

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

e-TENDER No. **CE/10/2019**



AN ISO 9001-2015 PORT
ISPS CODE Compliant

**e-TENDER FOR “PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”**

THROUGH E –TENDER ON WEB SITE

<https://eprocure.gov.in/eprocure/app>

Due Date of submission 03/08/2019 at 15.00 hrs

MORMUGAO PORT TRUST

ENGINEERING (CIVIL) DEPARTMENT

e- PORTAL NOTICE INVITING ONLINE TENDER

e-TENDER No. CE/10/2019

**e-TENDER FOR “PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”**

Sale of tender from : 25-07-2019 to 08-08-2019

Pre Bid Meeting Date & Time : N/A

Due date & time : 03/08/2019 at 15.00 hrs.

Cover I opening : 09/08/2019 at 15.30 hrs.

Further Details : <https://eprocure.gov.in/eprocure/app>

Chief Engineer

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. **CE/ 10 /2019**

**Name of the Work: “PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”**

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MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. **CE /10 /2019**

Name of the Work: "PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH"

F I R S T C O V E R (TECHNICAL BID)

(TO BE SUBMITTED IN SEPARATE SEALED ENVELOPE / COVER)

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

NOTICE INVITING ONLINE TENDERS (NIOT)

Details about tender:

Tender inviting	CHIEF ENGINEER , MORMUGAO PORT TRUST	
e - Tender No.	e-TENDER No. CE/10/2019	
Name of Work	e-TENDER FOR “PROVIDING 1300 size SCN REVERSE CONE FENDERS AT BREAKWATER BERTH”.	
Bidding Type	Open (e-tender mode only)	
Tender Currency Type	Single	
Tender Currency Settings	Indian Rupee (INR)	
Tender Cost	Rs. 5,000 /-	Mode of Payment : e-Payment Only
EMD Cost	Rs. 3,30,000 /-	
Transaction fees (Processing fees payable by each Tenderer)	Nil	
Payment of Tender Fee & EMD	<p>The Tender fee and EMD shall be paid in e-payment mode only. The EMD exemption Certificate from SSI/MSME/NSIC or any empowered Central/State Govt. Authority shall be submitted in electronic format (by scanning) while uploading the bid.</p> <p>Mode of Payment towards Tender Cost and EMD to be paid online through e-Payment mode before due date via :</p> <p>1.National Electronic Fund Transfer (NEFT) / Real-Time Gross Settlement RTGS). Tenderer requires download pre-printed Challan towards credit of ITG available on e-tender website and make its payment through any of their Bank.</p> <p>2. Internet Payment Gateway (Debit/ Credit Card of type VISA, MASTERCARD or RuPay.</p> <p>3.Net Banking: Payment can be made through the Internet Banking of Any Bank.</p>	

	<p>Note: Any Payments made through NEFT/RTGS will take 24 hours for its reconciliation. Hence the payments through NEFT/RTGS should be made at least TWO BANK WORKING DAYS in advance before any due date and upload the scanned copy of challans in the e-Tender website as a token of payment.</p>
Security Deposit	5 % of the contract value in the form Bank Guarantee from any Nationalised / Scheduled Bank, having its branch at Goa
Commencement Period	Within 15 days from date of Acceptance of the work order.
Period of Contract	Within 120 working days . (including monsoons)
Qualifying Criteria :	<p><u>PRE-QUALIFICATION CRITERIA / BIDDING CONDITION</u></p> <ol style="list-style-type: none"> 1. The bidder or his parent company or joint venture or partnership should have Average Annual Financial Turnover during the last Three (3) years ending 31st March 2018 should be at least Rs. 99,00,000/- Auditors report in original certified by CA or statutory auditors, for the years 2016-17, 2017-18 and 2018-19 including relevant P/L a/c and balance sheet. In case of the Foreign Bidders the audited financial statement for the calendar year ending 2017, 2018 and 2019 should be submitted. 2. The bidder or his parent company or Joint Venture or partnership should have thorough experience in similar works during the last 07 years prior to application due date, should be either of the following: <ol style="list-style-type: none"> i. Three similar completed works of contract value not less than Rs. 132.00 lakhs ii. Two similar completed works of contract value not less than Rs. 198.00 lakhs iii. One similar completed work of contract value not less than Rs. 264.00 lakhs <p>'SIMILAR' Works – means “Supply and Installation of fenders at Berths / Jetties / Port Terminals / Offshore structures ”</p> <p><u>Please Note:</u> The Tenderers shall enclose the copy of Annual Financial Turnover for the year 2016-17, 2017-18 and 2018-19 (Provisional / original copy certified by Chartered Accountant/ Statutory Auditor with Profit /Loss Account and balance sheet).The work order copies for similar works where experience is being claimed, successful completion certificates with performance certificate from clients indicating the date of completion, value of work done is required for the technical evaluation without which the technical scrutiny cannot be carried out and bid will be outright rejected without giving any clarification to the tenderers.</p>

Date & Place of Pre Bid Meeting	N/A
Date for submission of Bids	03 /08 /2019 @ 15:00 Hrs
Last Date & Time for Receipt of Bids	08 /08 /2019 @ 15:00 Hrs.
Bid Opening Date	Techno-commercial Bid (Cover-I) will be opened on 09/08/2019 @ 15.30 Hrs. Date of opening of price bid shall be notified after scrutiny and evaluation of Techno-commercial Bid.
Bid Validity	120 days from the last date fixed for receiving the tender.
Online Documents required to be submitted by scanning	<ul style="list-style-type: none"> a. EMD in the form of DD or Bankers cheque or online through e-payment. b. Copy of documents viz. Work Order, Completion certificate with performance, Financial Turnover, Auditor's report, Balance sheet, P/L account statement etc. Financial Turnover Certificate as at Appendix-II. c. Entire Tender document, each page and form duly signed and filled in.
Address for communication:	Chief Engineer, Engineering (Civil) Department., Mormugao Port Trust, 2nd Floor, A.O. Bldg, Headland Sada, Mormugao, Goa – 403804.
Contact Details	<p>For Tender related queries --- Phone :0832 – 2594617 ;</p> <p>For e-Tendering help contact:</p> <p>The Help Desk will be your first point of contact at NIC.</p> <p>Telephone: For any queries, please call 24 x 7 Helpdesk No.: 0120-4200462, 0120-4001002, 0120-4001005, 0120-6277787</p> <p>Email: Kindly send your Technical queries to cppp-nic@nic.in</p> <p>Note- Bidders are requested to kindly mention the URL of the Portal and Tender Id in the subject while emailing any issue with the Contact details.</p>
Website	<u>https://eprocure.gov.in/eprocure/app</u>

Format and Signing of Bid

The Price Bid to be submitted on-line shall be signed digitally by a person or persons duly authorized to sign on behalf of the Bidders.

The Bid shall contain no alterations, additions, except those to comply with instructions issued by the Port.

INSTRUCTIONS FOR ONLINE BID SUBMISSION

1. Bidders to follow the following procedure to submit the bids on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: online through the e-tender site <https://eprocure.gov.in/eprocure/app>

REGISTRATION

1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link "Online bidder Enrolment" on the CPP Portal which is free of charge.

2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.

4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.

5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.

6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.

2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk

PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues. Date of submission of Bids is from **03-08-2019** onwards
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to

be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

9) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

**Chief Engineer
MORMUGAO PORT TRUST**

MORMUGAO PORT TRUST
ENGINEERING CIVIL DEPARTMENT

TENDER NO CE/10/2019

**“PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”**

ELECTRONIC PAYMENT SYSTEM MANDATE FORM

The details for processing the payment through RTGS as below:-

Name of the Beneficiary	MORMUGAO PORT TRUST GENERAL ACCOUNT
Address of Beneficiary with PIN Code	Administrative Office Building, Headland Sada, GOA - 403804
PAN Number	AAALMO293P
Name & Mobile Number of responsible person	RAGHUNATH MORAJKER / 9423059702
Name of the Bank and Branch	STATE BANK OF INDIA, Harbour Branch
Bank Telephone No.	0832-2520212
Address of the Bank	STATE BANK OF INDIA MORMUGAO HARBOUR, GOA - 403803
MICR Code of the Bank	403002024
IFSC Code No.	SBIN0002164
Type of Account and Branch Code	Current Account / Branch Code:- 002164
Account number of the Bank	10438017048
	MPT GENERAL ACCOUNT
Beneficiary E-mail ID	cashmpt@mptgoa.gov.in

INSTRUCTION TO TENDERERS (ITT)

Tenders are invited on behalf of Mormugao Port Trust (MPT), from reputed firms fulfilling the Minimum Eligibility Criteria (MEC) as detailed at clause 1.5.1 of the tender document for the work of **“PROVIDING 1300 size SCN REVERSE CONE FENDERS AT BREAKWATER BERTH”**

- 1.2 Bidder is required to submit their tender offer in the form of Two cover system on or before due date (Refer NIOT). The time of opening of technical bid is as indicated at NIOT.
- 1.3 The Notice Inviting Tenders (NIOT) issued by MPT forms part of the Tendering Documents.
- 1.4 The Bidder shall make his all out efforts to ensure the correctness of Documents available on the Web site. MPT is not responsible for the completeness or correctness of the Tendering Documents and their addendum, if they were not obtained directly from MPT.
- 1.5 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Tendering Documents. Failure to furnish all information or documentation required by the Tendering Documents may result in the rejection of the Tender.

1.5.1. MINIMUM ELIGIBILITY CRITERIA (MEC)

1. The bidder or his parent company or joint venture or partnership should having **Average Annual Financial Turnover** during the last Three (3) years ending 31st March 2018 should be at least Rs. **99,00,000/-** Auditors report in original certified by CA or statutory auditors, for the years 2016-17, 2017-18 and 2018-19 including relevant P/L a/c and balance sheet. In case of the Foreign Bidders the audited financial statement for the calendar year ending 2017, 2018 and 2019 should be submitted.
2. The bidder or his parent company or Joint Venture or partnership should have thorough experience in similar works during the last 07 years prior to application due date, should be either of the following.
 - i. Three similar completed works of contract value not less than Rs. **132** lakhs
 - ii. Two similar completed works of contract value not less than Rs. **198** lakhs
 - iii. One similar completed work of contract value not less than Rs. **264** lakhs

‘SIMILAR’ Works – means “ **Supply and Installation of fenders at Berths / Jetties / Port terminals / offshore terminals, etc”**

Please Note: The Tenderers shall enclose the copy of Annual Financial Turnover for the year 2016-17, 2017-18 and 2018-19 (original copy certified by Chartered Accountant/ Statutory Auditor with Profit /Loss Account and balance sheet).The work order copies for similar works where experience is being claimed, successful completion certificates with performance certificate from clients indicating the date of completion, value of work done is required for the technical evaluation without which the technical scrutiny cannot be

carried out and bid will be outright rejected without giving any clarification to the tenderers.

1.6 LAST DATE FOR SUBMISSION OF TENDER

The final date of submission is as indicated at the NIOT. MPT may at its sole discretion reserves the right to extend the date for receipt of tender. Tenders received after the aforesaid time and date or the extended time and date, if any, shall be summarily rejected

1.7 BIDDER TO INFORM HIMSELF FULLY

- a. The Bidder is expected to examine carefully the contents of the tender document like Instructions to the Bidders, General Conditions, Special Conditions, Scope of work, Technical Specification etc. Failure to comply with the requirements of the tender will be at the Bidder's own risk. It would be deemed prior to the submission of the tender that the Bidder has made a complete and careful examination of requirements and other information set out in the tender document.
- b. The Bidder is advised to get acquainted himself with the job involved at the site, like availability of labour, means of transport, communication facilities, laws and bye laws in force from Government of Goa and Govt. of India and any other Statutory bodies as well as MPT regulation for the issue of passes and collect all information that may be necessary for preparing and submitting the tender and entering into Contract with MPT.
- c. Bidder shall bear all costs associated with the preparation and submission of his tender and MPT will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the tendering process.

1.8. EARNEST MONEY DEPOSIT (EMD)

- a. The Bidder shall furnish an EMD of **Rs. 3,30,000 /-**, without EMD the tender shall be treated invalid. The E.M.D. shall be paid through e-payment mode, for amount Rs. 3,30,000 /-, or EMD shall be submitted in the form of Demand Draft OR Bankers cheque from Nationalized/Scheduled Banks in favour of the Financial Advisor & Chief Accounts Officer, MPT, payable at Vasco, Goa
- b. To claim EMD exemption of the tenderers are required to produce an attested copy of the registration Certificate issued in the name of the firm who will submit the tender document. The exemption from the payment of EMD will be allowed only if similar work of the tender match with the enlistment statement shown in the Certificate issued by SSI/MSME/NSIC or any empowered Central/State Govt. Authority. No claims for exemption without the details stipulated above will be considered. The SSI/MSME/NSIC or any empowered Central/State Govt. Authority or any empowered Central/State Govt. Authority registration Certificate shall be submitted in electronic format (by scanning) while uploading the bid.

- c. In the event of Bidder withdrawing his tender before the expiry of **tender validity period of 120 days** from the date of opening of technical bid, the tender submitted by the Bidder shall be cancelled and EMD shall be forfeited.
- d. The Earnest Money Deposit of unsuccessful Bidders shall be returned on award of Contract to the successful Bidder. No interest shall be payable on the amount of E.M.D in any case. The Earnest Money Deposit of the successful Bidder shall be refunded only on receipt of Security Deposit as stipulated in the tender.
- e. MPT reserves the right to forfeit the Earnest Money Deposit in respect of successful Bidder, if he fails to furnish the necessary Security Deposit towards performance within 21 days and enter into a Contract within 21 days from the date of receipt of Letter of Acceptance (LOA).

1.9. Performance Guarantee (Security Deposit) :

The **successful bidder has to furnish 5 % of the contract value towards Performance Guarantee within 21 days of the issue of Work Order / Purchase Order**, in the form of Demand Draft or Bank Guarantee from Nationalized / Scheduled Bank having a branch in Goa, failing to furnish the Performance Guarantee within the prescribed time, the tender is liable to be terminated and entire amount of EMD will be forfeited. The Performance Guarantee shall be retained with the Port till the defect liability period plus claim period of 2 months.

2.0 Retention Money :

Retention Money will be recovered at the rate of 10 % on the value of each running bills, limited to 5 % of the contract value. Retention money will be released on completion of defect liability period.

2.1 MPT'S RIGHT TO ANNUL THE BIDDING PROCESS

- a. Notwithstanding anything contained in this tender document, MPT reserves the right to annul the bidding process at any time without any liability or any obligation for such annulment, without assigning any reason.
- b. MPT reserves the right to invite revised Techno-commercial bids with or without amendment of the tender document at any stage, without liability or any obligation for such invitation and without assigning any reason.
- c. MPT reserves the right to reject any Tender if at any time, a material misrepresentation is made or uncovered OR the Bidder does not respond promptly and thoroughly to requests for supplemental information required for the evaluation of the tender.

2.2 TENDER VALIDITY

The tender shall remain valid for acceptance for a period of 120 days from the date fixed for opening of Technical Bid. MPT reserves their right to extend the period of validity for a specific time. The request and the response, there to, shall be made in writing by post or by Fax/E-mail. However, in the event of the Bidder agreeing to the request, he shall not be permitted to modify his tender. In the event of the Bidder is agreeing to the extension, the Bidder shall correspondingly extend the validity of the tender suitably against this Tender. In case Bidders do not agree to extend the validity of their offer beyond the validity period, EMD of such Bidders shall be refunded after award of the contract.

2.3. AUTHORITY IN SIGNING TENDER DOCUMENTS

- a. The tender document and Price Bid shall be submitted by the person or persons duly authorized to sign on behalf of the Bidders.
- b. At the time of submission of the tender document, the Bidder shall give an undertaking that no changes have been made in the document as per declaration form as per Appendix - VII
- c. The tender, if submitted on behalf of principals or a Partnership Firm or Joint Venture should be signed either by all the partners or some of the partners or other person/s holding a valid "Power of Attorney" from other partners or all the partners constituting the firm or the Principals as the case may be. The technical and financial experience of the Parent Company / Joint venture /Partnership/ Principal can be considered subject to submission of the documentary evidence for the wreck removal works carried out.
- d. In the event, the tender is signed by some of the partners or other persons or the Agents, the Tender should be accompanied by a valid Power of Attorney duly executed by partners/Principals/ JV partners specifying that the partners or person/s or Agents signing the tender has the authority to bind them or the firm as the case may be, in all matters pertaining to the tender.
- e. In case of a Company, the tender should be signed by a person holding a valid Power of Attorney executed in his favour in accordance with the constitution of the Company.

2.4 AMENDMENTS

- a. At any time, prior to the last date for submission of tenders, MPT reserves the right to amend and modify the tender document. The amendments so carried out shall be forwarded to all the prospective Bidders prior to the last date for submission of the tender in writing either by post or e-mail including displaying the said amendment on MPT web site. The prospective Bidders shall immediately acknowledge receipt thereof either by post or mail (scanned copy with seal & sign) followed by hard copy.
- b. The amendment so carried out shall form part of the tender and shall be binding upon the Bidders. MPT may at their discretion, extend the last date for submission of the tender, to enable the Bidders to have reasonable time to submit their tender after taking into consideration such amendments.

2.5 TEST OF RESPONSIVENESS

Prior to evaluation of Tender, the Authority shall determine whether each Tender is responsive to the requirements of the tender. A tender shall be considered responsive only if:

- a. It is received by the Tender Due date including any extension thereof;
- b. Tender cost of **Rs 5,000/-** and the Earnest Money Deposit of **Rs 3,30,000/-** has been remitted through e-payment or DD or Bank Guarantee as indicated at the NIOT or exemption claimed by producing an attested copy of registration certificate from SSI/MSME/NSIC or any empowered Central/State Govt. Authority.
- c. The Auditor's report for the last three years endorsed by Chartered Accountant shall be submitted in electronic format in original for the year 2016-17, 2017-18 and 2018-19 (provisional) as per Appendix - IV, along with relevant profit and loss statements and balance sheets.
- d. Copies of work order for similar works, successful completion certificate with performance and value of work done to be submitted in electronic format.
- e. The Power of Attorney, as per Appendix- XI, to be furnished in electronic format.
- f. The tender document along with all the forms to be filled and submitted online with sign and seal.
- g. The bank details like name of bank, bank branch, type of account, bank Account no., MICR code, etc as per Appendix – XII .
 - ii) The bidder shall submit copy of valid Service tax Registration Certificate, PAN, VAT, EPF registration and ESI registration number.
 - iii) The Bidder should not be black listed by any Government or Non Government Organization as per Appendix – VII .

iv) **INTEGRITY PACT**

The Tenderer have to execute an "Integrity Pact" (IP) as per the format attached in **APPENDIX- XIII** of this tender document. Integrity pact shall cover the tender throughout its various phases and it would be deemed as a part of the contract. The Tenderer should sign and submit the "Integrity Pact" to be executed between the Tenderer and Mormugao Port Trust along with the Tender in a separate envelope superscribing "Integrity Pact". Tenders not accompanied with IP will be rejected. The IP would be implemented through the following Independent External Monitor (IEM) for this tender.

Sewa Ram,(IAS.ret'd.),

The Integrity Pact duly signed shall be placed in envelope containing Techno-Commercial bid.

The Tender fee and EMD shall be furnished as indicated in the NIOT. Upon confirmation of receipt of the same the Techno-commercial bid (Cover-I) shall be opened on the date indicated at the NIOT. The Price-bid of only those Bidders shall be opened whose Tender is found to be responsive. The date of opening of price bid shall be notified after scrutiny and evaluation of Techno-commercial Bid.

The Port Trust reserves the right to reject any tender which in its opinion is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by the Port Trust in respect of such Tenders.

2.6 ERRORS IN THE TENDER DOCUMENT

- a. Provided that a Tender is substantially responsive, the Port may waive any non-conformities or omissions in the Tender that do not constitute a material deviation.
- b. Provided that a Tender is substantially responsive, the Port may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Tender related to documentation requirements. Such omission shall not be related to any aspect of the price of the Tender. Failure of the Bidder to comply with the request may result in the rejection of its Tender.
- c. Provided that the Tender is substantially responsive, the Port shall correct arithmetical errors on the following basis:
 - (i) If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Port there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
 - (ii) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals or arithmetically corrected sub totals shall prevail and the total shall be corrected; and
 - (iii) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.
- d. If the Bidder that submitted the lowest evaluated Tender does not accept the correction of arithmetical errors, its Tender shall be rejected.

2.7 OTHER EXPENSES

All costs charges and expenses including any duty in connection with the Contract as well as preparations and completions of Agreement by MPT's attorneys shall be borne and payable by the Bidder. Bidder shall ascertain the taxes and duties to be paid on his own before the submission of the bid. All taxes & duties, to be paid to Govt. of India, Govt. of Goa or any statutory bodies shall be paid by the Contractor for stamp duty.

