. NO.
- Service accounting code (SAC) as prescribed by statutory authorities.
- GST Reg. No. of Udupi Cochin Shipyard Limited(**29AAACT1281B1ZO**).

9. PERIOD OF CONTRACT & COMMENCEMENT OF SERVICES

9.1. Period of contract will be one year from the date of work order. The rates quoted and all other terms and conditions will remain unchanged for the entire period and also for the extended period (if extended).

10. SECURITY DEPOSIT

10.1. The successful tenderer shall remit 5% of the value of the contract as security deposit within 15 days of receipt of the work order. This amount may be remitted by way of demand draft or bank guarantee (in approved proforma of UCSL) from any of the nationalized banks, valid till the satisfactory completion of the entire work. The Security Deposit will be released on certification of satisfactory completion of the contract and no liability to UCSL by Officer-in charge. The Security Deposit retained will not bear any interest.

11. PERFORMANCE GUARANTEE

11.1. The complete work carried out by the contractor shall be guaranteed against defective on poor workmanship for a period of six months from the date of completion of work or till delivery of that vessel, whichever is earlier. Any work found defective during this period is to be repaired entirely at the contractor's cost at the vessel's location and such repaired items shall be guaranteed for a further period of three months from the date of repair.

11.2. Should any unsatisfactory performance and / or damage or failure occur due to poor workmanship and poor-quality material used by the contractor, the contractor shall be solely responsible for payment/reimbursement of expenditure incurred by Ship owner for rectifying the defect.

11.3. Towards this, a performance guarantee equivalent to 5% of the value of the contract to be furnished by the contractor on completion of the works by way of a bank guarantee (in approved proforma of UCSL) from a nationalized bank valid till the expiry of the guarantee period. In case the contract fails to submit the PG in time, SD mentioned at Clause 10 will be retained till the expiry of guarantee period.

12. LIQUIDATED DAMAGES

12.1. The progress of work will be monitored against the mutually agreed detailed schedule. Liquidated damages for delays in execution of the work beyond the scheduled date of completion, for any reason other than force majeure conditions, will be recovered at the rate of half percent of the value of the contract per week or part thereof, subject to a maximum of ten (10) percent of the value of the contract.

12.2. For better clarity, order values mentioned in LD clause are values excluding duties and taxes (Basic value). Liquidated damages, if any, shall be decided and settled only after the completion of the entire project but prior to the release of Final stage Payment.

12.3. If, for any reasons, supplier has a justification towards delay in supply / work execution and would intend to consider applicability/ non applicability of LD, the same shall be intimated to UCSL by way of a letter, failing which it will be deemed that delay is attributable to the supplier.

12.4. Delay in supply/Interruption of the work for reasons not attributable to supplier shall entitle extension of the order execution period for proportionate period without any additional cost to UCSL.

13. POWER OF ATTORNEY

13.1. The tenderer(s) shall have to sign in each page of the tender documents with official stamp as a token of his acceptance of the conditions stated therein.

13.2. The person signing the tender form on behalf of another or on behalf of a firm, shall enclose to the tender, a Power of Attorney or the said deed duly executed in his favour or the partnership deed giving him such power showing that, he has the authority to bind such other

अनुबंध कक्ष
CONTRACT CELL
UDUPI COCHIN SHIPYARD LIMITED

persons or the firm, as the case may be, in all matters pertaining to the contracts. If the Person so signing the tender, fails to enclose the said Power of Attorney, his tender shall be liable for being summarily rejected. The Power of Attorney shall be signed by all partners in the case of partnership concern, by the Proprietor in the case of a proprietary concern, and by the person who by his signature can bind the company in the case of a Limited Company.

14. TERMINATION & LIMITATION OF LIABILITY

14.1. This contract may be terminated upon the occurrence of any of the following events

14.2. By agreement in writing of the parties hereto;

14.3. By the non-defaulting party, upon default by the other party, of any clause of this contract, if not remedied within fifteen (15) days, or such longer time as may be agreed upon by the parties, after receipt of notice thereof in writing from the non-defaulting party;

14.4. By the other party, upon either party;

i. Making the assignment for the benefit of creditors, being adjudged a bankrupt or becoming insolvent; or
ii. Having a reasonable petition filed seeking its' dissolution or liquidation, not stayed or dismissed within sixty (60) days; or
iii. Ceasing to do business for any reason.

14.5. For fraud and corruption or other unacceptable practices.

14.6. Upon expiry or termination of this Contract, neither party shall be discharged from any antecedent obligations or liabilities to the other party under this Contract unless otherwise agreed in writing.

14.7. UCSL may by notice in writing to Contractor to terminate the order after issuing due notice i.e., 30 days' notice period. UCSL shall be entitled to compensation for loss limited to the order value.

14.8. Liability maximum that can be claimed by the Contractor shall be limited to what is due to be and has been paid by UCSL for work done as per the payment milestones and limited to work order value.

15. ARBITRATION & JURISDICTION

15.1. Any disputes arising during the period of the contract shall, in the first instance be settled by mutual discussions and negotiations. The results of such resolution of dispute shall be incorporated as an amendment to the contract, failing which supplier shall approach the UCSL Grievance Redressal Committee as per relevant clause of the Contract.

15.2. If any dispute, disagreement or question arising out of or relating to or in consequence of the contract, or to its fulfillment, or the validity of enforcement thereof, cannot be settled mutually or the settlement of which is not herein specifically provided for, then the dispute shall within thirty days from the date either party informs the other in writing that such disputes, disagreement exists, be referred to arbitration. The arbitrators shall be appointed and the arbitration proceedings shall be conducted in accordance with and subject to the Arbitration and Conciliation Act, 1996 (No. 26 of 1996) as amended from time to time and the decision of the Arbitrators shall be final and binding on the parties hereto. The arbitration will be done by a Board comprising one arbitrator nominated by each party, and a mutually agreed Umpire. Each party shall bear its own cost of preparing and presenting its case. The cost of arbitration shall be shared equally by the parties unless the award provides otherwise. Performance under this Contract shall however, continue during arbitration proceedings and

no payment due or payable by the parties hereto shall be withheld unless any such payment is or forms a part of the subject matter of arbitration proceedings.

15.3. Seat & Venue of Arbitration: The seat & venue of arbitration shall be at Bangalore.

15.4. Language of Arbitration: The Language of arbitration shall be English.

15.5. Governing Law: The contract shall be governed by Indian Law

15.6. In case of disputes, the same will be subjected to the jurisdiction of courts at Bangalore, Karnataka.

16. SUB CONTRACTING AND ASSIGNMENT

16.1. Contractor shall not assign or transfer the Purchase Order/ Work Order or any share or interest therein in any manner or degree to any third party without the prior written consent of UCSL.

16.2. Contractor shall not contract with any subcontractor and/or vendor without the prior written consent of UCSL. Such consent shall not relieve the Contractor from any of his responsibilities and liabilities under the Purchase Order/ Work Order. In addition, Contractor shall ensure that the terms and conditions of any such contract shall comply with and correspond to the terms and conditions of the Purchase Order/ Work Order.

17. SECRECY & RESTRICTION ON INFORMATION TO MEDIA

17.1. The information contained in the enquiry as such shall NOT be communicated to any third party without prior approval of UCSL.

17.2. Information in respect of contracts/orders shall NOT be released to the national or international media or anyone not directly involved in its execution without the written approval of UCSL

18. CANCELLATION OF ORDER AND RISK CONTRACTING

18.1. In the event the Contractors fails to complete the work promptly and satisfactorily as per the terms of the order, and if any work is delayed beyond thirty (30) days from the agreed schedule, UCSL, without prejudice, reserves the right to cancel the order and get the work done at Contractor's cost and the expenditure so incurred including any damage or loss will be recovered from him and the Security Deposit furnished by him is liable to be forfeited either in whole or in part.

18.2. UCSL also reserves to right to impose penalties ranging from Rs. 100 to Rs.500 to the employees of contractors and will be deducted from the bills, for any habitual offence on the cleanliness of uniforms, lack of obedience, not attending the tasks etc., and will be to the discretion of the Officer in charge for the work.

19. FORCE MAJEURE

19.1. Should failure in performance of any part of this contract arise from war, insurrection, restraint imposed by Government act or legislation of other statutory authority, from explosion, riot, legal lock-out, flood, fire, act of God or any inevitable or unforeseen event beyond human control which will be construed as a reasonable ground for extension of time, UCSL may allow such additional time as is mutually agreed to be justified by the circumstances of the case.

20. SAFETY OF PERSONNEL AND FIRST AID

20.1. The contractor shall be entirely responsible for the safety of all the personnel employed by him on the work. In this regard, he may adopt all the required safety measures and strictly comply with the safety regulations in force. A copy of UCSL's "Safety Rules for Contractors (Revised)" is available with HSE department for reference.

20.2. The Contractor may arrange to suitably insure all his workmen/ other personnel in this regard. UCSL will not be responsible for any injury or illness to the Contractor's workmen/other personnel during execution of the works due to whatsoever reasons.

20.3. In this regard, the Contractor will have to fully indemnify UCSL against any claims made by his workmen/other personnel

20.4. The Contractor shall provide and maintain so as to be readily accessible during all working hours, a first aid box with prescribed contents at every place where he employs contract labor for executing the works.

21. LABOUR LAWS AND REGULATIONS

21.1. The Contractor shall undertake and execute the work with contract Labor only after taking license from the appropriate authority under the Contract Labor (Regulation & Abolition) Act 1970.

21.2. The Contractor shall observe and comply with the provisions of all labour and industrial laws and enactments and shall comply with and implement the provisions of the Factories Act, 1948, `Employees Provident Funds & Miscellaneous Provisions Act, 1952, Employees State Insurance Act, Payment of Gratuity Act, minimum Wages Act, Payment of Bonus Act, Contract Labour (Regulation and Abolition) Act and all other enactments as are applicable to him and his workmen employed by him. The Contractor shall inform UCSL his license number from the Central Labour Commissioner.

21.3. All Persons, except those exempted under the respective Acts, shall necessarily be insured under the ESI scheme and be made members of the EPF Scheme from the day of their engagement as personnel in the Company. In Case 1, All such insured Persons should carry with them their ESI Identity Card for verification by the authorities. No Persons without a valid ESI Identity Card for verification by the authorities will be permitted to work in the company.

21.4. Any other amount payable under any law or in respect of any person employed by the Contractor, if not paid by him, shall be deducted or adjusted by UCSL out of any amount payable to the Contractor including any Security Receipt and paid ever or withheld for payment by UCSL.

21.5. The Contractor shall be fully responsible for the conduct and discipline of the workmen employed by him in the Company premises. If such workmen commit any misconduct or criminal act inside the Company, the Contractor shall take appropriate action against such workmen. The Contractor shall abide by the instructions/ guidelines issued by the Company for maintenance of discipline and good conduct among the workmen employed by him.

21.6. All persons who are engaged for various works in UCSL either directly or through Contractor, should produce the following documents prior to issuing their entry passes:

21.7. Passport/Aadhaar attested copy of passport with photo and address particulars.

OR

उडुपि कोचीन शिपयार्ड लिमिटेड * UDUPI COCHIN SHIPYARD LIMITED * अनुबंध कक्ष CONTRACT CELL

SCOPE OF WORK

TENDER FOR PIPE SPOOL FABRICATION ON 3800 DWT GENERAL CARGO VESSEL

1. SCOPE OF CONTRACTOR:

1.1. Job to be executed on lumpsum turnkey basis which should be inclusive of material cost.

1.2. Pipe spool fabrication - 2200 Spools (Approx) per vessel.

1.3. The scope of work includes purchase of material by vendor (class certified wherever indicated in BOQ), fabrication at vendor premises, Galvanizing and pickling, transportation to yard (UCSL) and elimination of any imperfection or deficiency of the works until the project is completed.

1.4. The Contractor shall arrange all consumables, tools & tackles, cranes, laborer's, fabrication facility, surface treatment (galvanizing, pickling, painting, passivation) at his work site or at any sub vendors premises at his own responsibility and expenses.

1.5. The Contractor shall execute the work as per the specifications / drawings issued and to the satisfaction of UCSL.

1.6. Bending of pipe/tube spools will be required for less than 150 mm using bending machine. Desired bending radius will be 2D or 3D and maximum thickness upto 8 mm.

1.7. Bending deformations (pipe thinning, ovality, Wrinkling, damages, cracks) will not be accepted

1.8. Detailed piping and fittings Bill of Material (BOQ) is indicated in Annexure III

1.9. The contractor shall be responsible to UCSL for the following: -

a. Fabrication of the pipe spools as per drawing and piping standard as indicated by UCSL. Sample spool drawings attached for references.

b. All pipes root should be in TIG welding and balance (cover / filling runs) Arc welding preferred for carbon steel pipes. Proper root penetration to be ensured.

c. All copper pipes should be brazed.

d. All Stainless Steel (SS) pipes to be only TIG welded

e. Welded beads on inside surface of fabricated pipes, except butt welded joints using backing ring, shall be finished to suit to the purpose of the respective piping system. In case of TIG welding pipes, inside finishing of butt joint shall be omitted.

f. The spools should undergo Hydro Testing at test pressures indicated in the drawings post completion of welding and same will be witnessed by UCSL QC team or surveyor as applicable. Hydrotesting at shop is applicable only for class 1 & 2. Class -3 pipes are pressure tested on-board during layout survey. However, if found any defect, same will be rectified by UCSL yard. Compensation with penalty for defective welding or loss of the item will be recovered from the Contractor.

g. Pipes which require Hot-Dip Galvanizing shall be done with sand/grit blasting/special cleaning/ pickling with approved chemicals etc to remove oil, grease, paints, varnish, rust etc to make the surface ready for Hot dip galvanizing and then galvanizing (85-120 microns).

h. Pipes in which pickling is required, shall require sand blasting prior going to pickling and one coat of Primer(spray)/paint(spray) coating of marine grade to be done.

i. Stainless steel pipe to be passivated.

j. Pickling/ galvanizing/Passivation to be done as per the details given in fabrication drawing/yard standard.

k. Punching of pipes with MLF/paint code/ Pipe spool numbers as indicated by UCSL in the drawings.

l. Packing, Pelleting and transportation to be done without damaging/ deforming. Pipe end to be closed (air tight)

m. As per UCSL piping practice all pipes will having inspection by UCSL QC/OWNER, any imperfection/rejection/deficiency to be rectified by the contractor without any additional charges

1.10. Contractor shall maintain quality as per UCSL quality standards and yard quality procedures. UCSL will conduct inspection during fabrication.

