

निविदा पूछताछ
TENDER ENQUIRY

[वेब निविदा]
[WEB TENDER]

माझगांव डॉक शिपबिल्डर्स लिमिटेड
(भारत सरकार का उपक्रम)
MAZAGON DOCK SHIPBUILDERS LIMITED
(Formerly known as Mazagon Dock Limited)
(A Govt. of India Undertaking)
CIN: L35100MH1934GOI002079
Dockyard Road, Mumbai 400 010
Website- www.mazagondock.in
Certified - ISO 9001: 2008 for Shipbuilding Division
GST ID : 27AAACM8029J1ZA

निविदा सं./Tender No	1200003492	विभाग/Department	EY COMMERCIAL
क्रय अधिकारी/Purchase Exec.	Shashikant Javalkar	क्रय अधिकारी/Purchase Exec.	Shashikant Javalkar
सेवा में /To		दूरभाष सं./Telephone No	23762647
		फैक्स सं./Fax No	23741386
		ई-मेल/E-Mail	ssjavalkar@mazdock.com
		निविदा सं./Tender No	1200003492
		निविदा तिथि/ Tender Date	
		निविदा बंद की तिथि/Tender Closing Date	17.05.2026
		निविदा बंद होने का समय/Tender Closing Time	12:00:00
दूरभाष सं./Telephone		आरएफक्यू सं./RFQ No	2130000489
फैक्स सं./Fax			
ई-मेल/E-Mail			

निविदा शुल्क/Tender Fee	रु/Rs	0.00
बयाना राशि/EMD Amount	रु/Rs	0.00
पुर्व बिड बैठक तिथि और समय/Pre Bid Meeting Date & Time		,00:00:00
निविदा खोलने की तिथि और समय/Tender Opening Date & Time		,15:00:00
प्रस्ताव वैधता तिथि है/Offer should be valid up to		
सुरक्षा जमा/Security Deposit		0.00 %आदेश मूल्य का/PO value
वरीय बैंक जमानत /Perf. Bank Guarantee		5.00 %आदेश मूल्य का/PO value

(आगे के विवरण हेतु कृपया सम्बंधित नियम शर्तों को पढ़ें । सुनिश्चित करें कि कोटेशन और संबंधित पत्राचार के लिए विभाग का नाम, क्रय अधिकारी का नाम, निविदा संख्या, बंद होने का समय एवं तिथि एवं आरएफक्यू सं. अपने कोटेशनमें लिखें ।
Kindly read and refer relevant terms & conditions for further details. Do ensure to Quote Department Name, Purchase Executive 's Name , Tender Number, closing date & time and RFQ Number in your Quotation & related correspondence)

प्रिय महोदय/महोदया
Dear Sir / Madam ,

विषय /SUB:- DESIGN,MANUFACTURING,SUPPLY, ERECTION AND COMMISSION OF SUBMARINE PRESSURE HULL MANUFACTURING WORKSTATION

माझगाँव डॉक शिपबिल्डर्स लिमिटेड प्रतिष्ठित/संभावित आपूर्तिकर्ताओं से निम्न हेतु, प्रतियोगितात्मक दो बोली प्रणाली में (भाग - I तकनिकी - वाणिज्य बोली एवं भाग II मूल्य बोली) बोली आमंत्रित करती है।
Mazagon Dock Shipbuilders Limited (MDL) invites Competitive – Bid from reputed Supplier for the following in TWO BID system (Part - I Techno - Commercial Bid & Part - II Price Bid).

क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date
00100	सामग्री सं./ Material Number :- 51000000000003004 Station No.1(I) सामग्री वर्णन/Material Description :Station No.1(I)	1 Number	31.03.2027

क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date
Frame Fit-up Workstation for Web to Flange Assembly.			
00200	सामग्री सं./ Material Number :- 51000000000003005 Station No.2(I) सामग्री वर्णन/Material Description :Station No.2(I) Automatic Welding Workstation for Welding of Web Flange of Frame.	1 Number	31.03.2027
00300	सामग्री सं./ Material Number :- 51000000000003006 Station No.3(I) सामग्री वर्णन/Material Description :Station No.3(I) Automatic Welding Workstation for Frame to Shell Plate Welding.	1 Number	30.06.2027
00400	सामग्री सं./ Material Number :- 51000000000003007 Station No.4(I) & 5(I) सामग्री वर्णन/Material Description :Station No.4(I) & 5(I) (Combined) Automatic Welding Workstation for Welding of Shell to Shell (L-Seam & C-Seam) for Section Formation	1 Number	30.04.2028
00500	सामग्री सं./ Material Number :- 51000000000003008 Station No.6(I) सामग्री वर्णन/Material Description :Station No.6(I) Specialized Milling Workstation for Web Segment Machining, Bevel Preparation & Full Frame Machining/ Chamfering/Beveling.	1 Number	31.03.2027
00600	सामग्री सं./ Material Number :- 51000000000003009 Station No.8(I) सामग्री वर्णन/Material Description :Station No.8(I) Rotating Workstation for Frame & Shell Plate Assembly (Subsection Formation)	1 Number	30.06.2027

नियम और शर्तें : भाग ए में लिखी हुई और इतर संलग्नपत्रे इस निविदा एक अभिन्न अंग हैं |हमें आशा है की,हमें प्रतियोगित्मिक और उचित प्रस्ताव इस निविदा के लिए प्राप्त होगा |
Terms & Conditions as indicated in Part A of this tender and other enclosures / annexures form an integral part of this tender document. We look forward to receive your most competitive and reasonable offer against this Tender.

माझगाँव डॉक शिपबिल्डर्स लिमिटेड के लिए /For Mazagon Dock Shipbuilders Ltd

MAZAGON DOCK SHIPBUILDERS LIMITED

Commercial-East Yard

Global Open Tender Enquiry

(Two-Bid System on e-procurement portal)

PART-A

BUYER SPECIFIC ADDITIONAL TERMS & CONDITIONS WITH DETAILED SCOPE OF WORK

MAZAGON DOCK SHIPBUILDERS LTD. (MDL), Mumbai India, a premier Warship building, Ship repair, Submarine Construction & Refits and Heavy Engineering Company owned by Government of India under Ministry of Defense invites competitive bids through e-procurement Portal, in TWO BID SYSTEM (Part-I Techno Commercial Bid and Part-II Price Bid) for the following supplies/services from **Indian/Foreign Supplier/ Bidder/ Contractor**.

Issue of E - Tender Enquiry Document: This e-tender enquiry can be downloaded from our e-procurement website <http://eprocuremdl.nic.in>. To login and quote against this e-tender on e-procurement portal, bidders should have Digital Signature Certificate (DSC). The details of DSC are available on the MDL website.

Tender opening: Technical bid (PART-I) will be opened immediately after the tender closing date and time through e-procurement portal. Bidders can view details of quotation received against tender after tender opening on e-procurement website.

Price bid opening: Similarly, after completion of technical scrutiny/evaluation, price bid (PART-II) opening will be done and intimation will be forwarded to Techno-Commercially accepted bidders. Bidders can view the details of price bid opening against the tender on e-procurement web site.

This is an Open Tender Enquiry e-Tender on global firms.

BIDDER TO READ BID REJECTION CRITERIA CAREFULLY BEFORE SUBMITTING BID

SUBJECT: Design, Manufacturing, Supply, Erection and Commissioning of Submarine Pressure Hull Manufacturing Workstations

TENDER ENQUIRY FORM (TEF)

1. Description:

The detailed scope of Supply is attached as **Enclosure-1**.

Note: - Any technical query related to SOW shall be forwarded to following:

Mr. Anil Kichak,
HOS/DGM(Hull-EY)
E-mail: akichak@mazdock.com
Phone - 8169366941

Or

Mr. Deepak Sharma
DGM(Hull-EY)
E-mail: dsharma@mazdock.com
Phone - 8291995950

2. Instructions to the bidder:

- a. Bidders should submit all documents strictly through e-procurement portal only. Physical copy of the bid will not be accepted except for the physical copies of documents requested in the tender.
- b. In case of supply/services of duplicate / spurious / substandard items by the firm, MDL will resort to prosecution of the firm by legal action with all the stringent measures against the firm for supplying such items which had led to delay of the project of national importance and has endangered the national security. The firm will also be blacklisted in MDL & will be debarred from quoting in future MDL tenders and the same will be intimated to all other public sector undertakings and other Government organization.
- c. Bidders are requested to ensure that only relevant documents complete in all respect as indicated in the tender should be attached with their offer. The first page of every uploaded set of scanned documents shall be an index of its contents. In case the offers received against this tender are more than 20, opportunity may not be extended for submission of

deficient documents after opening of bids. The evaluation of the offers will be carried out and bidders will be qualified based on the documents received along with their offer.

- d. Delivery date mentioned in the RFQ/Tender is tentative. However, bidders have to follow delivery schedule as per purchase order. Non-compliance of the same beyond the contractual terms may lead to imposition of liquidated damages or cancellation of contract/ Purchase order.

3. Pre-qualification Criteria:

A. Technical Pre-Qualification:

- a) Bidder must demonstrate experience in design, engineering, manufacturing/ refurbishment/ upgradation, supply, installation, testing and commissioning of Special Purpose Machines on turnkey basis.
- b) Bidders willing to participate in the tender may visit the Shipyard (MDL) for clear understanding of the Scope of Work, proposed layout and constraints if any, in advance / prior to submitting their offer.
- c) Bidders must have carried out similar works in the last 25 years (as on the initial date of opening of tender), the details of similar work are given below:
 - i) Automatic Welding Workstations/ Equipment for construction of Pressure Hull/ Pressure Vessels/ Boilers/ similar Vessels of minimum diameter of 05 Meters, for Stations-2(I), 3(I) and 4(I) & 5(I) as per SOW.
 - ii) Special Purpose CNC based Milling Machines of travel size 3X8 Meters for Gantry system or minimum diameter of 05 Meters for Radial system, for Station-6(I) as per SOW
 - iii) Special Purpose Machines related to Assembly/ Fit-up, for Stations-1(I) and 8(I) as per SOW.Note: Bidder must qualify separately for Sr. 3 (A) (c) (i), (ii) & (iii) above.
- d) Bidder has to submit Work Completion Certificate (WCC)/ Performance Certificate/ Acceptance Certificate issued by the Client corresponding to the three categories mentioned at Para 3 (A) (c) (i), (ii) & (iii).
- e) In case of Work Completion Certificate (WCC)/ Purchase Order copy/ Contract Agreement copy/ Performance Certificate/ Acceptance Certificate issued by Clients in language other than English, Bidder shall submit English translation copies of the aforementioned credentials duly attested by Indian Embassy or Notary vetting.
- f) Joint Ventures and Holding Companies. In case the Bidder is a part of Joint Venture / Holding Company.
 - i) Joint Ventures: Credentials of the partner of Joint Ventures cannot (repeat cannot) be clubbed for the purpose of compliance of PQC in supply of Goods/ Equipment, and each partner must comply with all the PQC criteria independently.
 - ii) Holding Companies: Credentials of the Holding company cannot (repeat cannot) be clubbed for the purpose of compliance of PQC in supply of Goods/ Equipment, and each subsidiary bidding company must comply with all the PQC criteria independently. However, the Financial Standing credentials of a Holding Company can be clubbed with only one of its subsidiary bidding companies having shares 51% and more with appropriate legal documents proving such ownership. Cases where Holding Company is not fully (100%) owning the subsidiary bidding company, then Holding company shall also provide a corporate guarantee on the subsidiary bidding company.
- g) Bidder to submit details of Infrastructure available such as area of Workshops, Crane capacity, list of machinery, experienced man power, etc. to execute the similar work as mentioned at Para (c) above.
- h) Bidder to facilitate a factory visit of MDL members to their manufacturing premises, if required by MDL. Expenditure towards visit of MDL members would be borne by MDL.
- i) In case MDL wants to visit the site, for which the bidder has submitted the experience, then the bidder shall facilitate such visit. Expenditure towards visit of MDL members would be borne by MDL.

B. COMMERCIAL PRE-QUALIFICATION:

- i) The average annual financial turnover of 'The bidder' during the last three years, ending 31st March (or any other year ending followed in relevant country) of the previous financial year excluding the calendar year of tendering should be at INR 41,00,00,000/- as per the annual report (audited balance sheet and profit and loss account) of the relevant period, duly authenticated by a Chartered Accountant/Cost Accountant in India or equivalent in relevant countries. For foreign vendors, an equivalent amount in their currency for turnover as per the annual report (audited balance sheet and profit and loss account) will be considered.
- ii) Bidders Shop and establishment registration certificate or registration certificate from registrar of firms or certificate of incorporation from Registrar of Companies (Not required for permanent registered vendors with MDL).

C. Applicability of 'Make in India':

Bidders (manufacturer or principal manufactures of authorized representative) who have a valid/approved on going 'Make in India' agreement/program and who while meeting all other criteria above, except for any or more of sub-criteria in Experience and Past Performance above, would also be considered to be qualified provided:

- i) their foreign 'Make-in-India' associates meet all the criteria above without exemption, and
- ii) the Bidder submits appropriate documentary proof for a valid/approved on going 'Make in India' agreement/program.
- iii) the bidder (manufacturer or principal of authorized representative) furnishes along with the bid a legally enforceable undertaking jointly executed by himself and such foreign Manufacturer for satisfactory manufacture, Supply (and erection, commissioning if applicable) and performance of 'The Product' offered including all warranty obligations as per the general and special conditions of contract.

D. Authorized Representatives:

Bids of bidders quoting as authorized representative of a principal manufacturer would also be considered to be qualified, provided:

- i) their principal manufacturer meets all the criteria above without exemption, and
- ii) the principal manufacturer furnishes a legally enforceable tender-specific authorization in the prescribed form (Deed of Agreement) assuring full guarantee and warranty obligations and all contractual obligation as per the tender terms and conditions; and
- iii) the bidder himself should have been associated, as authorized representative of the same or other Principal Manufacturer for same set of services as in present bid (supply, installation, satisfactorily commissioning, after sales service as the case may be) for same or similar 'Product' for past three years.

E. Joint Ventures and Holding Companies:

Credentials of the partners of Joint ventures cannot (repeat cannot) be clubbed for the purpose of compliance of PQC in supply of Goods/Equipment, and each partner must comply with all the PQC criteria independently. However, for the purpose of qualifying the Financial Standing Criteria, the Financial Standing credentials of a Holding Company can be clubbed with only one of the fully owned subsidiary bidding company, with appropriate legal documents proving such ownership.

F. MSEs shall be given 100% relaxation of prior turnover only, however, MSEs shall meet prior experience criteria viz: TPQC mentioned at (A) above.

G. The work executed by the contractors for their in-house or capital use need not be considered for the purpose of bidders' experience of completion of similar works.

Note: Bidders need to upload / submit supporting documentary evidence in support of the Pre-Qualification Criteria Viz. Work / Purchase Order, Work Completion Certificate/ Proof of payment with Tax Invoice / Store Receipt and Acceptance Report or any other evidence that confirms that the work is completed which is issued by the party for whom the work is done. HOD-C (East Yard) or TNC (Technical Negotiation Committee of MDL) has a right to verify / cause verification of authenticity of the said documents whenever felt necessary.

4. Earnest Money Deposit (EMD) / Bid Security: INR 10,00,000/-

EMD shall be obtained by way of NEFT/ Demand Draft / Pay order / Bank Guarantee / Insurance Security Bond / e-Bank Guarantee in favour of Mazagon Dock Shipbuilders Limited, Mumbai from the list of Banks approved by SBI / Canara Bank published on MDL website. Crossed DD / Pay Order issued by Co-operative banks however may be considered to be accepted and the bid would be considered accordingly.

In case of foreign bidders, authorized Indian agent of the overseas bidders can submit EMD in the form of bank draft in Indian Rupees. Similarly authorized Indian Agent can submit BG from bank as per list of banks approved by SBI/ Canara Bank as bank of international repute published on MDL website on behalf of foreign bank. Bidders are encouraged to advice their banker to send EMD directly to commercial department or through SWIFT (MDL account mentioned below) to dispense with additional step of verification of authenticity of signatories. In case of EMD transmitted through SWIFT, it shall be the responsibility of the bidder that he directs the receiving banker to forward the message duly authenticated to the concerned commercial executive mentioned in the tender.

Details of MDL Bank Account:

Beneficiary Name: Mazagon Dock Shipbuilders Limited

Current A/c. No.: 10005255246

IFSC Code: SBIN0009054

Bank Name: STATE BANK OF INDIA

Bank Branch Address: "Mazagon Dock Branch, Opp. Nirman Bhavan, Mazagon, Mumbai-400010."

Commercial executive on receipt of Demand Draft / Pay Order from indigenous bidders shall forward the same immediately to the Treasury Section of Finance Dept. In case of foreign bidders, EMD shall be obtained by way of SWIFT / Bank Guarantee from bank of international repute or other banks. The Bank Guarantee shall be kept valid till validity

period of the offer. The original of the scanned copy of EMD (BG) should reach HOD (C)/ Dealing Executive within seven days of the tender closing date.

Bids / Offers without EMD/Bid Bond along with Part-I bid will not be considered. EMD of unsuccessful bidders will be returned after finalization of the tender and shall be interest free.

Firm should submit the original EMD in closed envelope (Sealed), Super scribed as EMD/BID Bond for Bid No....., due date, time, and addressed to, HOD (EY-Commercial Dept.), Alcock Yard, MAZAGON DOCK SHIPBUILDERS LIMITED, Dock Yard Road, Mumbai, 400010, INDIA, and should be Submitted at below address within 7 working days from the Bid closing date.

HOD (Commercial – EY),
4th floor, North Block,
SSA Work Shop,
Office building, Alcock Yard,
MAZAGON DOCK SHIPBUILDERS LIMITED,
Dockyard Road,
Mumbai-400010, India.

Timely submission of the original EMD is the responsibility of the bidders and no reasons / excuses in this regard will be entertained by MDL. Original EMD reached after 7 working days from tender closing date & time will render the e-bid (submitted by bidder) liable for rejection.

Exemption from submission of EMD / BID Bond:

Following bidders shall be exempted from submission of EMD/Bid Bond:

- i) State & Central Government of India Departments & Public Sector Undertakings.
- ii) Firms registered with MDL. To qualify for EMD exemption, firms should necessarily submit valid copy of the Registration Certificate issued by MDL, for the items for which the offer is being submitted. Firms in the process of obtaining MDL registration will not be considered for EMD exemption.
- iii) Micro and Small Enterprises who are manufacturer or Service Provider and give specific confirmation to this effect at the time of bid submission and whose credentials are validated online through Udyam Registration (as validated by Government from time to time) and through uploaded supporting documents.
- iv) Firms registered with NSIC under its “Single Point Registration Scheme”. (Exemption will apply only to items/services for which they are registered. To qualify for EMD exemption, firms should necessarily submit valid copy of the Registration Certificate along with the list of items / services for which they are registered, as issued by NSIC, in Part-I offer / bid. Firms in the process of obtaining NSIC registration will not be considered for EMD exemption.
- v) Start-ups as recognized by Department of Industrial Policy and Promotion (DIPP).
- vi) The recognized institutes such as VJTI/IIT.
- vii) Common/Deemed DPSU registered vendors qualify for EMD exemption. Such firms shall submit valid copy of the registration certificate issued by DPSUs (other than MDL) for the items / services for which the offer is being submitted in Part-I offer/bid. Firms in process of obtaining registration in other DPSUs will not be considered for EMD exemption.
- viii) Green Channel Status vendors qualify for EMD exemption. Such firms shall submit valid copy of the green channel certificate issued by MoD for the items for which the offer is being submitted

5. Forfeiture of EMD:

EMD shall be forfeited in the following cases:

- i) Bidder withdraws, amends, impairs or derogates from the tender, agreed conditions of TNC /PNC in any respect within the period of validity of his offer.
- ii) Non-acceptance of order.

6. Validity Period:

- i) Bids / Offers shall have a validity period of 180 days from the Bid closing date. A bid valid for a shorter period will be liable for rejection.
- ii) In exceptional circumstances, before the expiry of the original time limit, MDL may request the bidders to extend the validity period for a specified additional period. The request and the bidders' responses shall be made in writing or electronically. A bidder may agree to or reject the request. A bidder who has agreed to MDL's request for extension of bid validity, in no case, he shall be permitted to modify his bid.

7. Your Offer should contain the following:

A. PART I: Technical Bid

Soft Copies/Scanned Copies of below mentioned documents/details are to be uploaded on E-procurement portal:

- a. Bidder's statement on their Company Letterhead indicating Tender No, Tender Date, confirming compliance and acceptance on the Scope of Supplies and other Terms and Conditions as included in this tender enquiry, duly signed, stamped and dated by bidder's authorized person(s).
- b. Bidder to submit acceptance on clauses of Tender Enquiry Form (TEF), General Conditions of Contract (GCC) as 'ACC or DEV' as applicable for each of the clause at tender (**Enclosure-04, 05** respectively).
- c. Price schedule BLANKING the PRICES but clearly indicating 'QUOTED / UNQUOTED' as applicable against the listed item in the prescribed format of e - tender. (**Enclosure-02**).
- d. Bidder to submit Deviation sheet (**Enclosure-06**) in case of any deviation from Terms, Conditions & Technical requirements specified in the TEF & GCC.
- e. Bidder to submit signed scanned copy of SOW as acceptance.
- f. Manufacturer's Product Catalogues/Data sheets of the offered material and / or Technical Specifications.
- g. Bidder to submit List of Documents and Certificates those will be provided along with item(s).
- h. Bidder to submit their complete Bank details for payment.
- i. Extract of official secret Act 1923 (**Enclosure-18**) must be signed, stamped with company seal and submitted along with Part-I of the offer as a token of acceptance of the terms & conditions by the bidders.
- j. Bidder to submit format of End User Certificate, in case required by the bidder.
- k. GST registration details / GST acknowledgement or Tax Residency Certificate. (Indian Firms and Foreign Firms)
- l. Bidder Company Profile
- m. Bidder Company Registration Certificate.
- n. Audited Financial Statement for Last 3 years.
- o. Copy of signed Integrity pact as per **Enclosure-11. Original copy of IP to be submitted within week from date of tender closing.**
- p. Valid MSME Udyam Certificate, MDL Registration Certificate & ISO Accreditation Certificate (If applicable)

B. PART II: Price Bid

This should contain only the PRICES for the listed item strictly in the prescribed format provided with the e -tender at **Enclosure-02**. Prices mentioned/specified in any other format will not be considered for evaluation
Note:

- i) If, in the price structure quoted for the required goods, there is discrepancy between the unit price and total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly;
- ii) If there is an error in a total corresponding to the addition or subtraction of sub-totals, the 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.
- iv) Bidders in their own interest are requested to submit their bids well in advance of tender closing date to avoid the last-minute difficulties in submitting the bids. Bidder should submit offer with all relevant documents.

8. Currency of Bidding:

Foreign bidders are allowed to quote price (and get paid) in RBI's notified basket of foreign currencies - US Dollar or Euro or Pound Sterling or Yen etc. Indian Bidders are to quote and submit in INR only. Exchange rate of Tender Opening date will be considered for ranking of bids.

9. Bid rejection criteria:

A. Categorical Rejection Criteria

The following conditions / deviations are non-negotiable and therefore any bid falling under these conditions / deviations will be summarily rejected. Bidders to note that they shall not be provided any opportunity to rectify these conditions / deviations post bid opening:

- a. Bids received after tender closing date and time.
- b. Bids received other than through e-portal (in case of e-tender).
- c. Bids received without EMD (other than those who are exempted from payment of EMD).
- d. Bidders who are debarred under PPP MII order 2017, GeM, CPPP including Tender holiday issued by MDL.

B. Liable for Rejection Criteria

- a. Bids received without Integrity Pact duly signed by the bidder on each page.
- b. Non-compliance of clauses mentioned under loading criteria at clause no. 14.
- c. Non submission of NDA to receive the technical documentation for participation in the bid.
- d. Bid received from vendors not qualifying technical and commercial PQC.
- e. Non receipt of required documents as specified in Scope of work.
- f. Non submission of documents or details as per requirements mentioned above or the requirements mentioned in preceding paragraphs shall be considered as supplier's inability/casual attitude towards understanding and comprehending the TSP requirements and hence execution will be of similar sloppy, undesired and unwarranted nature and thus shall be liable for rejection.
- g. MDL will carry out a detailed evaluation of the responsive bids in order to determine whether the technical aspects are in accordance with the requirements set forth in the Bidding Documents. In order to reach such a determination, MDL will examine and compare the technical aspects of the bids on the basis of the information supplied by the bidders. The documents furnished by the bidder shall be examined for overall completeness and compliance with the Technical Specifications; quality, function and operation of any process, controls and concepts included in the bid. The bid that does not meet the complete technical specifications, as defined in the bid document, or substantiate the technical requirements specified will be liable for rejection.

10. Taxes and Duties:

- a) Foreign Bidders shall quote their price on Incoterm as per **INCOTERM DDP basis for delivery at MDL**
- b) Foreign bidder shall submit Tax Residency Certificate (TRC) and No Permanent Establishment (PE) in India in Part-I offer. In case of remittances to Foreign Companies for services, as per the Income tax act and DTAA provisions, TDS shall be carried out from the amount payable towards services. As per the extant applicability and existing rates, following cases pertaining to TDS are presented for clarity:
 - i) **Case 1 (TRC & No PE certificate is made available by foreign bidders):** Tax Deduction at Source (TDS) as per DTAA rates will be applicable for of total service payment. If this is not agreed to by the bidder in the bid or during TNC / CNC, then this shall be appropriately loaded as per applicable rates on the price for the purpose of ranking. However, bidders to note that TDS rates / DTAA rates differ from country to country. It tentatively varies from 10% to 25%.
 - ii) **Case 2 (TRC & No PE is not made available by foreign bidders):** Tax Deduction at Source (TDS) at the higher rates @ 40% plus surcharges & education cess will be applicable. If this is not agreed to by the bidder in the bid or during TNC / CNC, then this shall be appropriately loaded as per applicable rates on the price for the purpose of ranking.
- c) Indian Bidders must clearly mention the applicable Taxes in the rate sheet enclosed in the tender. The item wise rates (i.e., Basic + Duties & Cess + Packing, Forwarding, inspection charges, Freight & Insurance) quoted in the Rate sheet should including Taxes. Bidder should indicate GST rates as applicable separately under each of the head in the same rate sheet.
 - i) The prevailing rate of GST is to be indicated in your blank rate sheet in Part-I
 - ii) MDL's GST Number is 27AAACM8029J1ZA
 - iii) Bidder/supplier shall comply as per GST act of India and responsible for the financial and nonfinancial consequences in case of non-compliance of GST provisions/requirements/timelines on their part.

11. Ranking of Bid:

The foreign bidders shall quote on **'INCO term DDP basis for delivery at MDL'** basis or In case foreign bidders opt to quote on Cost, Insurance & Freight (CIF) basis. They should also to indicate the custom tariff number and custom duty applicable in India. To arrive at **'INCO term DDP basis for delivery at MDL'** cost over and above CIF cost the following charges to added / loaded:

- (a) Port Handling Charges @ one per cent.
- (b) Custom duty, countervailing duty and surcharges, as applicable on the date of opening of the tender.
- (c) Clearing agency charges.
- (d) Inland freight.

For bids with Letter of Credit (LC) payment, the likely LC charges (as ascertained from MDL's bankers) should also be added. Interest for period of 30 days @ base rate of SBI BPLR plus 2% on payment amount is to be considered while evaluating foreign bidders for ranking purpose.

In case both Indian and foreign bidders have quoted in the tender, the comparison of the offers would be done on the basis of **'INCO term DDP basis for delivery at MDL'** destination including all elements of costs, duties, levies, freight, insurance etc. including GST on the principle of the total outgo.