2.8 CONTRACT WORKS AND CONTRACT PRICE

- a. The work to be carried out (hereinafter referred to as "the Contract Works") and the Price for the same (hereinafter called "the Contract Price") shall include the work described in the specifications, schedules, drawings, etc. annexed hereto.
- b. Except where otherwise expressly provided, the Contractor shall provide all materials, labour and Plant and things necessary in connection with the Contract work although everything may not be fully specified and although there may be errors

and omissions in the specifications.

c. **SCHEDULE OF PRICE**

- The Schedule of price shall be read in conjunction with all other sections of bidding document. The Schedule of Price bid shall be submitted signed by a person or persons duly authorized to sign on behalf of bidders consists of all the works mentioned in the scope of works and Technical Specifications.
- The total prices will be evaluated based on lowest offer among competitive offer.
- *The price offered should be firm and inclusive of all taxes & duties except GST. GST will be paid extra as applicable. If Govt applies any other new tax in future, the same will be reimbursed on production of documentary evidence. Bidders to specify tax component separately.*

d. Bidder shall quote for the work after careful analysis of cost involved for the performance of the works as per Scope of Work, Scope of Supply, Specifications, Standards, Drawings, General Conditions of Contract and Special Condition of Contract.

e. The Price shall include all expenditure incurred towards mobilization and demobilization.

f. Price shall be quoted in Indian Rupees only.

2.9 LANGUAGE OF TENDER

The Tender submitted by the Bidder and all correspondence and documents relating to the Tender exchanged by the Bidder and MPT shall be written in the English language.

3.0 PRE-BID CONFERENCE (Not applicable for this work)

MPT shall hold a pre-bid meeting on **XX/XX/2019 at 15.00 hrs**, in order to clarify and discuss issues with respect to the tender vis-à-vis terms and conditions or any other related issues. The meeting shall be held at Conference Room, Office of the Chief Engineer, 2nd Floor, A.O. Bldg., MPT, Headland Sada 403 804 as per NIT. Bidders are advised to forward their queries to the Chief Engineer, MPT, on or before the scheduled date of the pre-bid meeting. If there are any further queries after Pre-Bid Conference, the same shall be submitted within the due date which will be indicated during Pre-Bid meeting. No queries will be entertained after this due date. The queries received from all the prospective Bidders would be consolidated and Port's clarification to the same would be uploaded on the website. The clarifications so issued would form part of the tender and remain binding on all the Bidders which shall be accepted and submitted by all the Bidders along with their offer.

3.1 TENDER OPENING, SCRUTINY AND EVALUATION OF TECHNICAL BID

A Tender that is substantially responsive is that which conforms to the preceding requirements without material deviation or reservation. A material deviation or reservation is one (1) which affects in any substantial way, the scope, quality, or performance of the Bidder, or (2) which limits in any substantial way, inconsistent with the Tender document, or (3) whose rectification would affect unfairly the competitive position of other Qualified Applicant presenting substantially responsive bids.

Since the tender involves selection based on Minimum eligibility criteria, test of responsiveness and technical specification, the Deputy Conservator will examine and seek clarification if any and list out the firms, which are found responsive and BOQ of such tenders only will be opened and EMD will be returned to the unresponsive Bidders.

The date and time will be intimated to Bidders whose offers are found suitable and BOQ of such Bidders will be opened.

After the tender opening, the whole process involving scrutiny, clarifications, evaluation and comparison of tenders and recommendations regarding award of Contract shall be confidential. Any efforts on part of any Bidder to influence the Port Trust in any way in the process of scrutiny, evaluation, comparison of tenders and decision concerning award of Contract may result in rejection of the Bidder's bid.

To assess the scrutiny, evaluation and comparison of tenders, the Port Trust may ask Bidder individually for clarifications. Request for clarification and response thereto, shall be in writing or through e mail followed by post or through speed post. No change in Price or substance of the tender shall be sought, offered or permitted nor is the Bidder permitted to withdraw the tender before the expiry of the validity period of the tenders in the process of clarifications.

OPENING OF PRICE BID

COVER – II DETAILS: BID (BOQ) - PRICE SCHEDULE

The date of opening of the Price cover will be intimated to the bidder who will qualify for technical cover. Price should be quoted in "Price Schedule" (as per BOQ).

3.2 EVALUATION OF PRICE BID

- a. The price quoted by the bidder shall be kept firm during the contract period. All taxes, duties and insurance shall be included in the quoted price, except the Service tax which shall be paid extra as applicable.
- b. MPT will evaluate and compare only those bids, which are substantially responsive.
- c. The price quoted by the Bidder shall be considered for the purpose of evaluation and comparison.

- d. In arriving at the final evaluated prices of the Tenders, any uncalled for lumpsum/percentage/or adhoc reduction, if any, offered by the Bidders, in the Schedule of Price shall be considered for the purpose of evaluation. However, if such reduction/rebate is from the recommended Bidder, then such rebate shall be taken into account while awarding the work.
- e. In arriving at the final evaluated prices of the bidders, evaluation of offer will be based on the lowest price quoted.

3.3 MPT'S RIGHT TO ACCEPT OR REJECT A BID

MPT reserves the right to accept a Bid other than the lowest and to accept or reject any Bid in whole or part, to annul the bidding process or to reject all Bids with or without notice or reasons. Such decisions by MPT shall bear no liability whatsoever consequent upon such decisions.

3.4 AWARD OF CONTRACT

The Bidder, whose Bid is accepted by MPT shall be issued Letter of Acceptance (LOA) prior to expiry of Bid validity. Bidder shall confirm acceptance by returning a signed copy of the LOA. MPT shall not be obliged to furnish any information/clarification/ explanation to the Contractors as regards non-acceptance of their Bid. Port reserves right to award the work or reject subject to decision of the Board.

**CHIEF ENGINEER
MORMUGAO PORT TRUST**

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/ 10 /2019

Name of Work : “ **PROVIDING 1300 size SCN REVERSE CONE FENDERS AT BREAKWATER BERTH ”**

JOINT VENTURE

- 1 The number of members in the Joint Venture (JV) shall be restricted to two.
- 2 Lead member of the JV shall have equity share of minimum 51% and maximum 74%. Lead member shall satisfy Financial and Technical criteria specified in the tender.
- 3 All the members of the joint venture shall be, jointly raise the finance whenever required and jointly responsible for the liability, during the bidding process and for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the authorization or memorandum of understanding or joint venture Agreement. The bid shall be signed so as to legally bind all the members, jointly or severally.
- 4 Bids submitted by a joint venture (JV) shall comply with the following requirements:
 - a) A copy of the Joint Venture Agreement (JVA) entered into by the partners shall be submitted with the bid. JVA shall include among other things, the Joint Venture’s objectives, the proposed management structure, the contribution of each partner to the Joint Venture operation, the commitment of the partners to joint and several liability for due performance, recourse / sanctions within the Joint Venture in the event of default or withdrawal of any partner and arrangements for providing the required indemnities.
 - b) The most experienced partner will be the Lead Partner and nominated as the partner- in-charge; in pursuance to Clause 2 and this authorisation shall be evidenced by submitting a power of attorney signed by the legally authorised signatories of all the partners. The most experienced partner/Lead Partner will be the one defined as such in the communication approved the pre-qualification.
 - c) The most experienced partner/Lead Partner of the joint venture will provide suitable experienced personnel at site for the purpose of general planning, site management and plant operations, during the whole period of contract execution and a statement to this effect should be included in the Joint Venture Agreement.
 - d) The bid, and in the case of the successful bidder, the Form of Agreement shall be signed and / or executed in such a manner as may be required for making it legally binding on all partners (including operative parts of the ensuing Contract in respect of Arbitration Agreement etc.)
- e) The partner-in-charge shall be authorised to incur liabilities and to receive instructions for and on behalf of all partners of the Joint Venture and the entire execution of the Contract including payment shall be carried out exclusively through the partner-in-

- charge. A statement to this effect should be included in the joint venture agreement.
- f) All partners of the joint venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a statement to this effect shall be included in the joint venture agreement.
 - g) Bid Security (EMD) as required can be furnished by any partner but it should be in the name of joint venture.
 - h) Performance guarantee, as required, will be furnished by all partner(s), out of their accounts, in proportion to their participation in Joint Venture.
 - i) Joint Venture Agreement shall contain a clause to the effect that there shall be a separate JV Bank Account (distinct from the Bank Accounts of the individual partners) to which the individual partner shall contribute their share capital and / or working capital.
 - j) Joint Venture Agreement shall also contain a clause to the effect that the financial obligations of the JV shall be discharged through the said JV Bank Account only and also all the payments received by the JV from the Employer shall be through that account alone.
 - k) In the event of default by the most experienced partner (lead Partner), it shall be construed as default of the Contractor; and Employer will take action under Conditions of Contract.
 - l) In the event of any other partner leaving the JV, it shall be intimated to the Employer within 30 days by the other partner(s). Failure to do so shall be construed as default of the Contractor and the Employer may take action under the Conditions of Contract.
 - m) In case the joint venture agreement is not acceptable to the Employer, the joint venture will modify the agreement so as to be acceptable to the Employer.
 - n) The bid submitted shall include all the information as per the PROFORMA in the bid document and furnished separately for each partner.
 - o) In case of withdrawal of any partner from the JV the following shall be applicable:
 - i) Stepping into the shoes of the existing partners of JV with all the liabilities of the existing partners from the beginning of the Contract;
 - ii) With the prior approval of the Employer;
 - iii) Notwithstanding demarcation or allotment of work between two JV partners, JV shall be liable for non-performance of the whole contract irrespective of their demarcation or share of work; and
 - iv) The payments under the contract will only be made to the JV and not to the individual partners.

CHIEF ENGINEER

MORMUGAO PORT TRUST

JOINT VENTURE PARTNER INFORMATION FORM

The Tenderer shall fill in this Form in accordance with the instructions indicated below}.

Date: insert date (as day, month and year) of Tender Submission].
Tender No.: [insert number of Tendering process]

1. Tenderer's Legal Name : (insert Tenderer's Legal name):
2. JV's Party Legal name: *[insert JV's Party legal name]*
3. JV's Party Country of Registration: *[insert JV's Party country of registration and details of registration]*
4. JV's Party Year of Registration: *Insert JV's Party year of registration*
5. JV's Party Legal Address in Country/ of Registration: *[insert JV's Party legal address in country of registration]*

JV's Party Authorized Representative Information

Name: [insert name of JV's Party authorized representative]

Address: [insert address of JV's Party authorized representative]

Telephone/Fax numbers: [insert telephone/fax numbers of JV's Party authorized representative]

Attached are copies of original documents of: *[check the box(es) of the attached original documents]*

- Articles of Incorporation or Registration of firm named in 2, above, in accordance with Tender

Document

- In case of government owned entity from India, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with Tender Document
- PAN Number
- GST registration Number
- Service Tax Registration Number
- Any other documents required for statutory compliance

Duly authorized to sign this Authorization on behalf of : *[Insert complete name of Tenderer]*

Dated on _____ day of _____, _____ *[insert date of signing]*

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. **CE/ 10 /2019**

Name of Work: “ **PROVIDING 1300 size SCN REVERSE CONE FENDERS AT
BREAKWATER BERTH ”**

GENERAL CONDITIONS OF CONTRACT.

SECTION - I

1.1 GENERAL CONDITIONS

1. The contractor shall conduct site inspection and apprise itself about the details on site. The Tenderer shall inspect the site, examine and obtain all information required and satisfy himself regarding matters such as access to site, communications, transport, equipment and facilities required for the work, availability of local labour, materials and their rates, local working conditions, weather, water tides table etc. Ignorance of the site conditions shall not be accepted by the client as basis for any claim for compensation or extension of time.
2. The Contractor shall obtain necessary Harbour entry **Gate Pass** for his staff's, workers, tools, plants, machineries, instruments, construction materials, etc. required for the work, well in advance (with minimum **two (2) days** in advance of Port holidays and Sundays). The contractor shall obtain the passes from the Port through online system. **The Harbour Entry Gate Passes for vehicles, labourers, staff's and material passes shall be free of cost.** Contractor shall print gate pass booklet for material entry as per MPT format at Contractor's cost. Any delay caused in receipt of passes due to any reason what so ever shall not be construed as valid reason for granting extension of work completion period.
3. Before commencement of the work and within **Fifteen (15) days** on receipt of Work Order (Purchase Order) from the Port, the contractor shall submit to the Chief Engineer, **a bar chart** for the work, indicating the duration of various activities of work along with details of machineries, instruments, and number of workers, staff schedule to be mobilized and deployed for the work.
4. The Chief Engineer may during progress of work, order the removal of equipment and part / whole of such work already executed, which is found not to be in accordance with drawings, specifications and instructions of the Purchaser. No extra claim shall be entertained for re-executing or altering of such works. Similarly the Contractor immediately at his own expense shall remove any materials brought to site and instructed by the Chief Engineer or his representative to remove the same from the site., Port premises, etc.
5. The contractor along with his Civil Engineer shall be present for the weekly/monthly meeting at 09.30 hrs. in the Chief Engineers cabin or at any office/Site and time as directed by the Port with BarChart, Tender, drawings, test reports, samples, etc. to

review the progress/ discrepancies in the work, failing which the contract is liable for termination.

6. All handling and transport charges , toll charges etc of raw materials and fabricated structures including double handling as required for completion of the work in accordance with time schedule are deemed to be included in the quoted rates.
7. The Contractor shall follow all safety norms throughout the period of work. Provisions of Bureau of Indian Safety Standards and other sound engineering practices shall be followed for the same.
8. The Contractor shall take all the precautions for rain, storm etc. and no liability shall rest with the Chief Engineer for any loss of plant , machinery, labour or incases of cost involved due to re-erection, rectification, remobilization, or retrieval of lost machinery etc. due to any unforeseen factors.
9. The Contractor **shall not remove** any material or equipment brought by him from construction site without written permission from the **Chief Engineer**.
10. Sequence of work

Contractor shall plan and sequence all works so as to achieve the desired progress keeping in mind overall safety and stability at all point of time. If due to particular design or specification or availability of machines or any other reason, a particular sequence of operation is demanded by the Engineer due to which some interruption to any one or more types of work or items of execution are inherent, then no claim for such interruption shall be entertained and contractor shall have to follow the sequence as instructed by the Engineer. Contractor shall carry out all mandatory tests for the fenders at standardized laboratories in the presence of Chief Engineer or his representative and obtain formal approval of confirmation to Technicial specifications. The Contractor shall make all safety provisions and employ trained staff, proper tools and equipments for removal of old fenders and transport to designated location for proper stacking. The new fenders should be transported, unloaded and stacked in area designated for storage. New fenders should be loaded onto trailers by using cranes and transported to site and installed in location at the Breakwater berth using suitable technicques.

11. Contractor shall not abandon the work half way through, and should therefore suitably plan and take all engineering measures for completion of work in the work completion period.
12. Contractor should obtain written permission from the Chief Engineer for demobilization of equipment and machinery, which will be granted on request after completion of work in all respects.
13. Contractor shall provide insurance cover to all the equipment, machinery and men deployed for the work. MPT shall not be held liable for any damages or losses incurred by the contractor during the execution of the work.

14. Damages

Any existing services or other properties if damaged or demolished during the course of execution either willfully or negligently, shall be repaired or re-erected by the Contractor. The Contractor will take all precautions against damages due to rain and storm and no liability shall rest with the Chief Engineer/ Mormugao Port Trust for any loss for redoing of any work due to this account. Existing Port services coming in the way of execution of this work etc. have to be adequately considered and supported by the Contractor at his own cost so as to avoid any obstruction or delay into the Port services.

15. In case of any accidental damage caused by the Contractor to the Port assets, the contractor shall arrange to rectify and reinstall those services immediately. Alternately, the Port shall undertake such repairs and recover the entire costs from the contractor, and the contractor shall not object to the same.

16 SITE REGISTERS

- 16.1 The contractor shall maintain and update all records of labour employed for this work and produce the same to the Controlling Officer regularly and any other Competent Authority as and when required.

The following minimum records shall be maintained :

- i) Muster roll.
 - ii) Register of Wages.
 - iii) Material Register (stating total received, consumption and balance)
 - iv) Site Instruction Book
 - v) Joint Record/Measurement Register
 - vi) Any other records to be maintained under various acts as applicable and as instructed by Chief Engineer or his representative. The contractor shall keep all registers in safe custody.
17. The contractor should carry out CAR (Contractors all risk) insurance policy, and insure all the equipment and machinery and men deployed for the work. The contractor shall produce the attested copies of insurance premiums made and the policies.

18. Permits

All necessary licences, approvals, authorisations or permits required to undertake and Complete the Services without let or hindrance shall be obtained and maintained by the Contractor . The Company shall provide the Contractor with all reasonable assistance in this connection.

19. The contractor shall arrange at his own risk and cost towards security services for the man and equipment's deployed at work site.

20. **Liabilities**

(a) The contractor will indemnify and hold the MPT harmless in respect of any liability adjudged due or claim reasonably compromised arising out of injury or death occurring during the services hereunder to any of the following persons:

- (i) any servant, agent or sub- contractor of the contractor.
- (ii) any other person at or near the site of the operation for whatever purpose on behalf or at the request of the contractor.

(b) Neither the MPT nor its servants, agents or sub-contractors for loss or damage of whatsoever nature sustained by the contractors owned or hired – in craft or equipment whether or not the same is due to breach of contractor, negligence or any other fault on the part of the MPT , its servants, agents or sub-contractors

(c) Neither party shall be liable to the other part for:

(i) any loss of profit, loss of use or loss of production whatsoever and whether or indirectly from the performance or non-performance of this agreement, and whether or not the same is due to negligence or any other fault on the part of either party, their servants, agents or sub – contractors: or

(ii) any consequential loss or damages for any whatsoever, whether or not the same is due to any breach of contract, negligence or any other fault on the part of either party, their servants, agents or sub-contractors.

21. **Notices clauses**

a) All notices given by either party or their agents to the other party or their agents to the other party or their agents in accordance with the provisions of this Agreement shall be in writing and shall, unless specifically provided in this Agreement to the contrary, be sent to the address for that other party as set out in Boxes 2 and 3 or as appropriate or to such other address as the other party may designate in writing.

A notice may be sent by registered or recorded mail, facsimile, electronically or delivered by hand in accordance with this sub- clause.

(b) Any notice given under this Agreement shall take effect on receipt by the other party and shall be deemed to have been received.

- (i) If posted, on the seventh (7) day after posting:
- (ii) If sent by facsimile or electronically, on the day of transmission; or
- (iii) If delivered by hand. On the day of delivery.

And in each case proof of posting, handing in or transmission shall be proof that notice has been given. Unless proven to the contrary.

22. **General Provisions.**

(a) Severability

If in any legal proceedings, it is determined that any provision of this Agreement is unenforceable under applicable law, then the unenforceable provision shall automatically be amended to conform to that which is enforceable under the law, in any event, the validity or enforceability of any provision shall not affect any other provision of this Agreement, and this Agreement shall be construed and enforced as if such provision has not been included.

(b) Third party Beneficiaries

Except as specifically provided for elsewhere in this Agreement, this Agreement shall not be construed to confer any benefit on any third party not a party to this Agreement nor shall this Agreement provided any rights to such third party to enforce any provision of this Agreement.

(c) Waiver

No benefit or right accruing to either party under this Agreement shall be waived unless the waiver is reduced to writing and signed by both the Contractor and the MPT. The failure of either party to exercise any of its rights under this Agreement including but not limited to either party's failure to comply with any time limit set out in this Agreement, shall in no way constitute a waiver of those rights, nor shall such failure excuse the other party from any of its obligations under this Agreement.

(d) Warranty of Authority

The contractor and the MPT each warrant and represent that the person whose signature appears in Party I above is its representative and is duly authorized to execute this Agreement as a binding commitment of such party.

(e) GENERAL OBLIGATION OF THE PORT

In execution of the Works no person other than the Contractor, sub Contractors and his and their employees shall be allowed on the site except by the written permission of the Engineer In Charge or his authorised representative, but the Engineer in charge, his authorised representative, other authorities and officials of MPT shall be afforded to inspect all facilities arranged by the Contractor at site.

(f) FRAUD AND CORRUPTION

The Port as well as Bidder, Contractor, Sub-Contractor and Consultants observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, MPT:

- a) Defines, for the purpose of this provision the terms set forth below as follows:
 - (i) "Corrupt practice" means the offering, giving, receiving or soliciting, directly or indirectly of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - (ii) "Fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;
- b) "Collusive practice" means a scheme or arrangement between two or more Bidders designed to establish Tender prices at artificial non competitive levels and;
- c) "Coercive practice" means harming or threatening to harm directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;
- d) Will black list a firm or individual, including declaring them ineligible either indefinitely or for a stated period of time to be awarded, if it at any time determines that they have, directly or through an agent engaged in corrupt, fraudulent, collusive or coercive practice in competing for, or executing and;
- e) Will have the right to enquire that Contractor to permit the Port to inspect their account and records and other documents relating to the Tender submission and contract performance.