1.11. The Bidder shall also be solely responsible for correct delivery of the materials in size, quantity, quality etc in good conditions and obtaining clear receipts to that effect.

1.12. Entire work as per Work order must be completed within the time line as per UCSL load conditions. As a benchmark 750 No of pipe spools would be expected to be fabricated per month.

1.13. Bidder should be ready to work round the clock and multiple shifts as per UCSL's requirement/ instruction of officer-in-charge.

1.14. All works shall be as per strict compliance to approved UCSL drawings/material type/ QAP.

2. OTHER CONDITIONS:

2.1. The bidder should have qualified welders having relevant WPS approved by classification societies. Welding shall be done by qualified welders for respective WPS and the welders shall carry / submit the welder's certificate to Quality control department for records. The contactors shall requalify the welders if so, felt necessary or as mandated by the class. The fee as applicable for re-certification of welder shall be to contractor's scope.

2.2. The bidder's team shall include a qualified piping engineer having minimum 05 years post qualification experience in pipe fabrication / ship pipe repairs or piping on floating marine structures. Details of qualification & experience (CV) shall be submitted along with the offer.

2.3. The bidder shall have a qualified QA / QC team / department with relevant procedures for ensuring quality. Details of structure and strength of QA / QC team shall be submitted.

2.4. Bidder shall carry out the Quality Checks (QC) of the pipes and Quality Check should be offered to UCSL Quality Assurance team at their premises prior proceeding for pickling/passivation/painting/galvanization. QC reports to be provided along with pipe spools for dimensional accuracy, contractor's internal QC verification is required before welding of the spools.

2.5. Contractor shall prepare and submit a Quality Assurance Plan (QAP) to UCSL covering aspects such as type of QA check, quantum of QA check, reference documents, acceptance norms, records to be maintained etc pertaining to various stages viz., raw material selection, fabrication, pickling, passivation, galvanizing, etc. Comments by UCSL shall be duly incorporated in the final QAP, which will be approved by UCSL. In addition, Contractor has to ensure QC inspection as required, during stages of fabrication as per the approved QAP.

2.6. QAP & schedule to be submitted prior commencement of work. All the works undertaken in

bidder workshop/Site to be properly recorded along with photographs. After completion of work detailed report to be handed over.

2.7. Successful bidder shall procure Quality standard welding consumables for (TIG/Arc/Brazing) and certificates shall be submitted to UCSL for verification. Welding of pipes are to be done by qualified welders by classification societies. (Welders with WPS certificates)

2.8. Necessary HSE representative is also to be arranged by the subcontractor at his work site who shall ensure that the HSE requirements are complied.

2.9. Items as per BOQ procured to be made available at the yard.

3. TECHNICAL EXPERIENCE

3.1. The Bidder shall have experience in pipe fabrication, galvanizing, painting of various pipe materials such as CS, SS, and Cu etc. in the last three years in ship building, ship repair, petrochemical and chemical sectors.

3.2. The technical experience means "the experience of successfully completed similar works (as per clause 3.1 above) for period of 3 years. In the case of ongoing works, work progress report from the authorized officer of the work order issued firm shall be submitted for considering UCSL requirement.

3.3. The average cumulative annual financial turn over should be at least Rs. 3 Crores during the last 3 consecutive financial year (Audited balance sheets showing turnover profit & loss account of the firm should be submitted).

3.4. The bidder should have qualified welders having relevant WPS approved by classification societies.

3.5. Documents to prove credentials of the firm to undertake the subject work. eg: Details of available equipments & facilities, Skilled / qualified Manpower, Work experience of similar job, etc. The firm has to submit the documents which validate the above-mentioned Clause 3.1 - 3.4 requirements.

3.6. If the experience claimed by the bidder is of no relevance with respect to pipe fabrication, galvanizing, painting of various pipe materials of Piping Systems, then such experience will not be considered for pre-qualification. Decision taken by UCSL in this regard will be final.

3.7. The Bidder should furnish the required work-specific information and satisfactory documentary evidence such as copy of work order / agreement and a certificate from the employer for satisfactory completion of work or any other relevant document indicating completion of work shall be submitted to UCSL in support of its claim of experience.

3.8. Bidder shall not be under a declaration of ineligibility issued by Govt. of India/ State govt./ Public Sector Undertakings etc. The bidder shall not have been debarred / black listed by UCSL or by any of the Public Sector Undertaking or Government department etc.

3.9. Bidder should have sufficient covered space and handling equipments to undertake the work.

3.10. Bidder should have the facility or sub vendor facility to galvanize minimum 3-meter length pipes and up to 500 NB size pipes with flanges and elbows.

3.11. Bidder should provide the detailed execution plan of Hot-Dip galvanizing, such as where Hot Dip Galvanizing being carried out. Galvanizing unit capacity, present load, undertaking to carry out the work as per this tender also to be produced along with the tender

3.12. The Contractor shall provide certificates wherever applicable, which shall include the results of all testing required as per the scope of work and performed on all items giving details, but not limited to the following:

3.12.1. Certified reports of all material.

3.12.2. Certified reports of hydrostatic testing.

3.12.3. QC inspection reports.

3.13. Successful bidder should depute a team (Fabricators & Supervisor) to UCSL to study the fabrication drawings which includes bending details reading, fit-up details reading, welding details reading etc.

4. SCOPE OF UCSL:

4.1. UCSL will provide necessary work instructions, technical specifications and applicable drawings etc. for the work.

4.2. Quality assurance plan (QAP) and available welding procedure specification (WPS) shall be provided. QAP & WPS are UCSL property & contractor should not use this for any other purpose.

4.3. Welder qualification shall be carried out by UCSL in presence of competent authority for acceptance and performing on the job woks. (The welder test will be conducted on chargeable basis)

4.4. Assistance from yard will be limited to Entry pass for personnel /Crane assistance/Fork Lift assistance for loading and unloading of items within UCSL premises, subject to availability at free of cost.

4.5. UCSL shall not be responsible for any compensation to personnel for injuries etc/damage to vehicles involved in accidents under any circumstance, whatsoever.

5. ADDITIONAL WORKS

5.1. This is a turnkey job and any additional works up to 10% growth of work on the material and spool fabrication in terms of total quantity of material and spools is to be envisaged and is to be undertaken without any additional price impact.

5.2. In case of additional work (rework/modification), written consent is to be obtained from the Officer-in-charge before commencement of the work.

5.3. Contractor shall carry out the complete work in accordance with Shipyard's approved drawings. Any minor modifications from drawing or any other work or supply of material, which is not specified hereunder, but is considered incidental and essential for the successful completion of the job shall be carried out by the Contractor without any additional charge.

5.4. The contractor shall be responsible for any damage caused to the spool's supplied to UCSL. Compensation with penalty for damage or loss of the item will be recovered from the Contractor, in the event of loss or damage.

6. INSPECTION

6.1. The complete work has to be carried out under the survey of UCSL Quality Control Dept.

6.2. Contractor to maintain the required dimensional accuracy and surface finish as per quality standards (to be provided by UCSL).

6.3. All welding works shall be carried out by approved and qualified welders only.

6.4. Welding spatters and slags on the flange face shall be removed.

6.5. Welded beads on inside surface of fabricated pipes, except butt welded joints using backing ring, shall be finished to suit to the purpose of the respective piping system. In case of TIG welding pipes, inside finishing of butt joint shall be omitted.

6.6. No holes other than those existing in the units are to be drilled to ease slinging while galvanizing. However, suitable hooks may be welded for slinging while galvanizing and removed later after galvanizing, at no extra cost. Any damage to the material while welding hooks or otherwise while in the premises of galvanizer should be rectified/replaced compensated by the bidder.

6.7. Cleaning of materials after galvanizing and removing lump of zinc sticking to the surface (both inside and outside), if any. Also, no zinc spray should be used.

6.8. All welding machines are to be calibrated.

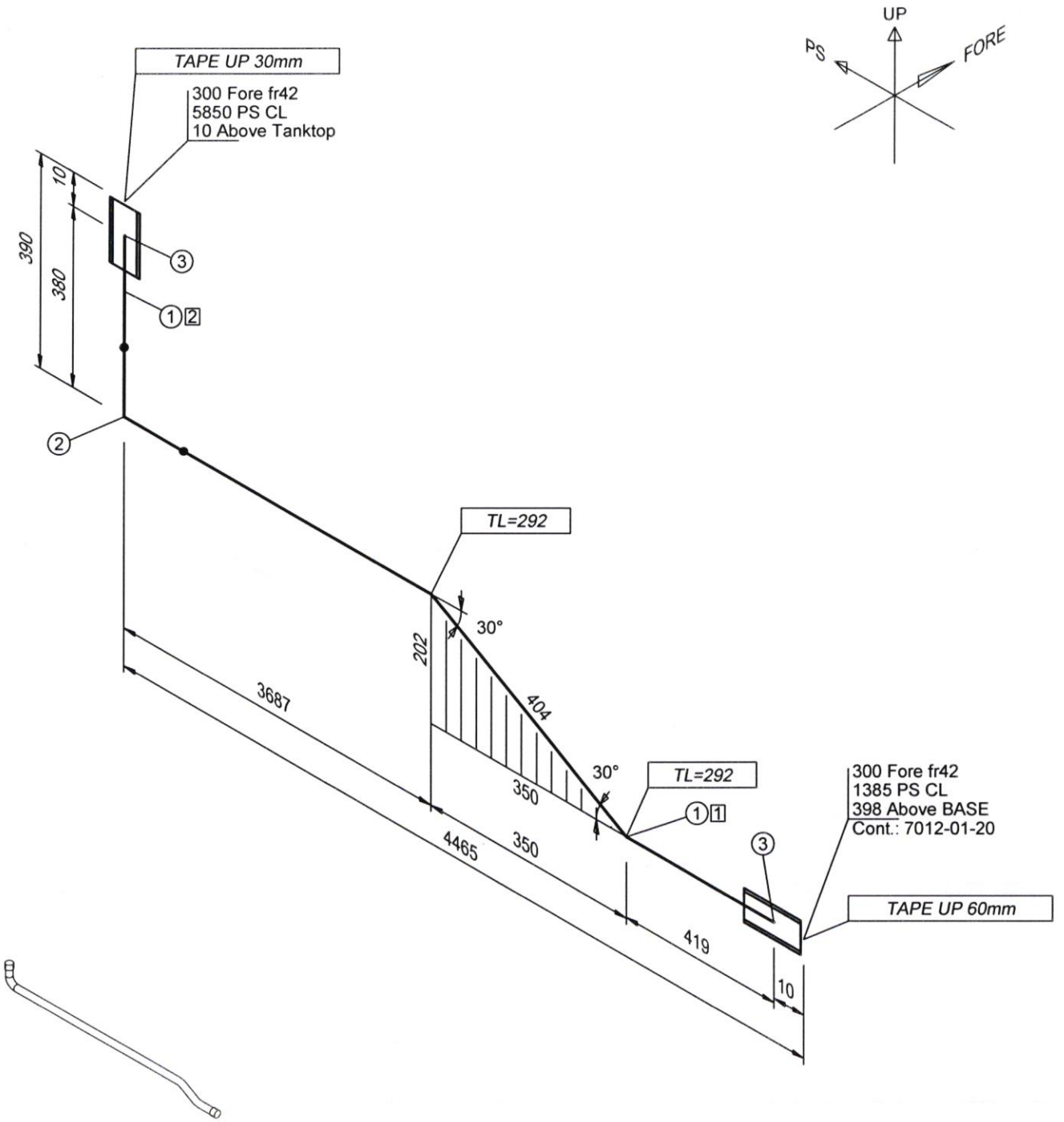
6.9. All test and Inspections shall be carried out as per approved Quality Plan.

6.10. All works shall be as per strict compliance to approved UCSL drawings.

6.11. All correspondence with the Shipyard to be in English language. All documents and plans to be in English language and in metric units.