In case there are no domestic bidders, a comparison of offers can be made on the basis of **'INCO term DDP basis for delivery at MDL'** costs since the rest of costs would be same for all bidders.

The applicable loading towards deviations shall be loaded on quoted price for ranking purpose.

For financial evaluation (Ranking), all bids shall be converted to Indian Rupees based on the "Bill for Collection (BC) selling "exchange rate on the last deadline for bid submission (Techno-commercial offer). If the last deadline for bid

submission happens to be holiday or non-transaction day, the exchange rate on immediate previous working day will be adopted. The rate could be obtained from RBI/SBI rates as available on Internet.

On-line ranking visible to the bidders after opening Part-II price bid is without loading parameters.

However, the L1 bidder will be evaluated offline by applying all applicable loading parameters as per tender and clarifications during techno-commercial scrutiny / TNC meeting.

Loading/Ranking will be done on original submitted bid at the time of closing of tender. However, in case MDL invites supplementary price bid from technically qualified bidders, then same will also be considered while ranking of bids.

12. Delivery Period / Completion Schedule:

- a. The overall time frame for this turn-key contract for each workstation including commissioning at MDL site from the date of receipt of confirmed MDL Purchase Order is as indicated below:

Workstation	Timeline
Stations 1(I),2(I),6(I)	09 Months
Stations 3(I),8(I)	12 Months
Stations 4(I)&5(I)	22 Months

- b. The contractor shall develop and submit a comprehensive schedule indicating milestone dates for project implementation. Performance of the contractor shall be evaluated vis-à-vis with this schedule later. Milestone chart shall be submitted along with offer.
- c. Schedule of Delivery:
Schedule for critical items of utility & equipment, construction, design, fabrication, FATs, delivery, installation, start-up, Inspections, SATs, Qualification Trials and training shall be indicated in the milestone chart with the following broad indicators:
- i) Submission by the firm of Design, Drawings, calculations, with corresponding detailed BOM (Bill of material), item/ equipment list etc. within 01 months from the date of receipt of order and review by MDL within 10 days from the date of receipt of such completed documents to provide comments on submissions made by the firm.
- ii) Firm to submit the revised design (If required) within 07 days from the date of receipt of MDL comments.
- d. Fortnightly progress meetings in person or over VC shall be attended by the Contractor with MDL from the date of award of contract till completion. However, it does not absolve MDL's right to call for a meeting at any time if necessary.
- e. Part delivery is acceptable

13. Pricing:

- a. **For Indian Bidders:** Quoted prices of all items/services shall be quoted for delivery of the items/services to the destination including charges towards inland transportation, inspection charges, insurance, custom duty & cess, and other local costs incidental to the delivery of the Goods/Services
- b. These quoted prices shall be inclusive of all GST, other taxes, duties and all cost components for supply of materials inclusive of all documentation of Commercial, Technical or any other nature as contained in this tender enquiry.
- c. **For Foreign Bidders:** Bidder shall quote the prices for the delivery on Incoterm **DDP basis for delivery at MDL**.
- d. Prices shall be firm and fixed till completion / delivery in MDL store/site in the case of indigenous bidders and for delivery '**INCO term DDP basis for delivery at MDL**', in the case of foreign bidders.
- e. Bidder shall quote the prices of all items / services listed in the format of the tender enquiry for delivery of the items at MDL. The prices quoted shall remain firm and fixed during the currency of the order / contract unless agreed otherwise by MDL.
- f. Price Variation Clause (PVC): Not Applicable

14. Loading Criteria:

Deviations sought by the bidder shall be loaded on the bidder/s quoted prices during price evaluation by MDL for ranking of bids to judge L1, as under

- a. Varied payment terms quoted by indigenous bidders as compared to the terms stated in the tender document shall be normalized by adopting the Prime Lending Rate of State Bank of India plus 2% thereon on the amount (s) at variation and / or for the period (in no. of days) at variation and LIBOR / EURIBOR rates plus 2 % or 6% whichever is higher in case of foreign bidders. (Except for mode of payment i.e., Swift/LC)
- b. In case of Foreign bidders, LC opening charges on CIF value, Interest for period of 30 days @ Benchmark Prime Lending Rate (BPLR) of SBI+2% on payment amount to be loaded if applicable for ranking purpose.
- c. Contingency charges (Guarantee extension charges, delivery extension charges, re-preservation charges, extra man-days charges etc.) as applicable should be added to decide L-1.

- d. Delivery of the goods: Delivery at MDL should be responsibility of the supplier. However, for unavoidable reasons, if bids are exclusive of transport and / or insurance, the same will be loaded at the cost to be incurred by MDL.
- e. For the additional delivery period sought by the bidder over the stipulated date of delivery as per Tender, 0.50% per completed week will be loaded to the quoted price.
- f. Bidders are fully and clearly aware of the loading factors proposed for normalization of the deviations in Commercial terms through Tender document and also in the discussions before submitting the price bids. Revision of price bids on the reason of lack of clarity on loading factors shall not be allowed.

15. Terms of Payment:

All the payments to vendors due shall be made through Real Time Gross Settlement (RTGS) / National Electronic Fund Transfer (NEFT)/SWIFT by MDL.

- a. 10% payment of each line item of PO will be released after approval of Design, QAP & PERT by MDL.
 - i) Proforma invoice
 - ii) Bank guarantee of equivalent amount of payment value valid till delivery of material.
 - iii) Certificate issued by MDL user department duly signed by CM or above confirming the approval of Design, QAP & PERT by MDL
- b. 20% payment of each line item of PO will be released after successful completion of FAT.
 - i) Proforma invoice
 - ii) Bank guarantee of equivalent amount of payment value valid till delivery of material.
 - iii) FAT Certificate
 - iv) Certificate issued by MDL user department duly signed by CM or above confirming the successful completion of FAT inspection.
- c. 50% payment of each line item of PO will be released after delivery and acceptance of material at MDL.
 - i) Original Tax invoice of full value
 - ii) Signed GRN copy
 - iii) Certificate of Conformity
- d. Balance 20% payment of each line item of PO will be released after successful completion commissioning of workstation/Final Acceptance.
 - i) Certificate issued by MDL user department duly signed by CM or above confirming successful commissioning of work-station/Final Acceptance.

16. Warranty:

- a. Warranty of each Workstation shall include all structures, machine and equipment made for the purpose of the technical requirement of each individual Workstation and shall be warranted by the supplier against damage or failure due to defect(s) in design, material or workmanship for a period of 24 months from the date of commissioning and user acceptance.
- b. Any breakdown or visit as and when required during warranty period to be attended within 24 hrs of intimation, failing which a penalty of Rs. 10,000/- per day will be charged.
- c. Any Spares & Machine Consumables (nozzles, hydraulic oils, coolants, etc.) required during warranty period to be arranged by the bidder at their own cost.

17. Performance Security (Performance Bank Guarantee cum Security Deposit):

Contractor / Supplier / Vendor will be required submit Performance Security {Performance Bank Guarantee (PBG) cum Security Deposit (SD)} for an amount of 5% (Five per cent) of the Contract/Order value excluding taxes, duties, freight etc. in the form of NEFT/ Demand Draft / Pay order / Bank Guarantee / Insurance Security Bond / e-Bank Guarantee in favour of Mazagon Dock Shipbuilders Limited, Mumbai from the list of Banks approved by SBI/ Canara Bank published on MDL website as per MDL standard format at **Enclosure-09** within 25 days after notification of the award of contract and it should remain valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the supplier, including warranty obligations.

Bank guarantee will be returned to vendor after completion of warranty period and clearance of any dues arising out of penalty

Non submission of Performance Security:

- a. In case of failure to submit performance security by the supplier within 25 days of transmission / notification of order by any mode, EMD (if available) will be forfeited and MDL reserves the right to cancel the order and invoke the risk purchase clause. If it is established that the contractor has failed to comply with the Guarantee/warranty obligations, the PSBG will be encashed by MDL. MDL's decision in this regard shall be final and binding on the supplier / contractor.
- b. In cases where the supplier / contractor has not submitted the PS and already commenced supply / services, Performance security will be retained from the bills, if any. In such case, interest will be recovered for the period

starting from 26th day of transmission / notification of order/contract by any mode and amount involved at the relevant rate of interest for that quarter. For Indian suppliers, it will be SBI BPLR plus 2%. For foreign supplier, it will be EUROBOR/LIBOR plus 2%.

18. Consignee:

The Supplier/Vendor shall arrange dispatch of good by appropriate transport mode as per the order and consign the same to:

Consignee & delivery Address:

**MAZAGON DOCK SHIPBUILDERS LIMITED,
Dock Yard Road,
Mumbai –India 400 010.**

Note: Exact location inside MDL for delivery will be informed at the time of delivery.

19. INSPECTIONS AND TRIALS POST DELIVERY:

- a) FAT at vendor's premises as per QAP by nominated team.
- b) Receipt inspection by MDL (QA-East Yard).
- c) Final acceptance by User Department
- d) GRN will be cleared based on User Acceptance Report

For detailed inspection plan refer SoW at Enclosure-01.

20. Integrity Pact

a) **INTEGRITY PACT (IP):**

The Integrity pact essentially envisages the agreement between prospective vendors / bidders & buyers committing the person/officials of both the parties not to exercise any corrupt influence on any aspects of the contract. Only those vendors/bidders who enter into such an integrity pact with the buyer would be competent to participate in the bid. The format of integrity Pact is enclosed **Enclosure-10** with tender documents. IP shall be submitted on plain paper.

The 'Integrity pact' dully filled as per enclosed format **Enclosure-10** to be submitted along with the offer. Each page of Integrity Pact shall be duly signed by the bidder. In case of non-submission of Integrity Pact by the bidders, duly signed on each page, with Part-I of the bid, shall render the bid liable for rejection.

The original IP to be submitted or couriered to MDL within 15 days after tender closing date. Address: Material Department, Mazagon Dock Shipbuilders Ltd, Dockyard Road, Mumbai-400010.

b) **INDEPENDENT EXTERNAL MONITORS (IEM):**

Presently the panel consisting of the following Independent External Monitors (IEMs) has been appointed by MDL, in terms of Integrity Pact (IP) which forms part of MDL Tenders / Contracts.

- i) Shri M.N.Krishnamurthy, IPS (Retd.)
Email ID: krishnamurthymn19@gmail.com
- ii) Shri Deepak Kashyap, IRTS (Retd.)
Email id : deepakkashyapnd02@gmail.com

This panel is authorized to examine / consider all references made to it under this tender / contract. The bidder(s), in case of any dispute(s) / complaint(s) pertaining to this tender falling under provisions of Integrity Pact may raise the same directly with the IEMs on the panel viz Shri M.N.Krishnamurthy, IPS(Retd.) Email ID: krishnamurthymn19@gmail.com; Shri Deepak Kashyap, IRTS (Retd) Email ID : deepakkashyapnd02@gmail.com.

- c) The Integrity Pact shall be valid for the Contractor 12 months after the last payment under the contract and for all other Bidders 06 months after the contract has been awarded. However, bidder will be required to extend the Integrity Pact, as and when required by the Principal/Buyer.

- d) The provisions regarding Sanctions for violation of Integrity Pact include forfeiture of Performance Bond in case of a decision by the Principal/Buyer to forfeit the same without assigning any reason for imposing sanction for violation of Integrity Pact.

IEM may be contacted for issues related to Integrity Pact (IP). For any other administrative enquiries and clarification on tender, bidders may contact Commercial Dealing Executive

21. Trade Receivable Discounting System (TReDS) for MSEs

TReDS is a digital platform to help MSMEs to address their financial needs for facilitating the financing of trade receivables from buyers, through multiple financiers. TReDS is governed by the Reserve Bank of India under the Payment and Settlement Systems Act, 2017 and the Factoring Regulations Act, 2011. Under the TReDS initiative, at present, RBI has given licenses to three participants (A. TReDS Ltd, RXIL, M1 Xchange). MDL is registered for TReDS online platform with A. TReDS Ltd (Invoice Mart), RXIL and M1Xchange to facilitate payments to MSMEs through TReDS. At TReDS, auctioning of invoices at competitive and transparent environment is done by financiers based on Buyer's credit profile.

MSE bidders desirous to receive payments through TReDS platform may avail the facility if they are already registered on TReDS platform or by registering on any one of the service providers. Contact details of TReDS platform service providers are to be indicated. MSE bidders upon successful delivery shall submit their invoices along with the mandated enclosures at MDL, central receipt section. MSE vendors, desirous to receive payments through a particular TReDS platform must submit their TReDS details along with the invoice at MDL, central receipt section. Upon receipt and acceptance of the supplied material and receipt of invoices with the mandated enclosures, MDL shall process the invoice for payment on that particular TReDS platform. Any unfinanced invoices / invoices of MSE bidders seeking payment from MDL directly shall be processed as per the standard payment terms agreed in PO / contract.

As a special gesture, all the above three discounting platforms i.e., M/s. RXIL, Invoice Mart and M1 Exchange have offered waiver of Registration/On boarding fees to MDL vendors.

- i) Below are the details of M1xchange:

1. Shaiwal Sinha
Mob: 9599224594
Mail : shaiwal.sinha@m1xchange.com

2. Ankit Singh
Mob : 9800250395
Mail : ankit.singh@m1xchange.com

M1xchange Office address (Mumbai): A-403, The Qube 4th floor, MV road Marol, Andheri (E) Mumbai – 400059.

- ii) Below are the details of rxil:

1. Name of Nodal Officer -: SANTOSH YADAV
Contact Details/ Mobile Number of Nodal Officer -: +91-9167708156
Email Id -: santosh.yadav@rxil.in

Complete address -: Receivables Exchange of India Limited, 701-702,7th Floor,
Supremus, E Wing, I-Think Techno Campus, Kanjurmarg East,
Mumbai 400042

2. Name of Nodal Officer -: ANGELIN ANBARASAN
Contact Details/ Mobile Number of Nodal Officer -: +91-8451975191
Email Id -: angelin.anbarasan@rxil.in
Complete address -: Receivables Exchange of India Limited, 701-702, 7th Floor,
Supremus, E Wing, I-Think Techno Campus, Kanjurmarg East,
Mumbai 400042.

22. Land Border Clause:

Non-submission of Compliance Certificate w.r.t Land Border Clause as per the enclosed format at **Enclosure-12**. Ref: Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 as elaborated here below:

Compliance of Public order on Restrictions under Rule 144 (xi) of the General Financial

Rules (GFRs), 2017

GoI vide Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 has imposed Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 on bidders from a country which shares a land border with India. Accordingly, following shall be complied by the Bidders while submitting bids.

- a. Any bidder from a country which shares a land border with India will be eligible to bid in this e-tender only if the bidder is registered with the Competent Authority. The Competent Authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT). **The Bidder shall submit declaration / certificate as per Enclosure-12 towards compliance of Public Order on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017.** However, Order will not apply to bidders from those countries (even if sharing a land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects. Lists of countries to which lines of credit have been extended or in which development projects are undertaken are given in the website of the Ministry of External Affairs.
- b. "Bidder" for the purpose of this Order (Public Procurement No.1, 2 & 3) (including the term 'GeM Bidder', 'consultant' 'vendor' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person, participating in a procurement process.
- c. "Bidder from a country which shares a land border with India" for the purpose of this Order (Public Procurement No.1, 2 & 3) means
 - i. An entity incorporated, established or registered in such a country; or
 - ii. A subsidiary of an entity incorporated, established or registered in such a country; or
 - iii. An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - iv. An entity whose beneficial owner is situated in such a country; or
 - v. An Indian (or other) agent of such an entity; or
 - vi. A natural person who is a citizen of such a country; or
 - vii. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

Note: "Beneficial owner" for the purpose of above paragraph (C) will be as under:

- (i) In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person(s), has a controlling ownership interest or who exercises control through other means. Explanation-
 - a) "Controlling ownership interest" means ownership of, or entitlement to, more than twenty-five per cent of shares or capital or profits of the company;
 - b) "Control" shall include the right to appoint the majority of the directors or to control the management or policy decisions, including by virtue of their shareholding or management rights or shareholder's agreements or voting agreements;
- (ii) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
- (iii) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
- (iv) Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- (v) In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- (vi) "Agent" for the purpose of this Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 is a person employed to do any act for another, or to represent another in dealings with third persons

23. Liquidated Damages:

- a. Time is an essence of the contract. Therefore, the job, as ordered, should be completed on the dates mutually agreed upon in accordance with the delivery schedule. In cases of delay not attributable to Purchaser beyond the agreed

schedule, the Supplier / Contractor shall pay liquidated damages, a sum representing 0.5% (Half per cent) of the of contract price of delayed line item of each week of delay or part thereof until actual delivery or performance, subject to maximum of 10% of contract price of delayed line item.

- b. Vendor / Contractor (Supplier) will also be liable to pay Liquidated Damages for late delivery of the Documentation as agreed to by Purchaser and Vendor / Contractor (Supplier) and as stated in the Purchase Order. The amount of such damages will be same as that stated in Para (a) above.

24. Purchase Preference to Micro and Small Enterprises (MSEs):

- a. Vendor shall meet prior experience and prior turnover criteria.
- b. The bidders need to upload / submit supporting documentary evidence in support of the Pre-Qualification Criteria Viz. Work / Purchase Order, Work Completion Certificate/ Proof of payment with Tax Invoice / Store Receipt and Acceptance Report or any other evidence that confirms that the work is completed which is issued by the party for whom the work is done. The concerned HoD or TNC has a right to verify / cause verification of authenticity of the said documents whenever felt necessary.
- c. Micro and Small Enterprises (MSEs) registered under Udyam Registration or as directed by government are eligible to avail the benefits under the policy. This Policy is meant for procurement of only goods produced and services rendered by MSEs. Traders/Distributors/Sole Agents/Works Contract are excluded from the purview of the policy. MDL has right to place order on MSE
Manufacturer and MSE Service Provider meeting following criteria:
 - (i) In tender, participating Micro and Small Enterprises (MSE) quoting price within price band of L1+15 (fifteen) per cent may be awarded for full/ complete supply of total tendered value to MSE, considering the spirit of the Policy for enhancing Govt. Procurement from MSEs by bringing down their price to L1 price in a situation where L1 price is from someone other than an MSE.

25. Purchase Preference to Make in India 2017

Preference to Make in India' clause is applicable.

“Local content” means the amount of value added in India which shall be the total value of item (goods, services or works or their combination) under procurement (excluding net domestic indirect taxes) minus the value of imported content in the item (including

all customs duties) as a proportion of the total value in percent. Different definition of Local Content may be specified by the Nodal Ministry for items assigned to them, which will prevail over above.

Explanatory notes for calculation of local content given above

(I) Imported items sourced locally from resellers / distributors shall be excluded from calculation of local content.

(II) The license fees / royalties paid / technical charges paid out of India shall be excluded from local content calculation.

(III) Procurement / Supply of repackaged / refurbished / rebranded imported products as understood commonly shall be treated as reselling of imported products and shall be excluded from calculation of local content. The definition of repackaged / refurbished / rebranded imported products is as follows;

'Refurbishing' means repair or reconditioning of an imported product does not amount to manufacture because no new goods come into existence.

'Repackaging' means repacking of imported goods from bulk pack to smaller packs would not ordinarily amount to manufacture of a new item.

'Rebranding' means relabeling or renaming or change in symbol or logo/makes or corporate image of a company/organization/ firm for an imported product would amount to rebranding.

(IV) To ensure that imported items sourced locally from resellers/distributors are excluded from calculation of local content, procuring entities to obtain from bidders, the cost of such locally-sourced imported items (Inclusive of taxes) along with break-up on license / royalties paid / technical expertise cost etc. sourced from outside India. For items sold by bidder as reseller, OEM certificate for country of origin to be submitted.

(V) weighted average of all items to be taken while calculating the local content.

Note:

1. The local content can be increased by vendors through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them.

2. Bidders offering imported products will fall under the category on non-local suppliers and they cannot claim themselves as Class-I local suppliers / Class-II local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC / CMC, etc. as local value addition. Hence, bidders offering imported products will be treated as non-local suppliers.

“Class-I Local Supplier” means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-I local supplier' under this Order.

“Class-II Local Supplier” means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-II local supplier' but less than that prescribed for 'Class-I local supplier' under this Order.

“Non-Local Supplier” means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than that prescribed for 'Class-II local supplier' under this Order.

“L1” means the lowest tender or lowest bid or lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

“Margin of Purchase Preference” means the maximum extent to which the price quoted by a “Class-I Local Supplier” may be above the L1 for the purpose of purchase preference. The margin of purchase preference shall be 20%.

Price/s of all Class I local supplier/s in a tender is more than 20% of L1's price no purchase preference shall be applicable.

Special Conditions in GTE Procurements: Agency Commission:

The amount of Agency Commission, (normally not exceeding five percent) payable to the Indian Agent should not be more than what is specified in the Agency agreement (a certified copy should be submitted along with the bid) between the bidder and the Indian Agent. The Indian Agent will be required to submit a certificate along with their Agency Commission bill, confirming that the amount claimed as Agency Commission in the bill has been spent/will be spent, strictly to render services to the foreign Principal, in terms of the Agency Agreement. The Purchaser or their authorized agencies and/or any other authority of the Government of India shall have rights to examine the books of the Indian Agent and defects or misrepresentations in respect of the afore indicated confirmation coming to light during such examinations will make the foreign Principal (i.e. the Contractor) and their Indian Agent liable to be banned/suspended from having business dealings with the Purchaser, following laid down procedures for such banning/suspension of business dealings.

26. Purchase preference:

- a. Purchase preference shall be given to only “Class-I Local Supplier” (Class II Local Supplier are not eligible for purchase preference) in procurements undertaken in the manner specified in the succeeding sub-paras:
- b. The Class-I local suppliers, under PPP-MII Order, participating in any government tender, may or may not be MSEs, as defined under the MSME Act. Similarly, MSEs participating in any government tender, may or may not be Class-I local suppliers. Suppliers may be categorized in following four broad categories for consideration or applicability of purchase preference:

Category	Terminology
Supplier is both MSE & Class- I local supplier	MSE Class-I local supplier
Supplier is MSE but not Class- I local	MSE but non-Class-I local supplier
Supplier is not MSE but is Class-I local supplier	Non-MSE but Class-I local supplier
Supplier is neither MSE nor Class-I local	Non-MSE non-Class-I local supplier

- c. Non-local suppliers, including MSEs falling in the category of non-local suppliers, shall be eligible to bid.

Purchase preference shall be accorded as under:

- (i) L-1 is "MSE Class-I local supplier": Contract shall be awarded to L-1.
- (ii) L-1 is not "MSE Class-I local supplier " but the "MSE Class-I local supplier" falls within 15% margin of purchase preference. Purchase preference shall be given to lowest quoting "MSE Class-I local supplier". If lowest quoting "MSE Class-I local supplier" does not accept the L-1 rates, the next higher "MSE Class-I local supplier" falling within 15% margin of purchase preference is to be given purchase preference and so on.

If all "MSE Class-I local supplier" do not accept L-1 rates, then Para 7.4.20.3(f)(iii)) shall be followed.

- (iii) If conditions mentioned in above sub paras (i) and (ii) above are not met i.e. L1 is not "MSE Class-I local supplier" and "MSE Class-I local supplier" is not eligible to take benefit of purchase preference as per PPP-MSE Order or all "MSE Class-I local supplier" do not accept L-1 rates, the contract is to be awarded /purchase preference to be given in different possible scenarios as under:

- (a) L-1 is "MSE but non-Class-I local supplier" or "Non-MSE but Class-I local supplier": Contract be awarded to L-1.

- (b) L-1 is "Non-MSE non-Class-I local supplier": Firstly, purchase preference shall be given to eligible MSE as per PPP-MSE Order. If MSEs not eligible or does not accept then purchase preference to be given to eligible Class- I Local supplier as per PPPMII

Order. If Class-I Local supplier is also not eligible or does not accept then contract be awarded to L-1.

27. Public Grievance Cell:

A Public Grievance Cell headed by Shri. R. R. Kumar (ED-Prod) has been set up in the Company. Members of public having complaints or grievances are advised to contact him on Wednesday between 10.00 hours and 12.30 hours in his office on 4th floor, D2 Bldg, East Yard, MAZAGON DOCK SHIPBUILDERS LIMITED, Dock Yard Road, Mumbai, 400010, INDIA or send their complaints / grievances to him in writing for redressal. His Telephone No. is +91 22-2376 263512 and Ext 3517

28. Book Examination Clause (BEC):

In case it is found to the satisfaction of MDL that the Supplier has engaged an Agent or paid commission or influenced any person to obtain the contract as described in clauses relating to Agents/Agency Commission and penalty for use of undue influence, the supplier, on a specific request of MDL shall provide necessary information/inspection of the relevant financial documents/information.

29. Breach of Obligation Clause with respect to Bid Submitted:

In case of breach of any obligation mentioned under, the bidder shall be disqualified / debarred from the bidding process for a period of one year from the date of notification,

- (i) Bidder has withdrawn / modified / amended / impaired / derogated from the tender during the period of bid validity.
- (ii) Bidder fails or refuses to execute the contract upon notification of acceptance of bid by MDL during the period of bid validity.

30. Right to reject any or all bids:

MDL reserves its right to accept or reject any or all bids, abandon / cancel the tender process, and issue another tender for the same or similar Goods/Services at any time before the award of the contract. It would have no liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for such action(s).

31. Contacting MDL during the evaluation:

From the time of bid submission to awarding the contract, no bidder shall contact MDL on any matter relating to the submitted bid. If a Bidder needs to contact MDL for any reason relating to this tender and/ or its bid, it should do so only in writing or electronically. Any effort by a Bidder to influence MDL during the processing of bids, evaluation, bid comparison or award decisions shall be construed as a violation of the Code of Integrity, and bid shall be liable to be rejected as nonresponsive in addition to other punitive actions for violation of Code of Integrity as per the Tender Document.

32. Discrepancies between Original and Additional/Scanned Copies of a Tender:

Discrepancies can be observed in responsive tenders between the original copy and other copies of the same tender set. In such a case, the text, and so on, of the original copy will prevail.

33. Tie Breaker:

When multiple vendors quote same price for particular item(s)/services under such situation, following action in given sequence shall be done:

- (a) Supplementary bid asking for discount to be obtained.
- (c) Lottery option to be exercised after above options are not conclusive.

34. Submission of revised Bids:

Bidders may revise their bids prior to the original or extended closing date and time of the tender.

35. Tender Acceptance Form (TAF):

TAF duly filled in by the bidders confirming their acceptance or deviation is to be submitted along with their techno-commercial bids.

36. General Conditions of Contract (GCC):

Bidder is required to submit the GCC acceptance form duly filled along with their techno-commercial offer.

37. Claims by firms:

No claims by the firms will be entertained after 03 years from date of execution/completion of order.

38. Local Content

- i) The 'local content' requirement to categorize a supplier as 'Class-I local supplier' is minimum 50%. For 'Class-II local supplier', the 'local content' requirement is minimum 20%. However, Nodal Ministry / Department may prescribe only a higher percentage of minimum local content requirement to categorize a supplier as 'Class-I local supplier' / 'Class-II local supplier'. For the items, for which Nodal Ministry / Department has not prescribed higher

minimum local content notification under the Order, it shall be 50% and 20% for 'Class-I local supplier' and 'Class-II local supplier' respectively.