(f) EXECUTION

The Contractor shall, in consideration of payments to be made to him as herein after provided, execute and do the Works set forth as described in the scope of the work and specifications, including any amendments to tender clauses.

Bidders should obtain temporary pass from MPT Traffic Manager at Main Admin Building, third floor, Mormugao Port Trust, Headland Sada, Vasco 403 802 to gain entry into the Trust's premises if necessary.

(g) SIGNING OF AGREEMENT

- (i) The Contractor shall execute an Agreement with the Trust within 30 days from the date of receipt of LOA. If the Contractor, whose tender has been accepted, fails to execute an Agreement within 30 days from the date of receipt of documents for execution of the Agreement, the Earnest Money Deposit (EMD) deposited by the Bidder shall be forfeited and the Bidder shall not be allowed further to participate in the Trust's tenders.
- (ii) The cost of stamping the contract Agreement and cost of preparation of contract document (1 original + 3 copies) must be borne by the successful Bidder. Stamp paper shall be purchased in the state of Goa.
- (iii) The place of stamping and signing of Agreement shall be at MPT only. Cost of Stamp paper for commercial agreement is Rs. 1000/- (Rupees One Thousand only).
- (iv) Further, if the successful Contractor undertakes, to enter into and execute,

when called upon to do so, an Agreement, with such modifications as agreed upon and unless and until the formal Agreement is prepared and executed, the successful Contractor's offer, Trust order and the written acceptance for the receipt of Trust order of the successful Contractor shall form a binding Contract between the Trust and the Contractor.

The Contract Agreement shall include amended final tender document, pre-bid queries, various clarification letter, written approval by the Trust authorities, Amended to the Contract Agreement and any other conditions as agreed upon by the Trust and the Contractor.

(h) LABOUR

- a. The Contractor shall make his own arrangements for the engagement of all labour for doing the work at site or in respect of or in connection with the execution of work as also for the transport, housing, feeding and payment thereof. Since time is the essence of this Contract, requisite number of labour force has to be kept, so as to complete the work within the completion period as stipulated in the tender.
- b. In the event of any outbreak of illness or an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government, or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.
- c. The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst his employees and for the preservation of peace and protection of persons and property in the neighbourhood of the Works against the same.
- d. The Contractor shall at all times during the continuance of the Contract comply fully with all existing Acts, Regulations and bye law as including all statutory amendments and re-enactment of state or Central Government and other local authorities and any other enactment and acts that may be passed in future either by the State or the Central Government or local authority, including Indian Workmen's Compensation Act, Labour Laws and Equal Remuneration Act, 1976, Factories Act, Minimum Wages Act, IE Act 1956, etc.
- e. If as a result of Contractor's failure, negligence, omission, default or non-observance of any provisions of any laws, MPT is called upon by any authority to pay or reimburse or required to pay or reimburse any amount, MPT shall be entitled to deduct the same from any moneys due or that they become due to the Contractor under this Contract or any other Contract or otherwise recover from the Contractor any sums which MPT is required or called upon to pay or reimburse on behalf of the Contractor. All registration and statutory inspection fees in respect of his work pursuant to the Contract shall be paid by the Contractor.
- f. The Contractor shall pay the labourer engaged by him on the work not less than a fair wage, which expression shall mean, whether for time or piece work, rate of wages as may be fixed by the Labour Department of the State as per the Minimum wages Act.
- g. The Contractor shall also comply fully with the provisions of the payment of Wages Act, 1936.

- h. If any enhancement in the rates of Wages becomes payable as a result of the implementation of the Chief Labour Commissioner's interpretation of the Contract, Labour (Regulation and Abolitions) Central Rules 1971 including an increase of the Wages, the same shall be borne by the Contractor/Contractors. The Contractor shall be responsible for the observance by his sub-Contractors, of the foregoing provisions/precautions.
- i. The Contractor shall make necessary arrangements for the representative of the Port and/or his representative to witness the payment made by the Contractor to his labourers. The Contractor shall also submit periodical returns of labour employed by him and wages paid, to the Port's representatives.
- j. The Contractor shall at his own expenses provide all safety gears for all labours engaged during the work and failing to do so, MPT shall provide the same and recover the cost thereof from any amount due or which may become due to the Contractor or from any amount lying with them or under their control.
- k. Contractor shall obtain prior permission of the Chief Engineer to work on Sundays and Public Holidays and is also liable for payment of overtime to the MPT staff deployed beyond the normal shift and office hours and on holidays.

(I) FAIR WAGES

- a) The Contractor shall pay the labours engaged by him on the work not less than fair wages which expression shall mean whether for time or piece work the respective rates of wages as fixed by the Labour Department of the State payable to the different categories of labourers. However, subject to the other provisions of any other law for the time being in force in the country, the minimum rates of wages for any person/persons will be paid as applicable.
- b) The Contractor shall notwithstanding the provision of any contract to the contrary cause to be paid in fair wages to the labourers directly engaged on the works including any labour engaged by the sub Contractor in connection with the said work, as if the labourer had been immediately employed by him.
- c) Display of notices regarding wages etc:
The Contractor shall before he commences his work of contract, display and correctly maintain and continue to display and correctly maintain in a clean and legible condition at conspicuous places on the work site, notices in English and in the local Indian language spoken by the majority of the workers stating therein the rates of wages which have been fixed as fair wages and the hours of work for which such wages are earned and send a copy of such notices to the Port.
- d) Wages book and wage slips:
The Contractor shall maintain a wage book of each worker in such forms as may be convenient but the same shall include the following particulars:-
Rate of daily or monthly wages,
 - ii) Nature of work on which employed,
 - iii) Total No. of days worked during each wage period.
 - iv) Total amount payable for the work during each wage period.
 - v) All deductions made from the wages with an indication in each case of the

ground for which the deductions are made. Wages actually paid for each wages period.

- vi) A wage slip for each worker employed on work provided that the Port may grant exemption from the maintenance of the wage slip, if in his opinion not more than 19 persons are likely to be employed directly or indirectly on the work but in any case he will have to maintain wage books.
- e) Preservation of books and slips:
The wage book and the wage slips shall be preserved for a period of not less than 12 months after the date of last entry made in it.
- f) Inspection of books and slips:
The Contractor shall allow inspection of the aforesaid wage books and wage slips to any of his workers or to an agent at a convenient time and place after due notice is received from the Engineer or any other person authorized by him on his behalf.
- g) Powers of the Board to make investigation/enquiries:
The Board or any other persons authorized by him on his behalf shall have powers to make enquiries with a view to ascertaining the enforcement due and proper observance of the "Fair Wages Clause". He shall also have the power to investigate into any complaint regarding any default made by the Contractor or sub-contractor in regard to such provision. The Port shall have the right to deduct from the money due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-payment of aforesaid fair wages, except on account of any deduction that may be permissible under any law for the time being in force.

(m) INCOME TAX DEDUCTION

Income tax, if any, as per the relevant provision of the Income Tax Act shall be deducted at source from any payment payable to the Contractor.

(n) NO INTEREST ON ACCOUNT OF DELAYED PAYMENTS

Any claim for interest will not be entertained by MPT with respect to any payment or balance which may be in their hands owing to any disputes between themselves and the Contractor or with respect to any delay on part of MPT in making payment.

(o) FORCE MAJEURE

If the Supply, Installation, Testing and Commissioning of equipment is hindered due to force majeure such as, war, riots, civil commotion, fire, epidemics, natural calamities like rain, flood, earthquake, cyclone, draught, etc. such period shall be exempted from Completion period of this tender document.

(p) LABOUR LAWS

The Contractor shall comply with all the provisions of the Labour Laws and the rules and regulations made there under as amended from time to time and as applicable from time to time with regard to the employees to be deployed by the Contractor during contract period.

(q) ACCEPTANCE OF OFFER

The Contractor shall acknowledge the receipt of Order/ LETTER OF ACCEPTANCE within 7 days of mailing of the same and any delay in acknowledging the receipt will

be a breach of contract and compensation for the loss caused will be recovered by MPT by forfeiting the Earnest Money Deposit/Bid bond.

(r) SUB-LETTING OF THE WORK

The sub-letting of the work is not permitted in the said contract.

(s) TERMS OF PAYMENT

The bill will be certified for payment only after successful and satisfactory completion of the work as certified by the Chief Engineer or his representative.

The contractor shall submit the complete report/relevant documents including ESI and PF deductions in respect of their employees alongwith the bill. The PAN, TIN, ESI, PF, Service Tax registration no., Name of the bank, State, Branch, MICR No., type of account and email address for EFT/ECS should be indicated on the bills for payment. Bills without the above details will not be processed. Payment shall be effected by EFT/ECS only.

(t) CANCELLATION FEE /LIQUIDATED DAMAGES

"In the event of failure by the contractor to commence the work within the time stipulated in the contract or by the expiry of any period of extension granted by the Board's terms thereof, the security deposit of 10% of the contract price will be forfeited. In case of the delay in completion of wreck removal work within the time stipulated in the contract or by the expiry of any period of extension granted by the Board's terms thereof, the contractor shall be liable to pay the Board as Liquidated Damages in a sum of 0.5% of contract price per week or part thereof subject to a maximum of 5% of the contract price and the Board shall have the power to deduct this amount from the payment of the amounts due to the contractor or from his deposit".

(u) ACCESS TO PORT AREA

The gate entry pass for inspection for the purpose of making the offer or for the execution of work for successful Tenderer. The Tenderer shall contact the Chief Engineer , Engineering (civil) Department , 2nd Floor, Mormugao Port Trust, A.O. Bldg, Headland Sada, Mormugao, Goa – 403804. Phone :0832- 2594601 Email : mgptce@gmail.com or sudin.pd@gmail.com .

(v) PERFORMANCE GUARANTEE / SECURITY DEPOSIT:

The contractor shall furnish Security Deposit towards performance guarantee within **21 days** from date of receipt of this Work Order. This security deposit shall remain valid for a period one year. The value of security deposit / performance guarantee should be 5 % of the contract value in the form Bank Guarantee from any Nationalized / Scheduled Bank, having its branch at Goa as per format attached as Annex-IV.

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. **CE/ 10 /2019**

Name of Work: **“PROVIDING 1300 size SCN REVERSE CONE FENDERS AT BREAKWATER BERTH”**

SCOPE OF WORK.

- Removal of existing old Dipti 1000 cone fenders from the Breakwater berth side fender panels by making suitable arrangements for holding, lifting and transportation, by loading onto trailers using suitable cranes, winch arrangements, etc and safely unloading with crane or other facilities and stacking these neatly at M.M/MPT store or at Headland store offices alongwith all fixtures and accessories of each fender placed and packed neatly in empty PP cement bags and transported to the MPT store office. Work to include cost of plugging the existing bolt drilled holes with strong grout of fosroc or any other equivalent make. Works to include all costs of temporary scaffolding, equipments, tools, hire of chain pulley blocks, cranes, trailers, etc. All labour and materials etc complete.
- Supplying, providing and fixing 1300 size SCN Super Reverse cone fenders to the fenders panels at the Breakwater berth, including drilling holes for the anchor bolts, fixing the panels and anchoring with SS anchor bolts and fixing with standard anchor grout of hilti or fosroc make or equivalent, and fixing the fenders securely to the panels. Cost to include transportation, unloading, stacking at a suitable safe location within a distance of 3 km of the site of work and then transportation by lifting onto trailers by loading , unloading at site of work, making lifting and supporting system at site with suitable tools, plant, equipment and lifting arrangements, and fixing the new fenders at site after drilling new anchor bolts, and fixing with grout etc. All labour and material etc complete. (As per Drawing and Technical specification). Cost to include for testing of the SCN fenders at standardised testing laboratory, to check confirmation with the technical specifications. The tests should be carried out in the presence of the Chief Engineer or his representative, and after submission of the lab tests and obtaining approval for confirmation to technical specifications , the fenders can be considered for installation.

Cost to include all tools, plants, equipment, hire of crane, trailer, loading, unloading, etc. All labour and material etc complete.

SECTION II

MORMUGAO PORT TRUST **ENGINEERING (CIVIL) DEPARTMENT**

e-TENDER No. CE/10/2019

TECHNICAL SPECIFICATIONS

Name of the Work: “PROVIDING 1300 size SCN REVERSE CONE FENDERS AT BREAKWATER BERTH”

TECHNICAL SPECIFICATIONS

1. Mobilisation/Demobilisation of machineries, tools and arrangement of temporary pontoon/hiring of small boat, scaffolding etc.
2. **SCAFFOLDING**: Supply and fixing of scaffolding with bracing and providing a platform with Steel to facilitate drilling holes and fixing of Cell fenders in vertical face of berth including cost of all material, all labour charges etc.

3. SPECIFICATION OF RUBBER:

3.1 PHYSICAL PROPERTIES:

PROPERTY	TESTING STANDARD	CONDITION	REQUIREMENT
Tensile strength	AS 1180 2: BS ISO 37	Original	16.0 MPa (min)
		Aged for 96 hours at 77° C	12.8 MPa (min)
Elongation	AS 1180 2: BS ISO 37	Original	350%
		Aged for 96 hours at 77° C	280%
Hardness	AS 1683, 15.2	Original	78° Shore A (max)
		Aged for 96 hours at 77° C	Original +8° Shore A (max)
Compression Set	AS 1683, 13 Method B BS903 A6, ISO 815	22 hours at 77° C	30% (max)
Tear Resistance	AS 1683, 12; BS ISO 34-1	Original	70 KN/m (min)

Ozone Resistance	AS 1683-24: BS ISO 1431-1	50ppm at 20% strain, 40° C, 100 hrs.	No cracks
Seawater Resistance	BS ISO 1817	28 days at 95° C	Hardness $\pm 10^{\circ}$ C Shore A (max) Volume: $\sim 10/-5\%$ (max)
Abrasion	BS ISO 4649:2002	Original	100mm ³ (max)
	BS 903 A9, Method B	3000 revolutions	1.5cc(max)
Bond Strength	BS 903, A21, Section 21.1	Rubber to Steel	7N/mm(min)
Density	ISO 2781	Original	Max 1.2g/cc
Polymer %	ASTM D6370	Original	Min 45%
Carbon Black %	ASTM D6370	Original	Min 30%
Ash %	ASTM D297	Original	Max 5%

3.2 CHEMICAL PROPERTIES

TEST	STANDARD	INSTRUMENT TO USE	SPECIFICATION
Density	ISO 2781	Densometer or weighing balance	Max 1.20 glee
Polymer %	ASTM D6370	TGA/FTIR	Min. 45%
Carbon Black%	ASTM D6370	ASTM D6370	Min. 30%
Ash%	ASTM D297	ASTM D6370	Max 5% (excluding Zinc Oxide, an essential ingredient which would be around 7 to 8% extra)
Polymer: filler ration			Min 1.20

3.3 The contractor has to arrange to carry out load deflection test using full size fenders at the manufacturing unit to verify the performance of the fender at his own cost in the presence of the Chief Engineer or his representative and submit a load deflection certificate.

3.4 **FRONTAL PANEL:**

The frontal panel of the cell fenders shall be designed considering the required hull pressure. All the frontal panels shall be fabricated from ASTM A-36 or equivalent and shall be closed box completely sealed. This shall be further tested to ensure no water ingress. The frontal panel shall consist of horizontal and vertical stiffeners to provide a strong resistance to bending, shear and local buckling. Panel shall be fabricated as per AWS D 1.1.

After fabrication of the frontal panel all the meal surfaces shall be de-greased and cleaned and cleaned by sand blasting Sa 2.5. (40 to 60 Microns) and paint the box of the frame with epoxy paint system as per C5M classification.

3.5 **UHMW PE PAD:**

The frontal panel shall be fitted with Ultra High Molecular weight polyethylene pads. The pads shall be fitted SS316 bolts by drilling counter sunk hole on the panel and the studs shall be welded into it (as per drawing). The pads shall be 50mm thick and the studs of M16 size.

The properties of UHMW pads shall be as follows:

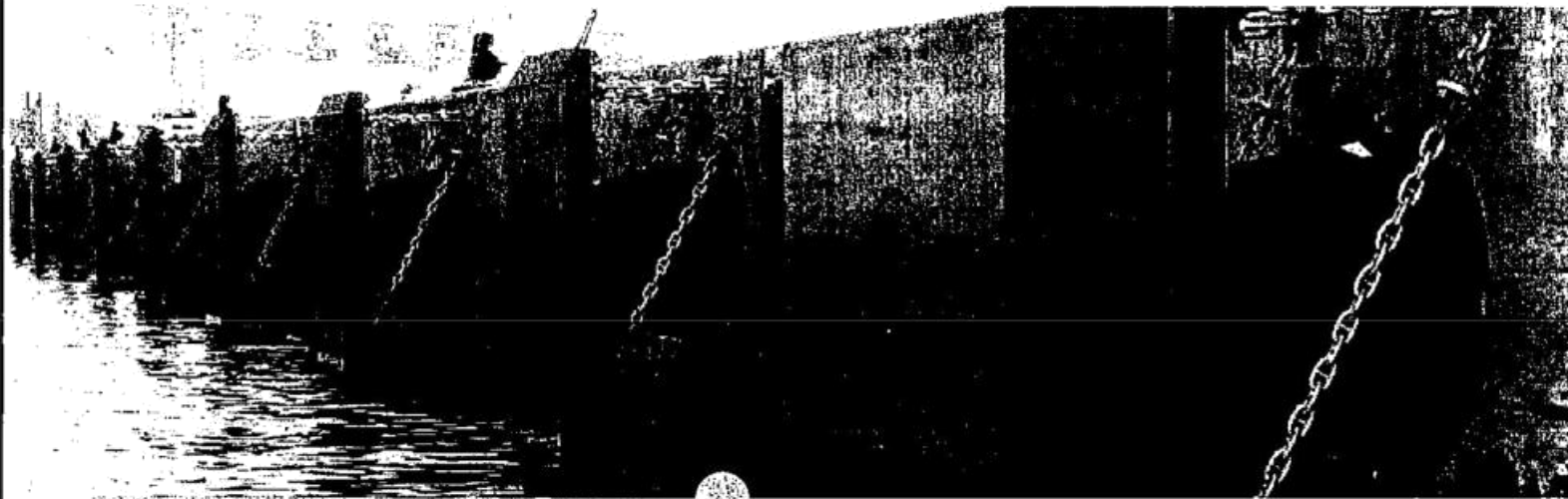
PROPERTY	UNIT	VALUE	TOLERANCE
Density	gm/cc	0.93	± 0.03
Tensile strength	MPa	20.27	$\pm 5\%$
Co-efficient of friction	Max	0.2	MAX
Elongation at break	%	300	$\pm 5\%$
Shore Hardness D		68°	± 3

3.6 **ANCHOR BOLTS, CHAINS AND ACCESSORIES:**

All fixing bolts, anchor bolts, sleeves shall be stainless steel of SS-316 grade. All the chains shall be of Gr.3 – Galvanized. Contractor has to submit necessary test certificates.

Note: Approval of all chemical to be incorporated in the work should be taken form the Chief Engineer or his representative before commencement.