Rev.	Description	Drawn	d.d.
A			
B			
C			

1	4352 mm	SMLS PIPE EN 10210-1/2	S355J2H
		114.3 x 8.0	PSL114080
2	228 mm	SMLS PIPE EN 10210-1/2	S355J2H
		114.3 x 8.0	PSL114080



3	2	INNER SLEEVE L=100	S235JRH
		DN100 - 133.0 x 8.0	WSL133080-100
2	1	SMLS ELBOW 3S EN10253-2A SERIE 5	P235GH
		90° -114.3 x 8.8	
1		SMLS PIPE EN 10210-1/2	S355J2H
		114.3 x 8.0 4580 mm	PSL114080
Pos. No:	Quant.	Part/Dimension	Material

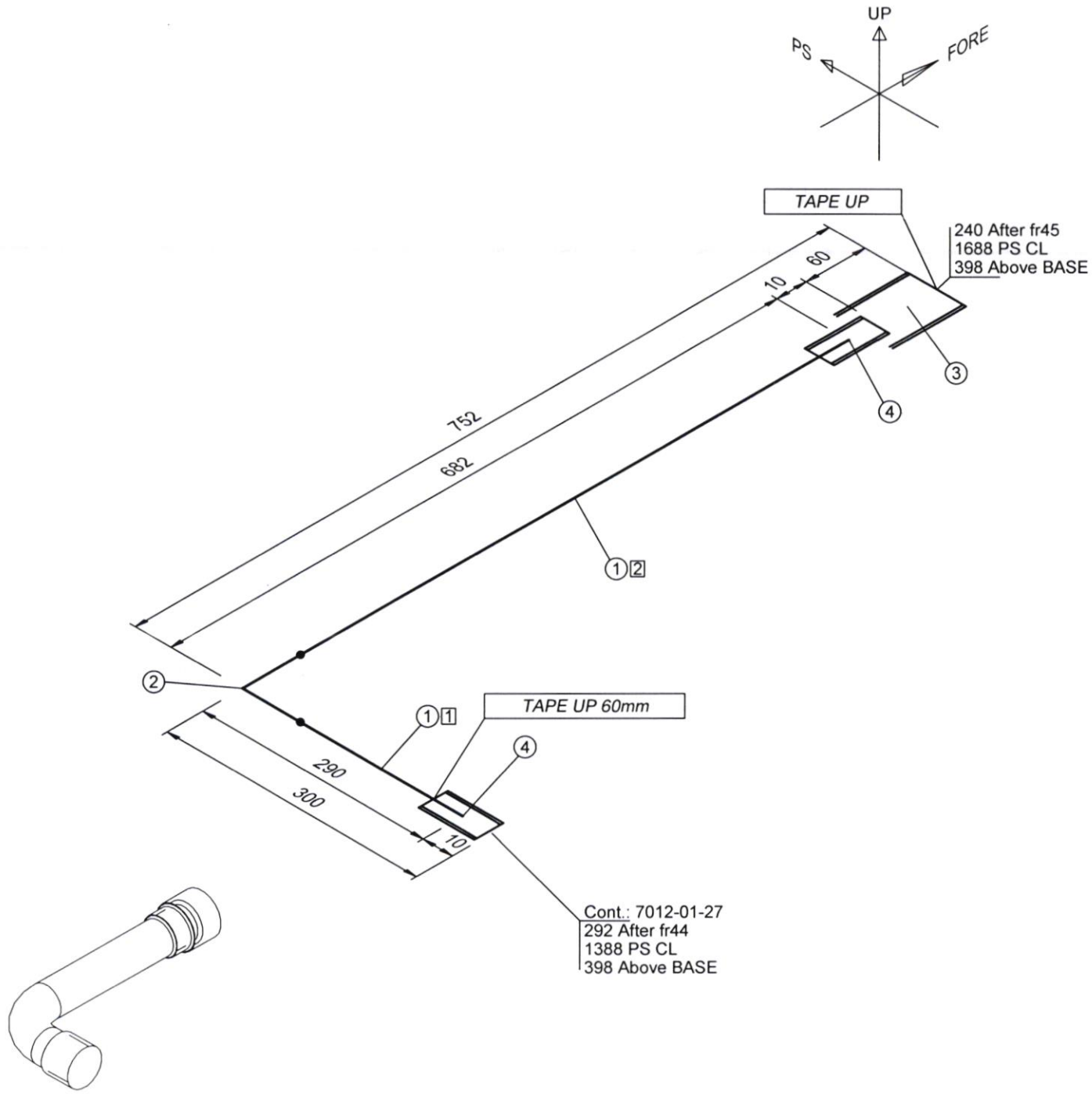
Total weight	106 kg		
Design.	AS		
Drawn	KP	Description	Ballast system mid ship PS
Date	23.10.23		
Checked	EP	Preperation	
Compartment/ Ring	2	☐ Shot bl. ☐ Black ☒ Galv. ☐ Paint ☐ Acid cl. ☐ NPI	CONOSHIP INTERNATIONAL
Section No.	320		

Hull No	Project Number	Assembly Drawing	Drawing/Pipe No	Rev.
UY165		7700-320	7012-01-21	0

Date printed: 24.10.23 at 13:21:14 hr

Rev.	Description	Drawn	d.d.
A			
B			
C			

1	138 mm	SMLS PIPE EN 10210-1/2	S355J2H
		114.3 x 8.0	PSL114080
2	530 mm	SMLS PIPE EN 10210-1/2	S355J2H
		114.3 x 8.0	PSL114080



4	2	INNER SLEEVE L=100	S235JRH
		DN100 - 133.0 x 8.0	WSL133080-100
3	1	OUTER SLEEVE L=100	S235JRH
		DN100 - 152.4 x 8.0	WSL152080-100
2	1	SMLS ELBOW 3S EN10253-2A SERIE 5	P235GH
		90° -114.3 x 8.8	
1		SMLS PIPE EN 10210-1/2	S355J2H
		114.3 x 8.0 668 mm	PSL114080

Pos. No:	Quant.	Part/Dimension	Material

Total weight	27 kg
Design.	AS
Drawn	KP
Date	20.10.23
Checked	EP
Compartment/ Ring	2
Section No.	320

Description: Ballast system mid ship PS

Preperation: ☐ Shot bl. ☐ Black ☐ Galv. ☐ Paint ☐ Acid cl. ☐ NPI

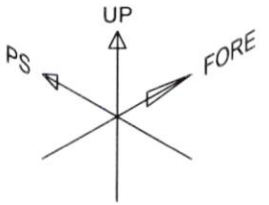
CONOSHIP INTERNATIONAL

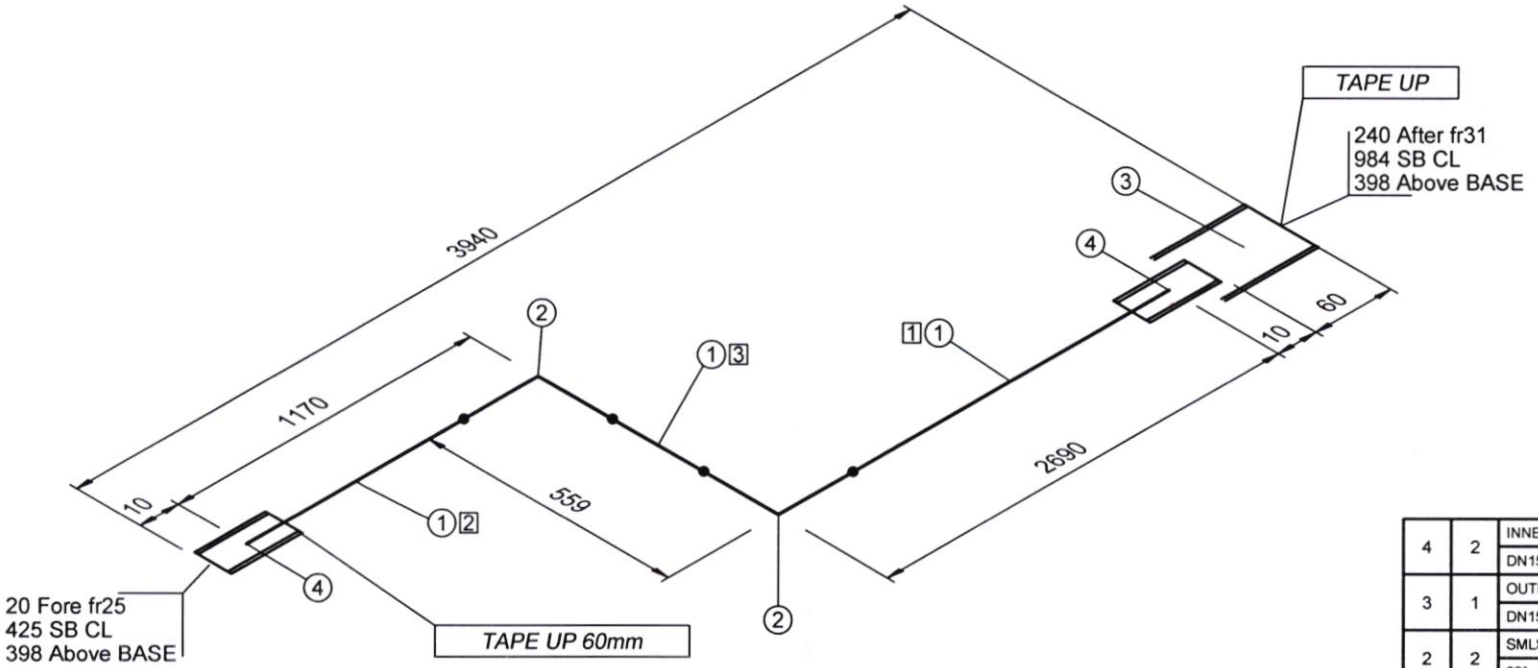
Hull No	Project Number	Assembly Drawing	Drawing/Pipe No	Rev.
UY165		7700-320	7012-01-28	0

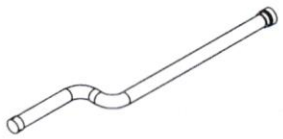
Date printed: 24.10.23 at 13:21:18 hr

Rev.	Description	Drawn	d.d.
A			
B			
C			

1	2461 mm	SMLS PIPE EN 10210-1/2	S355J2H
		168.3 x 8.8	PSL168088
2	942 mm	SMLS PIPE EN 10210-1/2	S355J2H
		168.3 x 8.8	PSL168088
3	101 mm	SMLS PIPE EN 10210-1/2	S355J2H
		168.3 x 8.8	PSL168088







Pos. No:	Quant.	Part/Dimension	Material
4	2	INNER SLEEVE L=100	S235JRH
		DN150 - 193.7 x 10.0	WSL193100-100
3	1	OUTER SLEEVE L=100	S235JRH
		DN150 - 219.1 x 10.0	WSL219100-100
2	2	SMLS ELBOW 3S EN10253-2A SERIE 5	P235GH
		90° -168.3 x 11.0	
1		SMLS PIPE EN 10210-1/2	S355J2H
		168.3 x 8.8 3503 mm	PSL168088

Total weight	165 kg
Design.	AS
Drawn	AS
Date	19.10.23
Checked	EP
Compartment/ Ring	2
Section No.	310

Description: Ballast system mid ship SB

Preperation: ☐ Shot bl. ☐ Black ☒ Galv. ☐ Paint ☐ Acid cl. ☐ NPI

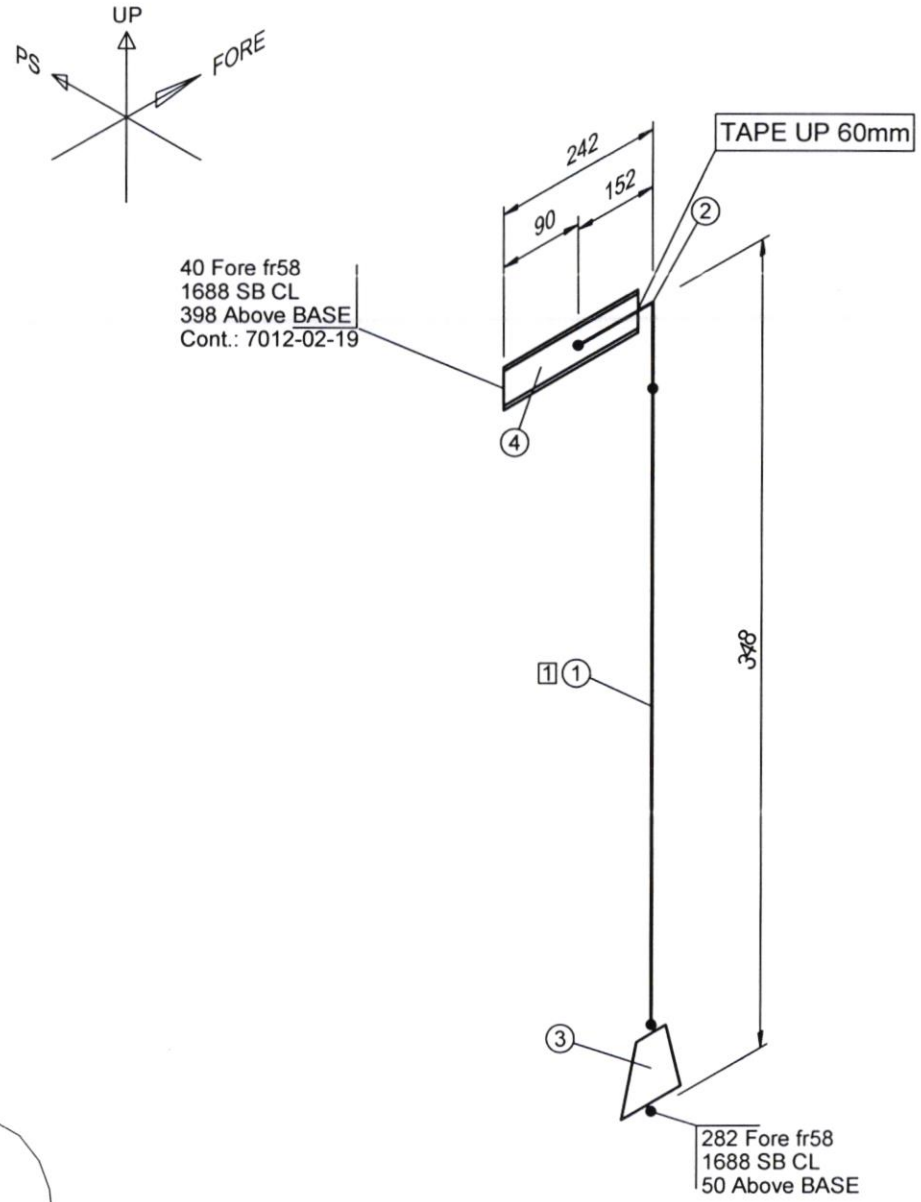
CONOSHIP INTERNATIONAL

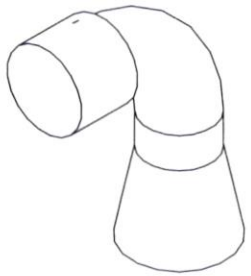
Hull No	Project Number	Assembly Drawing	Drawing/Pipe No	Rev.
UY165		7700-310	7012-02-03	0