- ii) The Nodal Ministry may keep in view the domestic manufacturing / supply base and assess the available capacity and the extent of local competition while identifying items and prescribing the higher minimum local content or the manner of its calculation, with a view to avoiding cost increase from the operation of this Order.
- iii) The Nodal Ministry may annually review the local content requirements with a view to increasing it, subject to availability of sufficient local competition with adequate quality.
- iv) For Global tenders, since 'Non-local suppliers' shall also be eligible, the minimum local content may not be indicated unless and otherwise it needs to be stipulated as per other GoI guidelines or Customer contract requirements.
- v) Bidder required to submit certificate of local content along with offers duly stamped and signed as per enclosure 7

39. Declaration / Verification of Local content:

- a. Tenders shall solicit participating bidders to indicate the percentage of local content (i.e., value added in India) along with the details of location/s where the local value addition is made, in their bids, item wise or tender wise. The indicated local content percentage shall decide categorization of the vendors as "Class-I Local Supplier" / "Class-II Local Supplier" / "Non-local Supplier". All bidders should declare that the item and service offered meets the minimum local content and indicate its percentage in their offer which shall meet or exceed required local content specified in tender. This declaration is necessary even if Custom Duty Exemption and / or ERV (if applicable) are not being sought. Certification as under is to be submitted mandatorily in technical offer-Part-I bid.
- b. Self-certification by Chief Financial Officer or Other legally responsible person nominated in writing by the Chief Executive or Senior Member / Person with Management Responsibility of Corporation / Partnership / Individual. However, in cases of procurement for value in excess of Rs.10 Crores, the bidders shall provide a certificate from statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of supplier other than companies) giving the percentage of local content.
- c. Further, it must be informed to bidders in the tender that once the declaration / certification is committed at tender submission stage, the same cannot be altered subsequently at technical negotiation stage or after award of contract. Doing so would be treated / considered as false declaration by bidder and necessary action shall be initiated as per para 7.4.20.12 of the said Order for debarment.
- d. Declared Local Content shall be the basis for categorization of the vendors and tender evaluation. However, MDL reserves the right to undertake detailed examination of declared local content and may call vendor to submit relevant documents.
- e. In cases where MDL received the complaint from any vendor or person, along with the fees prescribed below, verification of Declared Local Content shall be carried out by seeking additional info as deemed necessary and the bidders (including unsuccessful bidders) against the tender shall be obliged to furnish the necessary documents. Failing to do so, the vendor may invite penal action as per the provisions of the Order. If MDL possess the capability, then it shall perform the verification. However, if in the opinion of MDL matter needs to be dealt at higher level, then the complaint shall be referred to Nodal Ministry and their fees / expenses / charges applicable as per the Nodal Ministry, if any, shall be borne by the complainant. MDL is authorized to prescribe fees for handling complaints under revised PPP MII Order 2017. The fees for filing a complaint under the order shall be INR 10,000/- per case. The complaint shall be filed to the Chairman, Public Grievance Cell. The fee shall be deposited by complainant in MDL's Account by NEFT.
- f. On scrutiny of offer, if all the bidders participating in the tender happen to have either not submitted the declaration certificate or not declared / specified the local content percentage in the declaration certificate or specified local content lower than the minimum local content requirement as per the tender, the subject tender shall be cancelled & matter shall be taken up with Ministry, by the user department, as per the procedure indicated at note of 7.4.20.2(iii)(b) or as amended by MoD / DPIIT / DoE.
- g. On opening of the price bids, if it is identified that there is difference in local content declaration made and local content percentage as per price quoted is now not meeting (i.e., lesser than) the specified tender requirement (i.e., only on the quoted price without any loading) then such bidder shall be disqualified and shall not be considered for ranking purpose.
- b. The bid would be treated / considered as given false declaration and necessary action for debarment shall be initiated.

40. Debarment of bidders / suppliers

- a. False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of GFR 2017 for which a bidder or its successors can be debarred for up to 2 years as per Rule 151(iii) of GFR 2017 along with such other actions as may be permissible under law.
- b. A supplier who has been debarred by any procuring entity for violation of said Order shall not be eligible for preference under said Order for procurement by any other procuring entity for the duration of debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in such a manner that ongoing procurements are not disrupted.

41. Hindrance Register

- a. Wherever applicable such as where submission, approvals and clearances are required, the Tender shall have a Hindrance register clause that all hindrances with date of occurrences and removal shall be noted in the Hindrance register. The Hindrance register shall be signed by the reps of both MDL as well as Contractor.
- b. Executive in the rank of Chief Manager and above shall be the nodal executive of the User Department.

42. Working on MDL Holidays: Intimation for working on Saturday / Sunday / holidays if required, should be submitted 2 working days prior to the date of holiday indicating names of personnel to Personnel Department and Security through concerned Department.

43. Offset Policy: Not Applicable

44. Corrigendum to Tender Document: Before the deadline for submitting bids, MDL may update, amend, modify, or supplement the information, assessment or assumptions contained in the Tender Document by issuing a corrigendum. The corrigendum shall be published in the same manner as the original Tender Document. Without any liability or obligation, the Portal may send intimation of such corrigendum to bidders who have downloaded the document under their login. However, the bidders' responsibility is to check the website(s) for any corrigendum. Any corrigendum thus issued shall be considered a part of the Tender Document. To give reasonable time to the prospective bidders to take such corrigendum into account in preparing their bids, MDL may suitably extend the deadline for the bid submission, as necessary. After MDL makes such modifications, any Bidder who has submitted his bid in response to the original invitation shall have the opportunity to either withdraw his bid or re-submit his bid superseding the original bid within the extended time of submission.

45. Cartel Formation/Pool Rates

It is possible that sometimes a group of bidders quote the same rate against a tender. Such pool/cartel formation is against the basic principle of competitive bidding and defeats the very purpose of an open and competitive tendering system. Such and similar tactics to avoid/control true competition in a tender leading to "Appreciable Adverse Effect on Competition" (AAEC) have been declared as an offence under the Competition Act, 2002, as amended by the Competition (Amendment) Act, 2007. Such practices should be severely discouraged with strong measures. In case of evidence of cartel formation, detailed cost analysis may be done by associating experts if necessary. Besides, suitable administrative actions can be resorted to, such as rejecting the offers, reporting the matter to trade associations, the Competition Commission or NSIC, etc., and requesting them, inter-alia, to take suitable strong actions against such firms. New firms may also be encouraged to get themselves registered for the subject goods to break the monopolistic attitude of the firms forming a cartel. Changes in the mode of procurement (GTE instead of OTE) and packaging/slicing of the tendered quantity and items may also be tried. A warning clause may also be included in the bid documents to discourage the bidders from indulging in such practices. Purchaser may also debar the tenderers indulging in cartel formation/collusive bidding/bid rigging for a period of two years from participation in the tenders of the Purchaser.

46. Additional Instructions:

- a. Bidder shall abide to all tender terms & conditions including General Conditions of Contract (GCC).
- b. The bidder shall also abide to all statutory requirements, Official Secret Act 1923, Security and Safety Rules as per references, which are part of this tender. If contractors' employees are not adhering to the health, safety and environment norms and the contractors not equipping their employees with suitable safety gears, will be viewed seriously. For non-adherence to above will be levied as per extant guidelines of Security and Safety Rules prevailing time to time, to the contractor without prejudice to other rights to enforce the safety requirements.
- c. MDL shall not be bound by any printed conditions or provisions in the sellers bid forms or acknowledgement of contract, invoices, packing list and any other documents which purport to impose any conditions at variance with the tender terms / final negotiated & accepted terms.
- d. In case of improper on-line filling or non-submission of Acceptance formats for Tender Enquiry Form (TEF), GCC, it shall be presumed that all our tender terms & conditions are acceptable to the bidder.
- e. Wherever the clauses in tender document (Part A) are getting repeated in GCC, then in such cases bidders are requested to refer the clauses in the tender doc (Part A) and offer their comments/acceptance, accordingly.

47. E-Portal and E-Tender Guidance:

- a. Submission of bids against e-Tenders: The bidder is required to quote online on the e-Procurement website www.eprocuremdl.nic.in by the deadline, by submitting the Techno-commercial Bid & Price Bid in Electronic format only. The prices/quotes & a few declarations shall have to be entered/uploaded by the bidder online in the Tender's entry forms & other bid documents' scanned/soft copies shall have to be uploaded as part of the bid. All bids should be digitally signed using DSC (as explained below).

- b. To participate in e-Tender (s), every bidder must register themselves on the ASP's website (registration is free of cost) & must possess a legally valid Class-IIB or above Digital Signature Certificate (DSC) as per IT Act-2000, using which they can sign their electronic bids. The DSC can be procured from any Certifying Authority (CA) authorized by Controller of Certifying Authorities (CCA) of Govt. of India.
- c. National Informatics Centre (NIC) have been appointed by MDL as the Application Service Provider (ASP).
- d. Online User Manual is available on the website for the guidance of users & for participating in the eProcurement/ e-Tendering, the bidder must ensure having the requisite (IT) infrastructure at their office premises.
- e. For any further details of e tendering & digital signatures, please contact 0120- 4200462, 0120- 4001002, eproc-support@gov.in.
- f. Problems in hardware/software, internet connectivity, system configurations, Browser setting etc., for whatsoever reason shall not be considered for extension of tender closing date and time.
- g. MDL will not be responsible for an error in downloading of tender documents from web by the bidders. The version appearing on MDL website will be considered final and authentic.

48. MDL reserves the right to consider placement of Order / Contract in part or in full against the tendered quantity.

We look forward to receive your most competitive and reasonable offer against this tender.

Yours faithfully,
For MAZAGON DOCK SHIPBUILDERS LIMITED,

Shashikant Javalkar
Deputy Manager (C-EY)
(Commercial –East Yard)
022-2376-2690

List of Enclosures:

- Enclosure-01: Scope of work / supply.
- Enclosure-02: Rate sheet
- Enclosure-03: GENERAL CONDITIONS OF CONTRACT (GCC) FOR GOODS
- Enclosure-04: TEF Acceptance Format.
- Enclosure-05: GCC Acceptance Format.
- Enclosure-06: Deviation sheet.
- Enclosure-07: Form of certificate of conformity (COC)
- Enclosure-08: Format for certificate of warranty
- Enclosure-09: Proforma Bank Guarantee for Bid Bond / EMD
- Enclosure-10: Proforma Bank Guarantee for Performance Security
- Enclosure-11: Integrity Pact
- Enclosure-12: Declaration in relation to New Provision under Section 194Q, 206AB & 206CC of the Income tax act 1961
- Enclosure-13: Declaration of Compliance of Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017
- Enclosure-14: Declaration of Local Content
- Enclosure-15: LIST OF BANKS
- Enclosure-16: Document Confirmatory Matrix (CHECK LIST)
- Enclosure-17: Conflict of Interest among Bidders/ Agents
- Enclosure-18: EXTRACT OF PROVISIONS OF THE OFFICIAL SECRETS ACT, 1923
- Enclosure-19: VENDOR DECLARATION
- Enclosure-20: NON-DISCLOSURE AGREEMENT
- Enclosure-21: PROFORMA BANK GUARANTEE FOR ADVANCE PAYMENT

Detailed Scope of Supply

DEFINITIONS	
DETAILED SCOPE OF WORK	
1	SCOPE OF SUPPLY
2	LIST OF ITEMS (WORKSTATIONS) TO BE PROCURED
3	GENERAL CRITERIA
4	DETAILED TECHNICAL REQUIRMENT OF STATIONS
4.1	PROCUREMENT ITEM 1: SPECIALIZED MILLING WORKSTATION -Station 6(I)
4.2	PROCUREMENT ITEM 2: WEB TO FLANGE ASSEMBLY FRAME FITUP WORKSTATION-1(I)
4.3	PROCUREMENT ITEM 3: AUTOMATIC WELDING STATION 2(I)
4.4	PROCUREMENT ITEM 4: ROTATING WORKSTATION STATION NO.8(I)
4.5	PROCUREMENT ITEM 5: AUTOMATIC WELDING STATION 3(I)
4.6	PROCUREMENT ITEM 6: AUTOMATIC WELDING WORKSTATION (STATION 4(I) & 5(I)
5	ELECTRICAL
6	POWER SUPPLY, PANELS, MOTORS, CABLES, ETC.
7	LIGHTING
8	LABELS ON EQUIPMENT
9	FACTORY ACCEPTANCE TEST (FAT) CERTIFICATES/CALIBRATION CERTIFICATES
10	QUALITY ASSURANCE PLAN (QAP)
11	INSPECTIONS AND TRIALS POST DELIVERY
11.1	INSPECTIONS
11.2	TRIALS
12	COMMISSIONING
13	STATUTORY/LOCAL GOVERNMENT APPROVALS
14	TRAINING
15	OPERATING/MAINTENANCE MANUALS, LIST OF DRAWINGS AND DOCUMENTS
16	MDL SCOPE
17	DELIVERABLES
18	DELIVERY
19	SCHEDULE OF PAYMENT
20	WARRANTY
21	AFTER SALES SERVICE SUPPORT
22	TOOLS
23	INTELLECTUAL PROPERTY RIGHT (IPR)
24	RATE SHEET

DEFINITIONS

The following terms have been used throughout this document and are defined below for the sake of clarity.

- Mazagon Dock Shipbuilders Limited is hereafter referred to as "MDL" or "Owner".
- Throughout this document, the terms "contractor" or "supplier" or "vendor", or "parties" or "participants" or "bid" and "tender" and their derivatives ("bidder/ tenderer", "bid/tender/offer", "bidding / tendering", etc.) are to be treated as synonymous.
- The term "Station" shall refer to one whole assembly of parts/machines/equipment, designed to carry out specific tasks as defined in succeeding paragraphs.
- The term "Submarine" refers to a Naval Military Platform that is designed for deep sea water operations, requiring a high level of precision in manufacturing as per Naval Submarine Standards.
- Day means a calendar day
- Singular also means plural

General Note

The Technical Specifications or Scope of Work contained herein is not intended to enumerate each and every detail of Work required. Words which have well-known technical or trade meanings are used in the specifications in accordance with such recognized meanings.

All labor, material, work, services and equipment necessary for the administration and completion of the Project shall be in the scope of the Contactor except for any items expressly identified in MDL Scope or Supply.

DETAILED SCOPE OF WORK

1. SCOPE OF SUPPLY

- 1.1. To Design, Plan, Fabricate/Manufacture, Supply and Install, Test and Commission Work Stations (Procurement Items 1I to 6I) comprising of Machines and Equipment as detailed in this document, for the manufacturing of Submarine Pressure Hulls, within the workshops and in the areas approved by MDL at MDL Yard located at Dockyard Road, Mumbai, India. Necessary instructions and training to familiarize, operate and maintain the machines/equipment/systems shall be given by the supplier/OEM representative to the MDL personnel along with all other activities detailed in this scope of work. The required Machinery/Equipment is comprised of a series of Specialized, tailor-made manufacturing and welding Stations capable of integrating and welding parts made of High-Yield Strength steel/Special Naval Alloys. The output results must meet stringent Destructive and Non-Destructive Testing (NDT) and Class 1 (Diving Pressure) weld acceptance criteria and must be demonstrated by the vendor to qualify the equipment during commissioning.
- 1.2. The contractor shall design, install and commission the equipment/machinery of workstation(s) as a "Turnkey" job. The contractor shall be responsible for all facets of project planning, engineering, design, drawing, fabrication, supply, construction, installation, inspection/testing and approval from competent Government authorities as per law of land, transportation from manufacturer's site and subsequent clearance, safe storage, transport and move to erection site, onsite assembly and erection, civil work related to erection, temporary and enabling works, obtaining approvals and commissioning of the system with all necessary peripherals and associated work as necessary to meet the performance criteria and project requirements for successful completion and satisfactory performance of equipment/machinery as presented under this contract. The contractor will be required to create and explain the detailed engineering of the system designed and obtain MDL approval before proceeding for manufacturing and implementation.
- 1.3. The following Scope of Work is a brief outline for all systems, equipment and components necessary for this Turnkey Contract for each Work Station. However, it is the Contractor's responsibility to fully comprehend the Scope of Work and identify and bring about all items required to meet the requirements of this contract. Field investigations of each area are required to ensure that the contractor has a full understanding of the scope. Any work components, equipment even if not mentioned specifically in this scope, but required to undertake the task are to be considered as part of the Scope of Work by the supplier and the same must be completed in entirety i.e. design, manufacturing and supply. MDL supplied documents are for reference and concept definition only. The bidder shall make necessary field measurements to ensure accuracy and consider the same in the offer.
- 1.4. The layout of Workshops where equipment/ machinery is to be installed and commissioned is attached at Annexure "A" - Layout of CAS workshop for assembly of Workstation 1(I), 2(I) & 6(I)
Annexure "B" - Layout of Workshop-B for WorkStation 3(I) & 8(I)
Annexure "C" - Layout of New Alcock yard for WorkStation 4(I)&5(I).
- 1.5. It is strongly recommended for the bidder to undertake a site visit and assess the requirement and situation before submission of bid, to discuss the requirements prior to submission of their offer.

2. LIST OF ITEMS (WORKSTATIONS) TO BE PROCURED

The following is the list of Work Stations that are required by MDL

Procurement Item No	Title used by MDL	Purpose	Quantity (Nos)
1	Specialized Milling Workstation Station No.6(I)	Web Segment Machining, Bevel Preparation & Full Frame Machining/ Chamfering/ Beveling	01
2	Frame Fit-up Workstation Station No.1(I)	Web to Flange Assembly	01
3	Automatic Welding Workstation Station No. 2(I)	Welding of Web to Flange of Frames	01
4	Rotating Workstation Station No.8(I)	Frame & Shell Plate Assembly (Subsection Formation)	01
5	Automatic Welding Workstation Station No.3(I)	Frame to Shell Plate Welding	01

6	Automatic Welding Workstation Station No. 4(I) & 5(I)	Welding of Shell to Shell (L-Seam & C-Seam) for Section Formation	01
---	---	--	----

- 2.1. Technical requirements regarding the above are contained in succeeding paragraphs.
- 2.2. The Scope of work for individual procurement line item/ Workstation is defined in Para 4 of SoW below.
- 2.3. All other paragraphs of this document are pertaining to all Workstations wherever applicable.

3. **GENERAL CRITERIA**

- 3.1. FMEA is required for all major machinery, equipment and their parts, as per international guidelines
- 3.2. All Workstations to be Industry 4.0 compliant to the extent possible.
- 3.3. All Construction Material, handling equipment needed for shipment, transporting, unloading, moving and setting of equipment is the responsibility of the contractor.
- 3.4. **Material and Workmanship**
 - 3.4.1. All material used in the manufacture of the equipment/machines shall be specified and procured specifically for this contract.
 - 3.4.2. No pre-used or substandard material or equipment shall be used.
 - 3.4.3. The workmanship for the fabrication of all equipment/machines shall not be compromised with respect to efficiency as well as aesthetics to the approval of MDL.
 - 3.4.4. All structural works and components including but not limited to enclosures, chequered plates of floors, trolleys, rotators, rail track excluding mating face, trolley wheels excluding mating face shall be blasted to Sa2.5 and painted with an epoxy base high corrosion resistance primer and paint (liquid or powder) to min. 250-micron DFT. The finishing paint (liquid or powder) to be in a shade as per OSHA standards, and as agreed and confirmed by MDL, shall be an epoxy/ acrylic anticorrosive top coat paint. However, bought out items such as equipment, control panels, non-ferrous and SS items to be painted to appx. 100-micron DFT or as per the paint specification of OEM. The finish shall be free from imperfections like pinholes, orange peel, runoff sags, etc. Paint Inspection Certificates indicating the parameters maintained during blasting & painting and the painting scheme applied shall be provided for MDL's review & records.
 - 3.4.5. All labelling, placards, equipment tallies and signage for all equipment or facility to be provided by the contractor on SS plates.
 - 3.4.6. Energy Source Lockout / tag out Placards for all equipment to be provided.
 - 3.4.7. Complete start-up, equipment commissioning and utility data including all programming, optimizing, commissioning report, documentation of testing & resulting adjustments, documentation of final operating parameters and / or/ set-points shall be provided by the contractor.
 - 3.4.8. MDL prefers to use same make & model of bought out components for better spares inventory control & management. OEM are required to include similar type of spare parts as far as possible with source of supply.
 - 3.4.9. The operational control of equipment & facilities provided under this bid shall be operated, controlled & monitored through PLC and HMI monitor.
 - 3.4.10. All engineering work shall conform to the greatest extent possible with the processes identified within this package. The Contractor shall investigate "state of the art" technology to produce a system capable of manufacturing the highest quality product in an efficient, cost-effective manner. The Contractor shall be conscious of maintenance and housekeeping requirements for the various systems, ergonomics, fall hazard control, lockout and safety requirements, as well as employees' safety and shall strive to comply with all existing standards for the same. A list of all standards followed shall be submitted to MDL as part of the final technical proposal.
 - 3.4.11. The engineering shall incorporate, to the greatest extent possible practical, package or modular construction so that the maximum assembly work can be done and tested in the Contractor's shop with a minimum amount of work left for field completion in order to reduce field activity.
 - 3.4.12. All drawings, typical equipment layouts and cut sheets shall be submitted to MDL's designated representative(s) for review, prior to release for construction.
- 3.5. Upon completion of the project, Contractor shall provide complete project documentation and "as-built" drawings. The contractor has to submit three sets of hard copy of complete documentation & as-built drawings and one soft copy. All "As-built" drawings shall be duly approved by MDL for record.
- 3.6. The supplier's personnel shall comply with MDL polices of HSE, Security, HR and Factories Act rules and regulations. The contractor shall ensure the safety of its operatives by providing necessary safety gears.

- 3.7. Maximum noise level generated by the Workstation, must not exceed 90 db for total time of exposure of 8 hrs in a day as per the Model rules of Factories Act. To maintain the noise level specified, firm is to provide acoustic control equipment, if required.
- 3.8. MDL reserves the right to select or reject any design offered by any vendor that it deems suitable/unsuitable for its applications.
- 3.9. The final decision for the same shall lie with MDL alone.

4. DETAILED TECHNICAL REQUIREMENT OF STATIONS

4.1. PROCURMENT ITEM 1: SPECIALIZED MILLING WORKSTATION -STATION 6(I)

A.	DESCRIPTION
	Design, manufacturing, Supply, Installation and Commissioning of a High precision, heavy duty, specialized milling workstation [Station-6(I)]. The machine is intended for machining, beveling, and chamfering the internal and external diameters of web elements and frame rings.
B.	PURPOSE
	<p>The primary objective of this machine is square machining & beveling of the inside and side edges of the web elements, along with the final machining of outside diameter of the fabricated T-frame of the submarine. The machine must be designed to accommodate diameters ranging from 6m (minimum) to 8.5m (maximum). The workstation must ensure precise alignment and secure fitment prior and during machining process.</p> <p>The ring frame milling machine shall perform the following tasks:</p> <ol style="list-style-type: none"> (i) Milling of inner web dimensions of the web element (ii) Web edge preparation of the both sides of the web element (iii) Slot milling in the radial direction (iv) Milling of contours and penetrations in to the web (v) Final machining of the external diameter of the frame ring
C.	MDL JOB SPECIFICATIONS
	<p>The workstation must accommodate work pieces with the following specifications</p> <ol style="list-style-type: none"> (i) Diameter: 6m (Minimum diameter) to 8.5m (Maximum diameter) (ii) Height: Maximum work piece height of 500 mm (iii) Thickness: Minimum 10 mm to maximum 50 mm (iv) Weight: Minimum 0.5T to maximum 3T (v) Material: High yield strength, quenched and tempered steel (HY80/ HY100/ 80HLES/ 100HLES/ AB3).
D.	TECHNICAL CONFIGURATION AND WORKING PRINCIPLE
	<p>Either of Configuration 1 or Configuration 2 as below</p> <p style="text-align: center;"><u>Configuration 1: Rotary Type Milling Machine</u></p> <ol style="list-style-type: none"> (i) Heavy Duty CNC Rotary Milling Machine should consist of the fabricated machine bed (T-slot machine table), horizontal ram/ arm, vertical spindle, rotary drive system for circular motion, hydraulic clamping fixtures, central fixture shifting mechanism, hydraulic power pack, servo motors with gearboxes, electrical control panel with CNC system, automatic grease lubrication system, cabling and standard safety and maintenance accessories. (ii) The work piece should be held by hydraulically operated clamping fixtures mounted radially on a large T-slot machine table, ensuring rigid and concentric holding of the circular web during machining. (iii) Vertical spindle assembly should be mounted on a horizontal ram/ arm assembly and should rotate around the vertical center of the machine for circular milling operations. The milling cutter to be mounted on the spindle and the circular path is generated by rotating the ram/ arm assembly around the center while maintaining controlled feed in vertical and horizontal directions. (iv) All linear motions, including horizontal movement of the ram/ arm and vertical movement of the spindle, are to be carried out on hardened and ground linear guideways. These guideways provide high rigidity, long service life and high machining accuracy, even under heavy cutting loads. (v) The spindle assembly provides the cutting motion while the ram/ arm provides radial positioning. The entire ram/ arm-spindle assembly rotates around the vertical axis of the machine, enabling accurate circular milling of large diameter components. (vi) Laser/ Probe sensor to be provided on vertical spindle to track the surface of the web. (vii) A circular man-hole opening to be provided on the machine bed for easy access and maintenance of internal components.

- (viii) The machine should have servo-driven axes for precise motion control to ensure smooth, synchronized and accurate machining
 - a. Servo motor with gearbox for horizontal movement of the ram/ arm
 - b. Servo motor for vertical movement of the spindle assembly
 - c. Spindle motor with gearbox for rotary movement of the spindle
 - d. Servo motors for the circular movement of the ram/ arm around the vertical axis of the machine.
 - e. Any other motor as required
- (ix) Protection class of motors – IP 55 and Insulation class of motor- H.
- (x) Armored cable of appropriate capacity at specific location for the control panel
- (xi) Approx. 48 hydraulic clamping fixtures are to be arranged radially and equally spaced around the center of the machine. Each fixture should consist of a vertically mounted hydraulic cylinder and to be mounted on the T-slots of the machine table. These fixtures firmly clamp the circular web from the periphery, ensuring uniform gripping and accurate centering during machining. Hydraulically linked cylinders that automatically center the 6m-8.5m ring before final locking of the job.
- (xii) Maximum Operating pressure of hydraulic power pack should be 700 bar (adjustable via proportional valves) with adjustable force 5KN to 50KN per clamp to avoid deformation.
- (xiii) For OD machining, the hydraulic fixtures are mounted in their normal outward direction. For ID machining, all fixtures are removed and re-installed in the opposite direction on the same guide rods, allowing them to clamp the web from the inside and dual-direction milling heads with reversible clamping arrangement for the machining of inside diameter of web elements
- (xiv) Additional separate specialized jig arrangement for machining of inside diameter and side edges of the web elements.
- (xv) The machine will be operated through an operator control panel with latest HMI & software for sufficient number of programmed operation and data log, allowing easy control of all machining and clamping functions.
- (xvi) A dedicated rugged laptop with the compatible software & license key, communication cables to be provided.
- (xvii) A centralized grease lubrication system to be provided for automatic lubrication of guideways and moving parts, ensuring smooth operation and long service life.
- (xviii) Axis parameters & power as below:
 - a. Milling head should have heavy duty spindle with power 20KW to 60KW high-torque motor and speed 10-2500 RPM (variable frequency drive) with high torque gear reduction for heavy roughing of 50 mm plate
 - b. Axis Travel
 - Longitudinal axis (X-axis) - 1200mm to 1500mm
 - Vertical axis (Z-axis) – 500mm to 600 mm
 - Rotation (C-axis) - 360 degree continuous
- (xix) Tooling and cutting parameters
 - a. To maintain the squareness of the web within the tolerance of 0.1 mm, the final finishing pass should remove only 0.2 mm to 0.5 mm of material to minimize tool pressure. The repeatability and backlash up to 20 micron
 - b. The CNC must have a high-speed processor capable of processing thousands of blocks of code per second
 - c. The machine should have variable pitch cutters and hydraulic stabilizers to prevent chatter marks for the machining of lower thickness web
 - d. Numbers of insert for each holder – min 500 nos., minimum 02 nos. of holders of each dia. 60, 100, 125 & 150mm
- (xx) Control and Measurement
 - a. Latest High-end CNC of Globally reputed make with support office in India (Siemens, Fanuc, Mitsubishi, Heiden & Mazak) with specialized “Large Circle” interpolation
 - b. Metrology: Laser-based work piece diameter measuring system and wireless measuring system.