Super Cone Fenders



FEATURES

Highly efficient geometry

Minimal performance loss even at large berthing angles

Stable shape resists shear

Wide choice of rubber grades

APPLICATIONS

General cargo berths

Bulk terminals

Oil and LNG facilities

Container berths

RoRo and cruise terminals

Parallel motion systems

Monopiles and dolphins

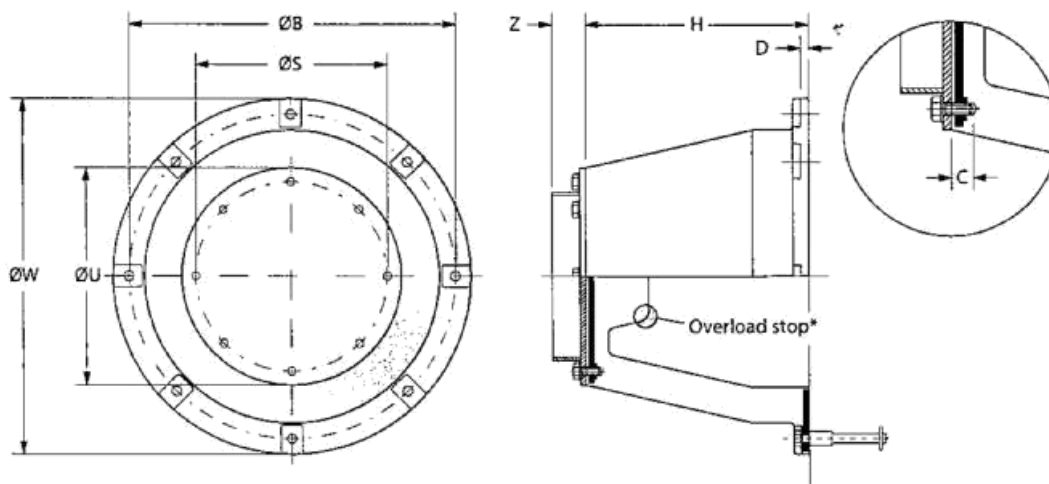
Super Cone Fenders

DIMENSIONS

	H	ØW	ØU	C	D	ØB	ØS	F0.9- 1.8 ANCHORS / HEAD BOLTS ^	F1.9- 3.1 ANCHORS HEAD BOLTS	Z _{min}	WEIGHT
SCN 300	300	500	295	27 - 37	20 - 25	440	255	4 x M16	4 x M16	77	40
SCN 350	350	570	330	27 - 37	20 - 25	510	275	4 x M16	4 x M16	77	50
SCN 400	400	650	390	30 - 40	20 - 28	585	340	4 x M16	4 x M20	82	76
SCN 500	500	800	490	32 - 42	30 - 38	730	425	4 x M20	4 x M24	95	160
SCN 550	550	880	540	32 - 42	30 - 38	790	470	4 x M20	4 x M24	95	210
SCN 600	600	960	590	40 - 52	35 - 42	875	515	4 x M20	4 x M30	115	270
SCN 700	700	1120	685	40 - 52	35 - 42	1020	600	4 x M24	4 x M30	120	411
SCN 800	800	1280	785	40 - 52	35 - 42	1165	685	6 x M24	6 x M30	120	606
SCN 860	860	1376	845	40 - 52	35 - 42	1250	735	6 x M24	6 x M30	130	750
SCN 900	900	1440	885	40 - 52	35 - 42	1313	770	6 x M30	6 x M30	135	841
SCN 950	950	1520	930	40 - 52	40 - 50	1390	815	6 x M30	6 x M30	142	980
SCN 1000	1000	1600	980	50 - 65	40 - 50	1460	855	6 x M30	6 x M36	150	1125
SCN 1050	1050	1680	1030	50 - 65	45 - 55	1530	900	6 x M30	6 x M36	157	1360
SCN 1100	1100	1760	1080	50 - 65	50 - 58	1605	940	8 x M30	8 x M36	165	1567
SCN 1150	1150	1840	1125	55 - 70	50 - 58	1680	980	8 x M30	8 x M36	175	1779
SCN 1200	1200	1920	1175	57 - 80	50 - 58	1750	1025	8 x M30	8 x M42	180	2028
SCN 1300	1300	2080	1275	65 - 90	50 - 58	1900	1100	8 x M36	8 x M42	195	2455
SCN 1400	1400	2240	1370	65 - 90	60 - 70	2040	1195	8 x M36	8 x M42	210	3105
SCN 1600	1600	2560	1570	65 - 90	70 - 80	2335	1365	8 x M42	8 x M48	240	4645
SCN 1800	1800	2880	1765	75 - 100	70 - 80	2625	1540	10 x M42	10 x M56	270	6618
SCN 2000	2000	3200	1955	80 - 105	90 - 105	2920	1710	10 x M42	10 x M56	300	9560
SCN 2250	2250	3600	2205	100 - 120	100 - 110	3285	1930	12 x M48	12 x M56	335	13,500
SCN 2500	2500	4000	2450	120 - 150	100 - 120	3650	2150	12 x M48	12 x M64	375	18,500

^ Fender anchors / head bolts indicated are based on a particular grade of steel. Please contact Trelleborg Marine Systems' local office for precise size, material and type for different grades of fenders pertaining to the project requirements.

[Units: mm, kg]



Some SCN sizes have a modified flange for reduced shipping dimensions.



SIZE	V
SCN 950	1440
SCN 1400	2180
SCN 1600	2390
SCN 1800	2700

* Contact Trelleborg Marine Systems' local offices

[Units: mm]

Super Cone Fenders

PERFORMANCE DATA*

			F 0.9	F 1.0	F 1.1	F 1.2	F 1.3	F 1.4	F 1.5	F 1.6	F 1.7	F 1.8	F 1.9	F 2.0	
1050	CV	E	392.0	435.0	446.6	458.2	469.8	481.4	493.0	504.4	515.8	527.2	538.6	550.0	
		R	626.0	695.0	713.4	731.8	750.2	768.6	787.0	813.4	839.8	866.2	892.6	919.0	
	RPD	E _R	427.3	474.2	486.8	499.4	512.1	524.7	537.4	549.8	562.2	574.6	587.1	599.5	
		R _R	682.3	757.6	777.6	797.7	817.7	837.8	857.8	886.6	915.4	944.2	972.9	1001.7	
	1100	CV	E	450.0	500.0	513.6	527.2	540.8	554.4	568.0	581.4	594.8	608.2	621.6	635.0
			R	685.0	761.0	781.6	802.2	822.8	843.4	864.0	893.4	922.8	952.2	981.6	1011.0
RPD		E _R	490.5	545.0	559.8	574.6	589.5	604.3	619.1	633.7	648.3	662.9	677.5	692.2	
		R _R	746.7	829.5	851.9	874.4	896.9	919.3	941.8	973.8	1005.9	1037.9	1069.9	1102.0	
1150		CV	E	514.1	570.3	585.5	600.7	616	631.2	646.4	661.6	676.8	692	707.2	722.4
			R	750	833.2	855.1	877.1	899	921	942.9	974.9	1007	1039	1071	1103
	RPD	E _R	560.3	621.7	638.2	654.8	671.4	688	704.5	721.1	737.7	754.3	770.9	787.4	
		R _R	817.5	908.2	932.1	956	979.9	1003.9	1027.8	1062.7	1097.6	1132.5	1167.3	1202.2	
	1200	CV	E	585.0	650.0	667.6	685.2	702.8	720.4	738.0	755.4	772.8	790.2	807.6	825.0
			R	818.1	909.0	933.4	957.8	982.2	1006.6	1031.0	1066.0	1101.0	1136.0	1171.0	1206.0
RPD		E _R	637.7	708.5	727.7	746.9	766.1	785.2	804.4	823.4	842.4	861.3	880.3	899.3	
		R _R	891.7	990.8	1017.4	1044.0	1070.6	1097.2	1123.8	1161.9	1200.1	1238.2	1276.4	1314.5	
1300		CV	E	742.5	825.0	847.0	869.0	891.0	913.0	935.0	957.0	979.0	1001.0	1023.0	1045.0
			R	957.6	1064.0	1092.4	1120.8	1149.2	1177.6	1206.0	1246.6	1287.2	1327.8	1368.4	1409.0
	RPD	E _R	805.6	895.1	919.0	942.9	966.7	990.6	1014.5	1038.3	1062.2	1086.1	1110.0	1133.8	
		R _R	1039.0	1154.4	1185.3	1216.1	1246.9	1277.7	1308.5	1352.6	1396.6	1440.7	1484.7	1528.8	
	1400	CV	E	927.0	1030.0	1057.6	1085.2	1112.8	1140.4	1168.0	1195.4	1222.8	1250.2	1277.6	1305.0
			R	1111.5	1235.0	1268.0	1301.0	1334.0	1367.0	1400.0	1447.2	1494.4	1541.6	1588.8	1636.0
RPD		E _R	1001.2	1112.4	1142.2	1172.0	1201.8	1231.6	1261.4	1291.0	1320.6	1350.2	1379.8	1409.4	
		R _R	1200.4	1333.8	1369.4	1405.1	1440.7	1476.4	1512.0	1563.0	1614.0	1664.9	1715.9	1766.9	
1600		CV	E	1381.5	1535.0	1576.6	1618.2	1659.8	1701.4	1743.0	1784.4	1825.8	1867.2	1908.6	1950.0
			R	1447.2	1608.0	1651.6	1695.2	1738.8	1782.4	1826.0	1888.0	1950.0	2012.0	2074.0	2136.0
	RPD	E _R	1478.2	1642.5	1687.0	1731.5	1776.0	1820.5	1865.0	1909.3	1953.6	1997.9	2042.2	2086.5	
		R _R	1548.5	1720.6	1767.2	1813.9	1860.5	1907.2	1953.8	2020.2	2086.5	2152.8	2219.2	2285.5	
	1800	CV	E	1966.5	2185.0	2244.0	2303.0	2362.0	2421.0	2480.0	2539.0	2598.0	2657.0	2716.0	2775.0
			R	1835.1	2039.0	2094.0	2149.0	2204.0	2259.0	2314.0	2392.6	2471.2	2549.8	2628.4	2707.0
RPD		E _R	2094.3	2327.0	2389.9	2452.7	2515.5	2578.4	2641.2	2704.0	2766.9	2829.7	2892.5	2955.4	
		R _R	1954.4	2171.5	2230.1	2288.7	2347.3	2405.8	2464.4	2548.1	2631.8	2715.5	2799.2	2883.0	
2000		CV	E	2700.0	3000.0	3080.0	3160.0	3240.0	3320.0	3400.0	3480.0	3560.0	3640.0	3720.0	3800.0
			R	2259.9	2511.0	2578.0	2645.0	2712.0	2779.0	2846.0	2941.8	3037.6	3133.4	3229.2	3325.0
	RPD	E _R	2862.0	3180.0	3264.8	3349.6	3434.4	3519.2	3604.0	3688.8	3773.6	3858.4	3943.2	4028.0	
		R _R	2395.5	2661.7	2732.7	2803.7	2874.7	2945.7	3016.8	3118.3	3219.9	3321.4	3423.0	3524.5	
	2250	CV	E	3843.9	4271.0	4385.0	4499.0	4613.0	4727.0	4841.0	4955.0	5069.0	5183.0	5297.0	5411.0
			R	2871.9	3191.0	3276.0	3361.0	3446.0	3531.0	3616.0	3738.0	3860.0	3982.0	4104.0	4226.0
RPD		E _R	4036.1	4484.6	4604.3	4724.0	4843.7	4963.4	5083.1	5202.8	5322.5	5442.2	5561.9	5681.6	
		R _R	3015.5	3350.6	3439.8	3529.1	3618.3	3707.6	3796.8	3924.9	4053.0	4181.1	4309.2	4437.3	
2500		CV	E	5273.5	5859.4	6015.6	6171.9	6328.1	6484.4	6640.6	6796.9	6953.2	7109.4	7265.7	7422.0
			R	3531.1	3923.4	4028.1	4132.8	4237.5	4342.2	4446.9	4596.6	4746.3	4895.9	5045.6	5195.3
	RPD	E _R	5537.1	6152.4	6316.4	6480.5	6644.5	6808.6	6972.6	7136.7	7300.8	7464.9	7629.0	7793.1	
		R _R	3707.6	4119.6	4229.5	4339.4	4449.4	4559.3	4669.2	4826.4	4983.6	5140.7	5297.9	5455.1	

^ Fender grades below F0.9 are available upon request.

[Units: kNm, kN]

*Note:

1. CV: slow speed constant velocity (2-8mm/s) compression.
2. RPD: Rated performance data, in accordance with PIANC with initial berthing velocity 150mm/s. RPD is corrected for decreasing velocity (DV) of compression of fenders by deceleration factors (0.74) (Please refer to fender design manual page 32).
3. RPD = CV (performance) * VF (velocity factor).
4. VF has been determined through experiments. Its value depends on strain rate (compression time) and nature of the rubber compounds (100% natural rubber, 100% synthetic rubber or blend).

Super Cone Fenders

PERFORMANCE DATA*

			F 2.1	F 2.2	F 2.3	F 2.4	F 2.5	F 2.6	F 2.7	F 2.8	F 2.9	F 3.0	
1050	CV	E	565.0	580.0	595.0	610.0	625.0	640.0	655.0	670.0	685.0	700.0	770.0
		R	948.0	977.0	1006.0	1035.0	1064.0	1101.0	1138.0	1175.0	1212.0	1249.0	1374.0
	RPD	E _R	615.9	632.2	648.6	664.9	681.3	697.6	714.0	730.3	746.7	763.0	839.3
		R _R	1033.3	1064.9	1096.5	1128.2	1159.8	1200.1	1240.4	1280.8	1321.1	1361.4	1497.7
1100	CV	E	652.0	669.0	686.0	703.0	720.0	737.0	754.0	771.0	788.0	805.0	886.0
		R	1042.4	1073.8	1105.2	1136.6	1168.0	1208.2	1248.4	1288.6	1328.8	1369.0	1506.0
	RPD	E _R	710.7	729.2	747.7	766.3	784.8	803.3	821.9	840.4	858.9	877.5	965.7
		R _R	1136.2	1170.4	1204.7	1238.9	1273.1	1316.9	1360.8	1404.6	1448.4	1492.2	1641.5
1150	CV	E	742.2	762	781.7	801.5	821.3	841	860.8	880.6	900.4	920.1	1012.9
		R	1137.6	1172.3	1206.9	1241.6	1276.2	1320.9	1365.6	1410.3	1455	1499.7	1649.2
	RPD	E _R	809	830.5	852.1	873.6	895.2	916.7	938.3	959.8	981.4	1002.9	1104.1
		R _R	1240	1277.8	1315.5	1353.3	1391.1	1439.8	1488.5	1537.2	1586	1634.7	1797.6
1200	CV	E	847.0	869.0	891.0	913.0	935.0	957.0	979.0	1001.0	1023.0	1045.0	1150.0
		R	1243.2	1280.4	1317.6	1354.8	1392.0	1439.8	1487.6	1535.4	1583.2	1631.0	1794.0
	RPD	E _R	923.2	947.2	971.2	995.2	1019.2	1043.1	1067.1	1091.1	1115.1	1139.1	1253.5
		R _R	1355.1	1395.6	1436.2	1476.7	1517.3	1569.4	1621.5	1673.6	1725.7	1777.8	1955.5
1300	CV	E	1073.6	1102.2	1130.8	1159.4	1188.0	1216.4	1244.8	1273.2	1301.6	1330.0	1463.0
		R	1453.4	1497.8	1542.2	1586.6	1631.0	1688.0	1745.0	1802.0	1859.0	1916.0	2107.0
	RPD	E _R	1164.9	1195.9	1226.9	1257.9	1289.0	1319.8	1350.6	1381.4	1412.2	1443.1	1587.4
		R _R	1576.9	1625.1	1673.3	1721.5	1769.6	1831.5	1893.3	1955.2	2017.0	2078.9	2286.1
1400	CV	E	1340.6	1376.2	1411.8	1447.4	1483.0	1518.4	1553.8	1589.2	1624.6	1660.0	1826.0
		R	1687.4	1738.8	1790.2	1841.6	1893.0	1959.0	2025.0	2091.0	2157.0	2223.0	2445.0
	RPD	E _R	1447.8	1486.3	1524.7	1563.2	1601.6	1639.9	1678.1	1716.3	1754.6	1792.8	1972.1
		R _R	1822.4	1877.9	1933.4	1988.9	2044.4	2115.7	2187.0	2258.3	2329.6	2400.8	2640.6
1600	CV	E	2003.0	2056.0	2109.0	2162.0	2215.0	2268.0	2321.0	2374.0	2427.0	2480.0	2728.0
		R	2203.0	2270.0	2337.0	2404.0	2471.0	2557.0	2643.0	2729.0	2815.0	2901.0	3191.0
	RPD	E _R	2143.2	2199.9	2256.6	2313.3	2370.1	2426.8	2483.5	2540.2	2596.9	2653.6	2919.0
		R _R	2357.2	2428.9	2500.6	2572.3	2644.0	2736.0	2828.0	2920.0	3012.1	3104.1	3414.4
1800	CV	E	2850.6	2926.2	3001.8	3077.4	3153.0	3228.4	3303.8	3379.2	3454.6	3530.0	3883.0
		R	2792.0	2877.0	2962.0	3047.0	3132.0	3241.0	3350.0	3459.0	3568.0	3677.0	4045.0
	RPD	E _R	3035.9	3116.4	3196.9	3277.4	3357.9	3438.2	3518.5	3598.8	3679.1	3759.5	4135.4
		R _R	2973.5	3064.0	3154.5	3245.1	3335.6	3451.7	3567.8	3683.8	3799.9	3916.0	4307.9
2000	CV	E	3904.0	4008.0	4112.0	4216.0	4320.0	4424.0	4528.0	4632.0	4736.0	4840.0	5324.0
		R	3430.0	3535.0	3640.0	3745.0	3850.0	3984.6	4119.2	4253.8	4388.4	4523.0	4975.0
	RPD	E _R	4138.2	4248.5	4358.7	4469.0	4579.2	4689.4	4799.7	4909.9	5020.2	5130.4	5643.4
		R _R	3635.8	3747.1	3858.4	3969.7	4081.0	4223.7	4366.4	4509.0	4651.7	4794.4	5273.5
2250	CV	E	5559.0	5707.0	5855.0	6003.0	6151.0	6299.0	6447.0	6595.0	6743.0	6891.0	7580.0
		R	4359.4	4492.8	4626.2	4759.6	4893.0	5064.0	5235.0	5406.0	5577.0	5748.0	6323.0
	RPD	E _R	5837.0	5992.4	6147.8	6303.2	6458.6	6614.0	6769.4	6924.8	7080.2	7235.6	7959.0
		R _R	4577.4	4717.4	4857.5	4997.6	5137.7	5317.2	5496.8	5676.3	5855.9	6035.4	6639.2
2500	CV	E	7625.1	7828.2	8031.3	8234.4	8437.5	8640.6	8843.7	9046.8	9249.9	9453.0	10398.0
		R	5359.4	5523.4	5687.5	5851.5	6015.6	6225.9	6436.2	6646.4	6856.7	7067.0	7773.4
	RPD	E _R	8006.4	8219.6	8432.9	8646.1	8859.4	9072.6	9285.9	9499.1	9712.4	9925.7	10917.9
		R _R	5627.3	5799.6	5971.9	6144.1	6316.4	6537.2	6758.0	6978.8	7199.6	7420.4	8162.1

[Units: kNm, kN]

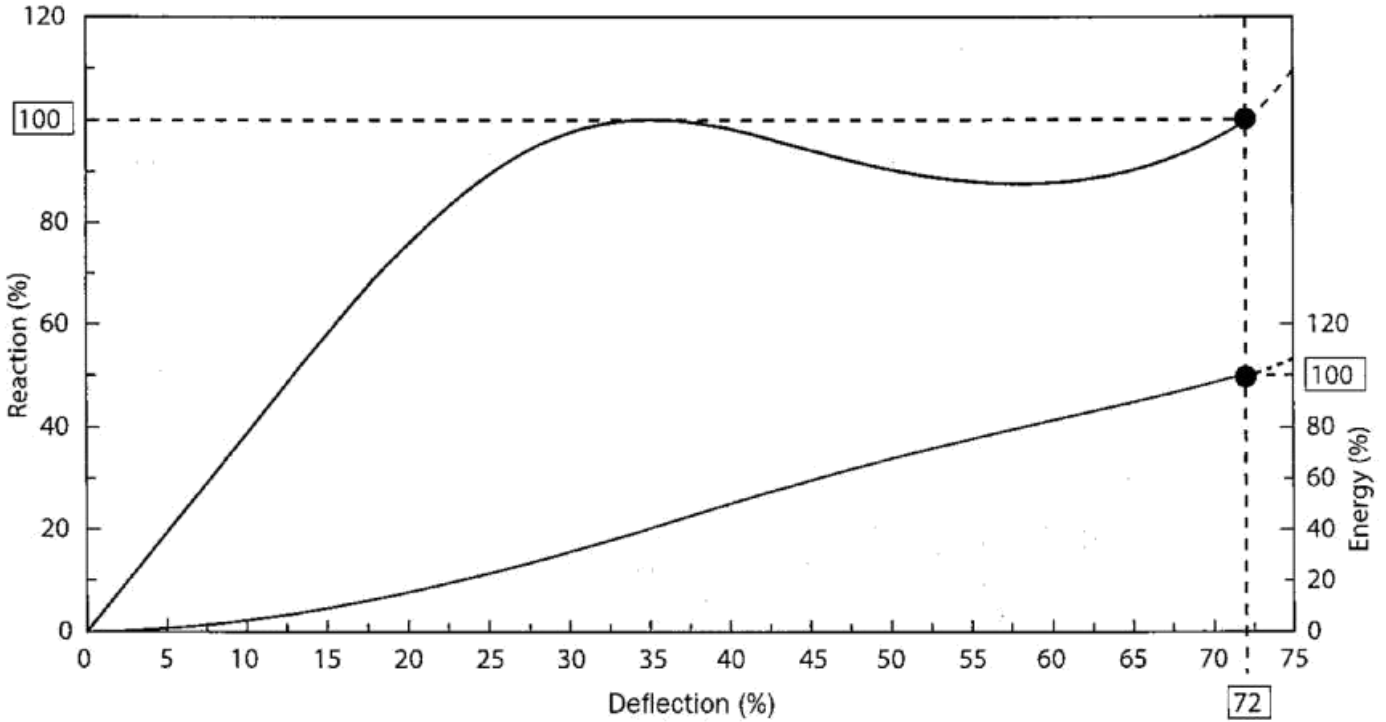
- For other initial berthing velocities, VF should be calculated separately (Refer to fender design manual).
- Performance for RPD is based on a rubber compound with a blend of NR and SBR. 100% Natural rubber compound and 100% Synthetic rubber compound are available on request. Please contact TMS office.
- In case of fenders are tested in decreasing velocity (DV) mode, RPD = DV (performance).
- Fender performance is subject to ±10% manufacturing tolerance (+10% for reaction force and -10% for energy).
- RPD is reported at 23°C ± 5°C temperature and 0° compression angle.