Date printed: 24.10.23 at 13:59:54 hr

Rev.	Description	Drawn	d.d.
A			
B			
C			

1	57 mm	PIPE EN 10217-2	P195GH
		114.3 x 4.5	





Pos. No:	Quant.	Part/Dimension	Material
4	1	INNER SLEEVE L=100 for Curve	S235JRH
		DN100 - 133.0 x 8.0	WSL133080-100
3	1	CONCENTRIC REDUCER EN10253-2 SERIE 3	P235GH
		168.3x5.6-114.3x4.5 L=140	
2	1	SMLS ELBOW 3S EN10253-2A SERIE 3	P235GH
		90° -114.3 x 4.5	
1		PIPE EN 10217-2	P195GH
		114.3 x 4.5 57 mm	

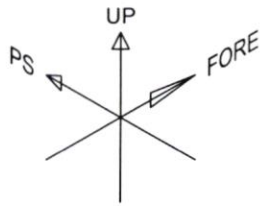
Total weight	9 kg		
Design.	AS		
Drawn	AS	Description	Ballast system mid ship SB
Date	19.10.23		
Checked	EP	Preperation	
Compartment/ Ring	3	☐ Shot bl. ☐ Black ☒ Galv. ☐ Paint ☐ Acid cl. ☐ NPI	CONOSHIP INTERNATIONAL
Section No.	330		

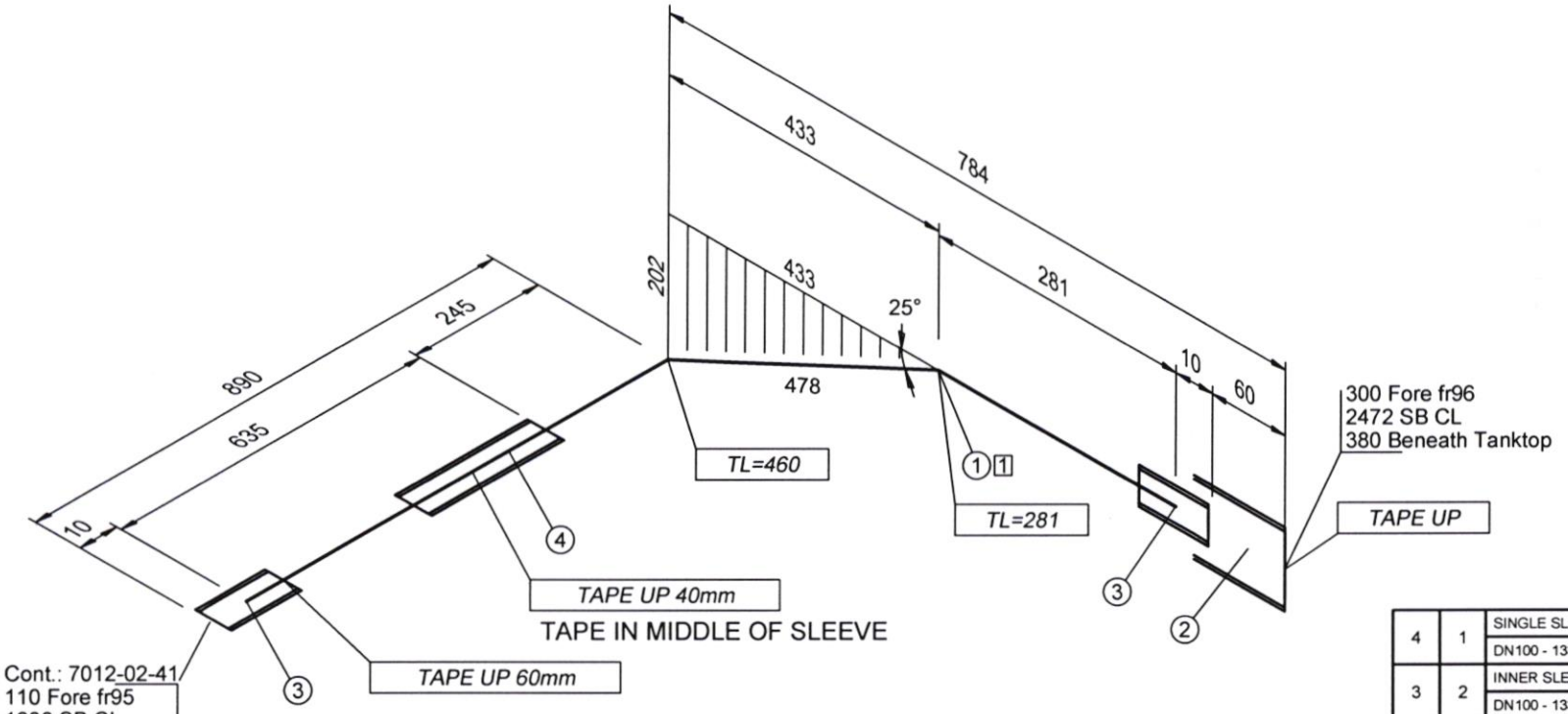
Hull No	Project Number	Assembly Drawing	Drawing/Pipe No	Rev.
UY165		7700-330	7012-02-20	0

Date printed: 24.10.23 at 14:00:03 hr

Rev.	Description	Drawn	d.d.
A			
B			
C			

1	1539 mm	SMLS PIPE EN 10210-1/2	S355J2H
		114.3 x 8.0	PSL114080





Pos. No:	Quant.	Part/Dimension	Material
4	1	SINGLE SLEEVE L=100 (ONTO)	S235JRH
		DN100 - 133.0 x 8.0	WSL133080-100
3	2	INNER SLEEVE L=100	S235JRH
		DN100 - 133.0 x 8.0	WSL133080-100
2	1	OUTER SLEEVE L=100	S235JRH
		DN100 - 152.4 x 8.0	WSL152080-100
1		SMLS PIPE EN 10210-1/2	S355J2H
		114.3 x 8.0 1539 mm	PSL114080

Total weight	43 kg
Design.	AS
Drawn	AS
Date	20.10.23
Checked	EP
Compartment/ Ring	4
Section No.	360

Description: Ballast system mid ship SB

Preperation: ☐ Shot bl. ☐ Black ☒ Galv. ☐ Paint ☐ Acid cl. ☐ NPI

CONOSHIP INTERNATIONAL

Hull No	Project Number	Assembly Drawing	Drawing/Pipe No	Rev.
UY165		7700-360	7012-02-42	0

Date printed: 24.10.23 at 14:13:12 hr

PART A

FABRICATION RATE FOR CARBON STEEL & STAINLESS-STEEL PIPES

Category	Inch Dia_Shop	Approx. Inch Diameter (IND) (A)	Unit rate (B)	Total Rate (C=A*B)
Carbon Steel Pipes total	**32763.3**			
32NB to 50NB	6789.30			
65NB to 80NB	4486.80			
100NB to 150NB	19373.40			
Above 150NB	2113.80			
Pipe bending	642.187			
Class Pipes total	**115.00**			
32NB to 50NB	17.5			
65NB to 80NB	30			
100NB to 150NB	22.5			
Above 150NB	45			
Copper Pipes total	**363**			
32NB to 50NB	363			
Stainless Steel Pipe total	**464.4**			
32NB to 50NB	120.00			
65NB to 80NB	267.60			
Above 150NB	76.80			

PART B
RATE FOR GALVANISATION/PICKLING/PASSIVATION

SL. No	Description	Total Weight in Ton (A)	Unit Rate/Ton (B)	Total Rate (C=A*B)
1	Hot Dip Galvanizing	45		Rs..... (Per Ton)
2	Pickling	4		Rs..... (Per Ton)
3	Passivation	1		Rs..... (Per Ton)

PART C
INDICATIVE BILL OF MATERIAL(BOQ)

Sr. No	Item Description	Size	OD	Schedule	Thickness	Material	Material Category	Standard	Rating	Class	Qty	UOM	Remark	Unit Price
1	Seamless Pipe	32	42.4		2.6	P195GH	Carbon Steel	EN10217-2	-	-	30	MTR		
2	Seamless Pipe	32	42.4		4	S355J2H	Carbon Steel	EN10210-1/2	-	-	1	MTR		
3	Seamless Pipe	32	42.4		4.5	P195GH	Carbon Steel	EN10217-2	-	-	65	MTR		
4	Seamless Pipe	40	48.3		2.6	P195GH	Carbon Steel	EN10217-2	-	-	68	MTR		
5	Seamless Pipe	40	48.3		4.5	P195GH	Carbon Steel	EN10217-2	-	-	110	MTR		
6	Seamless Pipe	40	48.3		4.5	P235TR1	Carbon Steel	EN 10216-1	-	-	5	MTR		
7	Seamless Pipe	40	48.3		6.3	P195GH	Carbon Steel	EN10217-2	-	-	8	MTR		
8	Seamless Pipe	40	48.3		6.3	P235TR1	Carbon Steel	EN 10216-1	-	-	175	MTR		
9	Seamless Pipe	40	48.3		10	S355J2H	Carbon Steel	EN10210-1/2	-	-	1	MTR	BV Class Certificate	
10	Seamless Pipe	50	60.3		3.2	P195GH	Carbon Steel	EN10217-2	-	-	210	MTR		
11	Seamless Pipe	50	60.3		3.6	P195GH	Carbon Steel	EN10217-2	-	-	15	MTR		
12	Seamless Pipe	50	60.3		4.5	P195GH	Carbon Steel	EN10217-2	-	-	160	MTR		
13	Seamless Pipe	50	60.3		6.3	P235TR1	Carbon Steel	EN 10216-1	-	-	2.5	MTR		
14	Seamless Pipe	50	60.3		6.3	S235J2H	Carbon Steel	EN10210-1/2	-	-	15	MTR		
15	Seamless Pipe	50	60.3		6.3	S355J2H	Carbon Steel	EN10210-1/2	-	-	12	MTR		
16	Seamless Pipe	50	60.3		7.1	P195GH	Carbon Steel	EN10217-2	-	-	15	MTR		
17	Seamless Pipe	50	60.3		10	S355J2H	Carbon Steel	EN10210-1/2	-	-	2	MTR	BV Class Certificate	
18	Seamless Pipe	50	60.33		3.91	AISI-316L	Stainless Steel	ASTM A36.10	-	-	8	MTR		
19	Seamless Pipe	65	73.03		5.16	AISI-316L	Stainless Steel	ASTM A36.10	-	-	18	MTR		
20	Seamless Pipe	65	76.1		3.6	P195GH	Carbon Steel	EN10217-2	-	-	50	MTR		
21	Seamless Pipe	65	76.1		4.5	P195GH	Carbon Steel	EN10217-2	-	-	28	MTR		
22	Seamless Pipe	65	76.1		6.3	P235TR1	Carbon Steel	EN 10216-1	-	-	3.5	MTR		
23	Seamless Pipe	65	76.1		6.3	S235J2H	Carbon Steel	EN10210-1/2	-	-	18	MTR		

24	Seamless Pipe	65	76.1		6.3	S355J2H	Carbon Steel	EN10210-1/2	-	-	3	MTR		
25	Seamless Pipe	80	88.9		3	AISI-316L	Stainless Steel	ASTM A36.10	-	-	2	MTR		
26	Seamless Pipe	80	88.9		3.6	P195GH	Carbon Steel	EN10217-2	-	-	105	MTR		
27	Seamless Pipe	80	88.9		4.5	P195GH	Carbon Steel	EN10217-2	-	-	5	MTR		
28	Seamless Pipe	80	88.9		7.1	P235TR1	Carbon Steel	EN 10216-1	-	-	2	MTR		
29	Seamless Pipe	80	88.9		7.1	S235JRH	Carbon Steel	EN10210-1/2	-	-	1	MTR		
30	Seamless Pipe	80	88.9		7.1	S355J2H	Carbon Steel	EN10210-1/2	-	-	100	MTR		
31	Seamless Pipe	80	88.9		10	S355J2H	Carbon Steel	EN10210-1/2	-	-	3	MTR	BV Class Certificate	
32	Seamless Pipe	100	114.3		3.6	P195GH	Carbon Steel	EN10217-2	-	-	125	MTR		
33	Seamless Pipe	100	114.3		4.5	P195GH	Carbon Steel	EN10217-2	-	-	70	MTR		
34	Seamless Pipe	100	114.3		4.5	P235TR2	Carbon Steel	EN10217-2	-	-	18	MTR		
35	Seamless Pipe	100	114.3		5	P195GH	Carbon Steel	EN10217-2	-	-	8	MTR		
36	Seamless Pipe	100	114.3		8	P195GH	Carbon Steel	EN10217-2	-	-	15	MTR		
37	Seamless Pipe	100	114.3		8	S355J2H	Carbon Steel	EN10210-1/2	-	-	500	MTR		
38	Seamless Pipe	100	114.3		8.8	S355J2H	Carbon Steel	EN10210-1/2	-	-	90	MTR		
39	Seamless Pipe	100	114.3		10	S355J2H	Carbon Steel	EN10210-1/2	-	-	1	MTR	BV Class Certificate	
40	Seamless Pipe	125	139.7		4	P195GH	Carbon Steel	EN10217-2	-	-	6	MTR		
41	Seamless Pipe	125	139.7		5	P195GH	Carbon Steel	EN10217-2	-	-	10	MTR		
42	Seamless Pipe	125	139.7		5	P235TR2	Carbon Steel	EN10217-2	-	-	8	MTR		
43	Seamless Pipe	125	139.7		5.6	P195GH	Carbon Steel	EN10217-2	-	-	10	MTR		
44	Seamless Pipe	125	139.7		8	P235TR1	Carbon Steel	EN 10216-1	-	-	1	MTR		
45	Seamless Pipe	125	139.7		8	S355J2H	Carbon Steel	EN10210-1/2	-	-	1	MTR		
46	Seamless Pipe	125	139.7		10	S355J2H	Carbon Steel	EN10210-1/2	-	-	1	MTR	BV Class Certificate	
47	Seamless Pipe	150	168.3		4.5	P195GH	Carbon Steel	EN10217-2	-	-	25	MTR		
48	Seamless Pipe	150	168.3		5	P235TR2	Carbon Steel	EN10217-2	-	-	2	MTR		
49	Seamless Pipe	150	168.3		8.8	P235TR2	Carbon Steel	EN10217-2	-	-	205	MTR		
50	Seamless Pipe	150	168.3		8.8	S355J2H	Carbon Steel	EN10210-1/2	-	-	1	MTR		