Configuration 2 : Gantry Type Milling Machine

- (i) Heavy Duty CNC Gantry Type Milling Machine should consist of the following points:
 - a. Machine consists of table size 10000 mm to 8500mm with T slot having center distance between 2 slots not more than 160mm.
 - b. The machine should have linear motion guideways in all axis (LM Guideway)
 - c. Servo Spindle motor with gearbox
 - d. Travel: X axis 10000mm, y axis 12000mm, z axis 1000mm
 - e. Spindle Nose to table 200mm

	<ul style="list-style-type: none"> f. Main Spindle: Spindle nose BT 50, Spindle RPM 6000 max g. Servo Spindle motor capacity: 22/26 KW min h. Automatic Tool Changer: 24 nos., Arm Type Tool Changer i. Max Tool dia standard (full): 125 mm j. Max Tool dia (Adjustable): 250mm k. Accuracy: Positional +/-20 Micro per meter l. Repeatability: +/-10 Micro per meter m. Hydraulic Clamping arrangement of max 8500mm dia n. All guideways covered with telescopic cover <ul style="list-style-type: none"> (ii) Hydraulic power pack, servo motors with gearboxes, electrical control panel with CNC system, automatic grease lubrication system, cabling and standard safety and maintenance accessories. (iii) The work piece should be held by hydraulically operated clamping fixtures mounted radially on a large T-slot machine table, ensuring rigid and concentric holding of the circular web during machining. (iv) The milling cutter to be mounted on the spindle and the circular path is generated by Gantry Motion controlled feed in vertical and horizontal directions. (v) All linear motions of the Gantry/Milling Head and vertical movement of the spindle, are to be carried out on hardened and ground linear guideways. These guideways provide high rigidity, long service life and high machining accuracy, even under heavy cutting loads. (vi) The spindle assembly provides the cutting motion while Gantry provides radial positioning. (vii) Laser/ Probe sensor to be provided on vertical spindle to track the surface of the web. (viii) A circular man-hole opening to be provided on the machine bed for easy access and maintenance of internal components. (ix) The machine should have servo-driven axes for precise motion control to ensures smooth, synchronized and accurate machining. (x) Protection class of motors – IP 55 and Insulation class of Motor- H. (xi) Armored cable of appropriate capacity at specific location for the control panel (xii) Approx. 48 hydraulic clamping fixtures are to be arranged radially and equally spaced around the center of the machine. Each fixture should consist of a vertically mounted hydraulic cylinder and to be mounted on the T-slots of the machine table. These fixtures firmly clamp the circular web from the periphery, ensuring uniform gripping and accurate centering during machining. Hydraulically linked cylinders that automatically center the 6m-8.5m ring before final locking of the job. (xiii) Maximum Operating pressure of hydraulic power pack should be 700 bar (adjustable via proportional valves) with adjustable force 5KN to 50KN per clamp to avoid deformation. (xiv) For OD machining, the hydraulic fixtures are mounted in their normal outward direction. For ID machining, all fixtures are removed and re-installed in the opposite direction on the same guide rods, allowing them to clamp the web from the inside and dual-direction milling heads with reversible clamping arrangement for the machining of inside diameter of web elements (xv) The machine will be operated through an operator control panel with latest HMI & software for sufficient number of programmed operation and data log, allowing easy control of all machining and clamping functions. (xvi) A dedicated rugged laptop with the compatible software & license key, communication cables to be provided. (xvii) A centralized grease lubrication system to be provided for automatic lubrication of guideways and moving parts, ensuring smooth operation and long service life. (xviii) Tooling and cutting parameters <ul style="list-style-type: none"> a. To maintain the squareness of the web within the tolerance of 0.1 mm, the final finishing pass should remove only 0.2 mm to 0.5 mm of material to minimize tool pressure. The repeatability and backlash up to 20 micron b. The CNC must have a high-speed processor capable of processing thousands of blocks of code per second c. The machine should have variable pitch cutters and hydraulic stabilizers to prevent chatter marks for the machining of lower thickness web d. Numbers of insert for each holder – min 500 nos., minimum 02 nos. of holders of each dia. 60, 100, 125 & 150mm (xxi) Control and Measurement <ul style="list-style-type: none"> a. Latest High-end CNC of Globally reputed make with support office in India (Siemens, Fanuc, Mitsubishi, Heiden & Mazak) with specialized “Large Circle” interpolation b. Metrology: Laser-based work piece diameter measuring system and wireless measuring system.
--	---

E.	Infrastructure and Environment
	<ul style="list-style-type: none"> (i) Waste Management: Suitable Chip/Scrap collection system (ii) Fencing: Suitable fencing/ protective guard to avoid unauthorized access to the job (iii) Tool and Job Cooling: Machine to have suitable air cooled system through spindle (iv) Protection: Integrated dust protection for HMI, electrical panels and environment (v) Control panel to work in environment having temperature 10-45 °C
F.	Quality and Acceptance
	<p>The overall machine performance and final acceptance shall be governed by:</p> <ul style="list-style-type: none"> (i) Positioning accuracy: +/- 20 Micron per Meter (ii) Job Machining Tolerance: 10 Micron per Meter (iii) Repeatability: 10 Micron per Meter
G.	HMI Interface (Human Machine Interaction)
	<ul style="list-style-type: none"> (i) Number of HMI Displays: 01 (ii) Rugged laptop with installed software (Permanent license) for program creation and redundancy for operation of Workstation in case of HMI failure. (iii) Transfer of data to and from HMI of Station to Rugged Laptop via USB/ LAN cable. All softwares are to be provided in a Separate CD/ HDD. (iv) List of features: <ul style="list-style-type: none"> a. Feeding of Multiple Programs at once to HMI and storage memory for at least 100 programs b. Parameter editing capability on HMI also c. Smart System to optimize work (v) Remote Control device that can be carried around by workman for job adjustment/physical inspection before start of process for <ul style="list-style-type: none"> a. Adjustment of clamping b. Position of work-piece via clamps c. Adjustment of machining head/tool d. Tracing with laser
H.	Site Acceptance Test (SAT) & Performance Guarantee
	<p>The site acceptance test shall be conducted at the MDL facility. Final acceptance is contingent upon the successful completion of the following:</p> <ul style="list-style-type: none"> (i) Geometrical and Accuracy Verification: (ii) Dimensional Accuracy: Verification of milling tolerances on a test work piece of 6000 mm diameter & 8500 mm diameter to ensure compliance with the specified "Acceptance/Tolerance" (iii) Clamping Integrity: Testing of the automatic changeover from inner to outer clamping to ensure no work piece slippage or deformation occurs under maximum radial/axial forces (iv) Positioning Repeatability (v) Milling heads must demonstrate a positioning accuracy of +/- 0.1 mm (or as per approved design specs) across the full 8500 mm travel range (vi) Functional and Capacity testing: Maximum capacity run: A trial run using a 3T (or available frame) work piece to verify the table and drive motors operate within thermal limits (vii) Control system and software, remote control checks: <ul style="list-style-type: none"> a. Master Control Panel integration: b. Validation of the digital twin (optional) by importing 3D model c. Test Program checks for various jobs d. Seamless execution of complex contours and penetration into the web e. Dry run in auto and manual mode f. Degraded mode checks g. Machine stops and emergency modes h. All HMI operations i. Loading of Software/Programs j. Data loading and extraction to and from Laptop k. Control of System via Laptop bypassing HMI as remote operation l. Parameter monitoring of all workstation sub systems as well as job status feedback m. Input of all parameter thresholds n. Workstation health checks o. Individual system operations in manual mode. (viii) Measuring system calibration: Verification of the laser diameter measurement and wireless measuring systems provide readings accurate to within +/-0.1 mm per meter accuracy against physical master gauge

4.2. PROCURMENT ITEM 2: WEB TO FLANGE ASSEMBLY FRAME FITUP WORKSTATION-1(I)

A.	DESCRIPTION
	<p>Design, Manufacturing, Supply, Installation and Commissioning of workstation for Fitment of Web with Flange ring for Submarine Pressure Hull T-Frame Assembly.</p> <p><u>Working Principle:</u></p> <ul style="list-style-type: none"> (i) After cutting, web sub elements and flange sub elements are respectively welded together to form web and flange rings. (ii) One web ring and one flange ring are placed in position on this station to form a frame assembly. (iii) The workstation/machine presses the web ring and flange ring together, facilitates adjustment and holds them in position. (iv) Tack welding is then carried out manually between the web ring and flange ring to form a frame.
B.	PURPOSE
	<p>The primary objective of this machine is the assembly of the web ring with flange ring to form T-frame of a Submarine Pressure hull. The workstation must ensure precise alignment and secure fitment prior to manual tack welding.</p>
C.	MDL JOB SPECIFICATIONS
	<p>The workstation must accommodate work pieces with the following specifications</p> <ul style="list-style-type: none"> (i) The work piece to be welded is a Steel ring with a T shape cross Section. (ii) Web ring with Flange ring of diameter from 6m to 8.5m. (iii) Thickness of the Web will vary from 12mm to 20mm (iv) Thickness of the Flange will vary from 30mm to 50mm (v) Material: High yield strength, quenched and tempered steel (HY80/ HY100/ 80HLES/ 100HLES/ AB3). (vi) Root gap of 2-3 mm will be in between joint of Web and Flange ring with bevel (weld edge preparation) of 25-60 degree either one side or both side of web ring with root face 0-2 mm (vii) Maximum weight of the web & Flange ring will not be more than 3MT
D.	FUNCTIONAL REQUIREMENTS & WORKING PRINCIPLE
	<ul style="list-style-type: none"> (i) The flange ring will be placed by help of an overhead crane on top of the table and centered by the hydraulic cylinders (ii) The web ring will be placed and centered in reference to the flange ring by maintaining the uniform root gap of 2-3 mm around the periphery of joint (iii) After final position is reached and both components are fixed, web and flange will be tack welded by manual welding (iv) Synchronous releasing of hydraulic cylinders for the removal of tacked Web with flange ring (T-frame) by overhead crane
E.	TECHNICAL DESCRIPTION (REQUIREMENT)
	<p>The workstation should mainly consist of the following components:</p> <ul style="list-style-type: none"> (i) Heavy duty radial fixture consisting of central hub (table) with 24 connecting multiple arms (fixtures) having arrangement of specialized clamping by means of hydraulic jacking system (Tailor-made Jig) integrated with the power pack to achieve and hold the precise axial and radial alignment throughout the fitment and tacking phase. The arms are required to be positioned at equal intervals to ensure uniform supports, accurate levelling and consistent clamping. The circumferential gap in between center of two adjacent arms should be between 1000-1200 mm @ 8.5m diameter. (ii) Housing should be design to accommodate work piece of different diameter from 6m to 8.5m with locking arrangement. (iii) The holding and locating arrangement for proper alignment of both web and flange ring prior to tack welding. Machined locating surfaces and guide elements to ensure correct positioning. Adequate clearance to be maintained to allow access for the fit-up and tack welding of Web with Flange. (iv) Each radial arm should have precision ground tracks and should also be equipped with manual adjustment mechanisms using a rack and pinion arrangement along with revolving handle for the manual movement of working head & carriage. This is required for the easy and precise accommodation of different diameters of the web and flange. Material of arm should be EN8 or equivalent. (v) Provision of Levelling arrangement to align the working head and carriage (vi) Each arm should be equipped with 04 hydraulic cylinders required for the following purpose for the best fit-up of web ring with flange ring:(Manually/Motorised) <ul style="list-style-type: none"> a. One cylinder to push web ring b. One cylinder to push flange ring c. One cylinder to hold web ring d. One cylinder to hold flange ring

	<p>These cylinders are configured to clamp the web and flange securely from appropriate directions to ensure uniform holding force and effective restraint against movement during fit-up and tack welding.</p> <p>The clamping force should be evenly distributed to avoid localized stress and distortion of the components. The thickness of the web and flange should be considered when designing the clamping force for each cylinder. The hydraulic cylinders are industrial duty type, suitable for continuous operation in a fabrication environment.</p> <p>(vii) To operate all the jacks synchronously, the station should consist of following:</p> <ol style="list-style-type: none"> a. Hydraulic tank of sufficient capacity along with the electric motor (motor of appropriate capacity) driven pump required for the massive force needed for the synchronized operation of all cylinders b. Chiller unit for the control of oil temperature. At any circumstances oil temperature should not exceed 50 degrees or as per international norms during operation. Alarm arrangement to be provided for the better control c. High pressure thermoplastic hydraulic hoses with manifold capacity of each hydraulic jacks should not be less than 10T. Hydraulic hoses should be tested with 700 bar pressure d. Hydraulic pump will be either of following make: Rexroth, Parker, Gemini, Hydac, Hylemann or Yuken <p>(viii) Power pack with electric motor-driven pump, hydraulic pipes (SS 304 or equivalent) with distributor, pressure relief valve, pressure gauge, oil level indicator, temperature monitoring provisions to ensure safe and reliable operation</p> <p>(ix) Structure should be sturdy enough to handle the job without vibration.</p> <p>(x) Standard industrial grade steel commonly used for the heavy-duty machines. Surface preparation and painting is mandatory.</p> <p>(xi) Operating panel should have:</p> <ol style="list-style-type: none"> a. Remote operation and synchronous & individual control of all hydraulic cylinders. b. Hydraulic oil temperature meter c. Alarm acknowledge/ reset system d. All electrical cables should be fire retardant <p>(xii) All the hoses and jacks must be supplied with valid test certificates</p>
F.	MDL Scope of Work
	(i) Welding equipment for tack welding
G.	Quality and Acceptance
	The overall machine performance and final acceptance shall be governed by:
	(i) Machine Tolerance-Positioning accuracy: +/- 0.2 mm
	(ii) Acceptance/Tolerance standards: +/- 0.5 mm
H.	Site Acceptance test (SAT) & Performance Guarantee
	The site acceptance test shall be conducted at the MDL facility. Final acceptance is contingent upon the successful completion of the following:
	(i) Satisfactory operation of each hydraulic cylinder as per the operating manual
	(ii) Synchronize operation of all hydraulic cylinders as per the operating manual
	(iii) Clamping Integrity: Holding capability of each hydraulic cylinder
	(iv) Accurate positioning of Web ring and Flange ring
	(v) Satisfactory performance of Hydraulic Power pack as per operating manual.

4.3. PROCURMENT ITEM 3: AUTOMATIC WELDING WORKSTATION 2(I)

A.	DESCRIPTION
	Design, Manufacturing, Supply, Installation and Commissioning of Specialized, Tailor-made workstation for automatic SAW welding of Web to Flange joint of Submarine Pressure Hull T-Frame Assembly.
B.	PURPOSE
	The primary objective of this machine is to perform automatic, high quality, continuous welding of the web ring with flange ring to form T-frame of a Submarine Pressure hull. The workstation must ensure compliances of welding parameters as per Welding Procedure Specifications (WPS), distortion free welding and meeting compliance to NDT & destructive testing as per applicable standards. It should achieve high deposition, low heat input (lower HAZ area) and excellent joint mechanical properties.
C.	MDL JOB SPECIFICATION
	<ul style="list-style-type: none"> (i) Thickness of the Web will vary from 12mm to 20mm (ii) Web height: 160mm to 240mm (iii) Thickness of the Flange will vary from 30mm to 50mm (iv) Flange Width: 90mm to 160mm (v) Frame diameter: 5m to 8.5m, Workshop layout is attached at Annex-A (vi) Frame weight: up to 3 MT (vii) Material: High yield strength, quenched and tempered steel (HY80/ HY100/ 80HLES/ 100HLES/ AB3) (viii) Root gap of 2-3 mm will be in between joint of web and flange ring with bevel (weld edge preparation) of 25-60 degree either one side or both side of web ring with root face 0-2 mm
D.	FUNCTIONAL REQUIREMENTS & WORKING PRINCIPLE
a)	<u>Welding procedure specification:</u> <ul style="list-style-type: none"> (i) Welding Process: Sub-merged Arc Welding (automatic). (ii) Welding speed: From 300 mm/min to 1000 mm/min or as per WPS. (iii) Simultaneous Welding from both sides of weld joint to be achieved at same location.
b)	<u>Frame loading and unloading arrangement:</u> <ul style="list-style-type: none"> (i) Loading & Unloading of Frame through hydraulic motor operated jack having capacity to hold the frame (up to 3 MT) for longer durations too. (ii) Frame will be loaded & unloaded from front side of the station along the axis of rotation. (iii) Frame will be placed on jack with the help of workshop overhead crane. (iv) Smooth automatic transfer of frame from jack to set of rollers for rotation. (v) The whole operation of loading and unloading of the Frame will be executed through PLC.
c)	<u>Set of Rollers</u> <ul style="list-style-type: none"> (i) Motor driven main rollers for rotation of frame must be design as per required welding speed (as per WPS). (ii) Set of rollers (hydraulically operated through PLC) on the station to control the rotation of the Frame by following: <ul style="list-style-type: none"> • Hold the Frame firmly • Rotate the Frame smoothly • Guide the Frame firmly • Frame Anti-drift • Deflection of the Web (iii) The idler roller system supports the weight of the frame and maintains circularity during rotation. Rollers contact both the top and bottom of the flange and both sides of the web, ensuring complete constraint of the frame. (iv) Material of roller: Due to rotation of job and probabilities of entrapment of spatters or welding flux material during welding, the material of the rollers should be made of durable material to avoid abrasion, wear & tear during operation. (v) System should have provision to operate all roller operation in sequential manner in auto/ manual mode through PLC via. HMI and Laptop. (vi) All rollers must provide smooth and jerk free rotation
d)	<u>Preheating, Inter-Pass and Post Heating Arrangement</u> <p>The aim of effective thermal management is to achieve the uniform desired temperature near the Welding of Web and Flange during Pre, Inter-pass and Post Heating.</p> <ul style="list-style-type: none"> (i) Station should be equipped with sufficient IR Heaters/ Induction Heaters of appropriate capacity, on flange and Web for maximum thermal management to achieve required temperature near the welding joint. (ii) Heaters should be contact less electrical IR / Induction type of reputed brand. Protection cover to be provided for individual heater element with reflector cover from inside to avoid heat loss. Positioning

	<p>of zone heaters on the job to be controlled in manual (Power Control) as well as auto mode through PLC.</p> <p>(iii) Sufficient nos. of Heating Zone with grouping of heaters to be positioned around the circularity of frame to reach the required temperature as per WPS in around one rotation.</p> <p>(iv) Uniform temp. should be maintaining throughout welding cycle near the welding area at flange and Web (maximum deviation of Web & Flange temp should be less than 5°C.</p> <p>(v) During the Welding process at no point of time, job temp. to exceed beyond 350°C except at welding point.</p> <p>(vi) Sufficient nos. of contact less temp. sensors (pyrometers/ rolling contact) to be installed in vicinity of each heater zone to monitor and control zone heaters through PLC for maintaining the web and flange temp.</p> <p>(vii) Separate two in nos. dedicated contact less temp. sensors one for Web and one for flange to be positioned prior to welding joint to monitor and record the pre- welding joint temperature.</p> <p>(viii) System should have interlock to allow the welding after reaching the joint temperature in predefined temperature range.</p> <p>(ix) There should be arrangement of changing the temperature range as per requirement.</p> <p>(x) Preheating, inter-pass and post heating temp. to be measured and recorded near the welding point.</p> <p>(xi) Calibrated contact less temp. sensors (pyrometers/ rolling contact) to be provided along with the calibration certificate.</p> <p>(xii) Station should have provision for recording (plotting on graph paper) of temperature (preheating, inter-pass and post heating) from start to end of the operation of nearby Welding Zone Pyrometers/ rolling contact sensors. Recorder input should be in sync to thermal sensor output to plot the temperature on graph. Graph to be plotted in time vs temperature.</p> <p>(xiii) System should have provision for heating and thermal management in auto and manual mode through PLC.</p>
e)	<p><u>SAW Welding Equipment</u></p> <p>(i) Type - AC/DC microprocessor controlled programmable digital IGBT full bridge inverter based with CC & CV capabilities</p> <p>(ii) 2 nos. (Left & Right) Multi wire welding system for simultaneous welding from both side</p> <p>(iii) Welding source to be integrated with wire feeder drive and PLC system</p> <p>(iv) Duty Cycle – AC 100% (1000A, 44V) DC 100% (1000A, 44V)</p> <p>(v) Output Voltage range – 20 to 44V</p> <p>(vi) Input Power Supply - AC 3 phase, 415 Volts ±10% 50 Hz ±2%</p> <p>(vii) Wire sizes – 1.6 mm to 4 mm</p> <p>(viii) Environment temp. range –10-45 °C under rugged condition</p> <p>(ix) Protection class –IP23S</p> <p>(x) Insulation class – H class</p> <p>(xi) Power source cooling – Forced Air</p> <p>(xii) X, Y & Z slide assembly to position the welding torch</p> <p>(xiii) Welding machine and its sensors must be of reputed make either of Miller, Lincoln Electric, ESAB, ADOR, Panasonic, Carl Cloos GmbH, Kaiyuan GmbH.</p> <p>(xiv) Equipment must be capable for achieving Full Penetration without root cleaning.</p> <p>(xv) The machine to be provided with control system centered on PLC and HMI unit for the programing function.</p> <p>(xvi) Duel Laser / Probe root and seam tracking system. The seam tracking system should continuously monitor the weld seam and adjust torch position automatically to maintain accurate weld alignment.</p> <p>(xvii) Suitable Fire retardant welding curtain (adjustable/ operable) to be provided all around the machine viewing boundaries.</p> <p>(xviii) Manual control panel to be positioned near to weld joint for welding torch alignment in manual/ auto mode (X, Y & Z direction) and localized fine tuning of welding parameters.</p>
f)	<p><u>Torch Cooling System</u></p> <p>(i) to provide cooling to the tip of both the torches(If Required).</p>
g)	<p><u>Wire Feed Mechanism:</u></p> <p>(i) Automatic twin wire feed with tandem wire arrangement and wire feeding speed up to 10 m/minutes.</p> <p>(ii) Automatic arc length control and wire feed speed mechanisms.</p> <p>(iii) Reversing system is desired to ensure proper arc striking.</p> <p>(iv) Wire feeding torches must have sturdy nozzle to have maximum endurance of welding.</p> <p>(v) Wire spool mounting assembly should handle wire spool weight up to 100 kg each.</p>
h)	<p><u>Flux Handling:</u></p> <p>(i) Flux feeding and recycling unit - Flux Recovery & recycling to be done through effective vacuum unit positioned ahead the welding torch.</p> <p>(ii) Flux hopper unit</p>

	<ul style="list-style-type: none"> (iii) Flux 3 stage dust filtration unit - Reclaimed flux to be passed through filter unit for removal of slag, metal & dust particles from the recycled flux. (iv) Flux preheating unit - Flux Pre-heating/drying system to have effective pre-drying unit (around 130°C) and active heating coils in hopper to remove moisture. (v) Automatic deposition of flux to be fed from the covered hopper mounted above the welding station with capacity of running for full welding of 02-03 Frames by gravity or with the aid of an additional system for feeding flux through LP air (with efficient moisture separator).
i)	<u>Fumes extraction system:</u> <ul style="list-style-type: none"> (i) Suitable fumes extractors to be provided. (ii) Localized vacuum suction hoods on both sides to be provided for eliminating the fumes from the job.
j)	<u>Earthing mechanism:</u> <ul style="list-style-type: none"> (i) Suitable Copper bush type/ wire brush type earthing mechanism (hydraulic/ pneumatic) to be arranged.
k)	<u>PLC Panel including Servo Drives and Hydraulics</u> <ul style="list-style-type: none"> (i) It should include advanced PLC which should be able to control all operations like Thermal management, Welding, Rotation of Frame and Loading and Unloading of Frames etc. (ii) Panel should be fully air conditioning and should have ingress protection of IP 54. (iii) Panel should have maintained humidity in the range of 50-60% at any point of time. Appropriate dehumidification system to be provided in the panel. (iv) Station should have provision for all control voltages used for controlling the station, no separate auxiliary supply will be provided. (v) Appropriate rating of Hydraulic motor and its drives to be used considering all Hydraulic operation. (vi) PLC should have logic to control and maintain the required temperature (90-200 °C) on welding joints. (vii) Reputed Electrical and Electronics Hardware to be used in PLC panel Obsolescence management of the same to be supported for a period of 10 years. (viii) PLC to communicate to Human Machine Interface (HMI) and Laptop (as redundant) which should be placed near the welding joint to control all operations of Station from single point. HMI should have provision to display all parameters like temperature, Rotation speed, Welding parameters etc. Separate data log and remote monitoring of the operational parameters. (ix) PLC logics should be capable enough to control zone heaters for linear rise of temperature with respect to time. (x) All IN and OUT cable control and power from the panel should be through suitable gland entry. No direct entry will be permissible. (xi) A laptop with all software, ladder logic and licensed Keys along with 2TB portable Hard disk to be hand over to MDL in accessible format post commissioning of Workstation. (xii) Panel should have Servo drives for controlled rotation of frame during the operation as per set value. Appropriate rating servo motor and its drive to be used as per design requirement. (xiii) Panel should also include VFD drive for Loading and Unloading of frame. (xiv) Provision to adjust various speed as per requirement. (xv) Servo motors of reputed brand such as (i) Siemens / (ii) Rexroth / (iii) Yasakawa / (iv) Bosch / (v) Mitsubishi / (vi) Yukon. (xvi) Safety alarm system to have smart sensors to monitor the all critical area and its parameters, like roller/ feed speed, temperature range, etc. in accordance with WPS
l)	<u>Control & Power Panel:</u> <ul style="list-style-type: none"> (i) Panel shall include the power switching device which takes logic feed from PLC and control the switching of all zone heaters as per design requirement. (ii) Panel should have sufficient cooling arrangement as per requirement. (iii) Adequate and appropriate Switching devices should be provided in panel to control each heating zone to maintain the temperature. (iv) Machine should have provision for auto and manual cut off of zone heaters through HMI. (v) Switching devices should have facilities for variable power output to control and maintain the temperature throughout the welding cycle. (vi) There should not be any increase in temperature beyond certain level (90-200 °C) as per requirement at the welding point throughout the operation. Increased in temperature after welding should be controlled automatically through input power adjustment to particular zone heaters. (vii) All IN and OUT control and power cables from the panel should be through suitable gland entry. No direct entry will be permissible.
E.	CIVIL STRUCTURES
	<ul style="list-style-type: none"> (i) Selection of Material for construction of the Station should enable sturdy and shock free operation.