Super Cone Fenders

INTERMEDIATE DEFLECTIONS

D_r (%)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	72	75
E_r (%)	0	1	4	8	15	22	31	40	50	59	67	75	82	89	96	100	106
R_r (%)	0	20	39	58	76	90	98	100	98	94	90	88	88	90	96	100	110

Nominal rated deflection may vary at RPD. Refer to the Performance Tolerances table in the Fender Application Design Manual.

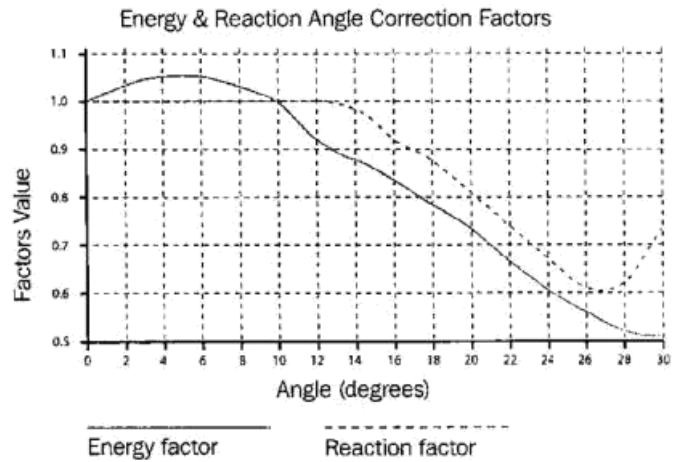


Generic curve shown. Actual curve geometry may vary depending on grade, temperature, velocity and angle.

ANGLE FACTOR (AF) TABLE

ANGLE (°)	ENERGY FACTOR	REACTION FACTOR
0	1.000	1.000
3	1.039	1.000
5	1.055	1.000
8	1.029	1.000
10	1.000	1.000
15	0.856	0.950
20	0.739	0.800

The graph shows fender performance with no chain restraints up to 12 degrees and chain restraints for angles above 12 degrees. Fender is fitted with a standard frontal frame.



Super Cone Fenders

VELOCITY FACTOR (VF) TABLE

COMPRESSION TIME (SECONDS)	BLEND OF NATURAL AND SYNTHETIC RUBBER (CATALOG COMPOUND)	100% NATURAL RUBBER	100% SYNTHETIC RUBBER (SPB)
		VF	
1	1.20	1.14	1.31
2	1.16	1.10	1.25
3	1.14	1.09	1.22
4	1.13	1.07	1.20
5	1.11	1.06	1.19
6	1.10	1.06	1.17
7	1.09	1.05	1.16
8	1.09	1.04	1.15
9	1.08	1.04	1.14
10	1.07	1.03	1.14
11	1.07	1.03	1.13
12	1.06	1.02	1.12
13	1.06	1.02	1.12
14	1.05	1.02	1.11
15	1.05	1.01	1.11
16	1.05	1.01	1.10
17	1.04	1.01	1.10
18	1.04	1.01	1.09
19	1.04	1.00	1.09
20	1.03	1.00	1.08

Compression time needs to be calculated using the following formula: $t = d/(f \cdot Vd)$

Where:

t = compression time (seconds)*

d = rated deflection (mm)

Vd = initial berthing velocity (mm/s)

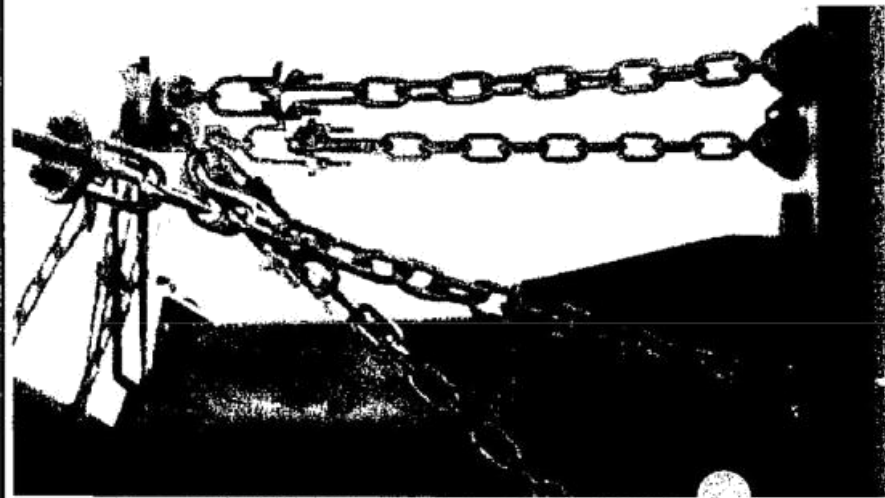
f = 0.74 deceleration factor (Peak reaction force occurs at between 30% - 40% deflection, where there has been a deceleration due to energy absorption. f represents the factor associated with deceleration.)

* Applicable for both partial deflection and rated deflection.

TEMPERATURE FACTOR (TF) TABLE

TEMPERATURE (°C)	BLEND OF NATURAL AND SYNTHETIC RUBBER (CATALOG COMPOUND)	100% NATURAL RUBBER	100% SYNTHETIC RUBBER (SPB)
		TF	
+50	0.916	0.914	0.918
+40	0.947	0.946	0.948
+30	0.978	0.978	0.979
+23	1.000	1.000	1.000
+10	1.030	1.025	1.038
+0	1.075	1.053	1.108
-10	1.130	1.080	1.206
-20	1.249	1.142	1.410
-30	1.540	1.315	1.877

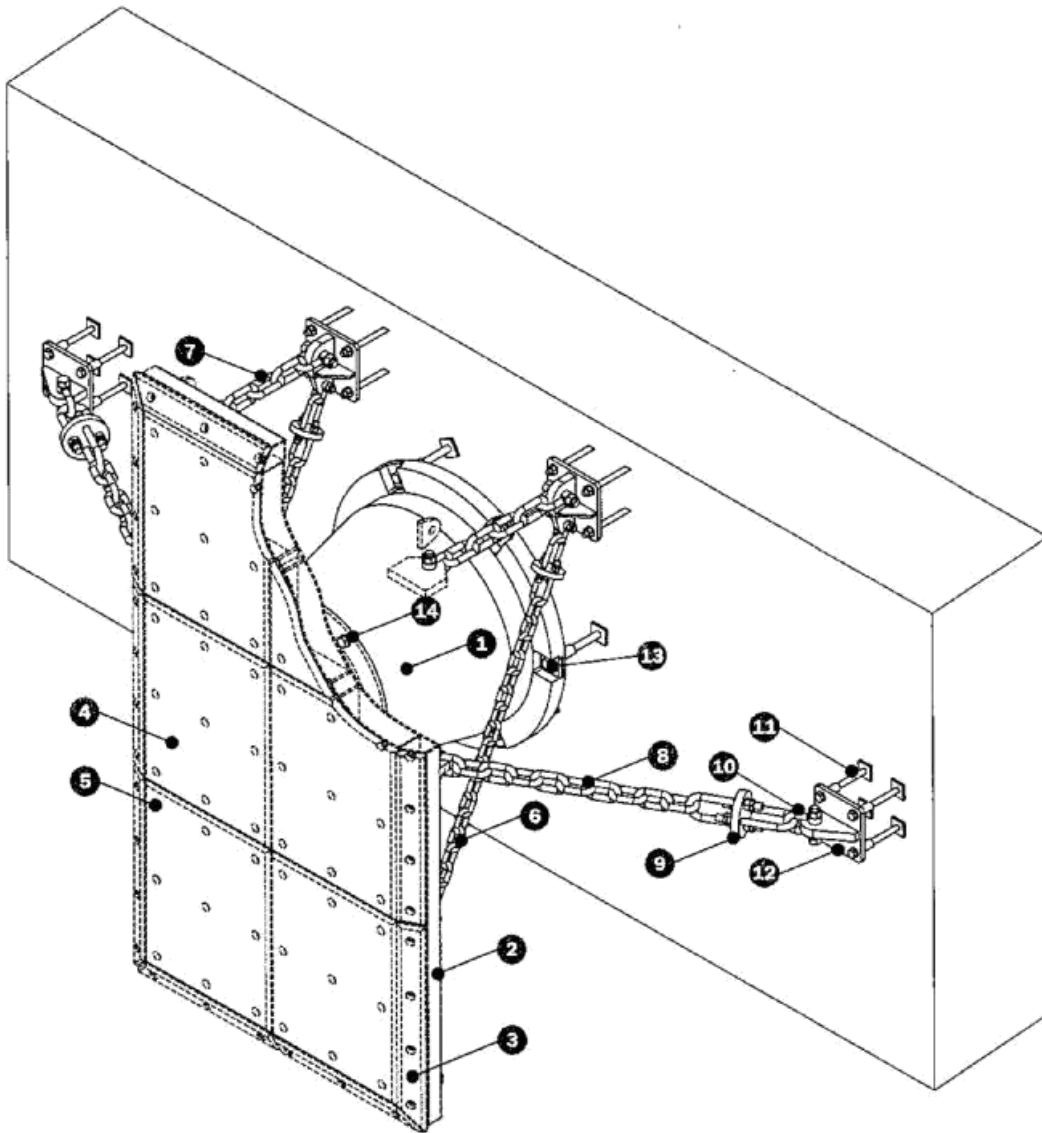
Accessories



Our ultra high molecular weight polyethylene (UHMW-PE) is the first choice material for facing steel fender panels and other heavy duty applications.

We can also supply both open link or stud link chains in several grade strengths. Accessories such as shackles and U-anchors are also available. The nominal breaking load (NBL) of these items is matched to chains of similar capacity. Chains and accessories are galvanized as standard. Chain brackets may also be supplied in an optional painted finish.

Fender Accessories (TYPICAL)



① Super cone fender

② Steel frontal frame

③ Chamfered edge on frontal frame

④ UHMW-PE facing pads

⑤ Fixing bolts for UHMW-PE pads

⑥ Weight chain

⑦ Tension chain

⑧ Shear chain

⑨ Chain tensioner

⑩ Chain shackle

⑪ NC3 type anchor

⑫ Bracket

⑬ Foot bolt

⑭ Head bolt

Fender Panels

Fender panels are just as important as the rubber units on high performance systems. That's why every panel can be purpose designed using structural analysis programs and 3D CAD modelling for optimum strength.

Fender panels distribute reaction forces to provide low hull pressures and cope with large tidal variations. They can also be designed to resist line loads from belted ships, or even point loads in special cases. Optional lead-in bevels reduce the snagging risk, whilst brackets (where required) provide highly secure connection points for chains.

Closed box designs are used almost exclusively – all fully sealed and pressure checked. Corrosion protection is provided by high durability C5M class paint systems to ISO 12944, and additional corrosion allowances can be designed in where required.

FEATURES AND OPTIONS

- I Closed box steel structure
- I Internal structural members
- I Blind boss fender connections
- I Pressure tested for water tightness
- I C5M modified epoxy paint*
- I Polyurethane topcoat (RAL5005 blue)†
- I Studs for UHMW-PE face pads
- I Chain brackets
- I Lifting points
- I Lead-in bevels and chamfers

* Other options available

† Alternative colours on request

SPECIFICATION AND DESIGN OF PANELS

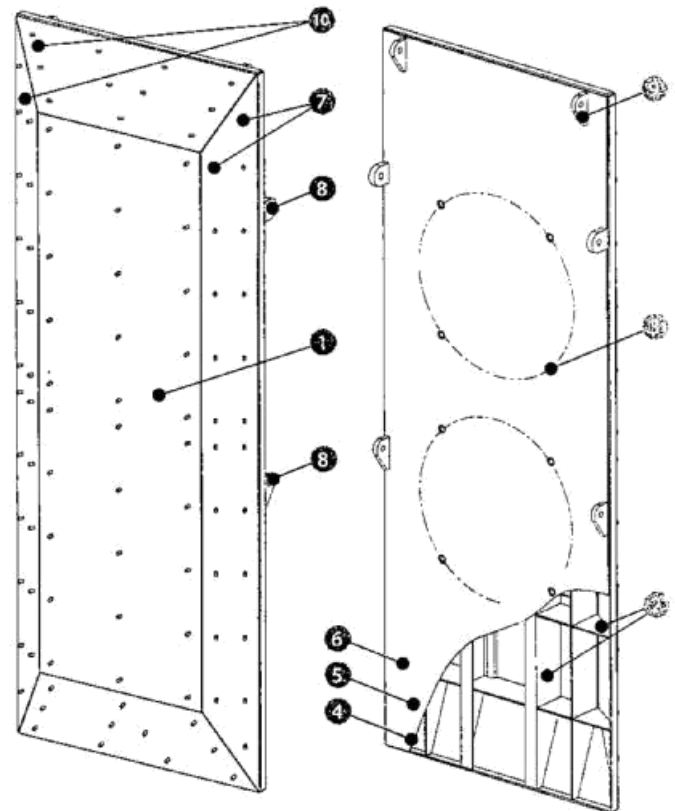
Panel specifications and designs should consider:

- I Hull pressures and tidal range
- I Lead-in bevels and chamfers
- I Bending moment and shear
- I Local buckling
- I Limit state load factors
- I Steel grade
- I Permissible stresses
- I Weld sizes and types
- I Pressure test method
- I Rubber fender connections
- I UHMW-PE attachment
- I Chain connections
- I Lifting points
- I Paint systems
- I Corrosion allowance
- I Maintenance and service life

Fender Panels (TYPICAL)

- 1 Closed box steel structure
- 2 Internal structural members
- 3 Blind boss fender connections
- 4 Shot blasted steel (SA2.5)
- 5 C5M modified epoxy paint*
- 6 Polyurethane topcoat (RAL5005 blue)†
- 7 Studs for UHMW-PE face pads
- 8 Chain brackets
- 9 Lifting points
- 10 Lead-in bevels and chamfers*

* Other options available † Alternative colours on request



STEEL PROPERTIES

STANDARD	GRADE	YIELD STRENGTH (min)		TENSILE STRENGTH (min)		TEST TEMPERATURE OF (v-notched) CHARPY IMPACT TEST	
		N/mm ²	psi	N/mm ²	psi	°C	
GB/T 700	Q235B	235	34000	375	54000	20	68
	Q275B	275	40000	490	71000	20	68
GB/T 1591	Q345B	345	50000	470	68000	20	68
	Q345C	345	50000	470	68000	0	32
EN 10025	S235JR (1.0038)	235	34000	360	52000	20	68
	S275JR (1.0044)	275	40000	420	61000	20	68
	S355J2 (1.0570)	355	51000	510	74000	-20	-4
	S355J0 (1.0553)	355	51000	510	74000	0	32
	SS400	235	34000	402	58000	0	32
JIS G-3101	SS490	275	40000	402	58000	0	32
	SM490	314	46000	490	71000	0	32
ASTM	A-36	250	36000	400	58000	0	32
	A-572	345	50000	450	65000	0	32

The national standards of France and Germany have been replaced by EN 10025. In the UK, BS4360 has been replaced by BS EN 10025. The table above is for guidance only and is not comprehensive. Actual specifications should be consulted in all cases for the full specifications of steel grades listed and other similar grades.

STEEL THICKNESS

(in accordance with PIANC 2002)

EXPOSED BOTH FACES	≥ 12
EXPOSED ONE FACE	≥ 9
INTERNAL (NOT EXPOSED)	≥ 8

[Units: mm]

Corresponding minimum panel thickness will be 140–160mm (excluding UHMW-PE face pads) and often much greater.

TYPICAL PANEL WEIGHTS

LIGHT DUTY	200 – 250
MEDIUM DUTY	250 – 300
HEAVY DUTY	300 – 400
EXTREME DUTY	≥ 400

[Units: kg/m²]

Ultra High Molecular Weight Polyethylene (UHMW-PE)

The contact face of a fender panel helps to determine the lifetime maintenance costs of a fender installation. UHMW-PE is the best material available for such applications. It uniquely combines low friction, impact strength, non-marking characteristics and resistance to wear, temperature extremes, seawater and marine borers. UHMW-PE is molded into plates at extremely high pressure and is a totally homogeneous material which is available in many sizes and thicknesses. These plates can be cut, machined and drilled to suit any type of panel or shield.

FEATURES

Very low friction coefficient

Excellent abrasion resistance

UV and ozone resistant

Does not rot, split or crack

100% recyclable

APPLICATIONS

Fender panel (frame) face pads

Rubbing strips

V-fender shields

Lock entrance and wall protection

Bridge buttress protection

Beltings on workboats

PROPERTY	TEST METHOD	UNIT	TYPICAL VALUE	
			VIRGIN	REGENERATED
Density	ISO 1183-1	g/cm ³	0.94 – 0.95	0.95 – 0.96
Notched Impact Strength (Charpy)	ISO 11542-2	kJ/m ²	140 – 170	100 – 130
Abrasion Index (Sand-slurry)	ISO/DIS 15527(Draft)	100	100 – 110	130 – 150
Yield Strength	ISO/R 50mm/min	N/mm ²	15 – 20	15 – 20
Elongation at Break*	ISO/R 50mm/min	%	> 50	> 50
Dynamic Friction (PE-Steel)	Pm = 1N/mm ² V = 10m/min	–	0.15	0.15
Hardness	ISO 868 / DIN 53505 3s value, 6mm sample	Shore D	63	63 – 66
Operating Temperature	–	°C	–80 to +80	–80 to +80
Thermal Expansion	DIN 53752	K ⁻¹	≈ 2 × 10 ⁻⁴	≈ 2 × 10 ⁻⁴
Molecular Weight	Viscometric	g/mol	4,200,000	4,200,000
Melting Point	ASTM D3418	°C	137 – 143	137 – 143

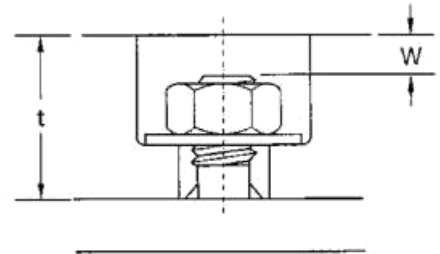
All values for black, UV stabilized material. Values for colored materials will vary. Actual properties will be confirmed on order.

* Alternative test methods such as ASTM 0638 give higher values circa 350%.

Ultra High Molecular Weight Polyethylene (UHMW-PE)

WEAR ALLOWANCES

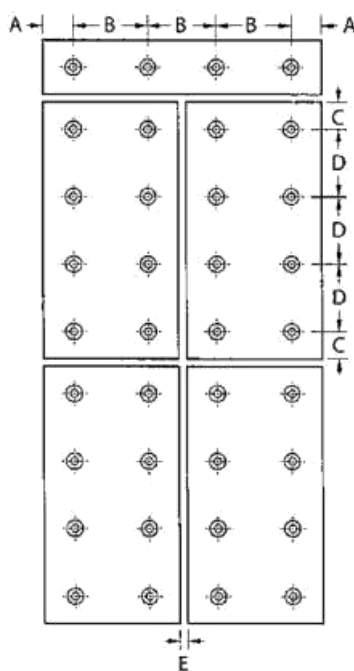
APPLICATION	t (mm)	W* (mm)	Bolt
Light duty	30	3 – 5	M16
Medium duty	40	7 – 10	M16 – M20
	60	15 – 19	
Heavy duty	70	18 – 25	M24 – M30
	80	22 – 32	
Extreme duty	90	25 – 36	M30 – M36
	100	28 – 40	



* Where allowances are typical values, actual wear allowance may vary due to fixing detail. Small increases in facing thickness can greatly extend service life for minimal extra cost.