51	Seamless Pipe	150	168.3		10	S355J2H	Carbon Steel	EN10210-1/2	-	-	1	MTR	BV Class Certificate	
52	Seamless Pipe	200	219.1		3	AISI-316L	Stainless Steel	ASTM A36.10	-	-	6	MTR		
53	Seamless Pipe	200	219.1		4	S235JRH	Carbon Steel	EN 10217-1	-	-	14	MTR		
54	Seamless Pipe	200	219.1		4.5	S235JRH	Carbon Steel	EN 10217-1	-	-	1	MTR		
55	Seamless Pipe	200	219.1		6.3	P195GH	Carbon Steel	EN10217-2	-	-	22	MTR		
56	Seamless Pipe	200	219.1		10	S355J2H	Carbon Steel	EN10210-1/2	-	-	1	MTR	BV Class Certificate	
57	Seamless Pipe	250	273		10	S355J2H	Carbon Steel	EN10210-1/2	-	-	2	MTR	BV Class Certificate	
58	Seamless Pipe	400	406.4		8.8	S355J2H	Carbon Steel	EN10210-1/2	-	-	0.5	MTR		
59	Concentric Reducer	100x50	114.3X60.3		4.5X3.6	P235GH	Carbon Steel	EN10253-2	-	-	2	NOS		
60	Concentric Reducer	100x50	114.3X60.3		8x6.3	P235GH	Carbon Steel	EN10253-2	-	-	2	NOS		
61	Concentric Reducer	100x50	114.3x60.3		3.6x3.2	P235GH	Carbon Steel	EN10253-2	-	-	1	NOS		
62	Concentric Reducer	100x65	114.3x76.1		3.6x3.6	P235GH	Carbon Steel	EN10253-2	-	-	2	NOS		
63	Concentric Reducer	100x80	114.3X88.9		3.6x3.6	P235GH	Carbon Steel	EN10253-2	-	-	6	NOS		
64	Concentric Reducer	100x80	114.3x88.9		4.5X4.0	P235GH	Carbon Steel	EN10253-2	-	-	8	NOS		
65	Concentric Reducer	100x80	114.3x88.9		6.0x6.0	P235GH	Carbon Steel	EN10253-2	-	-	2	NOS		
66	Concentric Reducer	100x80	114.3x88.9		8.8x8.0	P235GH	Carbon Steel	EN10253-2	-	-	7	NOS		
67	Concentric Reducer	125x100	139.7x114.3		4x3.6	P235GH	Carbon Steel	EN10253-2	-	-	7	NOS		
68	Concentric Reducer	150x100	168.3x114.3		4.5x3.6	P235GH	Carbon Steel	EN10253-2	-	-	7	NOS		
69	Concentric Reducer	150x100	168.3X114.3		5.6X4.5	P235GH	Carbon Steel	EN10253-2	-	-	4	NOS		

70	Concentric Reducer	150x125	168.3x139.7		4.5x4	P235GH	Carbon Steel	EN10253-2	-	-	7	NOS		
71	Concentric Reducer	200x100	219.1X114.3		7.1X4.5	P235GH	Carbon Steel	EN10253-2	-	-	3	NOS		
72	Concentric Reducer	200x150	219.1x168.3		7.1x5.6	P235GH	Carbon Steel	EN10253-2	-	-	2	NOS		
73	Concentric Reducer	200x150	219.1x168.3		4.5x4	P235GH	Carbon Steel	EN10253-2	-	-	3	NOS		
74	Concentric Reducer	200x150	219.1X168.3		6.3X4.5	P235GH	Carbon Steel	EN10253-2	-	-	1	NOS		
75	Concentric Reducer	32x25	42.4x33.7		2.6x2.6	P235GH	Carbon Steel	EN10253-2	-	-	7	NOS		
76	Concentric Reducer	40x25	48.3X33.7		2.6x2.6	P235GH	Carbon Steel	EN10253-2	-	-	12	NOS		
77	Concentric Reducer	40x25	48.3X33.40		2.77x2.77	P235GH	Carbon Steel	EN10253-2	-	10S	2	NOS		
78	Concentric Reducer	40x32	48.3x42.4		2.6x2.6	P235GH	Carbon Steel	EN10253-2	-	-	12	NOS		
79	Concentric Reducer	50x15	60.3x21.3		3.2x2.3	P235GH	Carbon Steel	EN10253-2	-	-	10	NOS		
80	Concentric Reducer	50x25	60.3x33.7		3.6x3.2	P235GH	Carbon Steel	EN10253-2	-	-	5	NOS		
81	Concentric Reducer	50x25	60.3x33.7		3.2X2.6	P235GH	Carbon Steel	EN10253-2	-	-	5	NOS		
82	Concentric Reducer	50x32	60.3x42.4		3.2x2.6	P235GH	Carbon Steel	EN10253-2	-	-	8	NOS		
83	Concentric Reducer	50x40	60.3X48.3		3.6X3.6	P235GH	Carbon Steel	EN10253-2	-	-	5	NOS		
84	Concentric Reducer	65x50	76.1x60.3		3.6x3.2	P235GH	Carbon Steel	EN10253-2	-	-	12	NOS		
85	Concentric Reducer	65x50	76.1x60.3		3.6x3.6	P235GH	Carbon Steel	EN10253-2	-	-	3	NOS		
86	Concentric Reducer	80x25	88.9x33.7		4x3.2	P235GH	Carbon Steel	EN10253-2	-	-	1	NOS		

37	Concentric Reducer	80x50	88.9x60.3		3.6x3.2	P235GH	Carbon Steel	EN10253-2	-	-	7	NOS		
38	Concentric Reducer	80x50	88.9x60.3		4x3.6	P235GH	Carbon Steel	EN10253-2	-	-	9	NOS		
39	Concentric Reducer	80x65	88.9X76.1		4X3.6	P235GH	Carbon Steel	EN10253-2	-	-	1	NOS		
90	Concentric Reducer	80x65	88.9X76.1		3.6x3.6	P235GH	Carbon Steel	EN10253-2	-	-	9	NOS		
91	Elbow 45 degree 1.5D	40	48.3		2.6	P235GH	Carbon Steel	EN10253-2	-	-	2	NOS		
92	Elbow 45 degree 1.5D	50	60.3		3.6	P235GH	Carbon Steel	EN10253-2	-	-	3	NOS		
93	Elbow 45 degree 1.5D	50	60.3		3.91	AISI-316L	Stainless Steel	ANSIB16.9	-	-	1	NOS		
94	Elbow 45 degree 1.5D	50	60.3		5	S235JRH	Carbon Steel	EN10253-2	-	-	8	NOS		
95	Elbow 45 degree 1.5D	50	60.3		7.1	P235GH	Carbon Steel	EN10253-2	-	-	7	NOS		
96	Elbow 45 degree 1.5D	65	76.1		10	P235GH	Carbon Steel	EN10253-2	-	-	1	NOS		
97	Elbow 45 degree 1.5D	65	76.1		5	S235JRH	Carbon Steel	EN10253-2	-	-	2	NOS		
98	Elbow 45 degree 1.5D	80	88.9		3.05	AISI-316L	Stainless Steel	ANSIB16.9	-	-	1	NOS		
99	Elbow 45 degree 1.5D	80	88.9		7.1	S235JRH	Carbon Steel	EN10253-2	-	-	2	NOS		
100	Elbow 45 degree 1.5D	80	88.9		8	P235GH	Carbon Steel	EN10253-2	-	-	18	NOS		
101	Elbow 45 degree 1.5D	100	114.3		3.6	P235GH	Carbon Steel	EN10253-2	-	-	3	NOS		
102	Elbow 45 degree 1.5D	100	114.3		4.5	P235GH	Carbon Steel	EN10253-2	-	-	4	NOS		
103	Elbow 45 degree 1.5D	100	114.3		8	P235GH	Carbon Steel	EN10253-2	-	-	4	NOS		

104	Elbow 45 degree 1.5D	100	114.3		8	P235GH	Carbon Steel	EN10253-3	-	-	10	NOS		
105	Elbow 45 degree 1.5D	100	114.3		8.8	P235GH	Carbon Steel	EN10253-2	-	-	2	NOS		
106	Elbow 45 degree 1.5D	100	114.3		11	P235GH	Carbon Steel	EN10253-2	-	-	20	NOS		
107	Elbow 45 degree 1.5D	125	139.7		4	P235GH	Carbon Steel	EN10253-2	-	-	6	NOS		
108	Elbow 45 degree 1.5D	200	219.1		3	AISI-304L	Stainless Steel	ANSIB16.9	-	-	1	NOS		
109	Elbow 45 degree 1.5D	200	219.1		3	AISI-316L	Stainless Steel	ANSIB16.9	-	-	1	NOS		
110	Elbow 45 degree 1.5D	200	219.1		4.5	P235GH	Carbon Steel	EN10253-2	-	-	1	NOS		
111	Elbow 90 degree 1.5D	-	42		1.5	Cu	Copper	Cu			9	NOS		
112	Elbow 90 degree 1.5D	-	35		1.5	Cu	Copper	Cu			34	NOS		
113	Elbow 90 degree 1.5D	32	42.4		5	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	4	NOS		
114	Elbow 90 degree 1.5D	40	48.3		2.6	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	8	NOS		
115	Elbow 90 degree 1.5D	40	48.3		3.6	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	9	NOS		
116	Elbow 90 degree 1.5D	40	48.3		4.5	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	24	NOS		
117	Elbow 90 degree 1.5D	40	48.3		5	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	11	NOS		
118	Elbow 90 degree 1.5D	50	60.3		3.2	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	40	NOS		
119	Elbow 90 degree 1.5D	50	60.3		3.6	P195GH	Carbon Steel	EN10253-2 TYPE A	-	-	27	NOS		
120	Elbow 90 degree 1.5D	50	60.3		3.6	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	61	NOS		

121	Elbow 90 degree 1.5D	50	60.3		3.91	AISI-316L	Stainless Steel	ANSIB16.9	-	40S	7	NOS		
122	Elbow 90 degree 1.5D	50	60.3		4.5	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	17	NOS		
123	Elbow 90 degree 1.5D	50	60.3		5.6	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	20	NOS		
124	Elbow 90 degree 1.5D	50	60.3		7.1	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	10	NOS		
125	Elbow 90 degree 1.5D	50	60.3		11	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	4	NOS		
126	Elbow 90 degree 1.5D	65	73.03		5.16	AISI-316L	Stainless Steel	ANSIB16.9	-	-	8	NOS		
127	Elbow 90 degree 1.5D	65	76.1		3.6	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	10	NOS		
128	Elbow 90 degree 1.5D	65	76.1		5.6	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	6	NOS		
129	Elbow 90 degree 1.5D	65	76.1		10	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	2	NOS		
130	Elbow 90 degree 1.5D	65	76.1		6.3	S355J2H	Carbon Steel	EN ISO 15494	-	-	1	NOS		
131	Elbow 90 degree 1.5D	80	88.9		3.05	AISI-316L	Stainless Steel	ANSIB16.9	-	10S	2	NOS		
132	Elbow 90 degree 1.5D	80	88.9		3.6	P195GH	Carbon Steel	EN10253-2 TYPE A	-	-	4	NOS		
133	Elbow 90 degree 1.5D	80	88.9		4	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	22	NOS		
134	Elbow 90 degree 1.5D	80	88.9		5.6	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	2	NOS		
135	Elbow 90 degree 1.5D	80	88.9		7.1	S355J2H	Carbon Steel	EN ISO 15494	-	-	1	NOS		
136	Elbow 90 degree 1.5D	80	88.9		8	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	14	NOS		
137	Elbow 90 degree 1.5D	100	114.3		3.6	P195GH	Carbon Steel	EN10253-2 TYPE A	-	-	36	NOS		

138	Elbow 90 degree 1.5D	100	114.3		3.6	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	6	NOS		
139	Elbow 90 degree 1.5D	100	114.3		4.5	P195GH	Carbon Steel	EN10253-2 TYPE A	-	-	9	NOS		
140	Elbow 90 degree 1.5D	100	114.3		4.5	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	64	NOS		
141	Elbow 90 degree 1.5D	100	114.3		8	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	36	NOS		
142	Elbow 90 degree 1.5D	100	114.3		8	S355J2H	Carbon Steel	EN ISO 15494	-	-	6	NOS		
143	Elbow 90 degree 1.5D	100	114.3		8.8	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	19	NOS		
144	Elbow 90 degree 1.5D	100	114.3		11	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	18	NOS		
145	Elbow 90 degree 1.5D	125	139.7		4	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	18	NOS		
146	Elbow 90 degree 1.5D	125	139.7		5	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	14	NOS		
147	Elbow 90 degree 1.5D	150	168.3		4.5	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	16	NOS		
148	Elbow 90 degree 1.5D	150	168.3		8.8	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	21	NOS		
149	Elbow 90 degree 1.5D	200	219.1		3	AISI 304L	Stainless Steel	EN10253-2 TYPE A	-	-	2	NOS		
150	Elbow 90 degree 1.5D	200	219.1		6.3	P235GH	Carbon Steel	EN10253-2 TYPE A	-	-	9	NOS		
151	Elbow 90 degree 1.5D	250	273		10	S355J2H	Carbon Steel	EN10210-1/2	-	-	4	NOS		
152	Equal Tee		35		1.5	Cu	Copper				6	NOS		
153	Equal Tee		42		1.5	Cu	Copper				3	NOS		
154	Slip On Flange	50	-	-	-	AISI-316L		EN 1092-1 Type 01 FF	PN10	-	4	NOS		
155	Slip On Flange	65	-	-	-	AISI-316L		EN 1092-1 Type 01 FF	PN10	-	26	NOS		
156	Slip On Flange	32	-	-	-	S235JRH	Carbon Steel	EN 1092-1 Type 01 FF	PN10	-	19	NOS		
157	Slip On Flange	40	-	-	-	S235JRH		EN 1092-1 Type 01 FF	PN10	-	90	NOS		