	<ul style="list-style-type: none"> (ii) Surface preparation of material to be SA2.5 & Epoxy based painting with 250 micron DFT to be achieved. (iii) Max Installation Space: 18mx11mx12m (LxBxH). (iv) Height of primary platform for primary system storage, welding operator and cleaner intervention to be maintained at an even plain above ground at about 8m. (v) Height of rollers and job for manual intervention from the primary platform to be 1 to 1.5m. (vi) Secondary platform for flux feeder storage to be maintained at about 2.5 m above primary platform. (vii) Load bearing capacity of primary structure should be sufficient to handle 10 operators and load of all equipment & accessories (around 10 MT), 1st level platform (operator platform) more than 3 MT and flux feeder platform more than 1.5 MT. (viii) Certification of the complete structure to be obtained from certified structural engineer. (ix) Pipelines for hydraulics to manufactured from SS304 or equivalent material and painted according to the structural paint scheme. (x) Hoses and hydraulic jacks to be supplied should be resistant to high ambient temperature with valid test pressure certificate as per international standard. (xi) Operator walkway above the job clamping unit, to allow the operator to reach in his seating position. (xii) Operator seat near by the welding torch assembly unit. (xiii) Separate entry and exit ladder arrangement for both platforms to be provided for better ergonomics of operators.
F.	General
	<ul style="list-style-type: none"> (i) Station should have Electrical switch board to distribute the supply to all consumers like Servo drive for rotation, Thermal management and Loading & Unloading of Frames with appropriate switchgears and cabling of reputed make as per requirement. (ii) Should have voltage stabilizer of appropriate rating to cater any fluctuation in the input supply voltage. It should have facilities of both auto and manual control.
G.	HMI Interface (Human Machine Interaction)
	<ul style="list-style-type: none"> (i) Number of HMI Displays: 01 (ii) HMI – 15” LCD colored touch screen monitor) which should be placed near the welding joint to control all operations of Station from single point. HMI should have provision to display all parameters like temperature, Rotation speed, Welding parameters etc. Separate data log and remote monitoring of the operational parameters. (iii) HMI should be capable to do all operation like Heat management, Frame Rotation, Roller adjustment, Loading and unloading of frames all Hydraulic operations, Welding operation or any critical operation etc. (iv) HMI should also be capable to monitor zone and prior welding area temperature, rotational speed, Welding Speed, Welding parameters or any critical parameters. (v) HMI should display fault when the thresholds limit reached and have acknowledgement facility. (vi) HMI should have provision for manual cut off/ regulate the zone heaters. (vii) Rugged laptop with installed software (Permanent license) for program creation and redundancy for operation of Workstation in case of HMI failure. (viii) All software related to HMI and Laptop are to be provided in a Separate CD/ HDD.
H.	Site Acceptance Test (SAT) & Performance Guarantee
	<p>The site acceptance test shall be conducted at the MDL facility. Final acceptance is contingent upon the successful completion of the following:</p> <ul style="list-style-type: none"> (i) Successful qualification of welding station as per WPS and applicable standards is in the scope of supply of Vendor. (ii) Achievement of machine and welding parameters as per WPS during and after welding of a Dummy T-Frame made from actual construction steel. (iii) Achievement of uniform heating of the frame during Pre-heating, during welding, interpass, Post heating cycles on the Dummy T-Frame made from actual construction steel. (iv) Achievement of successful NDT & Destructive Testing results in weldments of Dummy T-Frame as per standards. (v) Loading and Unloading Tests: Loading and Unloading will be checked on the dummy frame for at least 25 cycles. (vi) Functional and Capacity testing: Sequence of operation through HMI/ Laptop from start to end i.e., from loading of frame to final welding and unloading of frame as per WPS and reference documents. (vii) Smooth running of HMI control system and successful software integration. (viii) Loading and unloading software in PLC.

	(ix) Station will be deemed qualified for commissioning only on successful completion of all Welding inspections, viz visual, NDT as well as Destructive Testing.
--	---

4.4. PROCURMENT ITEM 4: ROTATING WORKSTATION - STATION NO.8(I)

A.	DESCRIPTION
	Design, Manufacturing, Supply, Installation, Trial & Commissioning of Rotating Workstation (Quantity- 02 nos.) for alignment of T-Frames and fitment with Shell Plates for formation of Subsections/ Subunits of Pressure Hull of Submarine.
B.	PURPOSE
	The primary objective of this workstation is the alignment & assembly of T-Frames with Shell Plates to manufacture Subsections/ Subunits of Pressure Hull of Submarine. The workstation must ensure precise alignment and secure fitment prior to tack welding of Frames with Shell Plates. Further, inner side (root side) Shell plate to Shell plate butt welding (L-Seam) also to be carried out on the Rotating Workstations.
C.	MDL JOB SPECIFICATION
	<ul style="list-style-type: none"> (i) Rotating Workstations for the assembly of Frame with Shell Plates of diameter from 8m to 8.5m. (ii) Thickness of the Web will vary from 12mm to 20mm (iii) Web height: 160mm to 240mm (iv) Thickness of the Flange will vary from 30mm to 50mm (v) Flange Width: 90mm to 160 mm (vi) Frame diameter: 7.9m to 8.4m (vii) Frame weight: up to 3 MT (viii) Number of Frames: 3 to 6 (ix) Frame Spacing: Approx. 550mm (x) Shape of Subsection: Cylindrical (xi) Sub-section Diameter: 8m to 8.5m (Layout is attached at Annex-B) (xii) Each Rotating workstation to have 02 removable modules/ fixture for holding Cylindrical Subsection (xiii) Subsection Weight: up to 50MT (xiv) Material: High yield strength, quenched and tempered steel (HY80/ HY100/ 80HLES/ 100HLES/ AB3) (xv) Root gap of 2-3 mm will be in between joint of Web and Shell plates with bevel (weld edge preparation) of 25-60 degree either one side or both side of web ring with root face 0-2 mm <p>*Precise dimensions will be provided at the time of bidding after signing of NDA</p>
D.	FUNCTIONAL REQUIREMENTS & WORKING PRINCIPLE
	<ul style="list-style-type: none"> (i) Particular module will be loaded on Workstation with the help of Workshop's EOT crane. (ii) The Frame rings & Shell plates will be loaded with the help of Workshop's EOT crane. (iii) The Frame will be positioned and aligned with the help of dial gauge mounted on Vertical column. All Frames will be aligned on fixtures in Vertical axis. (iv) The Shell plates will be placed on fixtures and centered in reference to the Frame ring by maintaining the uniform root gap of 2-3mm around the periphery of joint. Necessary arrangement to be provided for holding shell plates with a uniform root gap of 2-3 mm between Shell & Web of the Frame. (v) Shell plate to Shell plate butt welding (L-Seam) is to be carried out on the Rotating Workstations from inside. Post completion of the required L-Seam welding from inside, Web and Shell will be tack welded by manual welding. (Under MDL scope)
E.	TECHNICAL DESCRIPTION (REQUIREMENT)
	<p>The workstation should mainly consist of the following components:</p> <ul style="list-style-type: none"> (i) Rotating base equipped with heavy duty motor and guiding & supporting roller for handling & smoothly rotating Subsection of 50 MT holding capacity, mounted on Module/ fixture. (ii) Top surface of the platform to be machined and maintained the Ra value not more than 1.6, Diameter of the rotating base of the platform around 6m. Thickness of the base of the rotating platform should be greater than 60 mm. (iii) Suitable bolting arrangement (min 96 nos.) to hold the rotating base with module. Hole and bolt must be slide fitted to ensure zero movement between rotating base and removable module once fitted.

	<ul style="list-style-type: none"> (iv) Each Rotating workstation to have 02 removable Modules/ fixtures for holding Cylindrical Subsections. Each module should have 2 working platforms equipped with access ladders and safety railing for safe movement/ working. Suitable detachable stand for welders for tack welding. (v) Suitable lifting arrangement for module to be provided without interfering with job. (vi) Speed (clockwise & anticlockwise) of rotary platform: 0.25 revolution per minute to 02 revolutions per minute. Motor to be controlled by VFD and it should be provided in a control panel. (vii) Heavy duty suitable gear box to cater for smooth rotation of the platform/ module along with the Subsection (approx. weight 50MT) (viii) Module consists of 16 numbers of vertical link plates for holding Frames along with Shell plates. The module shall have arrangement to hold 3-6 T-Frames at equal distance. Vertical & Horizontal Pinching arrangement as well as locking to be provided to align and lock the T-frames. (ix) Shell plate support brackets along with 16 nos. of Screw jacks of each 5ton capacity for the alignment of shell with the frames to be provided. (x) Vertical column with arrangement of dial gauge to check circularity of the frames and optical device (Dumpy level) to check horizontality of the web of frame as well as vertical slide way on column to check the alignment & perpendicularity of all the Frames w.r.t. Platform. (xi) Structure should be sturdy enough to handle the job without vibration. (xii) Standard industrial grade steel commonly used for the heavy-duty machines to be used. (xiii) Portable Operating control panel along with remote wired pendant with 20m cable length at least to be installed adjacent to the Workstation.
F.	CIVIL STRUCTURES
	Foundation for Rotating Base and foundation of guide rollers in scope of supplier/vendor.
G.	Quality and Acceptance
	The overall machine performance and final acceptance shall be governed by: <ul style="list-style-type: none"> (i) Levelling Tolerance of rotating base +/-0.1mm on diameter (ii) General Acceptance/Tolerance standards- +/-0.5 mm
H.	Site Acceptance test (SAT) & Performance Guarantee
	The site acceptance test shall be conducted at the MDL facility. Final acceptance is contingent upon the successful completion of the following <ul style="list-style-type: none"> (i) Flatness check of rotating base after installation with laser optical device +/-0.1mm (ii) Rotating Speed at various RPM at full load (iii) Checks for smooth operation (iv) Checks of Dimensional accuracy and run out of modules (v) All final commissioning checks will be performed by manufacturing of Qualification Sub- Section (in MDL scope)

4.5. PROCURMENT ITEM 5: AUTOMATIC WELDING WORKSTATION - STATION 3(I)

A.	DESCRIPTION
	Design, Manufacturing, Supply, Installation and Commissioning of Specialized, Tailor-made workstation for automatic SAW welding of Web (T-Frame) to Shell joint of Submarine Pressure Hull.
B.	PURPOSE
	The primary objective of this machine is to perform automatic, high quality, continuous welding of the web rings with shell for finalization of joint of T-frames with Submarine Pressure Hull Sub-sections. The workstation must ensure compliances of welding parameters as per Welding Procedure Specifications (WPS), distortion free welding and meeting compliance to NDT & destructive testing as per applicable standards. It should achieve high deposition, low heat input (lower HAZ area), excellent joint mechanical properties.
C.	MDL JOB SPECIFICATION
	<ul style="list-style-type: none"> (i) Thickness of the Web will vary from 12mm to 20mm (ii) Thickness of the Shell Plate will vary from 30mm to 50mm (iii) Web height: 160mm to 240mm (iv) Sub-section Width: 1500mm to 4000 mm (v) Sub-section Diameter: 5m to 8.5m, Layout is attached at Annex-B (vi) Subsection Weight: up to 50MT

	<ul style="list-style-type: none"> (vii) Material: High yield strength, quenched and tempered steel (HY80/ HY100/ 80HLES/ 100HLES/ AB3). (viii) Root gap of 2-3 mm will be in between joint of Web and Shell with bevel (weld edge preparation) of 25-60 degree either one side or both side of web ring with root face 0-2 mm (ix) Shape of Subsection: Cylindrical as well as Conical (approx. 7-10 degree)
D.	FUNCTIONAL REQUIREMENTS & WORKING PRINCIPLE
a)	<u>Welding procedure specification:</u> <ul style="list-style-type: none"> (i) Welding Process: Sub-merged Arc Welding (automatic). (ii) Welding speed: From 300 mm/min to 1000mm/min or as per WPS. (iii) Simultaneous Welding from both sides of weld joint to be achieved at same location.
b)	<u>Sub Section loading and unloading arrangement:</u> <ul style="list-style-type: none"> (i) Loading & Unloading of Sub-section through workshop EOT Crane on the support/ driving rollers of the working station. (ii) Sub-section will be loaded & unloaded from front side of the station along/across the axis of rotation. (iii) Alignment of the Sub-section and adjustment of variable diameter for the specified range will be executed through PLC.
c)	<u>Set of Rollers or Turning Device (Alternate option for drive rollers):</u> <ul style="list-style-type: none"> (i) Motor driven main rollers/ Turning Device with adjustable clamp for rotation of Sub-section must be design as per required welding speed (as per WPS). (ii) For Roller driven system: <ul style="list-style-type: none"> a. Set of rollers (hydraulically operated through PLC) on the station to control the rotation of the Sub-section by following: <ul style="list-style-type: none"> b. Driving rollers are servo motor–driven for controlled rotation of the shell during welding c. Idler roller to hold the Sub-section firmly d. Rotate & guide the Sub-section smoothly e. Servo-drive system for anti-drifting f. Sensors to continuously monitor the axial position of the shell and provide feedback to the anti-drift drive system to maintain the Sub-section in the correct axial position throughout the welding cycle. (iii) For Turning Device system (Optional) (hydraulically operated through PLC): <ul style="list-style-type: none"> a. The Turning device consisting of vertical turn table for horizontal rotation of cylindrical as well as conical Sub-section b. Turn table to rotate the Sub-section along with 2 set of idler roller to support c. Turn table radial adjustable arms (having synchronized movement) to accommodate Subsection (5m-8.5m) d. Turning device to cater Subsection having weight up to 50MT e. Rotate & guide the Sub-section smoothly (iv) Material of roller: Due to rotation of job and probabilities of entrapment of spatters or welding flux material during welding, the material of the rollers should be made of durable material to avoid abrasion, wear & tear during operation. (v) System should have provision for positioning of all roller in auto/ manual mode through PLC. (vi) All rollers must provide smooth and jerk free rotation.
d)	<u>Preheating, Inter-Pass and Post Heating Arrangement</u> The aim of effective thermal management is to achieve the uniform desired temperature near the Welding of Web and Flange during Pre, Inter-pass and Post Heating. <ul style="list-style-type: none"> (i) Station should have equipped with sufficient IR Heaters/ Induction Heaters of appropriate capacity, on flange and Web for maximum thermal management to achieve required temperature near the welding joint. (ii) Heaters should be contact less electrical IR / Induction type of reputed brand. Protection cover to be provided for individual heater element with reflector cover from inside to avoid heat loss. Positioning of zone heaters on the job to be controlled in manual (Power Control) as well as auto mode through PLC. (iii) Sufficient nos. of Heating Zone with grouping of heaters to be positioned around the circularity of frame to reach the required temperature as per WPS in around one rotation. (iv) Uniform temp. should be maintaining throughout welding cycle near the welding area at flange and Web (maximum deviation of Web & Flange temp should be less than 5°C).

	<ul style="list-style-type: none"> (v) During the Welding process at no point of time, job temp. to exceed beyond 350°C except at welding point. (vi) Sufficient nos. of contact less temp. sensors (pyrometers/ rolling contact) to be installed in vicinity of each heater zone to monitor and control zone heaters through PLC for maintaining the web and flange temp. (vii) Separate two in nos. dedicated contact less temp. sensors one for Web and one for flange to be positioned prior to welding joint to monitor and record the pre- welding joint temperature. (viii) System should have interlock to allow the welding after reaching the joint temperature in predefined temperature range. (ix) There should be arrangement of changing the temperature range as per requirement. (x) Preheating, inter-pass and post heating temp. to be measured and recorded near the welding point. (xi) Calibrated contact less temp. sensors (pyrometers/ rolling contact) to be provided along with the calibration certificate. (xii) Station should have provision for recording (plotting on the graph paper) of temperature (preheating, inter-pass and post heating) from start to end of the operation of nearby Welding Zone Pyrometers/ rolling contact sensors. Recorder input should be in sync to thermal sensor output to plot the temperature on graph. Graph to be plotted in time vs temperature. (xiii) System should have provision for heating and thermal management in auto and manual mode through PLC.
e)	<p><u>SAW Welding Equipment</u></p> <ul style="list-style-type: none"> (i) Type - AC/DC microprocessor controlled programmable digital IGBT full bridge inverter based with CC & CV capabilities (ii) 2 nos. (Left & Right) Multi wire welding system for simultaneous welding from both side (iii) Welding source to be integrated with wire feeder drive and PLC system (iv) Duty Cycle – AC 100% (1000A, 44V) (v) DC 100% (1000A, 44V) (vi) Output Voltage range – 20 to 44 V (vii) Input Power Supply - AC 3 phase, 415 Volts $\pm 10\%$ 50 Hz $\pm 2\%$ (viii) Wire sizes range – 1.6 mm to 4 mm (ix) Environment temp. range –10-45 °C under rugged condition (x) Protection class –IP23S (xi) Insulation class – H class (xii) Power source cooling – Forced Air (xiii) X, Y & Z slide assembly to position the welding torch (xiv) Welding machine and its sensors must be of reputed make either of Miller, Lincoln Electric, ESAB, ADOR, Panasonic, Carl Cloos GmbH, Kaiyuan GmbH. (xv) Equipment must be capable for achieving Full Penetration without root cleaning. (xvi) The machine to be provided with control system centered on PLC and HMI unit for the programing function. (xvii) Duel Laser / Probe root and seam tracking system. The seam tracking system should continuously monitor the weld seam and adjust torch position automatically to maintain accurate weld alignment. (xviii) Suitable Fire retardant welding curtain (adjustable/ operable) to be provided all around the machine viewing boundaries. (xix) Manual control panel to be positioned near to weld joint for welding torch alignment in manual/ auto mode (X,Y & Z direction) and localized fine tuning of welding parameters.
f)	<p><u>Torch Cooling System</u></p> <ul style="list-style-type: none"> (i) To provide cooling to the tip of both the torches (if required).
g)	<p><u>Wire Feed Mechanism:</u></p> <ul style="list-style-type: none"> (i) Automatic twin wire feed with tandem wire arrangement and wire feeding speed up to 10 m/minutes (ii) Automatic arc length control and wire feed speed mechanisms. (iii) Reversing system is desired to ensure proper arc striking. (iv) Wire feeding torches must have sturdy nozzle to have minimum endurance of 200 hrs of welding. (v) Wire spool mounting assembly should handle wire spool weight up to 100 kg each.
h)	<p><u>Flux Handling:</u></p> <ul style="list-style-type: none"> (i) Flux feeding and recycling unit - Flux feeding, recovery & recycling to be done through effective vacuum unit positioned ahead the welding torch. (ii) Flux hopper unit (iii) Flux 3 stage dust filtration unit - Reclaimed flux to be passed through filter unit for removal of slag, metal & dust particles from the recycled flux.

	<ul style="list-style-type: none"> (iv) Flux preheating unit - Flux Pre-heating/drying system to have effective pre-drying unit (approx. 130 °C) and active heating coils in hopper to remove moisture. (v) Automatic deposition of flux to be fed from the covered hopper mounted above the welding station with capacity of running for full welding of 02-03 Frames by gravity or with the aid of an additional system for feeding flux through LP air (with efficient moisture separator).
i)	<u>Fumes extraction system:</u> <ul style="list-style-type: none"> (i) Suitable fumes extractor (ii) Localized vacuum suction hoods on both sides to be provided for eliminating the fumes from the job.
j)	<u>Earthing mechanism:</u> <ul style="list-style-type: none"> (i) Suitable Copper bush type/ wire brush type earthing mechanism (hydraulic/ pneumatic) to be arranged.
k)	<u>PLC Panel including Servo Drives and Hydraulics</u> <ul style="list-style-type: none"> (i) It should include advanced PLC which should be able to control all operations like Thermal management, Welding, Rotation of Frame and Loading and Unloading of Frames etc. (ii) Panel should be fully air conditioning and should have ingress protection of IP 54. (iii) Panel should have maintained humidity in the range of 50-60% at any point of time. Appropriate dehumidification system to be provided in the panel. (iv) Station should have provision for all control voltages used for controlling the station, no separate auxiliary supply will be provided. (v) Appropriate rating of Hydraulic motor and its drives to be used considering all Hydraulic operation. (vi) PLC should have logic to control and maintain the required temperature (90-200 °C) on welding joints. (vii) Reputed Electrical and Electronics Hardware to be used in PLC panel Obsolescence management of the same to be supported for a period of 10 years. (viii) PLC to communicate to Human Machine Interface (HMI) and Laptop (as redundant) which should be placed near the welding joint to control all operations of Station from single point. HMI should have provision to display all parameters like temperature, Rotation speed, Welding parameters etc. Separate data log and remote monitoring of the operational parameters. (ix) PLC logics should be capable enough to control zone heaters for linear rise of temperature with respect to time. (x) All IN and OUT cable control and power from the panel should be through suitable gland entry. No direct entry will be permissible. (xi) A laptop with all software, ladder logic and licensed Keys along with 2TB portable Hard disk to be hand over to MDL in accessible format post commissioning of Workstation. (xii) Panel should have Servo drives for controlled rotation of frame during the operation as per set value. Appropriate rating servo motor and its drive to be used as per design requirement. (xiii) Provision to adjust various speed as per requirement. (xiv) Servo motors of reputed brand such as (i) Siemens / (ii) Rexorth / (iii) Yasakawa / (iv) Bosch / (v) Mitsubishi / (vi) Yukon. (xv) Safety alarm system to have smart sensors to monitor the all critical area and its parameters, like roller/ feed speed, temperature range, etc. in accordance with WPS
l)	<u>Control & Power Panel:</u> <ul style="list-style-type: none"> (i) Panel shall include the power switching device which takes logic feed from PLC and control the switching of all zone heaters as per design requirement. (ii) Panel should have sufficient cooling arrangement as per requirement. (iii) Adequate and appropriate Switching devices should be provided in panel to control each heating zone to maintain the temperature. (iv) Machine should have provision for auto and manual cut off of zone heaters through HMI. (v) Switching devices should have facilities for variable power output to control and maintain the temperature throughout the welding cycle. (vi) There should not be any increase in temperature beyond certain level (90-200 °C) as per requirement at the welding point throughout the operation. Increased in temperature after welding should be controlled automatically through input power adjustment to particular zone heaters. (vii) All IN and OUT control and power cables from the panel should be through suitable gland entry. No direct entry will be permissible.
E.	CIVIL STRUCTURES
	<ul style="list-style-type: none"> (i) Selection of Material for construction of the Station should enable sturdy and shock free operation.

	<ul style="list-style-type: none"> (ii) Surface preparation of material to be SA2.5 & Epoxy based painting with 250 micron DFT to be achieved. (iii) Max Installation Space: As per layout (iv) Operator platform to be provided along with the boom near welding torch. (v) Load bearing capacity of platform should be sufficient to handle 10 operators and load of all equipment & accessories (around 10 MT). (vi) Certification of the complete structure to be obtained from certified structural engineer. (vii) Pipelines for hydraulics to manufactured from SS304 or equivalent material and painted according to the structural paint scheme. (viii) Hoses and hydraulic jacks to be supplied should be resistant to high ambient temperature with valid test pressure certificate as per international standard. (ix) Operator seat near by the welding torch assembly unit. (x) Entry / exit ladder arrangement for platform to be provided for better ergonomics of operators.
F.	General
	<ul style="list-style-type: none"> (i) Station should have Electrical switch board to distribute the supply to all consumers like Servo drive for rotation, Thermal management and Loading and Unloading of Frames with appropriate switchgears and cabling of reputed make as per requirement. (ii) Should have voltage stabilizer of appropriate rating to cater any fluctuation in the input supply voltage. It should have facilities of both auto and manual control mode.
G.	HMI Interface (Human Machine Interaction)
	<ul style="list-style-type: none"> (i) Number of HMI Displays: 01 (ii) HMI – 15” LCD colored touch screen monitor) which should be placed near the welding joint to control all operations of Station from single point. HMI should have provision to display all parameters like temperature, Rotation speed, Welding parameters etc. Separate data log and remote monitoring of the operational parameters. (iii) HMI should be capable to do all operation like Heat management, Frame Rotation, Roller adjustment, Loading and unloading of frames all Hydraulic operations, Welding operation or any critical operation etc. (iv) HMI should also be capable to monitor zone and prior welding area temperature, rotational speed, Welding Speed, Welding parameters or any critical parameters. (v) HMI should display fault when the thresholds limit reached and have acknowledgement facility. (vi) HMI should have provision for manual cut off/ regulate the zone heaters. (vii) Rugged laptop with installed software (Permanent license) for program creation and redundancy for operation of Workstation in case of HMI failure. (viii) All software related to HMI and Laptop are to be provided in a Separate CD/ HDD.
H.	Site Acceptance Test (SAT) & Performance Guarantee
	<p>The site acceptance test shall be conducted at the MDL facility. Final acceptance is contingent upon the successful completion of the following:</p> <ul style="list-style-type: none"> (i) Successful qualification of welding station as per WPS and applicable standards is in the scope of supply of Vendor. (ii) Achievement of machine and welding parameters as per WPS during and after welding of a Dummy Sub-section (with T-Frame) made from actual construction steel. (iii) Achievement of uniform heating of the frame during Pre-heating, during welding, interpass, Post heating cycles on the Dummy Sub-section made from actual construction steel. (iv) Achievement of successful NDT & Destructive Testing results in weldments of Dummy Sub-section as per standards. (v) Loading and Unloading Tests: Loading and Unloading will be checked on the dummy frame for at least 10 cycles. (vi) Functional and Capacity testing: Sequence of operation through HMI/ Laptop from start to end i.e., from loading of frame to final welding and unloading of frame as per WPS and reference documents. (vii) Smooth running of HMI control system and successful software integration. (viii) Loading and unloading software in PLC. (x) Station will be deemed qualified for commissioning only on successful completion of all Welding inspections, viz visual, NDT as well as Destructive Testing.