[Units: mm]

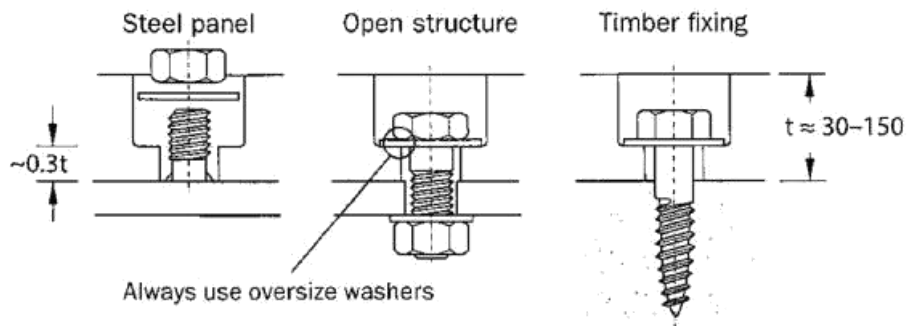
TYPICAL DIMENSIONS



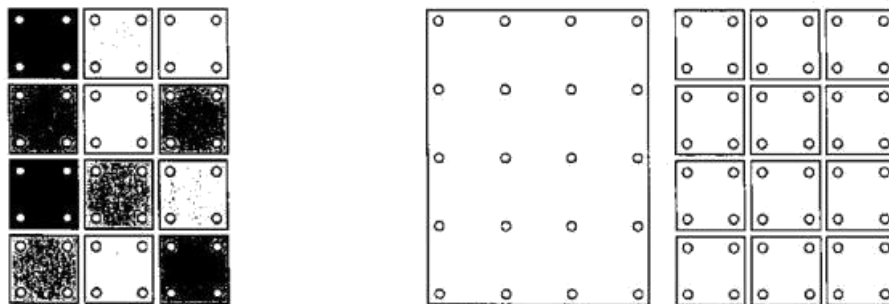
A	45 – 80
B	250 – 350
C	45 – 80
D	300 – 450
E	5 – 10

[Units: mm]

Dimensions will depend on pad thickness and application.



LARGE PADS VS SMALL PADS



Larger pads are usually more robust but smaller pads are easier and cheaper to replace.

The standard color is black, but UHMW-PE is available in many other colours if required.

Chains

Some fender systems need chains to help support heavy components or to control how the fender deflects and shears during impact. Open link or stud link chains are commonly used and these can be supplied in several different strength grades.

FEATURES

Choice of open or stud link chains

Various link lengths available

Proof load tested and certified

Galvanized as standard

Variety of matched accessories

APPLICATIONS

Large fender panels

Cylindrical fenders

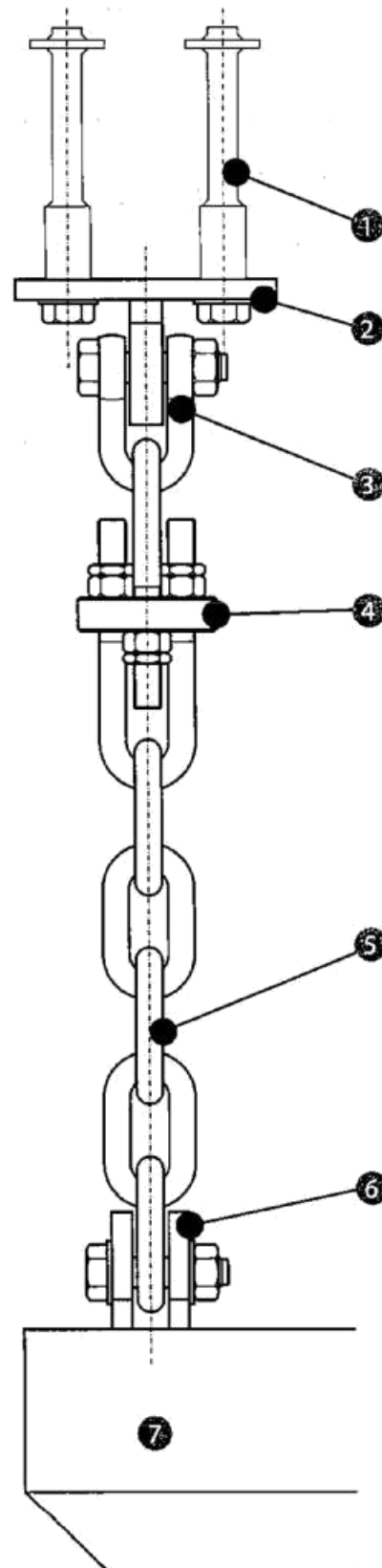
Floating fender moorings

Safety applications

Lifting and installing

TYPICAL CHAIN SYSTEM

- ① Anchors and fixing bolts
- ② Chain bracket
- ③ Alloy D or bow-shackle with safety pin
- ④ Chain tensioner
- ⑤ Open or stud link chain
- ⑥ Frontal frame bracket
- ⑦ Frontal frame

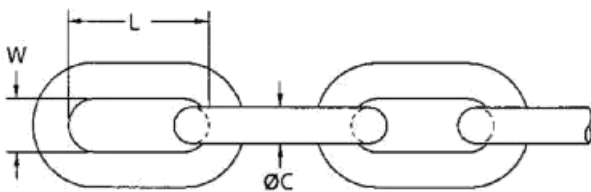


Chains

OPEN LINK CHAINS

ØC	1.0D LINKS			3.5D LINKS			5.0D LINKS			5.0D LINKS			SL2	
	L	W	WEIGHT	L	W	WEIGHT	L	W	WEIGHT	L	W	WEIGHT		
14	42	18	0.2	49	20	0.2	56	20	0.2	70	21	0.3	124	154
16	48	21	0.3	56	22	0.3	64	22	0.3	80	24	0.4	160	202
18	54	23	0.4	63	25	0.4	72	25	0.5	90	27	0.5	209	262
20	60	26	0.5	70	28	0.6	80	28	0.6	100	30	0.8	264	330
22	66	29	0.7	77	31	0.8	88	31	0.8	110	33	1.0	304	380
25	75	33	1.1	88	35	1.1	100	35	1.2	125	38	1.5	393	491
28	84	36	1.4	98	39	1.6	112	39	1.7	140	42	2.0	492	616
30	90	39	1.8	105	42	2.0	120	42	2.1	150	45	2.5	566	706
32	96	42	2.2	112	45	2.4	128	45	2.5	160	48	3.0	644	804
35	105	46	2.8	123	49	3.1	140	49	3.3	175	53	4.0	770	964
38	114	49	3.6	133	53	3.9	152	53	4.3	190	57	5.1	900	1130
40	120	52	4.2	140	56	4.6	160	56	5.0	200	60	6.0	1010	1260
45	135	59	6.0	158	63	6.5	180	63	7.1	225	68	8.5	1275	1590
50	150	65	8.2	175	70	8.9	200	70	9.7	250	75	12	1570	1960
55	165	72	11	193	77	12	220	77	13	275	83	16	1900	2380
60	180	78	14	210	84	15	240	84	17	300	90	20	2260	2770

[Units: mm, kg/link, kN]



MBL = Minimum Breaking Load (kN)

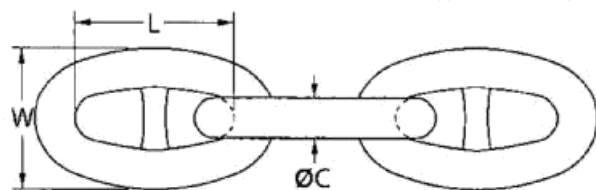
NBL = Nominal Breaking Load (kN)

Tolerance: all dimensions ± 2.5%

STUD LINK CHAINS

ØC	COMMON EN			MBL	
	L	W	WEIGHT	SL2 (U2)	SL3 (U3)
19	76	68	0.6	210	300
22	88	79	0.9	280	401
26	104	94	1.5	389	556
28	112	101	1.9	449	642
32	128	115	2.8	583	833
34	136	122	3.4	655	937
38	152	137	4.7	812	1160
42	168	151	6.3	981	1400
44	176	158	7.3	1080	1540
48	192	173	9.4	1270	1810
52	208	187	12	1480	2110
58	232	209	17	1810	2600
64	256	230	22	2190	3130
70	280	252	30	2580	3690
76	304	274	38	3010	4300
90	360	324	63	4090	5840

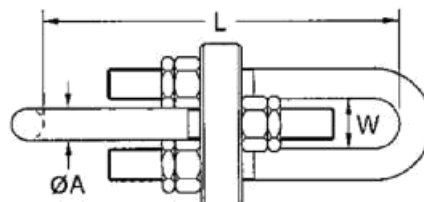
[Units: mm, kg/link, kN]



CHAIN TENSIONERS

CHAIN SIZE		L		WEIGHT
16	M16	200-240	40	2.7
18	M18	220-280	45	2.5
20	M20	235-305	50	5.3
22	M22	265-345	56	6.6
22	M24	280-370	60	8.8
25	M27	310-420	68	12
30	M30	345-465	76	17
32	M33	385-525	82	21
35	M36	420-560	90	27
40	M42	480-650	106	45
45	M48	545-745	120	64
50	M52	595-805	130	80
55	M56	640-880	140	99
60	M60	685-945	150	122
60	M64	730-1010	160	147

[Units: mm, kg]

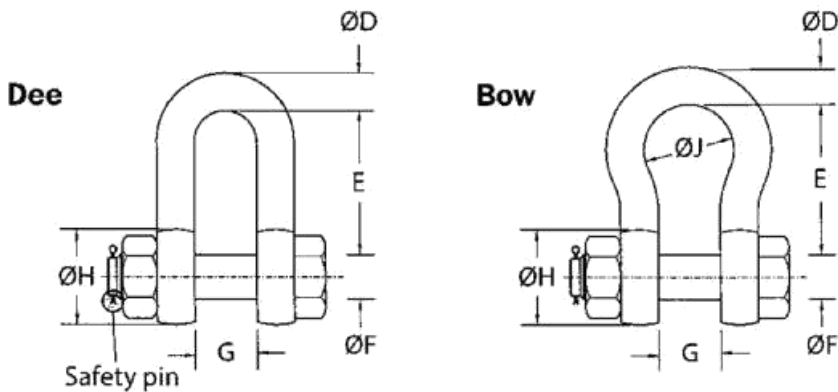


High Strength Shackles

ØD	F	ØH	G	DEE SHACKLE				WEIGHT	
				E	W (kg)	E			
13	16	26	22	43	0.4	51	32	0.4	120
16	19	32	27	51	0.7	64	43	0.8	195
19	22	38	31	59	1.1	76	51	1.3	285
22	25	44	36	73	1.5	83	58	1.9	390
25	28	50	43	85	2.6	95	68	2.8	510
28	32	56	47	90	3.3	108	75	3.8	570
32	35	64	51	94	4.7	115	83	5.3	720
35	38	70	57	115	6.2	133	95	7.0	810
38	42	76	60	127	7.6	146	99	8.8	1020
45	50	90	74	149	13	178	126	15	1500
50	57	100	83	171	18	197	138	21	2100
57	65	114	95	190	28	222	160	29	2550
65	70	130	105	203	35	254	180	41	3330
75	80	150	127	230	60	330	190	65	5100
89	95	178	146	267	93	381	238	110	7200
102	108	204	165	400	145	400	275	160	9000

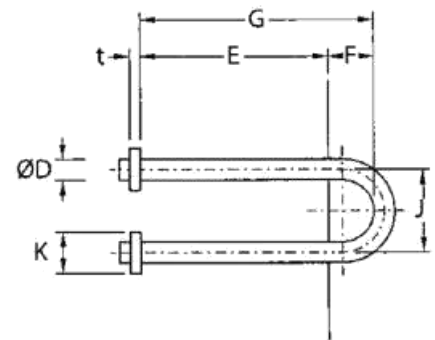
Please refer to your local office for detailed information

[Units: mm, kg, kN]



U-Anchors

ØD	E	F	G	J	t	NBL		
26	260	60	320	104	50	12	3.4	209
30	300	70	370	120	50	15	5.1	264
34	340	70	410	136	60	15	7.3	304
36	360	70	430	144	60	20	8.6	393
42	420	90	510	168	70	20	14	492
44	440	100	540	176	80	20	16	566
48	480	100	580	192	80	25	21	644
50	500	110	610	200	90	25	24	770
56	560	120	680	224	100	30	33	900
60	600	130	730	240	110	30	41	1010
66	660	140	800	264	120	35	55	1275
74	740	160	900	296	130	40	77	1570



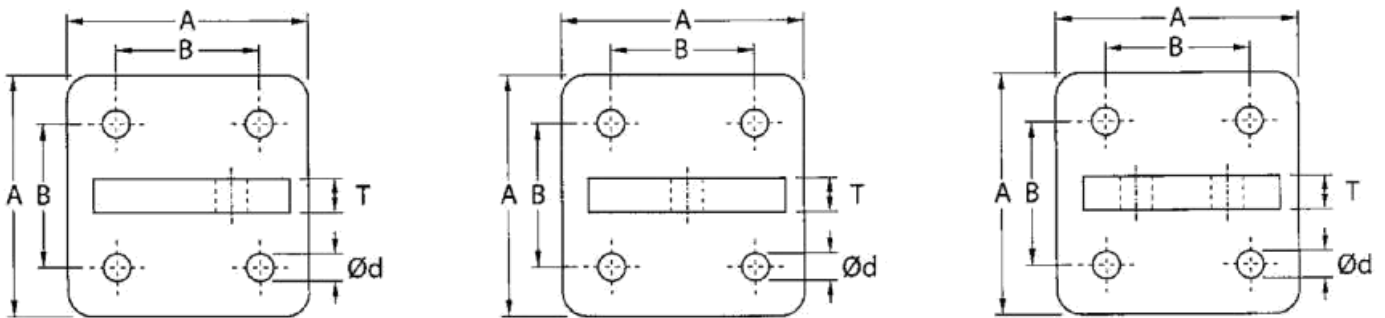
[Units: mm, kg, kN]

Brackets

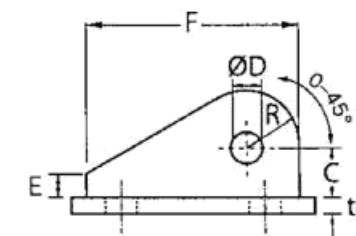
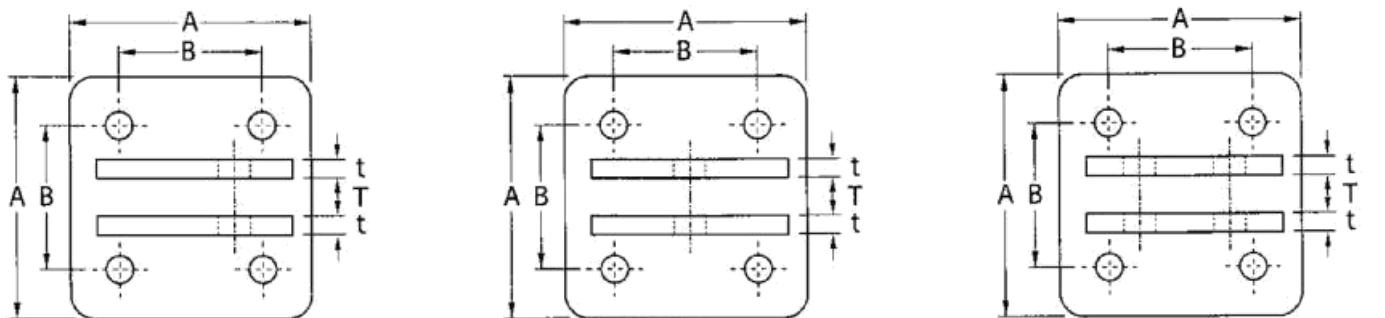
A	C	CB1		CB2		Ød	t	SINGLE LUG		TWIN LUG		ANCHOR		
		SHACKLE	BOLT PIN	SHACKLE	BOLT PIN									
190	110	40	20	75	160	24	40	15	30	19	28	M24 x 90	28	2/4 x M20
220	130	45	20	90	190	24	50	15	30	22	28	M24 x 90	28	2/4 x M20
250	150	50	25	100	210	28	55	20	40	25	36	M30 x 120	36	2/4 x M24
280	160	60	25	115	240	28	65	20	40	28	36	M30 x 120	36	2/4 x M24
320	190	65	35	130	270	36	75	25	45	32	42	M36 x 140	42	2/4 x M30
350	210	70	35	140	300	36	80	25	50	35	42	M36 x 140	42	2/4 x M30
380	220	80	35	155	320	42	85	30	50	38	50	M42 x 160	50	2/4 x M36
420	250	85	40	170	360	42	95	30	60	42	50	M42 x 170	50	2/4 x M36
440	260	90	40	180	360	50	100	30	60	44	60	M48 x 180	60	2/4 x M42

[Units: mm, kN]

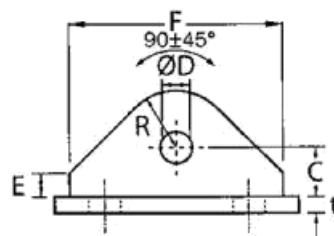
S-Series



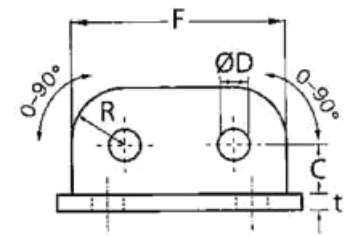
T-Series



CB1



CB2



CB3

- ! All chain and accessory information is for guidance only.
- ! Every chain design should be checked to confirm suitability for the intended application.
- ! Select chain system components so $MBL \approx NBL$.
- ! Every chain system is different. Check all dimensions for fit, clearance and tolerance.

- ! Chain brackets can be specified with 2 or 4 anchors to suit application and loads.
- ! If extra long life is required, add a corrosion allowance.
- ! Some slack in the chain is unavoidable and will not affect operation.
- ! For special sizes and applications, please refer to Trelleborg Marine Systems' local office.

Fender Fixings

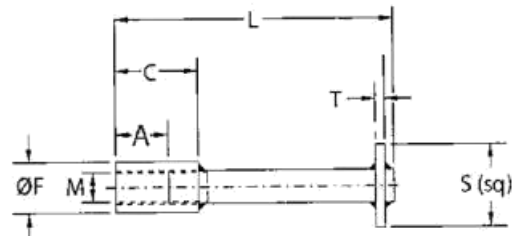
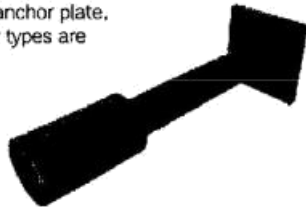
NC3 ANCHORS

THREAD		C		L		T	
M20	40	60	30	200	63	10	1.1
M22	44	66	32	225	63	10	1.4
M24	48	73	36	250	75	10	1.9
M27	54	84	40	265	75	10	2.4
M30	60	95	45	270	100	10	3.5
M36	72	112	54	320	100	12	5.5
M42	84	134	63	360	100	12	8.1
M48	96	156	72	400	100	15	12
M56	112	182	84	550	120	15	20
M64	128	208	100	600	130	20	30
M76	152	242	114	700	150	20	46

Anchors available in mid steel, HDG, SS 316 or super duplex

[Units: mm, kg]

The NC3 is a traditional cast-in anchor design used for installing fenders to new concrete. The NC3 anchor has a threaded socket, a long tail and a square anchor plate. Non-standard sizes and other cast-in anchor types are available on request.



Always check min/max clamping thickness and socket depths actual threaded length on bolts.

EC2 ANCHORS

THREAD		E		J		ØS		WEIGHT
M12	110	5 - 8	10	2.5	-	15	1 × C12	0.15
M16	140	6 - 9	13	3	175	20	1 × C16	0.26
M20	170	6 - 9	16	3	240	25	1 × C20	0.57
M24	210	8 - 12	19	4	270	28	1 × C24	0.92
M27	240	8 - 12	22	4	330	30	1 × C24	1.42
M30	280	8 - 12	24	4	360	35	1 × C30	1.91
M36	330	10 - 15	29	5	420	40	1 × C30	3.21
M42	420	14 - 21	34	7	500	50	2 × C30	5.21
M48	480	16 - 24	38	8	580	54	2 × C30 + 1 × C24	7.90
M56	560	18 - 27	45	9	-	64	4 × C30	13.0

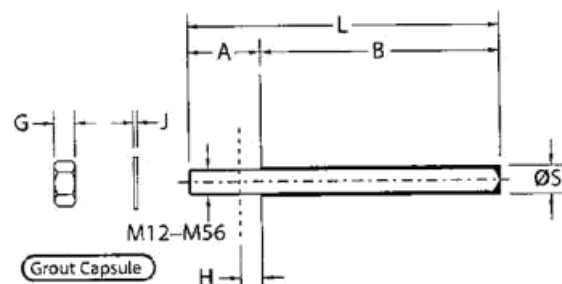
[Units: mm, kg]

$A = E + G + H + J$, rounded up to nearest 10mm.

E = clear threads after assembly.

H = clamping thickness of fender.

The EC2 anchor is used for installing fenders onto existing concrete or where cast-in anchors are unsuitable. The anchor is usually secured into a drilled hole using special grout capsules. Non-standard sizes and other grout systems are available on request.



Always follow the manufacturer's instructions when installing EC2 anchors.