158	Slip On Flange	50	-	-	-	S235JRH		EN 1092-1 Type 01 FF	PN10	-	357	NOS		
159	Slip On Flange	65	-	-	-	S235JRH		EN 1092-1 Type 01 FF	PN10	-	71	NOS		
160	Slip On Flange	80	-	-	-	S235JRH		EN 1092-1 Type 01 FF	PN10	-	178	NOS		
161	Slip On Flange	80	-	-	-	S235JRH		EN 1092-1 Type 01 FF	PN6	-	2	NOS		
162	Slip On Flange	100	-	-	-	S235JRH		EN 1092-1 Type 01 FF	PN10	-	472	NOS		
163	Slip On Flange	125	-	-	-	S235JRH		EN 1092-1 Type 01 FF	PN10	-	47	NOS		
164	Slip On Flange	150	-	-	-	S235JRH		EN 1092-1 Type 01 FF	PN10	-	130	NOS		
165	Slip On Flange	150	-	-	-	S235JRH		EN 1092-1 Type 01 FF	PN6	-	14	NOS		
166	Slip On Flange	200	-	-	-	S235JRH		EN 1092-1 Type 01 FF	PN10	-	34	NOS		
167	Slip On Flange	200	-	-	-	S235JRH		EN 1092-1 Type 01 FF	PN6	-	2	NOS		
168	Slip On Flange	250	-	-	-	S235JRH		EN 1092-1 Type 01 FF	PN10	-	6	NOS		
169	Blind Flange	32	-	-	-	S235JRH	Carbon Steel	EN 1092-1 Type 5	PN10	-	2	NOS		
170	Blind Flange	40	-	-	-	S235JRH	Carbon Steel	EN 1092-1 Type 5	PN10	-	2	NOS		
171	Blind Flange	50	-	-	-	S235JRH	Carbon Steel	EN 1092-1 Type 5	PN10	-	2	NOS		
172	Blind Flange	50	-	-	-	AISI-316L	Stainless Steel	EN 1092-1	PN10	-	1	NOS		
173	Blind Flange	80	-	-	-	S235JRH	Carbon Steel	EN 1092-1 Type 5	PN10	-	1	NOS		
174	Blind Flange	100	-	-	-	S235JRH	Carbon Steel	EN 1092-1 Type 5	PN10	-	1	NOS		
175	Bulkhead Flange Penetration - Double Tapped	32	140	-	34	St37	Carbon Steel	As per Drawing			1	NOS	REFER ENCLOSURE - II	
176	Bulkhead Flange Penetration - Double Tapped	40	150	-	34	St37	Carbon Steel	As per Drawing			6	NOS		
177	Bulkhead Flange Penetration - Double Tapped	50	165	-	34	S235JRH	Carbon Steel	As per Drawing			25	NOS		
178	Bulkhead Flange Penetration - Double Tapped	65	185	-	34	S235JRH	Carbon Steel	As per Drawing			5	NOS		
179	Bulkhead Flange Penetration - Double Tapped	80	200	-	34	S235JRH	Carbon Steel	As per Drawing			11	NOS		

180	Bulkhead Flange Penetration - Double Tapped	100	220	-	34	S235JRH	Carbon Steel	As per Drawing			47	NOS		
181	Bulkhead Flange Penetration - Double Tapped	150	285	-	40	S235JRH	Carbon Steel	As per Drawing			24	NOS		
182	Bulkhead Flange Penetration - Single Tapped	40	150	-	34	S235JRH	Carbon Steel	As per Drawing			1	NOS		
183	Bulkhead Flange Penetration - Single Tapped	50	165	-	34	AISI-316	Stainless Steel	As per Drawing			1	NOS		
184	Bulkhead Flange Penetration - Single Tapped	50	165	-	34	S235JRH	Carbon Steel	As per Drawing			4	NOS		
185	Bulkhead Flange Penetration - Single Tapped	65	185	-	34	S235JRH	Carbon Steel	As per Drawing			3	NOS		
186	Bulkhead Flange Penetration - Single Tapped	80	200	-	34	S235JRH	Carbon Steel	As per Drawing			7	NOS		
187	Bulkhead Flange Penetration - Single Tapped	100	220	-	34	S235JRH	Carbon Steel	As per Drawing			33	NOS		
188	Penetration Sleeve	50	REFER ENCLOSURE - I			AISI-316L	Stainless Steel	As per Drawing	PN 10		5	NOS		
189	Penetration Sleeve	32				S235JRH	Carbon Steel	As per Drawing	PN 10		4	NOS		
190	Penetration Sleeve	32				S355J2H	Carbon Steel	As per Drawing	PN 10		3	NOS		
191	Penetration Sleeve	40				S235JRH	Carbon Steel	As per Drawing	PN 10		68	NOS		
192	Penetration Sleeve	50				S235JRH	Carbon Steel	As per Drawing	PN 10		149	NOS		

193	Penetration Sleeve	50		AISI-316L	Stainless Steel	As per Drawing	PN 10		5	NOS		
194	Penetration Sleeve	65		S235JRH	Carbon Steel	As per Drawing	PN 10		62	NOS		
195	Penetration Sleeve	80		S235JRH	Carbon Steel	As per Drawing	PN 10		16	NOS		
196	Penetration Sleeve	80		S355J2H	Carbon Steel	As per Drawing	PN 10		9	NOS		
197	Penetration Sleeve	100		S235JRH	Carbon Steel	As per Drawing	PN 10		39	NOS		
198	Penetration Sleeve	100		S355J2H	Carbon Steel	As per Drawing	PN 10		32	NOS		
199	Penetration Sleeve	125		S235JRH	Carbon Steel	As per Drawing	PN 10		30	NOS		
200	Penetration Sleeve	125		S355J2H	Carbon Steel	As per Drawing	PN 10		04	NOS		
201	Penetration Sleeve	150		S235JRH	Carbon Steel	As per Drawing	PN 10		31	NOS		
202	Penetration Sleeve	150		S355J2H	Carbon Steel	As per Drawing	PN 10		24	NOS		
203	Penetration Sleeve	200		S235JRH	Carbon Steel	As per Drawing	PN 10		16	NOS		
204	Pipe Sleeve	32		S235JRH	Carbon Steel	As per Drawing	PN 10		30	NOS		
205	Pipe Sleeve	32		S355J2H	Carbon Steel	As per Drawing	PN 10		7	NOS		
206	Pipe Sleeve	40		S235JRH	Carbon Steel	As per Drawing	PN 10		54	NOS		
207	Pipe Sleeve	40		S355J2H	Carbon Steel	As per Drawing	PN 10		3	NOS		
208	Pipe Sleeve	50		S235JRH	Carbon Steel	As per Drawing	PN 10		47	NOS		
209	Pipe Sleeve	50		S235JRHG	Carbon Steel	As per Drawing	PN 10		15	NOS		
210	Pipe Sleeve	50		S355J2H	Carbon Steel	As per Drawing	PN 10		32	NOS		
211	Pipe Sleeve	65		S235JRH	Carbon Steel	As per Drawing	PN 10		21	NOS		
212	Pipe Sleeve	65		AISI-316L	Carbon Steel	As per Drawing	PN 10		1	NOS		
213	Pipe Sleeve	80		AISI-316L	Carbon Steel	As per Drawing	PN 10		5	NOS		
214	Pipe Sleeve	80		S235JRH	Carbon Steel	As per Drawing	PN 10		24	NOS		

215	Pipe Sleeve	80				S355J2H	Carbon Steel	As per Drawing	PN 10		30	NOS		
216	Pipe Sleeve	100				S235JRH	Carbon Steel	As per Drawing	PN 10		67	NOS		
217	Pipe Sleeve	100				S355J2H	Carbon Steel	As per Drawing	PN 10		118	NOS		
218	Pipe Sleeve	125				S235JRH	Carbon Steel	As per Drawing	PN 10		2	NOS		
219	Pipe Sleeve	150				S235JRH	Carbon Steel	As per Drawing	PN 10		72	NOS		
220	Pipe Sleeve	200				S235JRH	Carbon Steel	As per Drawing	PN 10		2	NOS		
221	Weld Nipple BSP	1"	-	-	-	St37	Carbon Steel	DIN2982			2	NOS		
222	Weld Nipple BSP	1/2"	-	-	-	St37	Carbon Steel	DIN2982			4	NOS	L=50	
223	Weld Nipple BSP	1/2"	-	-	-	Brass		DIN2982			3	NOS		
224	Weld Nipple BSP	1"	-	-	-	Brass		DIN2982			1	NOS		
225	Weld Nipple BSP	1"	-	-	-	St37		DIN2982			6	NOS		
226	Weld Nipple BSP	1"	-	-	-	Brass		DIN2982			2	NOS		
227	Weld Nipple BSP	1"	-	-	-	St37		DIN2982			7	NOS		
228	Weld Nipple BSP	1/2"	-	-	-	Brass		DIN2982			3	NOS		
229	Weld Nipple BSP	1/2"	-	-	-	St37		DIN2982			16	NOS		
230	Weld Nipple BSP	2"	-	-	-	St37		DIN2982			8	NOS		
231	Weld Nipple BSP	3/4"	-	-	-	Brass		DIN2982			4	NOS		
232	Blank Plate with nipple	200	Ø219-R1/2"	-	8	ST 37	Carbon Steel				3	NOS		
233	Blank Plate with nipple	80	Ø89-R1/2"	-	8	ST 37	Carbon Steel				1	NOS		
234	Blank Plate		76	-	6	ST 37	Carbon Steel				5	NOS		
235	Wearing plate		Ø100	-	6	St37		EN 10210-1/2	PN10		10	NOS		
236	Wearing plate		Ø90		6	St37		EN 10210-1/2	PN10		8	NOS		
237	MARPOL FLANGE FIRE	50	REFER ENCLOSURE - III			St37		As per Drawing			1	NOS		
238	MARPOL FLANGE DIRTY OIL	40				St37		As per Drawing			1	NOS		
239	MARPOL FLANGE FUEL OIL	100				St37		As per Drawing			1	NOS		

240	MARPOL FLANGE SANITARY	50				St37		As per Drawing			1	NOS		
241	INNER SLEEVE for CURVE	200	244.5		10	S235JRH	Carbon Steel	EN10210-1/2			1	NOS		
242	Orifice	50				AISI-316L	Stainless Steel		PN10		1	NOS		
243	Pipe Collar with flange	42			1.5	Cu	Copper				10	NOS		
244	Pipe Collar with flange	35			1.5	Cu	Copper				10	NOS		
245	Reducing Connector		35 x 22			Cu	Copper				6	NOS		
246	Reducing Connector		35 x 28			Cu	Copper				6	NOS		
247	Reducing Tee		35 x 22		1.5 x 1.2		Copper				6	NOS		
248	Reducing Tee		35 x 28		1.5 x 1.5		Copper				6	NOS		
249	Bulkhead Fitting	35				Brass					5	NOS		
250	Bulkhead Fitting	42				Brass					5	NOS		
251	Double Nipple	1/2"				AISI-316L	Stainless Steel				3	NOS		
252	Pipe end cap	50				St37	Carbon Steel				2	NOS		
253	Straight Connector	35				Brass					32	NOS		
254	Straight Connector	42				Brass					18	NOS		
255	Welding socket thick walled	G 1"X 50				St37					5	NOS		
256	Welding socket thick walled	G 1/2 "X 25				St37					24	NOS		
257	Welding socket thick walled	G 1/2 "X 50				AISI-316L					1	NOS		
258	Welding socket thick walled	G 1/2 "X 50				St37					24	NOS		
259	Welding socket thick walled	G 1/4"X 25				AISI-316L					2	NOS		

260	Welding socket thick walled	G 1/4"X 25				Brass					1	NOS		
261	Welding socket thick walled	G 1/4"X 25				St37					14	NOS		
262	Welding socket thick walled	G 3/4" X 25				Brass					1	NOS		

Note:

1. For Pipe sleeve and Penetration sleeve refer Enclosure 1
2. For MARPOL details refer Enclosure 2
3. Where BV certificate is indicated, the item is to be certified by class.
4. This is a turnkey job and any additional works up to 10% growth of work on the material and spool fabrication in terms of total quantity of material and spools is to be envisaged and is to be undertaken without any additional price impact.

Annexure IV

POWER OF ATTORNEY

(On Applicant's letter head)

(Date and Reference)

To
The Assistant General Manager (Materials & Contract Cell)
Udupi Cochin Shipyard Limited
Fishing Harbour complex, Malpe,
Udupi 576 108.

Subject: Power of Attorney

Mr. / Mrs. / Ms..... (Name of the Person(s)), domiciled at .....(Address), acting as..... (Designation and name of the company), and whose signature is attested below, is hereby appointed as the Authorized Representative and authorized on behalf of ..... (Name of the company) to provide information and respond to enquiries etc. as may be required by the Employer for the project of ..... (Project title) and is hereby further authorized to sign and file relevant documents in respect of the above.

(Attested signature of Mr. .....)

For.....
(Name & designation)

(Company Seal)

उडुपि कोचीन शिपयार्ड लिमिटेड * UDUPI COCHIN SHIPYARD LIMITED *
अनुबंध कक्ष
CONTRACT CELL

TENDER FOR PIPE SPOOL FABRICATION ON 3800 DWT GENERAL CARGO VESSEL

PRICE BID FORMAT (Per Vessel)

Sl. No.	Work Description	UOM	Quantity (A)	Rate (B)	Amount-INR C= (A x B)
1	PART A- FABRICATION RATE FOR CARBON STEEL, COPPER & STAINLESS-STEEL PIPES				
2	PART B -RATE FOR GALVANISATION/PICKLING/PASSIVATION				
3	PART C- BILL OF MATERIAL(BOQ)				
4	**Total Amount**				
5	**IGST/GST @.....**				
6	**Grand Total Amount**				
Grand total in words:					

Signature:

Address of the contractor:

Date:

Seal:

Note:

1.1. Prices are to be quoted in the Pricing Format. The quotations to be submitted in the company letter head and forwarded to contractcell@udupicsl.com

1.2. Quotations shall be submitted as Password Protected File. The bidders are advised to share the password through only SMS while opening the quotations.