4.6. PROCURMENT ITEM 6: AUTOMATIC WELDING WORKSTATION - STATION 4(I)&5(I)

A.	DESCRIPTION
-----------	--------------------

	Design, Manufacturing, Supply, Installation and Commissioning of Specialized, Tailor-made workstation for automatic SAW welding of butt joints of shell to shell (L-Seam) for manufacturing of Sub-sections at Station-5(I), automatic SAW welding of butt joints of Sub-section with Sub-section (C-Seam) at Station-4(I) &5(I) along with Bevel edge machining of Shell plates for Butt joint preparation for Submarine Pressure Hull.
B.	PURPOSE
	<p>Station-4(I): The primary objective of this Workstation is to perform automatic, high quality, continuous automatic SAW welding of butt joints of Sub-section with Sub-section (C-Seam from inside) of Submarine Pressure Hull. The workstation must ensure compliances of welding parameters as per Welding Procedure Specifications (WPS), distortion free welding and meeting compliance to NDT & destructive testing as per applicable standards. It should achieve high deposition, low heat input (lower HAZ area), excellent joint mechanical properties.</p> <p>Station-5(I): The primary objective of this Workstation is to perform automatic, high quality, continuous welding of the butt joints of shell plate with shell plate (L-Seam from outside) and to perform automatic, high quality, continuous automatic SAW welding of butt joints of Sub-section with Sub-section (C-Seam) from outside of the Submarine Pressure Hull. The workstation must ensure compliances of welding parameters as per Welding Procedure Specifications (WPS), distortion free welding and meeting compliance to NDT & destructive testing as per applicable standards. It should achieve high deposition, low heat input (lower HAZ area), excellent joint mechanical properties.</p> <p>Also the Workstation is to be enabled for double bevel edge (X) preparation by machining of Shell edge for Butt joint (C-Seam) for Submarine Pressure Hull. A separate working boom to be attached with the workstation for machining/ beveling to provide smooth edges from inside and outside of Shell plates.</p>
C.	MDL JOB SPECIFICATION
	<ul style="list-style-type: none"> (i) Thickness of the Shell Plate will vary from 30mm to 50mm (ii) Material: High yield strength, quenched and tempered steel (HY80/ HY100/ 80HLES/ 100HLES/ AB3). (iii) Root gap& bevel configuration will be maintained as per WPS. (iv) Sub-section Length: 1500mm to 4000 mm (v) Sub-section Diameter: 6m to 11m (vi) Subsection Weight: up to 50MT (vii) Shape of Subsection/ Section: Cylindrical as well as Conical (approx. 7-10 degree) (viii) Section Length: up to 20,000 mm (ix) Section Diameter: 6m to 11m (x) Section weight: approx. 250 MT <p>This Workstation is to be installed at New Alcock Yard Workshop at MDL, which is under construction. Layout of the same is attached at Annex-C.</p>
D.	FUNCTIONAL REQUIREMENTS & WORKING PRINCIPLE
A.	<p><u>Welding procedure specification:</u></p> <ul style="list-style-type: none"> (i) Welding Process: Sub-merged Arc Welding (automatic). (ii) Welding speed: From 300 mm/min to 1000 mm/min or as per WPS. (iii) One welding head moving along the axis of sub-section and tracking the seam for welding of L-Seam of Sub-section from outside of the joint. (iv) Simultaneous Welding from two sides diametrically opposite to each other is required for C-Seam welding, one head from inside & another head from outside (Same head used for L-Seam) wherein the Section assembly will be rotated with constant synchronized speed.
B.	<p><u>Sub Section loading and unloading arrangement:</u></p> <ul style="list-style-type: none"> (i) Loading & Unloading of Sub-section(s)/ Section through workshop EOT Crane on the support/ driving rollers of the Workstation. (ii) Sub-section(s)/ Section will be loaded & unloaded from front side of the station along/across the axis of rotation. (iii) Alignment of the Sub-section(s)/ Section with hydraulic jacks and adjustment of variable diameter for the specified range will be executed through PLC.
C.	<p><u>Set of Rollers</u></p> <ul style="list-style-type: none"> (i) Sufficient sets of rollers to cater for Section length up to 20,000 mm (ii) Motor driven main set of rollers for rotation of Sub-section(s)/ Section must be design as per required welding speed (as per WPS). (iii) Set of rollers (hydraulically operated through PLC) on the station to control the rotation of the Sub-section(s)/ Section by following: <ul style="list-style-type: none"> a) Set of drive rollers are servo motor–driven for controlled rotation of the Sub-section(s)/ Section during welding

	<ul style="list-style-type: none"> b) Set of idler rollers to hold the Sub-section(s)/ Section firmly c) Rotate & guide the Sub-section(s)/ Section smoothly d) Guide the Sub-section(s)/ Section firmly e) Servo-driven system for anti-drift (iv) Sensors to continuously monitor the axial position of the Sub-section(s)/ Section and provide feedback to the anti-creep drive system to maintain the Sub-section(s)/ Section in the correct axial position throughout the welding cycle. (v) Material of roller: Due to rotation of job and probabilities of entrapment of spatters or welding flux material during welding, the material of the rollers should be made of durable material to avoid abrasion, wear & tear during operation. (vi) System should have provision for positioning of all set of rollers in auto/ manual mode through PLC. (vii) All set of rollers must provide smooth and jerk free rotation.
D.	<p><u>Preheating, Inter-Pass and Post Heating Arrangement</u></p> <p>The aim of effective thermal management is to achieve the uniform desired temperature near the Welding of L-seam & C-Seam during Pre heating, Inter-pass and Post Heating.</p> <ul style="list-style-type: none"> (i) Station should be equipped with sufficient IR Heaters/ Induction Heaters of appropriate capacity, on Sub-section(s)/ Section for maximum thermal management to achieve required temperature near the welding joint. (ii) Heaters should be contact-less electrical IR / Induction type of reputed brand. Protection cover to be provided for individual heater element with reflector cover from inside to avoid heat loss. Positioning of zone heaters on the job to be controlled in manual as well as auto mode through PLC. (iii) Sufficient nos. of Heating Zone with grouping of heaters to be positioned around the circularity of Sub-section(s)/ Section both inside & outside to reach the required stable temperature as per WPS in around one rotation for C-seam welding. (iv) Sufficient nos. of heaters to reach the required stable temperature as per WPS in shortest possible of time (approx. 1 hr) for L-seam welding. (v) Uniform temp should be maintained throughout welding cycle near the welding area. Maximum deviation should be less than 5°C. (vi) During the Welding process at no point of time, job temp to exceed beyond 350°C except at welding point. (vii) Sufficient nos. of contact less temp. sensors (pyrometers/ rolling contact) to be installed in vicinity of each heater zone to monitor and control zone heaters through PLC for maintaining the Sub-section(s)/ Section temperature. (viii) For C-Seam: Separate four in nos. dedicated contact less temp. sensors to be positioned (top & bottom) prior to welding joint to monitor and record the pre- welding joint temperature. (ix) For L-Seam: sufficient numbers of dedicated contact less temp. sensors to be positioned along the welding joint to monitor and record the pre/ inter pass/ post welding joint temperature. (x) System should have interlock to allow the welding after reaching the joint temperature in predefined temperature range (90-200°C). (xi) There should be arrangement of changing the temperature range as per requirement. (xii) Preheating, inter-pass and post heating temp. to be measured and recorded near the welding points i.e. top & bottom. (xiii) Calibrated contact less temp. sensors (pyrometers/ rolling contact) to be provided along with the calibration certificate. (xiv) Station should have provision for recording (plotting on the graph paper) of temperature (preheating, inter-pass and post heating) from start to end of the operation. Recorder input should be in sync to thermal sensor output to plot the temperature on graph. Graph to be plotted in time vs temperature. (xv) System should have provision for heating and thermal management in auto and manual mode through PLC.
E.	<p><u>SAW Welding Equipment</u></p> <ul style="list-style-type: none"> (i) Type - AC/DC microprocessor controlled programmable digital IGBT full bridge inverter based with CC & CV capabilities (ii) 2 nos. (top & bottom) Multi wire welding system for simultaneous welding from inside & outside of the C-seam. (iii) One Multi wire welding system for welding of L-seam of Station-5(I) is to move on a suitable mechanism along the L-seam joint of the Subsection. (iv) Welding source to be integrated with wire feeder drive and PLC system (v) Duty Cycle – AC 100% (1000A, 44V)

	<p style="text-align: center;">DC 100% (1000A, 44V)</p> <ul style="list-style-type: none"> (vi) Output Voltage range – 20 to 44V (vii) Input Power Supply - AC 3 phase, 415 Volts $\pm 10\%$ 50 Hz $\pm 2\%$ (viii) Wire sizes range – 1.6 mm to 4 mm (ix) Environment temp. range - 10-45 °C under rugged condition (x) Protection class –IP23S (xi) Insulation class – H class (xii) Power source cooling – Forced Air (xiii) X, Y & Z slide assembly to position the welding torch (xiv) Welding machine and its sensors must be of reputed make either of Miller, Lincoln Electric, ESAB, ADOR, Panasonic, Carl Cloos GmbH, Kaiyuan GmbH. (xv) Equipment must be capable for achieving Full Penetration without root cleaning. (xvi) The machine to be provided with control system centered on PLC and HMI unit for the programming function. (xvii) Laser / Probe root and seam tracking system. The seam tracking system should continuously monitor the weld seam and adjust torch position automatically to maintain accurate weld alignment. (xviii) Suitable Fire retardant welding curtain (adjustable/ operable) to be provided all around the machine viewing boundaries. (xix) Manual control panel to be positioned near to weld joint for welding torch alignment in manual/ auto mode (X, Y & Z direction) and localized fine tuning of welding parameters.
F.	<p><u>Torch Cooling System</u></p> <ul style="list-style-type: none"> (i) To provide cooling to the tip of both the torches (if required).
G.	<p><u>Wire Feed Mechanism:</u></p> <ul style="list-style-type: none"> (i) Automatic twin wire feed with tandem wire arrangement and wire feeding speed up to 5m/minutes (ii) Automatic arc length control and wire feed speed mechanisms. (iii) Reversing system is desired to ensure proper arc striking. (iv) Wire feeding torches must have sturdy nozzle to have minimum endurance of 200 hrs of welding. (v) Wire spool mounting assembly should handle wire spool weight up to 100 kg each.
H.	<p><u>Flux Handling - Two sets, one each for Station 4(D)&5(I):</u></p> <ul style="list-style-type: none"> (i) Flux feeding and recycling unit - Flux Recovery & recycling to be done through effective vacuum unit positioned ahead of the welding torch. (ii) Flux hopper unit (iii) Flux 3 stage dust filtration unit - Reclaimed flux to be passed through filter unit for removal of slag, metal & dust particles from the recycled flux. (iv) Flux preheating unit - Flux Pre-heating/drying system to have effective pre-drying unit (approx. 130 °C) and active heating coils in hopper to remove moisture. (v) Automatically the deposition of flux to be fed from the covered hopper mounted above the welding station with capacity of running for full welding of C-seam by gravity or with the aid of an additional system for feeding flux through LP air (with efficient moisture separator).
I.	<p><u>Fumes extraction system:</u></p> <ul style="list-style-type: none"> (i) Suitable fumes extractor (ii) Localized vacuum suction hoods on both sides to be provided for eliminating the fumes from the job.
J.	<p><u>Earthing mechanism:</u></p> <ul style="list-style-type: none"> (i) Suitable Copper bush type/ wire brush type earthing mechanism (hydraulic/ pneumatic) to be arranged.
K.	<p><u>PLC Panel including Servo Drives and Hydraulics (for C Seam and L Seam operations)</u></p> <ul style="list-style-type: none"> (i) It should include advanced PLC which should be able to control all operations like Thermal management, Welding, Rotation of Frame and Loading and Unloading of Frames etc. (ii) Panel should be fully air conditioning and should have ingress protection of IP 54. (iii) Panel should have maintained humidity in the range of 50-60% at any point of time. Appropriate dehumidification system to be provided in the panel. (iv) Station should have provision for all control voltages used for controlling the station, no separate auxiliary supply will be provided. (v) Appropriate rating of Hydraulic motor and its drives to be used considering all Hydraulic operation. (vi) PLC should have logic to control and maintain the required temperature (90-200 °C). (vii) Two Separate PLC and HMI for monitoring of welding joints of C-Seam and L-Seam Joints independently

	<ul style="list-style-type: none"> (viii) Reputed Electrical and Electronics Hardware to be used in PLC panel Obsolescence management of the same to be supported for a period of 25 years. (ix) Each PLC to communicate to Human Machine Interface (HMI) and Laptop (as redundant) which should be placed near the welding joint to control all operations of Station from single point. HMI should have provision to display all parameters like temperature, Rotation speed, Welding parameters etc. Separate data log and remote monitoring of the operational parameters. (x) PLC logics should be capable enough to control zone heaters for linear rise of temperature with respect to time. (xi) All IN and OUT cable control and power from the panel should be through suitable gland entry. No direct entry will be permissible. (xii) A laptop with all software, ladder logic and licensed Keys along with 2TB portable Hard disk to be hand over to MDL in accessible format post commissioning of Station. (xiii) Panel should have Servo drives for controlled rotation of frame during the operation as per set value. Appropriate rating servo motor and its drive to be used as per design requirement. (xiv) Provision to adjust various speed as per requirement. (xv) Servo motors of reputed brand such as (i) Siemens / (ii) Rexorth / (iii) Yasakawa / (iv) Bosch / (v) Mitsubishi / (vi) Yukon. (xvi) Safety alarm system to have smart sensors to monitor the all critical area and its parameters, like roller/ feed speed, temperature range, etc. in accordance with WPS
L.	<p><u>Control & Power Panel (for C Seam and L Seam operations):</u></p> <ul style="list-style-type: none"> (i) Two Separate Control and power panel to be provided for of welding joints of C-Seam and L-Seam Joints independently (ii) Panel shall include the power switching device which takes logic feed from dedicated PLC and control the switching of all zone heaters as per design requirement. (iii) Panel should have sufficient cooling arrangement as per requirement. (iv) Adequate and appropriate Switching devices should be provided in panel to control each heating zone to maintain the temperature. (v) Machine should have provision for auto and manual cut off of zone heaters through HMI. (vi) Switching devices should have facilities for variable power output to control and maintain the temperature throughout the welding cycle. (vii) There should not be any shoot in temperature beyond certain level (90-200 °C) as per requirement at the welding point throughout the operation. Increased in temperature after welding should be controlled automatically through input power adjustment to particular zone heaters. (viii) All IN and OUT control and power cables from the panel should be through suitable gland entry. No direct entry will be permissible. (ix) Separate control panel for beveling(machining/milling) operation and positioning of tool
E.	CIVIL STRUCTURES
	<ul style="list-style-type: none"> (i) Selection of Material for construction of the Station should enable sturdy and shock free operation. (ii) Surface preparation of material to be SA2.5 & Epoxy based painting with 250 micron DFT to be achieved. (xi) Approx Max Installation Space: As per layout (iii) Operator platform to be provided along with the boom near welding torch. (iv) Load bearing capacity of platform should be sufficient to handle 10 operators and load of all equipment & accessories (around 10 MT). (v) Certification of the complete structure to be obtained from certified structural engineer. (vi) Pipelines for hydraulics to manufactured from SS304 or equivalent material and painted according to the structural paint scheme. (vii) Hoses and hydraulic jacks to be supplied should be resistant to high ambient temperature with valid test pressure certificate as per international standard. (viii) Operator seat near by the welding torch assembly unit. (ix) Entry / exit ladder arrangement for platform to be provided for better ergonomics of operators.
F.	General
	<ul style="list-style-type: none"> (i) Workstations should have Electrical switch board to distribute the supply to all consumers like Servo drive for rotation, Thermal management of weld joints and Loading & Unloading of Subsections with appropriate switchgears and cabling of reputed make as per requirement. (ii) Should have voltage stabilizer of appropriate rating to cater any fluctuation in the input supply voltage. It should have facilities of both auto and manual control mode.
G.	HMI Interface (Human Machine Interaction)
	<ul style="list-style-type: none"> (i) Number of HMI Displays: 02 (one for Station 4(I) & one for Station 5(I)), both will be synchronized at the time of C-seam welding)

	<ul style="list-style-type: none"> (ii) HMI – 15” LCD colored touch screen monitor) which should be placed near the welding joint to control all operations of Station from single point. HMI should have provision to display all parameters like temperature, Rotation speed, Welding parameters etc. Separate data log and remote monitoring of the operational parameters. (iii) HMI should be capable to do all operation like Heat management, Frame Rotation, Roller adjustment, Loading and unloading of frames all Hydraulic operations, Welding operation or any critical operation etc. (iv) HMI should also be capable to monitor zone and prior welding area temperature, rotational speed, Welding Speed, Welding parameters or any critical parameters. (v) HMI should display fault when the thresholds limit reached and have acknowledgement facility. (vi) HMI should have provision for manual cut off/ regulate the zone heaters. (vii) Rugged laptop with installed software (Permanent license) for program creation and redundancy for operation of Workstation in case of HMI failure. (viii) All software related to HMI and Laptop are to be provided in a Separate CD/ HDD.
H.	Site Acceptance test (SAT) & Performance Guarantee
	<p>The site acceptance test shall be conducted at the MDL facility. Final acceptance is contingent upon the successful completion of the following:</p> <ul style="list-style-type: none"> (i) Successful qualification of welding station as per WPS and applicable standards is in the scope of supply of Vendor. (ii) Achievement of machine and welding parameters as per WPS during and after welding of a Dummy L-Seam & C-Seam joint made from actual construction steel. (iii) Achievement of uniform heating of the frame during Pre-heating, during welding, inter-pass, Post heating cycles on the Dummy L-Seam & C-Seam joint made from actual construction steel. (iv) Achievement of successful NDT & Destructive Testing results in weldments of Dummy L-Seam & C-Seam joint as per standards. (v) Loading, Unloading & Alignment Tests: Loading, Unloading & alignment will be checked on the dummy Subsections for at least 10 cycles. (vi) Functional and Capacity testing: Sequence of operation through HMI/ Laptop from start to end i.e., from loading of Subsection to final welding and unloading of Subsection as per WPS and reference documents. (vii) Smooth running of HMI control system and successful software integration. (xi) Loading and unloading (backup) software in PLC. (xii) Station will be deemed qualified for commissioning only on successful completion of all Welding inspections, viz visual, NDT as well as Destructive Testing.

5. ELECTRICAL

Brief nature of general electrical work involved is as below.

All vendors must necessarily take note of the locations of power supply units and available resources in MDL Yard Workshops for setting up of electrical supply to stations. This must be done prior to acceptance of the contract and must be accounted for in the Quotation.

- 5.1. All electrical drives, controls, Switch gears should be of Siemens/ABB/ L & T/ Crompton & Greaves/ Schneider only.
- 5.2. Electrical instruments, switches, controllers, cabling and connections have to be as per National or International Standards: Suitable for tropical conditions
- 5.3. Protection class (Control cabinets, Limit switches, Push buttons): IP 54
- 5.4. Protection class (motor/ brake): IP55
- 5.5. Push buttons are to be oil and water tight.
- 5.6. All cables are to be properly tagged with numbering ferrules
- 5.7. All the components and panel shall have identification name plate. The name plate shall be of anodized Aluminium with engraving and shall be fixed with riveting.
- 5.8. All the power and control terminations for external connections shall be terminated on the bottom portion of the control panel through appropriate glands with suitable rated terminals.
- 5.9. Each panel interior shall have sufficient illumination level. Provision of additional switch and sockets (230 V, 15 A) inside panel for maintenance purpose. The panel light shall switch on automatically when the panel doors are opened.
- 5.10. All the components of the panel shall be of reputed make and fully conforming to the relevant IS standard / equivalent international standard.

- 5.11. All the components except the indicating instruments, indicating lamps, control push button and control switches shall be mounted on a separate plate fixed inside the control panel. The indicating instrument shall be of flush mounting type. The indicating lamps shall be of LED type.
- 5.12. All the internal wiring shall be done with proper ferrule numbers at both ends.
- 5.13. The wire used for control wiring shall be multi-stranded copper wire.
- 5.14. All the internal power cables shall be of multi-stranded copper conductor flexible cables and of required rating.
- 5.15. Panel should have provision for placement of drawing inside.
- 5.16. Paper stickers for identification of the components or similar type are not acceptable.
- 5.17. There shall be 20 % spare terminals for future use.
- 5.18. All the cables required for the connection of the major load/motors with the control panel including earth cables shall be in vendor's scope.
- 5.19. All brass cable glands and copper cable lugs required for the termination of the external cables and termination of all the cables shall be in vendor's scope.
- 5.20. The power and control circuit diagrams along with complete drawings viz. cable schedule, terminal schedule, general arrangement etc. shall be handed over in triplicate.
- 5.21. All panels shall have proper ventilation.
- 5.22. Laminated drawing/instructions shall be put up inside the panel at a conveniently readable location.
- 5.23. Single Emergency stop buttons are to be provided to stop all plant machinery, located in an easily accessible position.
- 5.24. All panels shall have temperature sensor, switch socket and tubes.

6. POWER SUPPLY, PANELS, MOTORS, CABLES, ETC.

- 6.1. Power supply of 415+/- 5 % Volts, 3 phase, 50 Hz +/- 2 % AC supply will be provided by MDL.
- 6.2. Subsequent distribution through distribution boards is to be arranged by the Supplier.
- 6.3. The scope includes supply, installation, testing and commissioning of the total electrical works of supplied equipment and its connected system. This being a turnkey job should include supply and installation of all accessories required for the successful completion of the job and commissioning of the same as per all relevant rules and regulations and to the entire satisfaction of MDL. All electrical works are to be carried out as per the latest revision of Indian Electricity Act 2003, Indian Electricity Rules-2005 and CEA Regulations 2010.
- 6.4. If any change or modification is required to suit the operational and running requirements, the supplier shall do the same at his cost.
- 6.5. All cabling inside the machinery/stations will be in supplier's scope.
- 6.6. Supply and installation of suitable type and size of cable includes laying, clamping, end terminations, identification tags, and ferrules etc. as per standards.
- 6.7. All armoured power cable of appropriate sizes shall be used. All power cables shall conform to relevant IS specification or equivalent IEC/EN/DIN/VD standards. Proper cable trays and cable ties shall be used for cable laying and routing. All cables to be dressed and laid aesthetically in appropriate cable trays/covers. No loose wiring will be acceptable. Power and control cables should not be run in parallel in the same tray. Double Shielded twisted cable shall be used for control signal cabling.
- 6.8. Wiring shall be fitted into cable trays, or into box sections according to length and position. Complete wiring, cable trunking, Electrical cables, wiring material & accessories as well as connections and commissioning of the panel and equipment's for satisfactory performance is under the scope of supplier.
- 6.9. Each equipment to be provided with MCCB's of industrial grade for efficient running of the system
- 6.10. All ACB, MCCBs, MCBs, control switches, indicating lamps, push buttons, sockets, fittings, fixtures shall be of Siemens/ ABB/ Crompton Greaves/ Areva/ Schneider/ GE make and should be able to withstand workshop and manufacturing conditions.
- 6.11. All Power and control panels are in contractor's scope.
- 6.12. The Power Control Centre shall be manufactured as per the relevant Indian or International Standards. All the major parts in the panel shall be of Siemens/ ABB/ Crompton Greaves/ Areva/ Schneider/ GE make.
- 6.13. The panel manufactured shall be fully conforming to the following or equivalent IEC/EN/DIN standards:
 - 6.13.1. IS 8623-Part -1 1993: - Specification for low voltage switchgear and control gear assemblies
 - 6.13.2. IEC: 439 -1 1985 Low Voltage Switchgear and Control Gear Assemblies.
 - 6.13.3. IS: 4237-1982 General Requirements for Switchgear and Control gear for voltages not exceeding 1000V AC or 1200 V D.C.
 - 6.13.4. IS: 2147-1962 Degree of Protection provided by enclosures for low voltage switchgear and control gear.
 - 6.13.5. IS: 1897-1983 Copper strips for Electrical purposes.

6.13.6. IS: 375-1963 and IS: 5578-1970 Marking and arrangement for Switchgear Main connections, Auxiliary Wiring and Insulated Conductors.

6.14. Routine Test (as per 18.862681): These tests shall include but not necessarily be limited to the following:

6.14.1. Operation under simulated service condition to ensure accuracy of wiring, correctness of control scheme and proper functioning of the equipment.

6.14.2. All wiring and current carrying part shall be given appropriate high voltage test.

6.14.3. Primary current and voltage shall be applied to all instruments.

6.14.4. Routine test shall be carried out on all equipment such as circuit breakers, MCBs, MCCBs, instrument transformers, relays, meters etc.

6.14.5. Primary injection test.

6.15. Test Certificates: Certified reports of all the tests, carried out at the works shall be furnished in two (2) copies for approval.

6.16. Power and Control panel shall be capable of operation continuously and without adverse effects or injurious due to overheating under all specified conditions of operation.

6.17. Power and Control panel shall be capable of withstanding without damage or danger to operating personnel, fault currents equal to the system fault level.

6.18. All materials, equipment and accessories used in the manufacture shall conform to the latest editions of relevant Indian Standards including amendments and addenda or equivalent shall be followed.

6.19. The electrical arrangement of the Power and Control panel, protection, metering, control, interlocking, inter-tripping etc. shall be in accordance with the Single Line Diagram(s) of the complete system offered.

6.20. All power distribution feeders to be housed in separate compartments. All compartments to be fully segregated from one another, as well as from bus-bar chambers, with sheet steel barriers. Terminal chambers for incoming feeders to be segregated from those for outgoing feeders. Each feeder compartment shall have a separate door.

6.21. Separate compartments shall be provided specifically for circuit breakers, horizontal and vertical bus-bar / cable chambers, which will be fully and effectively segregated from one another. This is to confine internal faults to faulted compartment and to prevent damage to equipment in any other compartments.

6.22. The Power distribution shall have main horizontal and riser bus-bars, air insulated / sleeved, housed in a separate compartment, o segregated from all other compartments, with sheet steel barriers. Bus-bars shall be of high conductivity electrolytic copper or aluminium, suitable for carrying the rated and short time current without overheating. Bus-bars shall be adequately supported on insulators to withstand dynamic stresses due to short circuits. Busbar support design should ensure free thermal expansion. Maximum bus-bar temperature shall not exceed 85°C under normal operating condition and 200°C under short-circuit condition.

6.23. All bus-bar connections and bus taps to individual feeders shall be by means of 1000 V grade multi-strand annealed copper conductor PVC insulated wires or links insulated with shrunk PVC sleeves. Bus-bars shall be color coded for easy identification of three phases. All Feeders should have appropriate isolator switch.

6.24. All insulating materials used in manufacture shall be non-hygroscopic and shall be treated for preventing fungus growth. Surface of insulators shall be highly glazed and treated with silicone compound to minimize accumulation of dust, condensation of moisture and tracking.

6.25. All Cable inside panels should be fire redundant.

6.26. The insulating materials shall preferably be non-carbonizing type.

6.27. Bus-bars for risers shall be rated to carry 125% of the rated current of all feeders connected to the risers.

6.28. Bus-bars for main horizontal and risers shall be of uniform section throughout.

6.29. The minimum cross section of neutral bus-bars shall be more than half the size of bus-bars for phase.

6.30. Bus-bars of different voltage level shall be fully segregated from each other.

6.31. Only zinc passivated or cadmium plated high tensile strength steel bolts, nuts and washers shall be used for all bus-bar joints and supports.

7. LIGHTING

7.1. Adequate lights for Illumination of 300-500 Lux to be provided for each workstation measured at any location within the boundary of the workstation and its working area.

7.2. Protection class of light fittings shall be minimum IP55.

8. LABELS ON EQUIPMENT

- 8.1. Tablet (name plates) should be made of anti-corrosive material put to each equipment shall be stuck in a proper position to be showed and accessed easily. The following minimum contents shall be carved on the tablet.
 - 8.1.1. Name of manufacturer.
 - 8.1.2. Model number of manufacturers.
 - 8.1.3. Serial number of the machine
 - 8.1.4. Rated capacity

9. FACTORY ACCEPTANCE TEST (FAT) CERTIFICATES/CALIBRATION CERTIFICATES

- 9.1. Test certificates/Calibration certificates from OEM shall be provided for all machinery, equipment, gauges/measuring instruments (provided additionally as well as supplied as an integral part of the system) etc.
- 9.2. Each equipment, machine and component used for the facility would be checked for FAT and capacity/ rating vis-à-vis specifications stipulated
- 9.3. Factory acceptance tests shall be carried out by the manufacturer of equipment in the presence of purchaser (MDL) as mutually agreed upon QAP to the satisfaction of MDL and the result recorded on test report shall be submitted to the purchaser (MDL).
- 9.4. All of the devices and work, work pieces needed for the test and inspection shall be prepared by manufacturer. Manufacturer shall also notify the purchaser (MDL) the date 6-weeks earlier before the test (FAT) in advance.

10. QUALITY ASSURANCE PLAN (QAP)

- 10.1. The Contractor shall ensure that his detailed Quality Assurance Plan is prepared prior to the Commencement of the Work. The Quality Assurance Plan shall comply with ISO 9000 standard or equivalent.
- 10.2. The Supplier shall submit to MDL for approval the detailed Quality Assurance Plan document within 01 month from the receipt of PO. MDL will take 15 days for approval.
- 10.3. The Quality Assurance Plan document shall include detailed procedures and processes relating to assuring quality for any and all aspects of the Works.
- 10.4. The Supplier shall maintain and revise the Quality Assurance Plan document throughout the period of the Works to address any modifications or additions to the works. Any such revision shall be submitted to MDL for approval within 7 days of the identification of said modifications or additions to the Works.
- 10.5. Test, Trials, Inspections etc. as indicated in this document shall be added to the QAP.
- 10.6. In case of any conflict in parameters between the ones indicated in this document and those present in a relevant existing code, the stricter norm shall be adopted in case of any parameter indicated in this document
- 10.7. Inspection of work will be carried out by MDL as per the approved QAP.

11. INSPECTIONS AND TRIALS POST DELIVERY

11.1.INSPECTIONS

- 11.1.1. Each equipment will be inspected at MDL during the following stages:
 - 11.1.1.1. Receipt inspection by QA-EY
 - 11.1.1.2. After installation by User/ QA-EY
 - 11.1.1.3. During the system trials by User/ QA-EY
- 11.1.2. The performance tests shall be conducted by the Suppliers personnel and demonstrate the overall suitability of equipment for the submarine building function intended together with proof of specified performance as required and qualification of jobs as mentioned serials above along with amply demonstrating operational reliability.
- 11.1.3. Any breakdown/failure of component or equipment that arise during the tests shall be rectified or replaced at the Suppliers cost. Root cause analysis for the failure and the corrective and preventive action shall be done to the satisfaction of MDL.
- 11.1.4. All tests associated with the breakage or failure shall be repeated.
- 11.1.5. The equipment has to successfully complete tests to MDL satisfaction.
- 11.1.6. The performance tests to include, inter alia:
 - 11.1.6.1. All routine tests on PCCs and MCCs.
 - 11.1.6.2. All routine tests on cables and motors.
 - 11.1.6.3. Insulation resistance tests on cables and motors.
 - 11.1.6.4. Operation of all emergency stops, interlocks and safety equipment.
 - 11.1.6.5. Functional operation tests.