Fender Fixings

BOLTS, NUTS AND WASHERS

SIZE	WIRE AREA	WASHERS				TYPICAL THREAD LENGTHS †					
		OD	ID	t	WEIGHT ‡	AF	WEIGHT	L > 125			
M16	157	30	18	3	0.01	24	13	0.04	38	44	2.0
M20	245	37	22	3	0.02	30	16	0.07	46	52	2.5
M24	353	44	26	4	0.03	36	19	0.12	54	60	3.0
M27	459	52	29	4	0.05	41	22	0.23	60	66	3.0
M30	561	56	33	4	0.06	46	24	0.24	66	72	3.5
M36	817	66	39	5	0.09	55	29	0.40	78	84	4.0
M42	1120	78	45	7	0.18	65	34	0.63	90	96	4.5
M48	1470	92	52	8	0.28	75	38	0.90	102	108	5.0
M56	2030	105	62	9	0.40	85	45	1.43	118	124	5.5
M64	2680	115	70	9	0.45	95	51	2.09	134	140	6.0

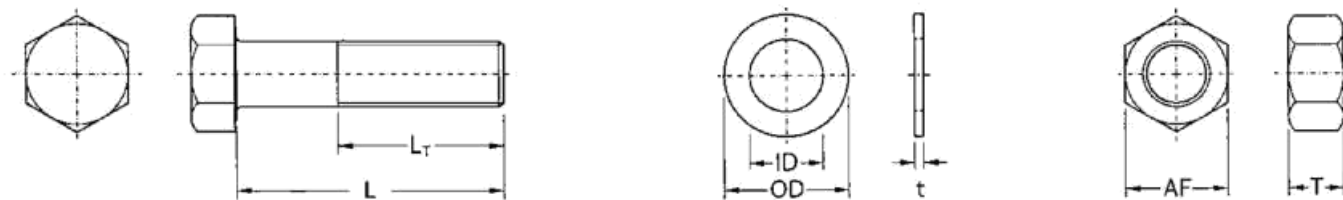
* Standard bolts given according to DIN933.

[Units: mm, kg]

† Standard washers given according to DIN125. Larger OD washers available on request.

‡ Thread lengths may vary depending on standard. Other lengths available.

Standard nuts given according to DIN934.



GRADES

	PREN GALVANIZED		ISO 356 STAINLESS STEEL *	
Bolt grade	4.6	8.8	A-50 †	A-70 †
Nut grade	4	8	A-50 †	A-70 †
Tensile strength (MPa)	400	800	500	700
0.2% yield stress (MPa)	240	640	210	450

* Refer to Fender Application Design Manual for further details about PREN and galling.

† Size ≤ M39 unless agreed with manufacturer.

‡ Size ≤ M24 unless agreed with manufacturer.

Fenders must be properly fixed to operate correctly. Anchors are supplied to suit new or existing structures, in various strength ratings and with the choice of galvanized or various stainless steels.

4. STRUCTURAL STEEL WORKS

1. The steel used shall conform to I.S. 226 (latest edition). The steel should be free of scale, blisters, laminations, cracked edges and defects of any sort. All steel shall be checked carefully for its straightness and any bend noticed should be removed by straightening under pressure and not by hammering. Necessary test certificates shall be furnished to the Chief Engineer.
2. The cutting of steel sections shall be by punching, shearing machine. The plates may be cut by oxyacetylenic flame and cut edge should be properly finished smooth by files. The ends of the structural member shall be sawn or cropped to length and whenever directed shall be chipped off. Steel templates shall be prepared from detailed drawings and the sizes and shape shall be marked by using template and cut by a shearing machine. The cut sizes shall be within the tolerance specified for structural steel work by I.S. 800 latest edition. The holes in plates, angles, etc., shall be drilled and not punched or gas cut.
3. WELDING: Welding should be arc welding type conforming to I.S.I. 816 -latest edition. Electrodes conforming to I.S.I. 814,8 SWG or 10 SWG welding rods 'Ferrosprod electrodes' from Indian Oxygen Co. Ltd., or any other equivalent approved quality may be used. In all cases where welded joints are liable to be exposed to weather conditions the jointing edge of contact surfaces shall be sealed by welding or parts shall be efficiently connected by welding so that contact surface are securely held to prevent the entry of moisture.
4. In built up members in which parts are connected by intermittent fillet welding continuous side fillet welds should be used at the ends for length not less than the width of plate connected. Where butt welding or fillet welding is provided the locations of the weld and the form and dimensions of weld surface shall be such as to provide access for the filler rod to the surface to be welded and enable the welder to see clearly the work in progress.
5. The total thickness of the weld deposited shall be achieved by series of runs of smaller thickness along the joint. After each run the surface of weld shall be thoroughly cleaned, by light hammering and wire brushing so as to remove all slag before depositing second run of weld.
6. The edges of members to be welded should be properly matched and held in position by tack welds if necessary before starting the work in joint proper.
7. Welds showing cavities or lack of proper fusion or under cuts lumps etc., shall be cut out and rewelded to the satisfaction of Chief Engineer at no extra cost of welders shall be provided with such staging and protection as will enable them to perform welding properly.
8. All the welding shall be in good condition and capable of enabling the welder to provide and maintain uniform melting of welding rod.
9. The welder shall be provided with protective glasses and gloves. The welder shall be an experienced hand and if the quality of work is not to the satisfaction of the Chief Engineer he shall be replaced.
10. Whenever necessary the joint after welding shall be ground smooth by flat grinders to the satisfaction of Chief Engineer at no extra cost. If any defects like blowsides or porous weld are exposed after grinding the same they shall be rectified by chiseling and light run of weld all over and regrinding the same smooth, at no extra cost.

11. **ERECTION:** Anchor bolts shall be installed in position by grouting to keep proper alignment of columns. Care shall be taken to see that side masonry wall etc. are not damaged during the erection. Trusses shall be checked for alignment spacing and level. Erection work shall be started after the approval of the Chief Engineer. For lifting trusses, hoists and pulleys shall be used. Purlins and bracers shall be welded to the trusses after checking alignment.
12. In case of erection of framed steel structures contractor should ensure adequate temporary ties and cross supports to keep unfinished structures in stable position and alignment before permanent bracings are welded in position.
13. Final alignment vertically etc. should be checked and got approved before the frame is rigidly connected by cross ties and bracing and no attempt which may induce damage, should be done to rectify the same at later stage.
14. **PAINTING:** The whole of the steel work shall be scrapped and thoroughly cleaned of all scales and rust. Before fabricating all parts in contact or accessible after assembling shall be painted with minimum one coat of zinc chromite in addition to shop coat, done by suppliers. After fabricating all parts and members which are not to be embedded in concrete shall be given a coat of zinc chromite and which are to be embedded in concrete or masonry with a coat of cement wash. Other parts which are to remain exposed shall be painted with two coats of approved enamel paint. The paint shall conform to relevant Indian Standard Specification. The primary coat and first coat shall be applied before fixing the roof sheets. Final coat shall be applied, after roofing is over. All the operations shall conform to I.S. 1477 Part I of latest edition.
15. No subsequent coat shall be applied before the first one dries up. No painting shall be done in wet weather. Painting shall not be started until the structural work is inspected by Chief Engineer or his representative. The make as well as the colour of the paint shall be got approved by the Chief Engineer before applying.
16. The structural steel work and iron work shall be measured by weight in kilogram except otherwise mentioned. Unless otherwise specified in schedule, the net weight of cleats, brackets, gussets, anchor bolts, fish plates etc. calculated on the basis of weight of steel section given in relevant I.S. shall be added to the weight of respective items. The weight of steel, sheet, plate and strip shall be taken from relevant Indian Standards based on 7.85kg/m² for every milli-metre sheet thickness, or rolled steel sections, rods etc. The weights given in the relevant I.S. shall be used without any tolerance for rolling margin. The rate quoted for the structural steel work shall include all fabrication and erection. In the case of welded connections payment will not be made for weld separately. The item shall include necessary bolts, nuts, rivets, etc. as specified.

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/ 10 /2019

**e – tender for “PROVIDING 1300 size SCN REVERSE CONE FENDERS AT
BREAKWATER BERTH”**

FORM OF TENDER

The Chief Engineer,
Mormugao Port Trust,
MORMUGAO HEADLAND SADA (GOA).

I/We _____ do hereby offer to execute the work comprised in the annexed Tender “**PROVIDING 1300 size SCN REVERSE CONE FENDERS AT BREAKWATER BERTH**” in strict accordance with the Instructions to Tenderers, General Conditions of Contract (GCC), Specifications, etc. at the rate entered in the attached Schedule of Quantities and Rates.

2. I/We undertake to complete the work included in the Schedule of Quantities and Rates in the tender within **120 Days** from the date receipt of work order .We also agree that this tender will remain open for acceptance until disposed off by the Trustees of Port Mormugao. I/We have independently considered the question of the amount of loss or damage likely to result to the Trustees from the delay on my/our part in the performance of the contract and I/We agree that the Liquidated damages at the rate of 0.5% of the contract price per week or part thereof delay in work subject to a maximum ceiling at 5% of the contract price represents a fair estimate of the loss likely to result from the delay.

3. I/We enclose herewith a sum of **Rs. 3,30,000 /- (Rupees Three lakhs thirty thousand only)** towards **Earnest Money Deposit** in the form of Demand draft / Bankers cheque as proof of my/our willingness to enter into the contract if my / our tender is accepted.

4. In the event of my/our tender being accepted, I/We agree to enter into a contract in the prescribed form with such alterations or additions thereto which may be necessary to give effect to the acceptance of this tender and such contract shall contain and give full effect to the specifications, Schedule of Quantities and Rates attached to this tender.

5. I/We also agree, if awarded the contract that the earnest money lodged with this tender will be retained by the Trustees towards part of the Security Deposit and to make further deposit by Demand Draft or in the form Bank Guarantee from a Nationalized Bank / Scheduled Bank , within **21 days** or such extension of the period permitted by the Chief Engineer, in writing, after receipt of information that my/our tender has been accepted by the Port Trust.

6. I/We further agree, if awarded the contract, to lodge the Retention Money equivalent to 5% of the contract price of my/our tender by way of deductions from my/our bills at the rate of 10% of the gross value of work certified in each bill till the amount of 5% of the contract price is

accumulated.

7. Should this tender be accepted, I/we hereby agree to abide by and fulfill all the terms and conditions of the said tender annexed hereto, so far as applicable or in default thereof to forfeit and pay the Board of Trustees and/or its assignees, the sum of money mentioned in the said conditions and to execute an agreement in the prescribed form with the Mormugao Port Trust **within 21 days** of the award of the contract, or in default thereof, to forfeit the **Earnest Money** deposited by me/us. Unless and until, a formal agreement is prepared and executed, this tender together with your written acceptance thereof shall constitute a binding contract between us.

8. I/we undertake, if our tender is accepted, to commence the work within **15 days** of receipt of the **Chief Engineer's orders** to commence and to complete and deliver the whole of the work comprised in the contract within the time allowed for the work.

9. A sum of **Rs. 3,30,000 /- (Rupees Three lakhs thirty thousand only)** towards **Earnest Money Deposit** has been deposited by me/us with the Financial Adviser and Chief Accounts Officer of Mormugao Port Trust as Earnest Money, the full value of which is to be absolutely forfeited to the Board of Trustees without prejudice to any other rights or remedies of the said Board, should I/we fail to commence the work specified in the above mentioned memorandum, otherwise the said sum of **Rs. 3,30,000 /- (Rupees Three lakhs thirty thousand only)** shall be detained by the Port Trust as part of the Security Deposit as aforesaid.

10. I/we agree to abide by this tender to be valid for the period of six months from the date fixed for receiving/opening the same and it shall remain binding upon me/us and may be accepted any time before the expiration of that period.

11. I/we further agree that if I/we withdraw the tender before the expiration of this period of **four months**, or fail to execute an agreement in the form aforesaid **within 15 days** from the date of award of contract, the Earnest Money deposited shall be forfeited to the Board.

12. I/we understand that the Board is not bound to accept the lowest or any tender you may receive and may reject the same (the lowest) or any other tender without assigning any reason therefore.

13. "I have read and understood the General conditions and specification of the work which are printed in Volume – I supplied to me by the Department which will form a part of tender and this shall remain binding on me".

14. I/We have enclosed herewith the following completed documents as required under instructions to tenderers:-

- a) Organisation Chart.
- b) List of similar works carried out by me/us.
- c) Bar Chart/ CPM Chart.
- d) List and description of main plant and equipments proposed to be used on this work and Proforma 1 to 3
- e) Check list and Vendor Registration Form

15. I/We have inspected the site and I am /we are fully aware of the work to be carried out while tendering for the contract.

16. (A) Mine is a proprietary firm and I am sole proprietor of the firm. My firm is/is not registered with Registrar of firms.

Name : _____ Age _____ Years

(B) Ours is a partnership firm and the names of all major partners are given below:

NAME	AGE
1. _____	_____ Years
2. _____	_____ Years
3. _____	_____ Years
4. _____	_____ Years

We understand and confirm that if our offer is accepted, the contract will be entered into with the above mentioned partners only and the Trustees will not recognize or deal with any minor partners of their guardians.

(C) Ours in a company with liability and a copy of our Memorandum and Articles of Association will be sent for perusal upon acceptance of our offer.

Proposed contract is intended to be signed by a duly constituted Attorney and original power of Attorney in his favour will be submitted for perusal immediately on acceptance of the tender.

17. The name and address of our Banker is ** _____

18. My/our permanent Income Tax Accountant No. is _____.

Witness's

Tenderer's

Signature _____

Signature _____

Name _____

Name _____

Address _____

Address _____

Tel. No. _____ Tel No. _____

Hand Phone (Mobile) No. _____

Date _____ Date _____

N. B. : Strike out whichever is not applicable.

Here the Name of the Bank should be stated.

NAME AND ADDRESS OF TENDERER:-

SIGNATURE OF TENDERER

Witness: - _____

Date: _____ Day of _____ 2019

Witness: - _____

Witness: - _____

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. **CE/ 10 /2019**

APPENDIX TO THE TENDER NOTICE

e – tender for “PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”

APPENDIX- I

The following Clauses shall be read in conjunction with respective Clauses of
General Conditions of Contract (GCC)

Sr. No.	Particulars	Clause of G.C.C.(Vol. I)	
1.	Amount of Initial Security and Time.	11(1)	Five percent of the contract price and 18 months.
2.	Period for commencement from the Chief Engineer's orders to commence.	38	15 days
3.	Period of Completion Applicable	40	(04) Four months (including monsoons)
4.	Amount of liquidated damages. Applicable if Completion of Part I delayed beyond scheduled date of completion	43	Calculated at 0.5% value of the contract per week of seven days, or part thereof subject to a ceiling of 5% value of the contract.
5.	Free Maintenance Period. Applicable	45(1)	12 months
6.	Percentage of retention from each running account bill	54(1)	10%.
7.	Limit of Retention Money	54(1)	5% value of the contract.
8.	Total initial Security Deposit	11(1)	5% value of the contract.
9.	Minimum amount of interim Certificate	54(1)	100,00,000/-
10.	Time within which payment to be made after contractor's submission of the bill based on joint measurement.	54(1)	100 % within 15 working days
11.	Mobilization Advance	N.A	Not Applicable

12.	Interest rate on mobilization advance.	N.A	Not Applicable
13.	Mode of recovery of Mobilization Advance	N.A	Not Applicable
14.	Variation in price , labour and materials.	70	Not Applicable to this contract.
15.	Arbitration Clause	66	Not Applicable to this contract.
16.	Minimum amount of third party Insurance.	Cl. No.13 to 15 of G.C.C.	5% of the tendered amount.
17.	Lease rent.	Cl. No.9 to 11 of G.C.C.	Refer Appendix III

Dated this ____ Day of 2019

Signature ----- in the capacity of _____

duly authorised to sign tender for and

On behalf of ____ .

(IN BLOCK LETTERS) -
Address

Witness : _____

Occupation : _____

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. **CE/ 10 /2019**

Name of Work : "PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH"

APPENDIX- II

MATERIALS TO BE SUPPLIED BY THE DEPARTMENT FOR THE WORK

Sr. No.	Description of materials	Approx. qty. to be supplied	Unit	Rate in Figures/Words	Place of Delivery
1.	Water	--	Cubic Metre	Rs.44/m ³ (Rupees Forty for only)	Ref. Clause No.9.19 of Special Conditions – Vol.I
2.	Electric Power	----	KWH	Electric supply as per the relevant rate applicable and supply point will be indicated by the CME's Department.	Ref.Clause No.9.20 of Special Conditions – Vol.I

Note : Above materials shall be provided subject to availability. The Contractor shall make his own arrangements in case of non-availability of the above..

SIGNATURE OF THE CONTRACTOR

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. **CE / 10 /2019**

APPENDIX- III

ESTATE RENTAL CHARGES

Name of Work : **“PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”**

Sr. No.	Description	Rate* Rs.	Remarks
1.	Licence fees on Port land for Site Office,Stores, Labour Quarters and other structures.	Rate will be charged as per scale of rates prevailing during period of contract.	Payment shall be made to CDC Section, Finance Dept, before submission of running bills

NOTE : Location of suitable area, subject to the availability, shall be decided by the Chief Engineer.

* Rate shall be charged per 10 sq. m. or part thereof per calendar month or part thereof.

SIGNATURE OF THE TENDERER

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/10/2019

APPENDIX- IV

**Name of Work: “PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”**

APPENDIX - X

ANNUAL TURNOVER STATEMENT

The bidder shall indicate herein his annual turnover during preceding 3 years based on the audited balance sheet/profit & loss account statement.

FINANCIAL YEAR	ANNUAL TURNOVER (In Indian Rupees)	NET WORTH (In Indian Rupees)

NOTE:

1. Audited balance sheets in original with Profit & Loss account statement for the last 3 financial years (i.e. 2016-2017, 2017-18 and 2018-19) are enclosed along with the bid. In case of the Foreign Bidders the audited financial statement for the calendar year ending 2016, 2017 and 2018 should be submitted.

2. Bidder shall work out Net worth on following basis:

Net Worth: Reserve + Capital - Accumulated loss (Net-Worth of the Bidder should be positive for the latest financial year). In case of Foreign Bidders to convert the foreign currency value of annual turnover and net worth into Indian Rupees in the above columns.

3The technical and financial experience of the Bidder can be Parent Company / Joint Venture /Partnership/Principal can be considered subject to submission of the documentary evidence for the wreck removal works carried out.

SIGNATURE OF BIDDER:

NAME OF BIDDER:

COMPANY SEAL :

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/10/2019

APPENDIX- V

Name of Work: **“PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”**

**EXECUTION OF SIMILAR WORK CARRIED OUT AS PRINCIPAL CONTRACTOR DURING EACH
OF LAST SEVEN YEARS ENDING 31ST MARCH 2019.**

(Rs. in lakhs)

Sr. No.	Tender No.	Name of the work	Employer	Amount Received Rs.
1	2	3	4	5

NAME, SIGNATURE:

& SEAL OF TENDERER :

DATE :

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. **CE/10/2019**

APPENDIX- VI

Name of Work: **“PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”**

LIST OF MAJOR TOOLS, PLANT, MACHINERY AND EQUIPMENT

IN WORKING CONDITION AND OWNED BY THE TENDERER

(USE CONTINUATION SHEET IF REQUIRED)

SR. NO.	DESCRIPTION	NO. OF UNITS	YEAR PURCHASE	OF	PRESENT CONDITION	PRESENT LOCATION
	MAKE					
	CAPACITY					
1	2	3	4	5	6	

NAME, SIGNATURE

& SEAL OF TENDERER :

DATE :

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER No. CE/ 10 /2019

APPENDIX- VII

Name of Work: **“PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”**

DECLARATION FORM

Sr. No.	Description	Yes / No.
1.	Agree to all terms and conditions of Tender and declare that no changes are made to the Port's original Tender Document	
2.	Have you ever been Black listed by any Government / PSU	

Firm's Sign and Seal

Place:

Date:

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

e -TENDER No. **CE/ 10 /2019**

APPENDIX- VIII

FORM OF AGREEMENT

THIS AGREEMENT made this _____ day of _____ two thousand eighteen BETWEEN the Board of Trustees of the Port of Mormugao, a body corporate under the Major Port Trusts Act. 1963 (herein under referred to as “the Board” which expression shall unless repugnant to the context or meaning thereof mean and include their successors and assigns) of the ONE PART of M/s. _____, having their registered office at _____ (hereinafter referred to as “the contractor”, which expression shall unless repugnant to the context or meaning thereof, mean and include their heirs, executors, administrators, representatives and assignees or successors in office) of the OTHER PART.

WHEREAS the Board is desirous of executing the work of

_____ ” on the terms and conditions stipulated in the contractor’s tender dated _____ and read with the conditions contained in the tender documents attached to the above mentioned tender.

AND WHEREAS the contractor by their above mentioned tender has offered to execute, complete and maintain such work, which tender has been accepted by the Board and such tender with correspondence, specifications, schedule. Amendments and acceptance thereof will constitute abiding contract between the Board and the contractor.

AND WHEREAS the contractor has furnished to the Board, a Bank Guarantee No. _____ dated _____ for a sum of Rs. _____ Rupees _____ only) as Initial Security for the due performance and observance by the contractor of the terms and conditions of this Agreement.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this agreement words and expressions shall have the same meaning as are respectively assigned to them in the conditions of contract herein after referred to.
2. The following documents shall be deemed to form and be read and construed as part of this agreement.