1.3. L1 will be determined based on the total amount at sl no.6

1.4. Price quoted for Anticipatory items will not be considered in L1 determination and it may be considered in account, if required during execution at a later stage, as the case may be.

1.5. Cost of Pipe spool fabrication will be = Size of pipe in inch x No. of joints (of that size) X Inch Dia Rate in the respective category.

- Each Butt joint is considered as one joint.
- Each Flange fitment, inside and outside welding (Fillet) is considered as two joints.

- Sleeve welding both ends considered as one joint.
- Brach connection butt joint is considered as one joint
- Pipe bending by cold bending process is considered as 0.5 joints for charges.

1.6. Rate quoted for Inch Diameter (IND) includes all activities involved in that joint such as edge preparation, fitment, welding of flanges, sleeves, elbows, tees, reducers, bends, branch pipes, butt welding, fillet welding etc.

1.7. Root welding should be TIG welding.

1.8. Fabrication also includes marking, cutting, edge preparation, cold bending, branch connections, profile cutting, preparation, testing, inspection etc. as per drawings, specifications/ instructions of Engineer- in - Charge.

1.9. Cost for electrodes/filler wire, consumables, primer paint (one coat) wherever applicable, materials for galvanizing, pickling and passivation, pressure testing, inspection etc. shall be inclusive in the quoted rate.

1.10. All costs for the satisfactory completion of pipe spool fabrication and Primer coating or Hot -dip galvanizing shall be included in PART A/B.

ANNEXURE-VI

TECHNO COMMERCIAL CHECK LIST (To be submitted by the bidder)

(Bidders may confirm acceptance of the Tender Conditions/deviations if any to be specified)

SL No.	Tender Enquiry Requirements	Confirmation from bidder (Strike off whichever is not applicable)	Specific comments /Remarks
1	Terms & Condition, Scope of work & Indicative Quantum of Work. (Annexure-I, II & III)	Agreed as per tender /Do not agree	
2	Schedule Clause 4.1 & 4.2(Annexure-I)	Agreed as per tender/Do not agree	
3	Eligibility criteria documents	Submitted/Not submitted	
4	Unconditional Acceptance	Agreed as per tender/Do not agree	
5	Offer Validity	01 Year - Agreed as per tender/Do not agree	
6	Taxes & Duties	Specified/included in Price	
7	Payment terms - confirm		
a	As per Clause 7 of Annexure - I	Agreed as per tender/Do not agree	
8	Price shall remain firm and fixed and No Escalation in prices after awarding of contract	Agreed as per tender/Do not agree	
9	Security Deposit	Agreed as per tender/Do not agree	
10	Performance Guarantee	Agreed as per tender/Do not agree	
11	Force Majeure	Agreed as per tender/Do not agree	
12	Liquidated damages and cancellation of contract	Agreed as per tender/Do not agree	
13	Arbitration & Jurisdiction clauses	Agreed as per tender/Do not agree	
14	Confirm all other terms and conditions of our enquiry are acceptable.	Confirmed/Not confirmed	
15	Deviations from Tender conditions	No Deviations	

Signature:

Address of the Contractor:

Seal:

Annexure-VII

UNCONDITIONAL ACCEPTANCE LETTER

(Unconditional acceptance to be given by in letter head)

ACCEPTANCE OF TENDER CONDITIONS

1. Tender Document no. UCSL/CC/T/W/002 dated 19th October 2023 Tender For Pipe Spool Fabrication On 3800 Dwt General Cargo Vessel at UCSL has been received by me/us and I/We hereby unconditionally accept the tender conditions of tender documents in its entirety for the above work.

2. It is further noted that it is not permissible to put any remarks/conditions in the tender enclosed in "Part-2 (price bid)". I/We agree that the tender shall be rejected and ACCEPTING AUTHORITY.

Yours faithfully,

(Signature of the tenderer) with rubber stamp

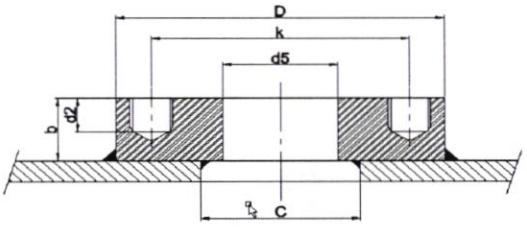
Date: .....

Enclosure - II

Bulkhead flange single tapped PN10 dimensions and materials

CONOSHIP INTERNATIONAL

Sheet info:	4700-128
Originator:	Peter Holtkamp
Status:	
Last modified:	07/04/2017
By:	PH
Rev.:	0



Pipe			Bulkhead flange single tapped										
		ISO			ISO								
DN	INCH	O.D. (mm)	D (mm)	b	k	d2	d5	Bolts nxm	H.I.P. C	Dimensions acc. To	Rating	Material	Weight kg
20	3/4"	26,9	105	30	75	16	27,6	4xM12	51	EN 1092	PN10	S235JR	1,83
25	1"	33,7	115	30	85	16	34,4	4xM12	61	EN 1092	PN10	S235JR	2,16
32	1 1/4"	42,4	140	34	100	20	43,1	4xM16	68	EN 1092	PN10	S235JR	3,57
40	1 1/2"	48,3	150	34	110	20	49	4xM16	78	EN 1092	PN10	S235JR	4,06
50	2"	60,3	165	34	125	20	61,1	4xM16	93	EN 1092	PN10	S235JR	4,78
65	2 1/2"	76,1	185	34	145	20	77,5	4xM16	113	EN 1092	PN10	S235JR	5,78
80	3"	88,9	200	34	160	20	90,3	8xM16	128	EN 1092	PN10	S235JR	6,42
100	4"	114,3	220	34	180	20	116	8xM16	148	EN 1092	PN10	S235JR	7,09
125	5"	139,7	250	34	210	20	141,5	8xM16	178	EN 1092	PN10	S235JR	8,67
150	6"	168,3	285	40	240	24	170,5	8xM20	200	EN 1092	PN10	S235JR	12,45
200	8"	219,1	340	40	295	24	221,8	8xM20	255	EN 1092	PN10	S235JR	15,99
250	10"	273,0	395	40	350	24	276,2	12xM20	310	EN 1092	PN10	S235JR	19,13
300	12"	323,9	445	40	400	24	327,6	12xM20	360	EN 1092	PN10	S235JR	21,95

Remarks:

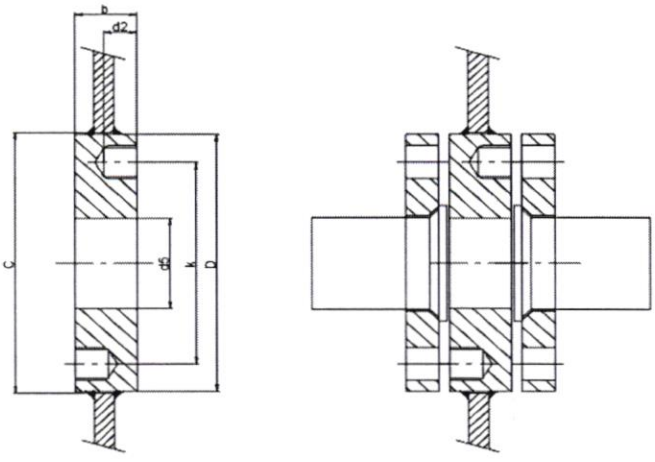
Hexagon head bolts acc. to DIN 933 Steel, zinc coated - qlt. : 8.8
Bolts to secure with springrings acc. to DIN 127B

Bulkhead flange doudle tapped PN10 dimensions and materials

CONOSHIP INTERNATIONAL

Sheet info: **4901-313**
Originator: Peter Holtkamp
Status:
Last modified: 17/09/2020 By: PH Rev.: 0

Detail



Pipe			Bulkhead flange single tapped										
		ISO			ISO								
DN	INCH	O.D. (mm)	D (mm)	b	k	d2	d5	Bolts nxm	H.I.P. C	Dimensions acc. To	Rating	Material	Weight kg
20	3/4"	26,9	105	30	75	16	27,6	4xM12	107	EN 1092	PN10	S235JR	1,78
25	1"	33,7	115	30	85	16	34,4	4xM12	117	EN 1092	PN10	S235JR	2,10
32	1 1/4"	42,4	140	34	100	20	43,1	4xM16	142	EN 1092	PN10	S235JR	3,45
40	1 1/2"	48,3	150	34	110	20	49	4xM16	152	EN 1092	PN10	S235JR	3,94
50	2"	60,3	165	34	125	20	61,1	4xM16	167	EN 1092	PN10	S235JR	4,65
65	2 1/2"	76,1	185	34	145	20	77,5	8xM16	187	EN 1092	PN10	S235JR	5,66
80	3"	88,9	200	34	160	20	90,3	8xM16	202	EN 1092	PN10	S235JR	6,16
100	4"	114,3	220	34	180	20	116	8xM16	222	EN 1092	PN10	S235JR	6,83
125	5"	139,7	250	34	210	20	141,5	8xM16	253	EN 1092	PN10	S235JR	8,42
150	6"	168,3	285	40	240	24	170,5	8xM20	287	EN 1092	PN10	S235JR	11,98
200	8"	219,1	340	40	295	24	221,8	8xM20	342	EN 1092	PN10	S235JR	15,52
250	10"	273,0	395	40	350	24	276,2	12xM20	397	EN 1092	PN10	S235JR	18,42
300	12"	323,9	445	40	400	24	327,6	12xM20	447	EN 1092	PN10	S235JR	21,25

Remarks:

Hexagon head bolts acc. to DIN 933 Steel, zinc coated - qlt. : 8.8
Bolts to secure with springrings acc. to DIN 127B

Enclosure - I

Conoship International

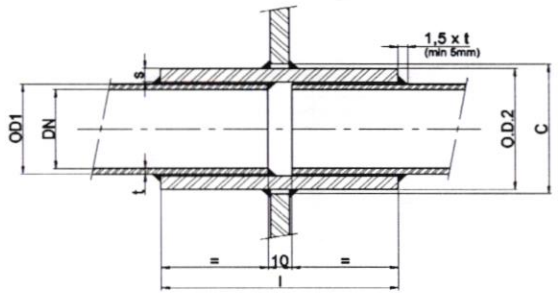
Single sleeve dimensions and materials

CONOSHIP

Sheet info:	**4700-133**
Originator:	Peter Holtkamp
Status:	
Last modified:	06-04-2017

By: PH

Rev.: 0



Pipe

Single sleeve

Seamless pipe •

Welded pipe o

DN	INCH	ISO O.D. (mm)	O.D. 2 (mm)	s3 (mm)	l3	ISO Dimensions acc. To	Material	Weight kg/m		H.I.P. C
20	3/4"	26.9	38.0	4.0	100	EN10210-1/2	S235JRH	0.34	•	41.0
25	1"	33.7	44.5	5.0	100	EN10210-1/2	S235JRH	0.49	•	48.0
32	1 1/4"	42.4	57.0	6.3	100	EN10210-1/2	S235JRH	0.79	•	63.0
40	1 1/2"	48.3	60.3	5.0	100	EN10210-1/2	S235JRH	0.68	•	63.0
50	2"	60.3	76.1	7.1	100	EN10210-1/2	S235JRH	1.21	•	79.0
65	2 1/2"	76.1	95.0	8.0	100	EN10210-1/2	S235JRH	1.72	•	98.0
80	3"	88.9	108.0	8.0	100	EN10210-1/2	S235JRH	1.97	•	111.0
100	4"	114.3	133.0	8.0	100	EN10210-1/2	S235JRH	2.47	•	136.0
125	5"	139.7	159.0	8.0	100	EN10210-1/2	S235JRH	2.98	•	162.0
150	6"	168.3	193.7	10.0	100	EN10210-1/2	S235JRH	4.53	•	197.0
200	8"	219.1	244.5	10.0	100	EN10210-1/2	S235JRH	5.78	•	248.0
250	10"	273.0	298.5	10.0	100	EN10210-1/2	S235JRH	7.11	•	302.0

Engineering Standards

Conoship International

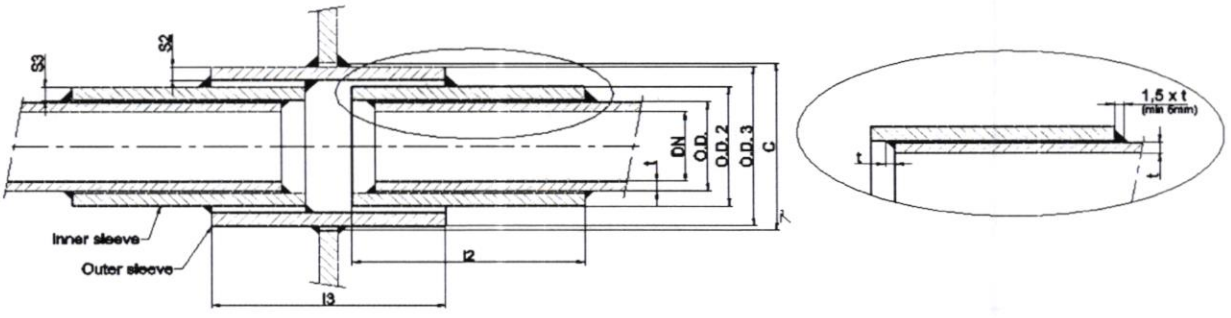
Inner & Outer sleeve dimensions and materials

CONOSHIP

Sheet info:	**4700-134**
Originator:	Peter Holtkamp
Status:	
Last modified:	06-04-2017