- 11.1.6.6. Noise level checks.
- 11.1.6.7. Vibration level checks.
- 11.1.7. The Supplier shall provide details of all proposed testing standards and procedures for each discrete test to MDL for approval.
- 11.1.8. On approval, testing will be undertaken in accordance with the agreed finalized procedures and methods to the entire satisfaction of MDL.

11.2. TRIALS

Final acceptance shall be on the basis of trials carried out on the stations as mentioned in the respective Technical Descriptions in Para 4.

12. COMMISSIONING

- 12.1. All holding down devices, bolts, nuts, washers, screws, fasteners, fixtures etc necessary for installation of equipment is in supplier's scope. All machinery including welding machines etc are to be brought by the installation team of the supplier.
- 12.2. All commissioning personnel required during installation/commissioning to be in suppliers scope and at suppliers cost. All consumables required during commissioning of the system will be in supplier's scope of supply. Any oil/coolant/etc. required for the first commissioning or setting to work of the system shall be in supplier's scope of supply.
- 12.3. Each Station will be considered for commissioning only when the entire systems is installed, set to work, tested, loose items delivered, documentations delivered, systems inspected to their capacities and deliverables, approvals of statutory and local government bodies obtained and formalities completed.
- 12.4. The supplier shall also provide the know-how of operation and maintenance, including health and safety provisions of the installed machines, equipment and controls to MDL nominated personnel.

13. STATUTORY/LOCAL GOVERNMENT APPROVALS

All approvals required by the Statutory Government bodies and the Local government bodies shall be obtained by the contractor before commissioning of the system. All the fees and expenses for obtaining these approvals will be borne by the contractor. Resolving all technical issues/ queries and co-ordination with these agencies is contractor's responsibility.

14. TRAINING

Training: On-site training for at least four operators and four maintenance technicians

15. OPERATING/MAINTENANCE MANUALS, LIST OF DRAWINGS AND DOCUMENTS

- 15.1. Safe to Work Certificate for the entire work station
- 15.2. Calibration Certificates of all measuring probes and laser systems
- 15.3. Software Backup: A complete digital backup of CNC parameters
- 15.4. Spare Parts List: A recommended list of "wear and tear" items for 72 months of operation
- 15.5. Operator manuals (03 sets): Step-by-step instructions for machine operation in English along with soft copy
- 15.6. Operation Manual shall include:
 - 15.6.1. Safety procedures.
 - 15.6.2. Start up, shut down and lock-out procedures.
 - 15.6.3. Application of the daily check list.
 - 15.6.4. Instruction and familiarization regarding the overall operation and maintenance including Health and Safety provisions incorporated.
- 15.7. Maintenance Manuals (03 sets): Mechanical and electrical schematics, Hydraulic system, Lubrication schedules and troubleshooting guides along with soft copy
- 15.8. The Maintenance manual shall include:
 - 15.8.1. Illustrated instructions on what tasks need to be undertaken on a regular basis and how to perform all routine and scheduled tasks.
 - 15.8.2. Lubrication Schedule which shall specify the quantity, type and frequency of lubrication (with equivalent Indian grade as available) for each component.
 - 15.8.3. Routine examination and planned preventative maintenance.
 - 15.8.4. Fault diagnosis.
 - 15.8.5. Removal, dismantling and replacement of parts and components.
 - 15.8.6. Basic electrical checks, safety routines and component replacement.
 - 15.8.7. Approach to hydraulic system overhaul.

- 15.8.8. Maintenance planning records and procedures
- 15.9. Notes, specifically pertaining to the 'MUST DO' before start and during close of systems should be provided in laminated sheets or displayed permanently near the machines in laminated boards.
- 15.10. The manual(s) shall contain exploded isometrics where ever applicable identifying all components and their associated spare part numbers for all items and components, both Contractor's manufactured and also sub contractors' manufactured and suppliers' manufacture, shall be provided.
- 15.11. Typical drawings and documents shall consist of GA drawings, schematic drawings, electrical drawings, component manuals, factory test reports and manuals — bought out items, BOQ along with make and model of components, cable schedule, interconnection diagrams, etc.
- 15.12. One printable soft copy of all manuals, documents and drawings, etc. to be supplied along with the system (PDF Format).

16. **MDL SCOPE**

- 16.1. Compressed LP Air Supply
- 16.2. 415V (+/-5%), 50Hz (+/-2%), 3-phase power supply at machine installation point.
- 16.3. Electricity and cranes of the workshops (inside) will be provided free of cost for installation.
- 16.4. Provision of parent material for qualification pieces (web flange Frame Sub section etc.) as well as welding consumables for carrying out qualification trials shall be in the scope of MDL.
- 16.5. Tests to be carried out post welding such as NDT, Destructive Testing, etc. shall be in the scope of MDL.
- 16.6. Everything else including what has not specifically been mentioned in this technical specification will be in supplier's scope of supply, it is the sole responsibility of the supplier to complete and prove the systems to the desired capacities as specified in this technical specification.

17. **DELIVERABLES**

- 17.1. The prospective bidder shall provide a system wise list of deliverables specifying capacity, make and quantity in their offer.
- 17.2. Bidder to ensure compliance to all provisions of the bidding document and submit their bid accordingly. Bids with any deviation to the bid conditions (including the list of bought out items with specified quality bench mark) shall be liable for rejection.
- 17.3. Bidder to submit NDA to receive technical documentation for participation in bid.
- 17.4. All calculations, representations and drawings shall be in SI system of units.
- 17.5. **The following are essentially required in the prospective bidder's proposal offer:**
- 17.5.1. Primary design including list of key components, their capacities and General arrangement drawing for each Station.
- 17.5.2. General arrangement drawing indicating layout of layout area.
- 17.5.3. Layout of each equipment for the total system.
- 17.5.4. Manufacturer's technical data sheet to support design parameters for major components used.
- 17.5.5. Equipment Description with their exploded views and flow chart diagram where ever applicable.
- 17.5.6. Reason for selection of the major component's rating including their noise levels; support calculations based on "Authentic Data Sheet" of the Individual system of the equipment, where ever applicable must be provided.
- 17.5.7. Draft QAP
- 17.5.8. Total Weight of Station
- 17.5.9. Tentative PERT chart.
- 17.6. **After order confirmation the successful bidder shall submit the following for MDL approvals:**
- 17.6.1. Updated final versions of all of the above
- 17.6.2. Foundation details of equipment (to be submitted within 01 month from placement of order, civil work and all foundations required for each station will be in scope of vendor)
- 17.6.3. The structural drawings and details, details of foundations of stations.
- 17.6.4. Lifting Drawings of Stations/Components
- 17.6.5. Location of connection with Earth Pits.
- 17.6.6. Work Layout indicating free space and movement area, hazard area etc.
- 17.6.7. Electrical items/ machinery cabling drawings (SLD) along with details of switches, sockets, MCBs, power supply etc.
- 17.6.8. Quality assurance Plan
- 17.6.9. PERT charts.

- 17.7. The contractor shall perform System Validation requirements for all systems, equipment and utilities. These will include filling up of the approved detailed checklists for all systems and equipment - specific to that process / equipment / utility. All Systems Validation checklists and associated data will be included in the Systems Validation manual, provided by the Contractor.
- 17.8. The Contractor will work with MDL to establish those systems and equipment that will require performance testing.
- 17.9. Non submission of documents or details as per requirements mentioned above or the requirements mentioned in preceding paragraphs shall be considered as supplier's inability/casual attitude towards understanding and comprehending the TSP requirements and hence execution will be of similar sloppy, undesired and unwarranted nature and thus shall be liable for rejection.
- 17.10. A supplier will be deemed to have agreed to the above Terms and Conditions of the deliverables unless it notifies MDL in its submission of the unacceptable terms in its offer.
- 17.11. MDL is not responsible for any costs (whether direct or indirect) incurred by a Vendor in preparing and/or submitting a Proposal or otherwise responding to this tender or in any subsequent discussions or negotiations. All parties and participants must bear their own costs.
- 17.12. MDL must receive a hard copy of the Proposal submitted online within a fortnight of tender closing date.

18. DELIVERY

- 18.1. The overall time frame for this turn-key contract for each workstation **including commissioning on MDL site** from the date of receipt of confirmed MDL Purchase Order is as indicated below:

Workstation	Timeline
Stations 1(I),2(I),6(I)	09 Months
Stations 3(I),8(I)	12 Months
Stations 4(I)&5(I)	22 Months

- 18.2. The contractor shall develop and submit a comprehensive schedule indicating milestone dates for project implementation. Performance of the contractor shall be evaluated vis-à-vis with this schedule later. Milestone chart shall be submitted along with offer.
- 18.3. **Schedule of Delivery**
Schedule for critical items of utility & equipment, construction, design, fabrication, FATs, delivery, installation, start-up, Inspections, SATs, Qualification Trials and training shall be indicated in the milestone chart with the following broad indicators:
 - 18.3.1. Submission by the firm of Design, Drawings, calculations, with corresponding detailed BOM (Bill of material), item/ equipment list etc. within 01 months from the date of receipt of order and review by MDL within 10 days from the date of receipt of such completed documents to provide comments on submissions made by the firm.
 - 18.3.2. Firm to submit the revised design (If required) within 07 days from the date of receipt of MDL comments.
- 18.4. Fortnightly progress meetings in person or over VC shall be attended by the Contractor with MDL from the date of award of contract till completion. However, it does not absolve MDL's right to call for a meeting at any time if necessary.

19. SCHEDULE OF PAYMENT

Schedule of payment for each Work Station/procurement line items is as follows:

Sr. no.	Stage	Deliverables	Payment %
1	On design approval by MDL, submission of QAP & PERT	Approval of Design, QAP & PERT by MDL,	10
2	On successful FAT	Successful FAT report	20
3	On delivery	Receipt inspection by QA-EY	50
4	On commissioning/final Acceptance	Final acceptance by User	20

20. WARRANTY

- 20.1. Warranty of each Workstation shall include all structures, machine and equipment made for the purpose of the technical requirement of each individual Workstation and shall be warranted by the supplier against damage or failure due to defect(s) in design, material or workmanship for a period of 24 months from the date of commissioning and user acceptance.
- 20.2. Any breakdown or visit as and when required during warranty period to be attended within 24 hours of intimation, failing which a penalty of Rs. 10,000/- per day will be charged.

20.3. Any Spares & Machine Consumables (nozzles, hydraulic oils, coolants, etc.) required during warranty period to be borne by bidder/firm.

21. AFTER SALES SERVICE SUPPORT:

21.1. Firm shall be committed to give minimum 10 years of service support for all spares, software, hard ware, accessories, maintenance, operation and other related services from date of commissioning of Workstation.

21.2. It is preferred to have Authorized Indian firm for after sales, service and support.

21.3. Obsolescence management of all the hardware and software to be supported for a period of 10 years from date of Commissioning of Workstations.

21.4. A list of Machine Spares & Consumables along with rate valid for the period of 3 years to be submitted by the vendor along with offer for future procurement by MDL whenever required.

22. TOOLS

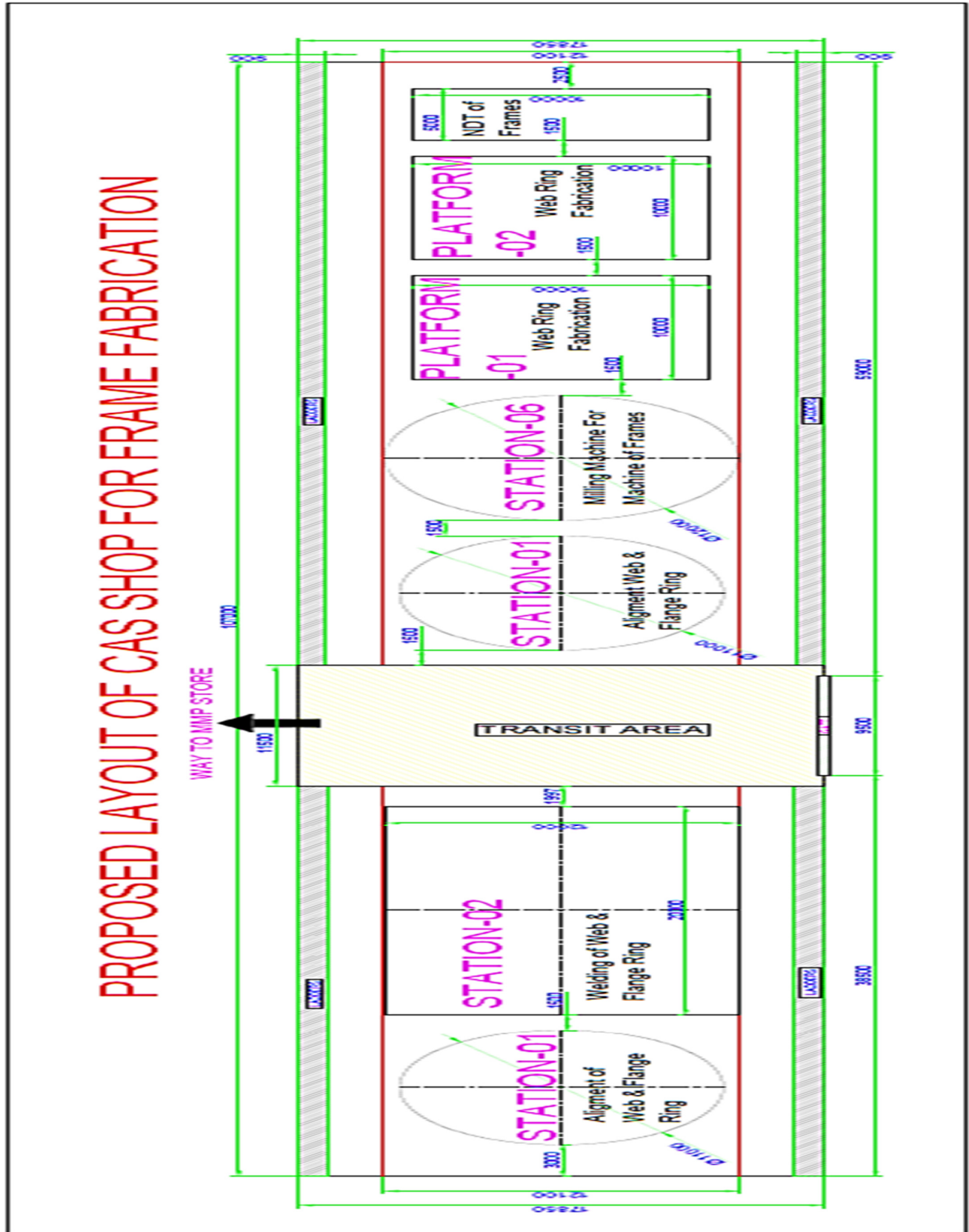
The supplier shall provide 2 sets of all special tool(s) for each individual station required for cleaning, maintaining, assembly or disassembly of the supplied machines or equipment.

23. INTELLECTUAL PROPERTY RIGHT (IPR).

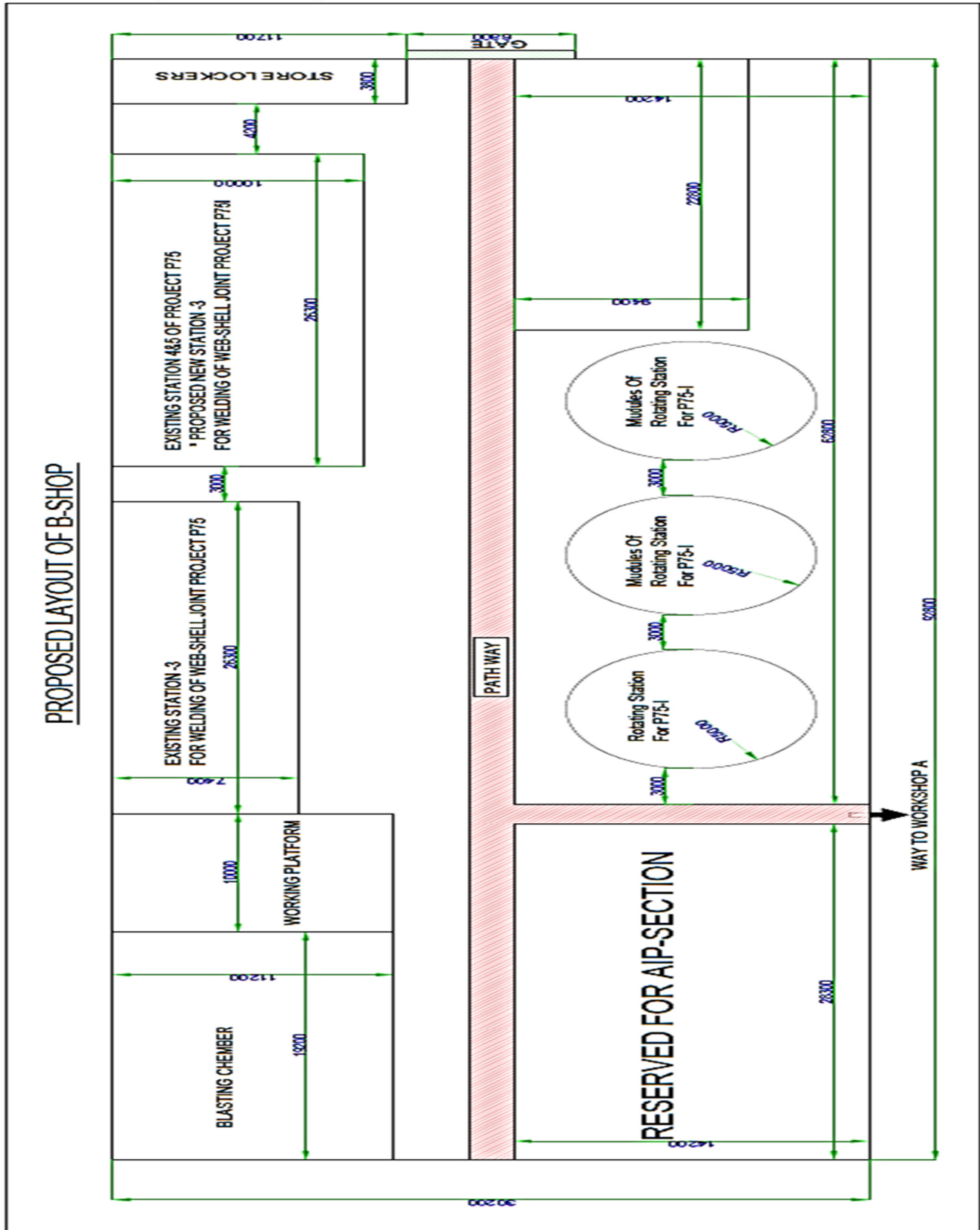
Comprehensive IP sharing contract with mutually acceptable terms shall be signed at the time of order placement.

24. **RATE SHEET**

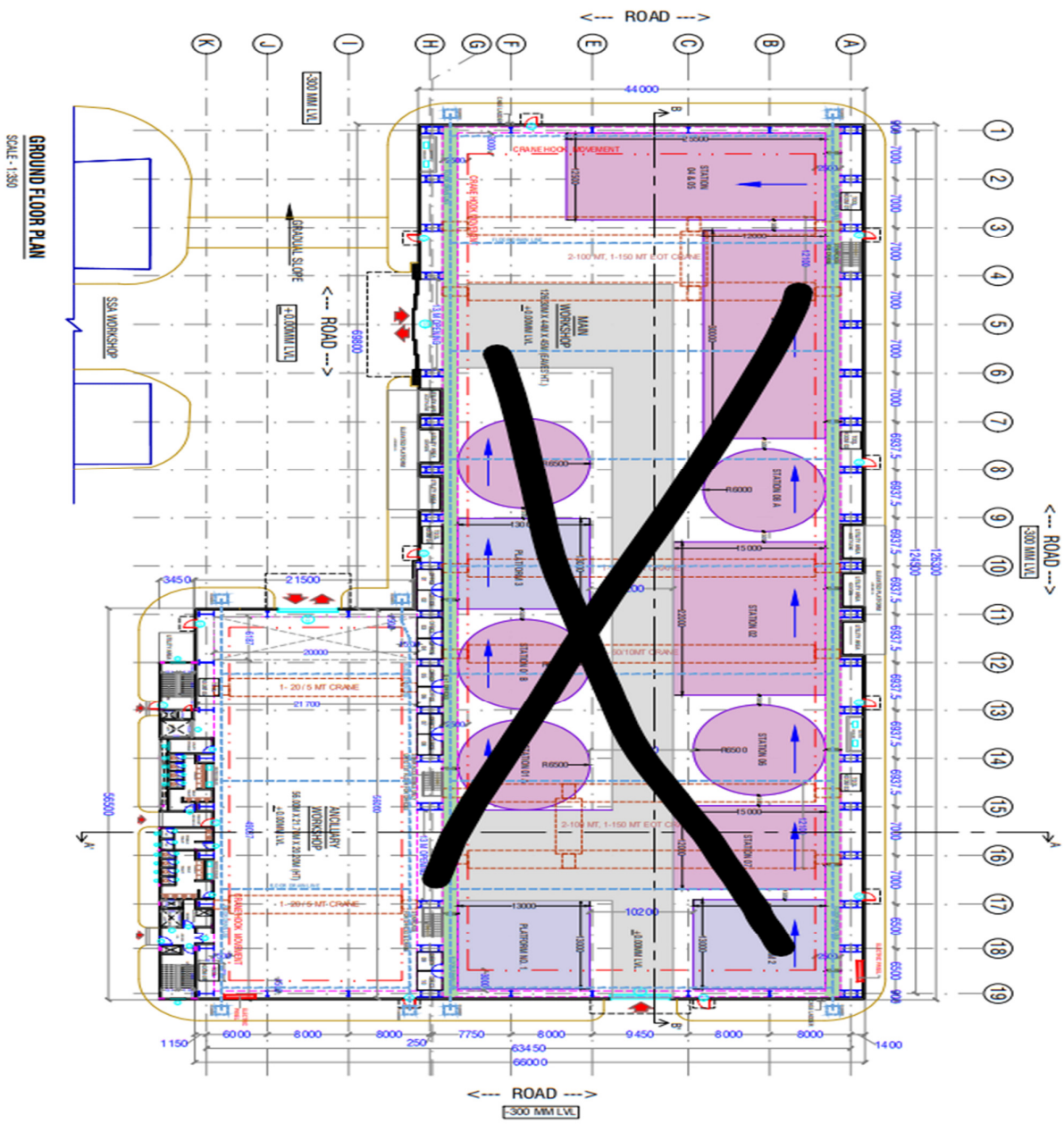
Procurement Item No		Description	Quantity (Nos)	Rate	Total
1	1(a)	Specialized Milling Workstation Station No.6(I)	01	Quoted/Not quoted	Quoted/Not quoted
2	2(a)	Frame Fit-up Workstation Station No. 1(I)	01	Quoted/Not quoted	Quoted/Not quoted
3	3(a)	Automatic Welding Workstation Station No. 2(I)	01	Quoted/Not quoted	Quoted/Not quoted
4	4(a)	Rotating Workstation Station No. 8(I)	01	Quoted/Not quoted	Quoted/Not quoted
5	5(a)	Automatic Welding Workstation Station No. 3(I)	01	Quoted/Not quoted	Quoted/Not quoted
6	6(a)	Automatic Welding Workstation Station No. 4(I) & 5(I)	01	Quoted/Not quoted	Quoted/Not quoted



Annexure B: Layout of Workshop-B for WorkStation 3I & 8I



Annexure C: Layout of New Alcock yard for WorkStation 4I&5I.



Rate sheet

Sl. No.	Service Description	QTY.	Unit	Unit Price Incl. of all i.e., taxes, duties, etc. (Currency)	Total Price Incl. of all i.e., taxes, duties, etc. (Currency)
1.	Station No.1(I) Frame Fit-up Workstation for Web to Flange Assembly	01	Nos	Quoted/Not quoted	Quoted/Not quoted
2.	Station No. 2(I) Automatic Welding Workstation for Welding of Web Flange of Frame	01	Nos	Quoted/Not quoted	Quoted/Not quoted
3.	Station No.3(I) Automatic Welding Workstation for Frame to Shell Plate Welding	01	Nos	Quoted/Not quoted	Quoted/Not quoted
4.	Station No. 4(I) & 5(I) (combined) Automatic Welding Workstation for Welding of Shell to Shell (L-Seam & C-Seam) for section formation	01	Nos	Quoted/Not quoted	Quoted/Not quoted
5.	Station No.6(I) Specialized Milling Workstation for Web Segment Machining, Bevel Preparation & Full Frame Machining/Chamfering/Beveling.	01	Nos	Quoted/Not quoted	Quoted/Not quoted
6.	Station No.8(I) Rotating Workstation for Frame & Shell Plate Assembly (Subsection Formation)	01	Nos	Quoted/Not quoted	Quoted/Not quoted
Total Price					Quoted/Not quoted

Note: Indian vendors to indicate applicable GST rate considered in their offer.

GENERAL CONDITIONS OF CONTRACT (GCC) FOR GOODS

The word 'Purchaser' refers to MAZAGON DOCK SHIPBUILDERS LIMITED, (MDL), a Company within the meaning of Companies Act, 2013 and it includes its successors or assignees.

The word 'Bidder' (including the term 'tenderer', 'consultant' 'vendor' or 'service provider' in certain contexts) means any legal entity such as firm(s) of Proprietorship / Partnership Firm / Limited Liability Partnership / Private Limited / Limited company / Society registered under Society's Act / Statutory Bodies/ Consortium/ Joint Venture etc. participating in a procurement process.

The word 'Owner' means the person or authority with whom Mazagon Dock Shipbuilders Limited (Purchaser) has contracted to carry out work in relation to which orders are placed by the Purchaser on the Bidder/Supplier/Contractor under this contract for supply or manufacture of certain items and would include Department of Defence Production, Ministry of Defence, Government of India, the Indian Navy, the Coast Guard and any other specified authority.

Unless otherwise indicated specifically by the bidder / contractor in his bid, it shall be construed as his acceptance of all the conditions mentioned in this GCC.

1. TENETS OF INTERPRETATION:

Unless where the context requires otherwise, throughout the contract:

- (a) The heading of these conditions shall not affect the interpretation or construction thereof.
- (b) Writing or written includes matter either whole or in part, in digital communications, manuscript, typewritten, lithographed, cyclostyled, photographed, or printed under or over signature or seal or digitally acceptable authentication, as the case may be.
- (c) Words in the singular include the plural and vice-versa.
- (d) Words importing the masculine gender shall be taken to include other genders, and words importing persons shall include any company or association or body of individuals, whether incorporated or not.
- (e) Terms and expression not herein defined shall have the meanings assigned to them in the Contract Act, 1872 (as amended) or the Sale of Goods Act, 1930 (as amended) or the General Clauses Act, 1897 (as amended) or of INCOTERMS, (current edition published by the International Chamber of Commerce, Paris) as the case may be.
- (f) Any reference to 'Goods' shall be deemed to include the incidental Works/Services also.
- (g) Any generic reference to GCC shall also imply a reference to TEF as well.
- (h) In case of conflict, provisions of TEF shall prevail over those in GCC.
- (i) Any reference to 'Contract' shall be deemed to include all other documents (inter-alia GCC, TEF).
- (j) Any reference to any legal Act, Government Policies or orders shall be deemed to include all amendments to such instruments, from time to time, till date.
- (k) Fall Clause shall be expressly applicable in the case of Rate Contract.