(A) **COVER No. - I**

Contents of Tender Document Undertaking by the Tenderer

Tender Notice

General Conditions of Contract. Appendix I and all other Appendices and Proformas

Instructions for preparation and submission of tender. Joint Ventures

Technical Specifications. Additional special instructions. Scope of Work

Form of Bank Guarantee for EMD and Security Deposit and Form of Agreement (Annexures I & II)

Indicative Drawing No.

A printed set containing Instructions to tenderers, General and special conditions of contract. (VOLUME –I)

(B) **COVER No. II**

Preamble to Schedule of Quantities and Rates

Schedule of quantities and rates

Tender Form

Contractor's acceptance letter No. _____ dated _____.

Any other relevant correspondence exchanged upto the issue of work order which has not been specifically mentioned above.

All additional drawings, specifications and written Instructions when issued by or approved in writing by the Chief Engineer as per clause No.9 of the General Conditions.

THE COMMON SEAL OF THE TRUSTEES OF

THE PORT OF MORMUGAO HAS HEREUNTO

AFFIXED AND THE CHAIRMAN THEREOF CHIEF
ENGINEER HAS HEREUNTO SET HIS HAND IN THE

PRESENC
E OF 1.

2.

SIGNED AND SEALED BY THE
CONTRACTOR IN THE PRESENCE OF

1.

2.

APPENDIX - IX

FORM OF BANK GUARANTEE FOR SECURITY DEPOSIT

(Bank Guarantee Bond to be issued by nationalized banks only)

In consideration of the Board of Trustees, Mormugao Port Trust (hereinafter called "Board") having offered to accept the terms and conditions of the proposed agreement between and (hereinafter called "the said contractor(s)" for the work (hereinafter called "the said agreement") having agreed to production of the irrevocable Bank Guarantee for Rs..... (Rupees..... only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We(indicate the name of the Bank) (hereinafter referred to as the "Bank") hereby undertake to pay to the Board an amount not exceeding Rs..... (Rupees only) on demand by the Board.
2. We(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Board stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs..... (Rupees only).
3. We, the said Bank, further undertake to pay to the Board any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder, and the contractor(s) shall have no claim against us for making such payment.
4. We(indicate the name of the Bank) further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement, and it shall continue to be enforceable till all the dues of the Board under or by virtue of the said Agreement have been fully paid, and its claims satisfied or discharged, or till the Deputy Conservator, on behalf of the Board, certifies that the

terms and conditions of the said Agreement have been fully and properly carried out by the said contractor(s), and accordingly discharge this guarantee.

5. We(indicate the name of the Bank) further agree with the Board that the Board shall have the fullest liberty without our consent, and without effecting in any manner our obligations hereunder, to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Board against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement, and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act of omission on the part of the Board or any indulgence by the Board to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to Sureties would, but for this provision, have effect of so relieving us.
6. This Guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).
7. We(indicate the name of the Bank) lastly undertake not to revoke this Guarantee except with the previous consent of the Board in writing.
8. This Guarantee shall be valid upto unless extended on demand by the Board. Notwithstanding anything mentioned above, our liability against this Guarantee is restricted to Rs..... (Rupees only) and unless a claim in writing is lodged with us within six months of the date of expiry or extended date of expiry of this Guarantee, all our liabilities under this Guarantee shall stand discharged.

Dated the day of For
.....

(indicate the name of the Bank).

APPENDIX – XI

FORMAT OF POWER OF ATTORNEY

Dated : _____

**POWER OF ATTORNEY
To Whomsoever It May Concern**

Mr. _____ (Name of the Person(s)), domicile at _____ (Address), acting as _____ (Designation and name of the firm), and whose signature is attested below, is hereby authorized on behalf of _____ (Name of the Tenderer) to provide information and respond to enquiries etc. as may be required by the Port or any governmental authority for the (project title) _____ and is hereby further authorized to sign and file relevant documents in respect of the above.

(Attested signature of Mr. _____)

For _____ (Name of the Tenderer)

APPENDIX - XII

BANK DETAILS FOR ECS PAYMENT

1. Name of the Bank and Branch :
2. Account Number :
3. MICR Number :
4. Type of Account :
5. IFSC Number :
6. CST / VAT Number :
7. Copy of PAN Card :
8. TIN Number :
9. Service Tax Regn. No.:
10. EPF No. :
11. ESI Regn. No.

Bidder's Name, Sign and Seal

Place:

Date:

APPENDIX -XIII

PRE CONTRACT INTEGRITY PACT

General

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on _____ day of the month of _____ 20_____, between, on one hand, the Board of Trustees of Mormugao Port Trust acting through Shri. _____, (Designation of the Officer), Mormugao Port Trust (hereinafter called the 'BUYER/EMPLOYER', which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s. _____ represented by Shri. _____, Chief Executive Officer (hereinafter called the "BIDDER/SELLER" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the 'BUYER/ EMPLOYER' has invited bids for the _____ and the BIDDER/SELLER is submitting his bid for the same and WHEREAS the BIDDER is a Private Limited company/Public Limited company/Government undertaking/registered partnership firm/ constituted in accordance with the relevant law in the matter and the 'BUYER/EMPLOYER' is Mormugao Port Trust.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-

Enabling the BUYER/EMPLOYER to obtain the desired said stores/equipment/ services/works at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the 'BUYER/ EMPLOYER' will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

Commitments of the 'BUYER/ EMPLOYER'

1.1 The 'BUYER/ EMPLOYER' undertakes that no official of the 'BUYER/EMPLOYER', connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favor or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

1.2 The 'BUYER/ EMPLOYER' will, during the pre-contract stage, treat all BIDDERS alike and will provide to all BIDDERS the same information and will not provide any such information to

any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.

1.3 All the officials of the 'BUYER/ EMPLOYER' will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the 'BUYER/ EMPLOYER' with full and verifiable facts and the same is prima facie found to be correct by the 'BUYER/ EMPLOYER' necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the 'BUYER/ EMPLOYER' and such a person shall be debarred from further dealings related-to the contract process. In such a case while an enquiry is being conducted by the 'BUYER/ EMPLOYER' the proceedings under the contract would not be stalled.

Commitments of BIDDERS

3. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-

3.1 The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favor, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the 'BUYER/EMPLOYER' connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.

3.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favor, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the 'BUYER/ EMPLOYER' or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favor or disfavor to any person in relation to the contract or any other contract with the Government.

3.3 BIDDERS shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.

3.4 BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.

3.5 The BIDDER further confirms and declares to the 'BUYER/EMPLOYER' that the BIDDER has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the BUYER or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.

3.6 The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the 'BUYER/ EMPLOYER' or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

3.7 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

3.8 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.

3.9 The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the 'BUYER/EMPLOYER' as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate carelest any such information is divulged.

3.10 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.

3.11 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.

3.12 If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of the 'BUYER/ EMPLOYER' or alternatively, if any relative of an officer of the 'BUYER/EMPLOYER' has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filing of tender. The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act 1956.

3.13 The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the 'BUYER/ EMPLOYER'.

4. Previous Transgression

4.1 The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify bidder's exclusion from the tender process.

4.2 The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

5. Earnest Money / Security Deposit

5.1 While submitting commercial bid, the BIDDER shall deposit an amount of Rs. _____/- as Earnest Money, with the 'BUYER/ EMPLOYER' through the following instruments:

(i) EMD by online through e-payment or in form of DD or bankers cheque from a Nationalised/Scheduled Bank in favour of FA&CAO, Mormugao Port Trust, Vasco.

5.2 The Security Deposit shall be valid up to a period of 36 months or the complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and the BUYER, including warranty period, whichever is later.

5.3 In case of the successful BIDDER, a clause would also be incorporated in the Article pertaining to Performance Security in the Project Contract that the provisions of Sanctions for Violation shall be applicable for forfeiture of Performance Security in case of a decision by the BUYER/ EMPLOYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

5.4 In case of the successful BIDDER a clause would also be incorporated in the Article pertaining to Performance Bond in the Purchase Contract that the provisions of Sanctions for violation shall be applicable for forfeiture of Performance Bond in case of a decision by the BUYER to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

5.5 No interest shall be payable by the 'BUYER/ EMPLOYER' to the BIDDER on Earnest Money/Security Deposit for the period of its currency.

6. Sanctions for Violations

6.1 Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the 'BUYER/ EMPLOYER' to take all or any one of the following actions, wherever required:-

(i) To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.

(ii) The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit/Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the 'BUYER/ EMPLOYER' and the 'BUYER/EMPLOYER' shall not be required to assign any reason therefore.

(iii) To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.

(iv) To recover all sums already paid by the BUYER, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher

than the LIBOR. If any outstanding payment is due to the BIDDER from the BUYER in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.

(v) To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the BUYER, along with interest.

(vi) To cancel all or any other Contracts with the BIDDER. The BIDDER shall, be liable to pay compensation for any loss or damage to the 'BUYER/ EMPLOYER' resulting from such cancellation/rescission and the 'BUYER/ EMPLOYER' shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.

(vii) To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which may be further extended at the discretion of the 'BUYER/ EMPLOYER'.

(viii) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the BUYER with the BIDDER, the same shall not be opened.

(ix) To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.

(x) Forfeiture of Performance Guarantee in case of a decision by the 'BUYER/EMPLOYER' to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

6.2 The 'BUYER/ EMPLOYER' will be entitled to take all or any of the actions mentioned at para 6.1(i) to (x) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.

6.3 The decision of the 'BUYER/ EMPLOYER' to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent Monitor(s) appointed for the purposes of this Pact.

7. Fall Clause

7.1 The BIDDER undertakes that it has not performed/is not performing similar project at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found at any stage that similar project was performed by the BIDDER to any other Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to the 'BUYER/EMPLOYER', if the contract has already been concluded.

8. Independent Monitors

8.1 The 'BUYER/ EMPLOYER' has appointed the following Independent Monitors (hereinafter referred to as Monitors) for this Pact in consultation with the Central Vigilance Commission.

Sewa Ram,(IAS.retd.),
ADD:_____

8.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.

8.3 The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.

8.4 Both the parties accept that the Monitors have the right to access all the documents relating to the project/bidding, including minutes of meetings.

8.5 As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the BUYER/EMPLOYER,

8.6 The BIDDER(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the BUYER/EMPLOYER, including that provided by the BIDDER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Subcontractor(s) with confidentiality.

8.7 The BUYER/ EMPLOYER will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.

8.8 The Monitor will submit a written report to the designated Authority of BUYER/ EMPLOYER within 8 to 10 weeks from the date of reference or intimation to him by the BUYER/ EMPLOYER/ BIDDER and, should the occasion arise, submit proposals for correcting problematic situations.

9. Facilitation of Investigation

In case of any allegation of violation of any provisions of this pact or payment of commission, the BUYER / EMPLOYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

10. Law and Place of Jurisdiction

This Pact is subject to Indian Law.' The place of performance and jurisdiction is the seat of the BUYER/ EMPLOYER

11. Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

12. Validity

12.1 The validity of this Integrity Pact shall be from date of its signing and extend up to 150 days or the complete execution of the contract to the satisfaction of both the BUYER/ EMPLOYER and the BIDDER/SELLER, including warranty period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.

12.2 Should one or several provisions of this Pact turn out to be invalid;

the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

12.3 If the BIDDER is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

13. The parties hereby sign this Integrity Pact at _____ on _____

BUYER/ EMPLOYER BIDDER
Deptt./MINISTRY/PSU

Name of the Officer: CHIEF EXECUTIVE OFFICER
Name of the Bidder Designation

Witness
1. _____
2. _____

Witness
1. _____
2. _____,

* Provisions of these clauses would need to be amended/ deleted in line with the policy of the BUYER/ EMPLOYER in regard to involvement of Indian agents of foreign bidders

APPENDIX-XIV

**BANK GUARANTEE FORMAT FOR EARNEST MONEY DEPOSIT (EMD) -
(Not applicable for this work)**

Ref: Title: _____ .
Tender No. : _____ Date: _____ .

WHEREAS _____ (herein after called "the Bidder") has/have submitted his/their bid dated _____ for _____ (hereinafter called the "the Bid").

KNOWN ALL MEN by these presents that we _____ of _____ having our registered office at _____ (hereinafter called "the Bank") are bound onto Mormugao Port Trust (hereinafter called Mormugao Port Trust) in the sum of Rs. _____ (Rupees _____) only, for which payment will and truly to be made to the said Mormugao Port Trust, the Bank binds itself, its successors and assigns, by these presents. Sealed with the Common Seal of the Bank this _____ day of _____ 20____.

THE CONDITIONS under which the EMD shall be forfeited are as under:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form, after bid opening or
2. If the Bidder submits fraudulent documents and / or wrong information in support of it's eligibility / qualification or
3. If the Bidder, having been notified of the acceptance of its bid by Mormugao Port Trust during the period of bid validity,
 - a) fails to sign the Agreement or
 - b) fails to submit the required initial security deposit and/or does not agree to carry out the obligations as per the tender conditions.

We undertake to pay to Mormugao Port Trust the above amount, according to and upon receipt of their first written demand, without Mormugao Port Trust having to substantiate their demand, provided that in their demand Mormugao Port Trust will note that the amount claimed by them is due to them owing to the occurrence of any one or all of the above-stated conditions, specifying the occurred condition or conditions.

This Bank Guarantee shall be payable at (**Detail Postal Address of the branch with code no. where payable**), Vasco-da-gama, Goa

THIS GUARANTEE will remain in force up to and including Dt. _____ and any demand in respect thereof should reach the Bank not later than such date.

The above reference (TENDER No.) must be used for all correspondences on this Bank Guarantee.

(Name of the Bank)

By _____
Title Authorized Representative

(Signature of witness)
Name & Address of witness:

APPENDIX - XV

CHECKLIST FOR FURNISHING SCANNED DOCUMENTS

Sr. No.	Description	Tick mark if attached
1.	Cost of Tender/EMD in the form of e-payment	<input type="checkbox"/>
2.	Work Order copies	<input type="checkbox"/>
3.	Completion Certificates with performance report	<input type="checkbox"/>
4.	Financial turnover	<input type="checkbox"/>
5.	P/L Account and Balance statement	<input type="checkbox"/>
6.	Entire Tender document, each page and form duly signed and filled in	<input type="checkbox"/>
7.	Tender Form	<input type="checkbox"/>
8.	Power of Attorney	<input type="checkbox"/>
9.	Declaration Form	<input type="checkbox"/>
10.	Bank Details	<input type="checkbox"/>
11.	Proforma of Pre Contract Integrity Pact	<input type="checkbox"/>
12.	Bank Guarantee Format	<input type="checkbox"/>
13.	Copies of GST Registration Certificate, PAN, VAT, EPF registration and ESI registration number	<input type="checkbox"/>

APPENDIX - XVI

VENDOR REGISTRATION FORM

1. Name of the Organization : _____

2. Address (In Detail) : _____

3. Telephone Number : _____

4. E-Mail Id : _____

5. Permanent Account Number (PAN) : _____

6. Bank Name : _____

7. Bank Branch Address (In Detail) : _____

8. Bank Branch Code : _____

9. Bank Account Number : _____

10. Bank Account Type : _____

11. Magnetic Ink Character Recognizer (MICR) : _____

-
12. Tax Identification Number (TIN) : _____
13. GST Registration Number : _____
14. Service Tax Registration Code : _____
15. CST Registration Number : _____
16. Employee Provident Fund (EPF)
Registration Number : _____
17. Employee State Insurance Scheme
(ESIS) Registration Number : _____
18. IFSC Code : _____



An ISO 9001 : 2015 Port

ISPS CODE Compliant

**MORMUGAO PORT TRUST
ENGINEERING CIVIL DEPARTMENT**

e-TENDER No. **CE/ 10 / 2019**

e- TENDER FOR

(Cover No: 2)

**“PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”**

<https://eprocure.gov.in/eprocure/app>



ISPS CODE Compliant

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

e - TENDER NO: **CE/ 10 /2019**

“FINANCIAL BID”

(BOQ)

FOR

**“PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”**

Further details <https://eprocure.gov.in/eprocure/app>

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

E-TENDER No. CE/10/2019

e-tender for “**PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH**”

COVER NO. 2 (FINANCIAL BID)

1. Directions to Tenderers for filling in the Schedule of quantities & rates
2. Schedule of Quantities & Rates

MORMUGAO PORT TRUST,
ENGINEERING CIVIL DEPARTMENT,
MAIN ADMINISTRATIVE OFFICE BLDG,
HEADLAND, SADA, GOA.

MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT

TENDER NO. **CE/10/2019**.

e-tender for **“PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH”**

**DIRECTIONS TO TENDERERS FOR FILLING
THE SCHEDULE OF QUANTITIES & RATES.**

1. Tenderers are required to fill in their ITEM rate in the Price in the space provided for the purpose and unless this is done, their tender will not be considered. Only one item rate on all Rates of Schedule of Quantities & Rates shall be named.
2. The Amount / Rate inserted shall hold good for all works under this contract, without reference to quantity or location of the work or the variation in the estimated quantity.
3. Quantity of item of work mentioned in the Schedule should be noted and the rate worked out carefully, having regard to the specifications before submitting the tender, as no variation in rates etc. will be allowed on any ground such as mistake or misunderstanding etc. after the tender has been submitted. The amount / rate quoted at the end of the Schedule of Quantities & Rates, will apply to all the items of work involved in execution of the subject tender and any excess in the item that may be directed to be executed by the Chief Engineer.
4. The tender value shall be rounded off to the nearest rupee.
5. In the event there is variation in specification of drawing, bill of quantities and general specification the bill of quantities will prevail.
6. **The bidder shall quote the price exclusive of GST. Applicable GST shall be paid extra on the quoted price.**
7. The Contractor shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management , execution and safety practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods.
8. The work description against each are not exhaustive in themselves and be deemed to include all the necessary and ancilliary works involved for successful completion of that item and the entire works.

Chief Engineer

**MORMUGAO PORT TRUST
ENGINEERING (CIVIL) DEPARTMENT**

TENDER NO. **CE/10/2019**.

e-tender for “**PROVIDING 1300 size SCN REVERSE CONE FENDERS
AT BREAKWATER BERTH**”

PRICE SCHEDULE ONLY FOR VIEW (BILL OF QUANTITIES)

(DO NOT QUOTE IN THIS DOCUMENT)

Item No	Description of work	Unit of Qty.	Qty.	Rate		Total Amount
				Per	At	
					Rs. P.	Rs. P.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	PROVIDING 1300 size SCN REVERSE CONE FENDERS					
1	Removal of existing old Dipti 1000 cone fenders from the Breakwater berth side fender panels by making suitable arrangements for holding, lifting and transportation, by loading onto trailers using suitable cranes, winch arrangements, etc and safely unloading with crane or other facilities and stacking these neatly at M.M/MPT store or at Headland store offices alongwith all fixtures and accessories of each fender placed and packed neatly in empty PP cement bags and transported to the MPT store office. Work to include cost of plugging the existing bolt drilled holes with strong grout of fosroc or any other equivalent make. Works to include all costs of temporary scaffolding, equipments, tools, hire of chain pulley blocks, cranes, trailers, etc. All labour, toolas and equipment and materials etc complete.	No	32	No		
2	Supplying, providing and fixing 1300 size SCN Super Reverse cone fenders to the fenders panels at the Breakwater berth, including drilling					

	<p>holes for the anchor bolts, fixing the panels and anchoring with SS anchor bolts and fixing with standard anchor grout , and fixing the fenders securely to the panels. Cost to include transportation, unloading, stacking at a suitable safe location within a distance of 3 km of the site of work and then transportation by lifting onto trailers by loading, unloading at site of work, making lifting and supporting system at site with suitable tools, plant, equipment and lifting arrangements, and fixing the new fenders at site as per approved technical specifications and direction of the Chief Engineer and his representative. Cost to include for testing the Fenders (entire cost of testing to be borne by the contractor) A joint inspection to be conducted with the Chief Engineer or his representative in a standardised Laboratory. (Work to be executed as per Drawing and Technical specification). Cost to include all labour, tools and equipment and material etc complete.</p>	No	32	No		
	<p>TOTAL AMOUNT OF TENDER</p> <p>(EXCLUDING GST) ESTIMATEED AMOUNT</p>					
	<p>I hereby agree to execute the work at</p>	<p>Rs. _____</p> <p>Rupees _____</p> <p>_____</p>				
	<p>Name of the Contractor</p>					
	<p>Quoted Amount</p>					
	<p>Difference Amount</p>					

(Tender Amount in Words

Rupees _____
 _____ only)

TENDERER'S NAME & SIGN WITH SEAL

Place :

Date:

Note: The offered rates shall be inclusive of all taxes and duties, GST shall be extra as applicable. If new tax is imposed by Central/State Govt, the same will be reimbursed on submission of documentary evidence. ***Bidder to specify tax component separately.***