By: PH

Rev.: 0



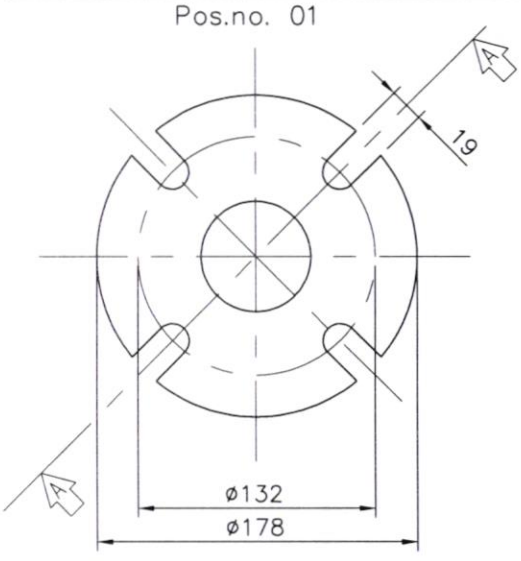
Pipe			Inner sleeve					Seamless pipe	•		
								Welded pipe	o		
		ISO				ISO					
DN	INCH	O.D. (mm)	O.D. 2 (mm)	s3 (mm)	l3	Dimensions acc. To	Material	Weight kg/m		H.I.P. C	
20	3/4"	26.9	38.0	4.0	100	EN10210-1/2	S235JRH	0.34	•	-	
25	1"	33.7	44.5	5.0	100	EN10210-1/2	S235JRH	0.49	•	-	
32	1 1/4"	42.4	57.0	6.3	100	EN10210-1/2	S235JRH	0.79	•	-	
40	1 1/2"	48.3	60.3	5.0	100	EN10210-1/2	S235JRH	0.68	•	-	
50	2"	60.3	76.1	7.1	100	EN10210-1/2	S235JRH	1.21	•	-	
65	2 1/2"	76.1	95.0	8.0	100	EN10210-1/2	S235JRH	1.72	•	-	
80	3"	88.9	108.0	8.0	100	EN10210-1/2	S235JRH	1.97	•	-	
100	4"	114.3	133.0	8.0	100	EN10210-1/2	S235JRH	2.47	•	-	
125	5"	139.7	159.0	8.0	100	EN10210-1/2	S235JRH	2.98	•	-	
150	6"	168.3	193.7	10.0	100	EN10210-1/2	S235JRH	4.53	•	-	
200	8"	219.1	244.5	10.0	100	EN10210-1/2	S235JRH	5.78	•	-	
250	10"	273.0	298.5	10.0	100	EN10210-1/2	S235JRH	7.11	•	-	

Pipe			Outer sleeve					Seamless pipe	•		
								Welded pipe	o		
		ISO				ISO					
DN	INCH	O.D. (mm)	O.D. 3 (mm)	s2 (mm)	l3	Dimensions acc. To	Material	Weight kg/m		H.I.P. C	
20	3/4"	26.9	48.3	4.0	100	EN10216-2	P235GH	0.44	•	50.0	
25	1"	33.7	60.3	6.3	100	EN10210-1/2	S235JRH	0.84	•	62.0	
32	1 1/4"	42.4	76.1	7.1	100	EN10210-1/2	S235JRH	1.21	•	78.0	
40	1 1/2"	48.3	76.1	7.1	100	EN10210-1/2	S235JRH	1.21	•	78.0	
50	2"	60.3	95.0	8.0	100	EN10210-1/2	S235JRH	1.72	•	98.0	
65	2 1/2"	76.1	114.3	8.0	100	EN10210-1/2	S235JRH	2.10	•	117.0	
80	3"	88.9	127.0	8.0	100	EN10210-1/2	S235JRH	2.35	•	130.0	
100	4"	114.3	152.4	8.0	100	EN10210-1/2	S235JRH	2.85	•	155.0	
125	5"	139.7	177.8	8.0	100	EN10210-1/2	S235JRH	3.35	•	181.0	
150	6"	168.3	219.1	10.0	100	EN10210-1/2	S235JRH	5.16	•	222.0	
200	8"	219.1	267.0	10.0	100	EN10210-1/2	S235JRH	6.34	•	270.0	
250	10"	273.0	323.9	10.0	100	EN10210-1/2	S235JRH	7.74	•	327.0	

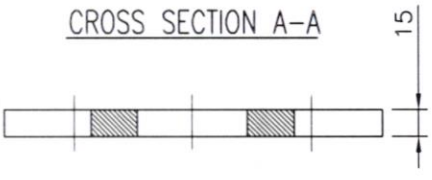
Enclosure - III

INTERNATIONAL SHORE CONNECTION FLANGE

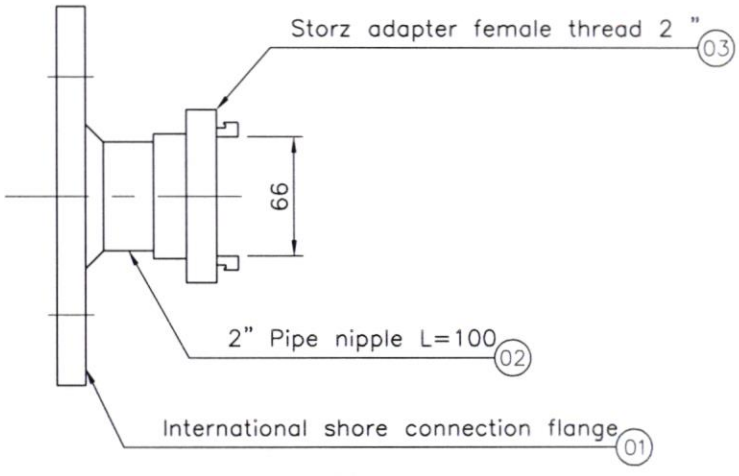
Pos.no. 01



CROSS SECTION A-A



ASSEMBLY INTERNATIONAL SHORE CONNECTION PIECE

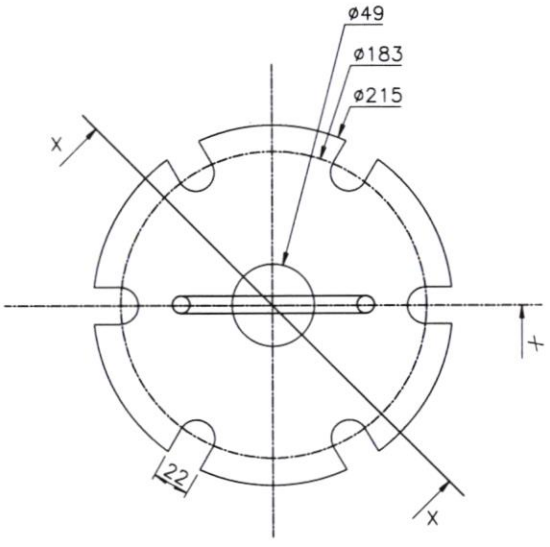


CONOSHIP INTERNATIONAL
P.O.Box 6029 - GRONINGEN - THE NETHERLANDS

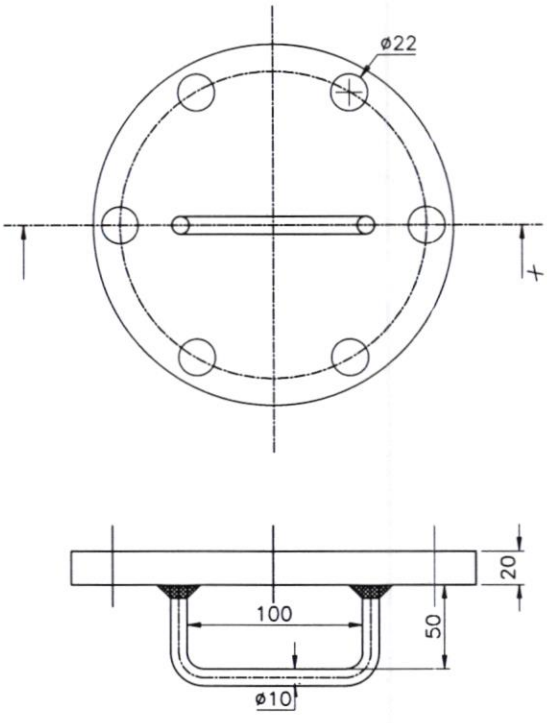
DRAWING NO.	0000-310-902				
DESCRIPTION	International shore connection piece FiFi				
SCALE: 1:2	SIZE: A3	YARD NO.: 0000	VERSION: 00	CLASS: B.V.	SHEET: 1-1
DRAWN BY: AS	DATE: 23-11-2022	APPROVED BY: ---	DATE: ---		

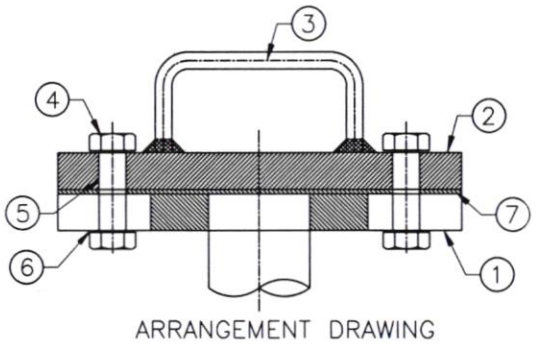
MARPOL SHORE CONNECTION FLANGE – OILY BILGE/ SLUDGE

SHORE CONNECTION FLANGE



BLIND FLANGE





ARRANGEMENT DRAWING
(FOR REFERENCE ONLY)

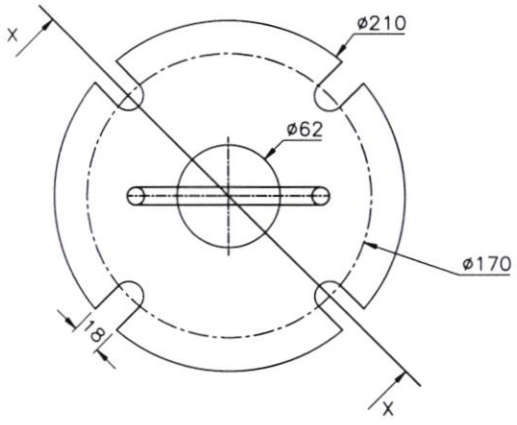
PIPE		FLANGE					FASTENERS		
DN	OD	ød	A	B	øC	øD	n	M	L
–	mm	mm	mm	mm	mm	mm	Nos	–	mm
40	48.3	49	22	20	215	183	6	M20	70

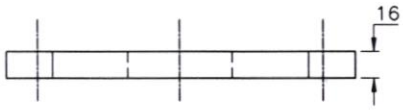
DIMENSION TABLE
(FOR REFERENCE ONLY)

INTERNATIONAL SHORE CONNECTION FOR OILY BILGE/ SLUDGE			
PART	DESC	MATERIAL	QTY
1	INTERNATIONAL SHORE CONNECTION FLANGE	IS 2062 / Equivalent	1
2	BLIND FLANGE	IS 2062 / Equivalent	1
3	SQUARE / ROUND	IS 2062 / Equivalent	~220mm
4	BOLTS	MS Galv / Equivalent	4
5	NUTS	MS Galv / Equivalent	4
6	PLAIN WASHER	MS Galv / Equivalent	4
7	GASKET	NACF	1

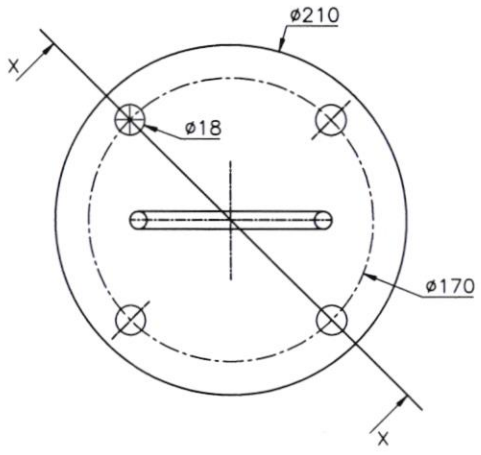
MARPOL SHORE CONNECTION FLANGE – SEWAGE

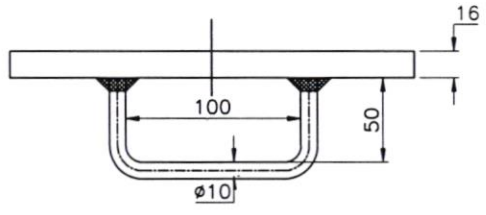
SHORE CONNECTION FLANGE

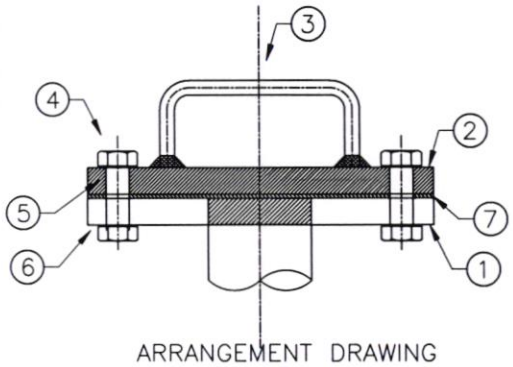




BLIND FLANGE







ARRANGEMENT DRAWING
(FOR REFERENCE ONLY)

PIPE		FLANGE					FASTENERS		
DN	OD	ød	A	B	øC	øD	n	M	L
–	mm	mm	mm	mm	mm	mm	Nos	–	mm
50	60.3	61.1	18	16	210	170	4	M16	55

DIMENSION TABLE
(FOR REFERENCE ONLY)

INTERNATIONAL SHORE CONNECTION FOR SEWAGE DISCHARGE			
PART	DESC	MATERIAL	QTY
1	INTERNATIONAL SHORE CONNECTION FLANGE	IS 2062 / Equivalent	1
2	BLIND FLANGE	IS 2062 / Equivalent	1
3	SQUARE / ROUND	IS 2062 / Equivalent	~220mm
4	BOLTS	MS Galv / Equivalent	4
5	NUTS	MS Galv / Equivalent	4
6	PLAIN WASHER	MS Galv / Equivalent	4
7	GASKET	NACF	1