2. LANGUAGE OF CONTRACT:

Unless otherwise stipulated in TEF, the contract shall be written in the Official Language or English. All correspondence and other contract documents, which the parties exchange, shall also be written/ translated accordingly in that language. For purposes of interpretation of the contract, the English documents/ translation shall prevail.

3. GOVERNING LAWS AND JURISDICTION:

3.1 Governing Laws and Jurisdiction

- (a) This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Laws of India for the time being in force.
- (b) Irrespective of the place of delivery, or the place of performance or the place of payments under the contract, the contract shall be deemed to have been made at the place from which the Purchase Order/Contract/Letter of Intent has been issued. The courts of such a place shall alone have jurisdiction to decide any dispute arising out or in respect of the contract.

3.2 Changes in Laws and Regulations

Unless otherwise stipulated in the contract, if after the last deadline for the bid submission (Techno-commercial), any law, regulation, ordinance, order or bye-law having the force of law is enacted, promulgated, abrogated, or changed in India (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/ or the contract Price, then such Delivery Date and/ or Contract Price shall be correspondingly increased or decreased, to the extent that the contractor has thereby been affected in the performance of any of its obligations under the contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable.

4. CONFIDENTIALITY, SECRECY AND IPR RIGHTS:

(a) IPR Rights

All deliverables, outputs, plans, drawings, specifications, designs, reports, and other documents and software submitted by the contractor under this Contract shall become and remain the property of MDL and subject to laws of copyright and must not be shared with third parties or reproduced, whether in whole or part, without MDL's prior written consent. The contractor shall, not later than upon termination or expiration of this Contract, deliver all such documents and software to MDL, together with a detailed inventory thereof. The contractor may retain a copy of such documents and software but shall not use it for any commercial purpose.

(b) Confidentiality

All documents, drawings, samples, data, associated correspondence or other information furnished by or on behalf of MDL to the contractor, in connection with the contract, whether such information has been furnished before, during or following completion or termination of the contract, are confidential and shall remain the property of MDL and shall not, without the prior written consent of MDL neither be divulged by the contractor to any third party, nor be used by him for any purpose other than the design, procurement, or other services and work required for the performance of this Contract. If advised by MDL, all copies of all such information in original shall be returned on completion of the contractor's performance and obligations under this contract.

(c) Secrecy

If the Contract declares the subject matter of this Contract as coming under the Official Secrets Act, 1923 or if the contract is marked as "Secret", the contractor shall take all reasonable steps necessary to ensure that all persons employed in any connection with the contract, have acknowledged their responsibilities and penalties for violations under the Official Secrets Act and any regulations framed thereunder.

(d) Obligations of the contractor

- (i) Without MDL's prior written consent, the contractor shall not use the information mentioned above except for the sole purpose of performing this contract.
- (ii) The contractor shall treat and mark all information as confidential (or Secret – as the case may) and shall not, without the written consent of MDL, divulge to any person other than the person(s) employed by the contractor in the performance of the contract. Further, any such disclosure to any such employed person shall be made in confidence and only so far as necessary for such performance for this contract.
- (iii) Notwithstanding the above, the contractor may furnish to its holding company or its Subcontractor(s) such documents, data, and other information it receives from MDL to the extent required for performing the contract. In this event, the contractor shall obtain from such holding company/ Subcontractor(s) an undertaking of confidentiality (or secrecy – as the case may be) similar to that imposed on the contractor under the above clauses.
- (iv) The obligation of the contractor under sub-clauses above, however, shall not apply to information that:
 - (aa) The contractor needs to share with the institution(s) participating in the financing of the contract;
 - (ab) now or hereafter is or enters the public domain through no fault of Contractor;
 - (ac) can be proven to have been possessed by the contractor at the time of disclosure and which was not previously obtained, directly or indirectly, from MDL; or
 - (ad) otherwise lawfully becomes available to the contractor from a third party that has no obligation of confidentiality.
- (v) The above provisions shall not in any way modify any undertaking of confidentiality (or Secrecy – as the case may be) given by the contractor before the date of the contract in respect of the contract/ the Tender Document or any part thereof.
- (vi) The provisions of this clause shall survive completion or termination for whatever reason of the contract.

5. PERMITS, APPROVALS AND LICENSES:

Whenever the supply of Goods and incidental Services requires that the contractor obtain permits, approvals, and licenses from local public authorities, it shall be the contractor's sole responsibility to obtain these and keep these current and valid. Such requirements may include but not be restricted to export licence or environmental clearance if required. If requested by the contractor, MDL shall make its best effort to assist the contractor in complying with such requirements in a timely and expeditious manner, without any dilution of the Contractor's responsibility in this regard.

6. TRANSFER OF TITLE OF GOODS:

(a) Unless otherwise stated in the contract, notwithstanding any inspection and approval by the Inspecting Officer on the contractor's premises, or any payments made to the contractor, property in the Goods (and resultant rights and liabilities) shall not pass on to MDL until the Goods have been received, inspected, and accepted by the consignee. The Goods and every constituent part thereof, whether in the possession or control of the contractor, his agents or servants or a carrier, or the joint possession of the contractor, his agents or servants and MDL, his agents, or servants, shall remain in every respect at the risk of the contractor, until their actual delivery to a person stipulated in the contract, as the interim consignee for despatch to the consignee. The Contractor shall be responsible for all loss, destruction, damage, or deterioration of or to the Goods

from any cause whatsoever while the Goods after approval by the Inspecting Officer are awaiting despatch or delivery or are in the course of transit from the contractor to the consignee or interim consignee, as the case may be. The Contractor shall alone be entitled and responsible for making claims against any carrier in respect of non-delivery, short delivery, mis-delivery, loss, destruction, damage, or deterioration of the Goods entrusted to such carrier by the contractor for transmission to the consignee or the interim consignee as the case may be.

(b) Provided that where, under the terms of the contract, the Goods are required to be delivered to an interim consignee for despatch to the consignee, the Goods shall be at MDL's risk after their delivery to the interim consignee.

7. EXTENSION OF DELIVERY PERIOD:

(a) If at any time during the currency of the contract, the contractor encounters conditions hindering timely delivery of the Goods and performance of incidental Works/ Services, he shall promptly inform MDL in writing about the same and its likely duration. He must make a request to MDL for an extension of the delivery schedule. On receiving the contractor's communication, MDL shall examine the situation and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages and with and without denial clause by issuing an amendment to the contract.

(b) Conditions for Extension of Delivery Period

When the period of delivery is extended due to unexcused delay (Note: please ensure that unexcused delay is defined. Otherwise replace "unexcused delay" with the "delays attributable") by the contractor, the amendment extending the delivery period shall, inter alia, be subject to the following conditions:

(i) Liquidated Damages MDL shall recover from the contractor, under the provisions of this clause, liquidated damages on the Goods and incidental Works/Services, which the contractor has failed to deliver within the delivery period stipulated in the contract.

(ii) Denial Clause

(aa) No increases in price on account of any statutory increase in or fresh Imposition of GST, customs duty or on account of any other taxes/ duty/ cess/ levy), leviable in respect of the Goods and incidental Works/ Services stipulated in the said contract which takes place after the original delivery date, shall be admissible on such of the said Goods, as are delivered after the said date; and

(ab) Notwithstanding any stipulation in the contract for an increase in price on any other ground, including price variation clause or foreign exchange rate variation, or any other variation clause, no such increase after the original delivery date shall be admissible on such goods delivered after the said date.

(ac) Nevertheless, MDL shall be entitled to the benefit of any decrease in price on account of reduction in or remission of GST, customs duty or on account of any other Tax or duty or any other ground as stipulated in the price variation clause or foreign exchange rate variation or any other variation clause which takes place after the expiry of the original delivery date.

(c) Liquidated damages

If the contractor fails to deliver any or all of the Goods or fails to perform the incidental Works/ Services (e.g. installation, commissioning or operator training) within the time frame(s) incorporated in the contract, MDL shall, without prejudice to other rights and remedies available to MDL under the contract, deduct from the contract price, as agreed liquidated damages, but not as a penalty, a sum equivalent to the 0.5 % percent (excluding taxes) of the delivered price of the delayed Goods and/ or incidental Works/ Services for each week of delay or part thereof until actual delivery or performance, subject to a maximum deduction of the 10% of the delayed Goods' or incidental Works/ Services' contract price(s). Besides liquidated damages during such a delay, the denial clause shall also apply. Any failure or delay by any subcontractor, though their employment may have been sanctioned shall not be admitted as a ground for any extension of time or for exempting the contractor from liability for any such loss or damage as aforesaid.

8. DEFAULTS, BREACHES & TERMINATION OF CONTRACT:

Termination due to Breach, Default, and Insolvency

(a) Defaults and Breach of Contract

In case the contractor undergoes insolvency or receivership; neglects or defaults, or expresses inability or disinclination to honour his obligations relating to the performance of the contract or ethical standards or any other obligation that substantively affects MDL's rights and benefits under the contract, it shall be treated as a breach of Contract. Such defaults shall include inter-alia:

1. Default in Performance and Obligations

If the contractor fails to deliver any or all of the Goods or fails to perform any other contractual obligations (including Code of Integrity or obligation to maintain eligibility and Qualifications based on which contract was awarded) within the period stipulated in the contract or within any extension thereof granted by MDL.

2. Insolvency

If the contractor is wound up or ceases to otherwise trade or is unable to pay its debts as and when they fall due or is otherwise subject to any insolvency procedure.

(iii) If a receiver or similar official is appointed overall or any of the assets of the contractor or a petition is presented for its winding up or it entered into a composition with its creditors;

3. Notice for Default

As soon as a breach of contract is noticed, a show-cause 'Notice of Default' shall be issued to the contractor, giving two weeks' notice, reserving the right to invoke contractual remedies. After such a show-cause notice, all payments to the contractor would be temporarily withheld to safeguard needed recoveries that may become due on invoking contractual remedies.

(b) Terminations for Default

- (i) Notice for Termination for Default: In the event of unsatisfactory resolution of 'Notice of Default' within two weeks of its issue as per subclause above, MDL if so decided, shall by written Notice of Termination for Default sent to the contractor, terminate the contract in whole or in part, without compensation to the contractor.
- (ii) Such termination shall not prejudice or affect the rights and remedies, including under sub-clause below, which have accrued and/ or shall accrue to MDL after that.
- (iii) Unless otherwise instructed by MDL, the contractor shall continue to perform the contract to the extent not terminated.
- (iv) All warranty obligations, if any, shall continue to survive despite the termination. Contractual Remedies for Breaches/Defaults or Termination for Default:
If there is an unsatisfactory resolution within this period, MDL shall take one; or more of the following contractual remedies.
- (v) Temporary withhold payments due to the contractor till recoveries due to invocation of other contractual remedies are complete.
- (vi) Call back any loaned property or advances of payment, if any, with the levy of interest at the prevailing rate (MIBID - Mumbai Interbank Bid Rate).
- (vii) Recover liquidated damages and invoke denial clause for delays.
- (viii) Encash and/ or Forfeit performance or other contractual securities.
- (ix) Prefer claims against insurances, if any.
 - (i) Terminate contract for default, fully or partially including its right for Risk and Cost Procurement as per following sub-clause.
 - (ii) Risk and Cost Procurement
In addition to termination for default, MDL shall be entitled, and it shall be lawful on his part, to procure Goods same to those terminated, with such terms and conditions and in such manner as it deems fit at the "Risk and Cost" of the contractor. Such 'Risk and Cost Procurement' must be initiated (viz. AIP/PR/Tender) within six months from the termination of Contract. The Contractor shall be liable for any loss which MDL may sustain on that account provided the procurement, or, if there is an agreement to procure, such agreement is made. The Contractor shall not be entitled to any gain on such procurement, and the manner and method of such procurement shall be in the entire discretion of MDL.
 - (iii) Initiate legal proceedings in a for the recovery of the losses and damages, not addressable by the above means.

9. CLOSURE OF CONTRACT:

The contract shall stand closed upon successful performance of all obligations by the firm, including completion of warranty obligations and final payment. If no claim is received within 03 years from last supplies/services, then no claim shall be entertained thereafter.

10. COMMUNICATION AND LANGUAGE FOR DOCUMENTATION:

Any letter, facsimile message, e-mail intimation or notice sent to the Bidder/Supplier/Contractor at the last known address mentioned in the offer / order shall be deemed to be valid communication for the purpose of the order/contract. Unless stated otherwise by the purchaser, Language for communication and all documentation shall be same, which the Purchaser has used, in the tender enquiry.

11. PRESERVATION AND MAINTENANCE:

Should any material require any preservation till its final installation/fitment, the detailed procedure (Long term and short term) for the same as also the time of interval after which the state of preservation needs to be reviewed is to be stated by the Bidder/Supplier/Contractor.

Further the de-preservation prior to the material/equipment being commissioned and the maintenance procedure together with its periodicity is also to be indicated by the Bidder / Supplier / Contractor.

12. FREIGHT AND INSURANCE:

(a) For Indigenous Bidders

Bidder shall quote for 'Door Delivery to Purchaser,' all charges towards door delivery viz. transport, Insurance charges etc. shall be borne by the Bidder /Supplier / Contractor.

(b) For Foreign Bidders

For overseas bidders, bidder shall agree for supplying the goods on CIF/CIP, Incoterm basis. The Bidder / Supplier / Contractor shall immediately on despatch of the items, inform all relevant details of despatch such as Order Number, Bill of Lading/AWB Number marked as Freight Paid, Insurance policy/document, number of packages, value of consignment, invoice number etc. as per contractual terms.

13. DEMURRAGE:

Storage, and Demurrage, fines etc. charges will be payable by the Bidder / Supplier / Contractor for all shipments in case of improper documentation, wrong declarations, error in weight measurements, packing list, invoice, late receipt of documents etc. i.e. for reasons which are not attributable to the purchaser.

14. CANCELLATION OF TENDER:

The Purchaser reserves the right to cancel/withdraw the tender in to or part and or award the contract / order in full or part without assigning any reason whatsoever and without thereby incurring any liability to the affected Bidder or Bidders or any obligations to inform the affected Bidder or Bidders of the grounds for MDL action.

15. PURCHASER'S PROPERTY:

All property (such as materials, drawings, documents etc.) issued by the Purchaser or any other individual or firm on behalf of the Purchaser in connection with the contract shall remain confidential, being the property of the Purchaser and the Bidder/Supplier/Contractor shall undertake to return all such property so issued and will be responsible for any or all loss thereof and damage thereto resulting from whatever causes and shall reimburse the Purchaser the full amount of loss and damage.

On completion of work in any compartment / location of the purchaser's premises, the Bidder/Supplier/Contractor must ensure that the place is left in a reasonably clean state and all scrap is transferred to nearby scrap-bins.

16. REJECTION OF MATERIALS:

If the Goods, or any portion thereof of the equipment found defective / rejected, the Supplier / Contractor shall collect the same from MDL's Stores, all incidental charges being borne by him (inclusive of Custom duty, if payable), within 30 days from the date of intimation to the Supplier / Contractor of such rejection. If not collected within 30 days, MDL shall recover storage charges @ 1 % per month maximum up to 5% of cost of rejected items. MDL reserves the right to dispose off the rejected items at the end of a total period of six months in any manner to the best advantage to MDL and recover consequential damages maximum up to order value.

17. RECOVERY-ADJUSTMENT PROVISIONS:

Payment made under one order shall not be assigned or adjusted to any other order except to the extent agreed upon in writing by the Purchaser. During the currency of the contract, if any sum of money is payable by the Bidder / Supplier / Contractor the same shall be deducted from any sum then due or thereafter may become due to the Bidder / Supplier / Contractor under the contract or any other contract with the Purchaser.

18. INDEMNIFICATION:

The Bidder / Supplier / Contractor, his employees, licences, agents or Sub-Supplier / Sub-contractor, while on site of the Purchaser for the purpose of this contract, indemnifies the Purchaser against direct damage and/or injury to the property and/or the person of the Purchaser or that of Purchaser's employees, agents, Sub-Contractors / Suppliers occurring and to the extent caused by the negligence of the Bidder / Supplier / Contractor, his employees, licensees, agents or Sub-contractor by making good such damages to the property, or compensating personal injury and the total liability for such damages or injury shall be as mutually discussed and agreed to.

19. TRANSFER OF SUPPLIERS / CONTRACTOR'S RIGHTS:

The Bidder / Supplier / Contractor shall not either wholly or partly sell, transfer, assign or otherwise dispose of the rights, liabilities and obligations under the contract between him and the Purchaser without prior consent of the Purchaser in writing.

20. SUBCONTRACT AND RIGHT OF PURCHASER:

The Bidder / Supplier / Contractor under no circumstances undertake or subcontract any work / contract from or to any other Sub-contractor without prior written approval of the Competent Authority of Purchaser. In the event it is found that such practice has been indulged in, the contract is liable to be terminated without notice and the Bidder / Supplier / Contractor is

debarred all from future tender enquiries / work orders. However, in no circumstances a contractor is permitted to subcontract any part of the contract to the bidders who had quoted for the concerned tender.

21. PATENT RIGHTS:

The Bidder / Supplier / Contractor shall hold harmless and keep the Purchaser indemnified against all claims arising as a result of infringement of any patent / copy rights on account of manufacture, sale or use of articles covered by the order.

22. AGENTS/AGENCY COMMISSION:

The seller confirms and declares to the buyer that the seller is the original manufacturer or authorized distributor/stockiest of original manufacturer of the goods referred to in this contract and has not engaged any individual or firm, whether Indian or foreign whatsoever, to intercede, facilitate or in any way to recommended to the Buyer or any of its functionaries, whether officially or unofficially , to the award of the Contract / Purchase order to the Seller; nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Seller agrees that if it is established at any time to the satisfaction of the Buyer that the present declaration is in any way incorrect or if at a later stage it is discovered by the Buyer that the Seller has engaged any such individual/firm, and paid or intended to pay any amount, gift, reward , fees, commission or consideration to such person, party, firm or institution , whether before or after the signing of this Contract / Purchase order, the Seller will be liable to refund that amount to the Buyer. The seller will also be debarred from participation in any RFQ/Tender for new projects/program with Buyer for a minimum period of five years. The buyer will also have a right to consider cancellation of the Contract either wholly or in part, without any entitlement or compensation to the Seller who shall in such event be liable to refund all payments made by the buyer in terms of the Contract along with interest at the rate of 2% per annum or 6% whichever is higher above LIBOR (London Inter Bank Offer Rate) (for foreign vendors) and base rate of SBI plus 2% (for Indian Vendors). The Buyer will also have the right to recover any such amount from any contracts concluded earlier with Buyer.

23. USE OF UNDUE INFLUENCE / CORRUPT PRACTICES:

The Bidder / Supplier / Contractor undertakes that he has not used corrupt practices or used any undue influence which is not admissible as per Indian law to obtain contract/order or in doing any business with the purchaser. If found that Bidder / Supplier / Contractor is involved in such wrong practices, then Purchaser is entitled to cancel the contract/s and all or any other contracts and then to recover from the Bidder / Supplier / Contractor the amounts of any loss arising from such contracts' cancellation, including but not limited to imposition of penal damages, forfeiture of Performance security, encashment of the Bank Guarantee and refund of the amounts paid by the Purchaser.

24. IMMUNITY OF GOVERNMENT OF INDIA CLAUSE:

It is expressly understood and agreed by and between M/s. (Bidder / Supplier /Contractor) and Mazagon Dock Shipbuilders Limited, Dockyard Road, Mumbai – 400 010 (MDL) is entering into this Agreement solely on its own behalf and not on the behalf of any person or entity. In particular, it is expressly understood and agreed that the Government of India is not a party to this Agreement and has no liabilities, obligations or rights hereunder. It is expressly understood and agreed that MDL is an independent legal entity with power and authority to enter into contracts solely in its own behalf under the applicable of Laws of India and general principles of Contract Law. The (Bidder / Supplier / Contractor) expressly agrees, acknowledges and understands that MDL is not an agent, representative or delegate of the Government of India. It is further understood and agreed that the Government of India is not and shall not be liable for any acts, omissions and commissions, breaches or other wrongs arising out of the contract. Accordingly, (Bidder / Supplier / Contractor) hereby expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Government of India arising out of this contract and covenants not to sue Government of India in any manner, claim, cause of action or thing whatsoever arising of or under this Agreement.

25. EXPORT LICENCE:

The export licenses that may be required for delivery of the various items/equipment to MDL shall be arranged by the Bidder / Supplier / Contractor from the concerned authorities in their country without any time and cost implications on the Purchaser.

26. BANNED OR DE-LISTED CONTRACTORS / SUPPLIERS:

The Bidder / Supplier / Contractor declares that they being Proprietors / Directors /Partners have not been any time individually or collectively blacklisted or banned or de-listed by any Government or quasi-Government agencies or PSUs. If a bidder's entities as stated above have been blacklisted or banned or de-listed by any Government or quasi-Government agencies or PSUs, this fact must be clearly stated and it may not necessarily be a cause for disqualifying him.

27. DUTY OF PERSONNEL OF SUPPLIER/CONTRACTOR:

MDL being a Defence Public Sector Undertaking, Bidder / Supplier / Contractor undertakes that their personnel deployed in connection with the entrusted work will not indulge in any activities other than the duties assigned to them.

28. DISPUTE RESOLUTION MECHANISM AND ARBITRATION:

(a) Dispute resolution mechanism (DRM)

- i) Any dispute/differences between the parties arising out of and in connection with the contract shall be settled amicably by mutual negotiations at HoS/HoD level.
- ii) In case of non-settlement by (i) above, if at any time, before, during or after the contract period any unsettled claim, dispute or difference arose between the parties, upon or in relation to or in connection with or in any way touching or concerning this tender/agreement/order/contract, the same shall be referred to the concerned Functional Director. The Functional Director shall then nominate an Executive of the rank of General Manager whom he thinks fit and competent or a Committee of Executives who/which shall then scrutinise the claims/disputes that have been referred to the concerned functional Director and make efforts for amicable settlements by mutual discussions/negotiations.
- iii) In case no amicable settlement is arrived by (ii) above within a period of three months, then the contractor shall approach Public Grievance Cell and address the disputes as per the provisions made under the relevant clause of the contract.
- iv) In case the issues/disputes do not get settled within a period of six months from the date of submission of the dispute to the Grievance Cell, then the contractor may invoke Arbitration Clause of the contract.

(b) Arbitration:

Unresolved disputes/differences, if any, shall then be settled by Arbitration. The Arbitration proceedings shall be conducted at Mumbai, India, in English Language, under the Arbitration and Conciliation Act, 1996 as amended from time to time and the rules thereunder. MDL prefers to have arbitration through Institutes such as Indian Council of Arbitration (ICA)/ICA-DR, Mumbai Centre for International Arbitration, International Chamber of Commerce (ICC), Singapore International Arbitration Centre (SIAC) with the mutual consent of the parties. In case of unresolved difference/dispute between the Purchaser and Supplier, being Central Public Sector Enterprises/Central Govt. departments, the disputes shall be resolved firstly through mutual discussion or through the empowered agencies of the Govt. or through arbitration by reference by either party to the department of Public Enterprises, as per extant guidelines. If disputes/differences remain unresolved/unexecuted, the same shall be referred first to the Cabinet Secretariat and then, if necessary to the PMO.

29. JURISDICTION OF COURTS:

All contracts shall be deemed to have been wholly made in Mumbai and all claims there under are payable in Mumbai City and it is the distinct condition of the order that no suit or action for the purpose of enforcing any claim in respect of the order shall be instituted in any Court other than that situated in Mumbai City, Maharashtra State, India i.e. courts in Mumbai shall alone have jurisdiction to decide upon any dispute arising out of or in respect of the contract.

30. CONTRACT LABOUR (REGULATION AND ABOLITION) ACT 1970

Contractor / Bidder shall obtain licence under Section 12 and 13 of the Contract Labour (Regulation and Abolition) Act, 1970 and rules made there under and the same should be kept valid at least until the expiry of contract with Purchaser. The registration and Licence under the Contract Labour (Regulation and Abolition) Act 1970 shall be renewed in time every year and if work continues for more than a year, a copy of the Licence is produced as and when demanded by the concerned authorities of Purchaser.

The Contractor / Bidder shall carryout his obligations and duties under the Contract Labour (Regulation and Abolition) Act, 1970 and the rules framed there under. In the event any employee/s of Contractor / Bidder is advised by the concerned Department to deploy their employees for job during weekly-off, Sundays and holidays, the Contractor / Bidder must inform through Concerned Department the name/s of the employee/s in the prescribed format to CISF / Security and to the concerned Divisional Personnel by mentioning specifically 'Compensatory - Off', before 3 days from the date actual payment.

31. MINIMUM WAGES ACT

The Contractor / Bidder shall pay to his employees not less than the minimum wages and allowances applicable to the Engineering Industry as notified from time to time by the Central Government or the State Government whichever is higher under the Minimum Wages Act. Contractor / Bidder shall be responsible for timely payment of wages of all his employees engaged in the Purchaser's Yard, not less than the prescribed minimum wages in each case and without any deductions of any kind, except as specified by Government or permissible under the Payment of Wages Act. The Contractor / Bidder must settle all the pending dues of the employees i.e., arrears of wages, proportionate leave wages, proportionate bonus payment, etc. Before winding up the site, the Contractor / Bidder shall pay all terminal dues to his employees such as Notice pay, Gratuity, Retrenchment compensation, etc.

32. BONUS ACT

The Contractor / Bidder shall pay to his eligible employees a Statutory Bonus as per 'Payment of Bonus Act' at the rate prescribed by the Statutory Authorities from time to time.

33. FACTORIES ACT

The Contractor / Bidder shall observe all applicable Rules and Regulations stipulated under Factories Act applicable to contract labour. The Contractor / Bidder shall maintain a separate register prescribed under the Act and pay Privilege Leave wages to all eligible employees. On completion of execution of the contract and before winding up, the Contractor / Bidder shall pay proportionate Privilege Leave wages to all eligible employees.

34. EMPLOYEES' PROVIDENT FUNDS AND MISCELLANEOUS PROVISIONS ACT, 1952

The Contractor / Bidder, where applicable, shall cover his employees deployed in the Purchaser's Yard (a) under the Employees' Provident Funds and Miscellaneous Act, 1952, (b) under the Family Pension Scheme, and (c) under the Employees' Deposit Linked Insurance Scheme and pay the contributions both in respect of his employees and his own. He shall submit all the necessary returns and other particulars periodically as prescribed under the said Act. Contractor / Bidder shall cover from the first day working all his contract labour on MDL jobs by filling requisite returns to concerned Statutory authorities and obtaining Code Numbers / Account Numbers. Contractor / Bidder shall remit employees' and employers' contributions directly to the concerned authorities along with Inspection and Administrative Charges as per relevant provisions of the concerned Acts and Schemes made there under within 15 days from the close of every month. The Contractor / Bidder must submit copies of P. F. dues payment challans, copy of Form No. 12 (A), copy of form No. 6 (A) (Annually) and copies of Muster Roll of their workmen every month to Corporate Personnel Department before renewal of passes for entry into the yard. The Contractor / Bidder must also attend to P. F. Inspections by concerned authorities and submit copy of the Inspection Report.

The Contractor / Bidder through his own P. F. code number shall fill in P. F. / Pension settlement forms of all the employees engaged in Purchaser's Yard, well in advance of last working day and forwards the said settlement forms to the respective P. F. Commissioner's office for settlement. Contractors who are yet to obtain PF code shall apply for Code no s to PF Commissioners Office and furnish copies of the same to Corporate Personnel Department. Purchaser shall recover PF dues from the contractors running bills till such time the PF Code no is obtained.

The Contractor / Bidder may contact Corporate Personnel Department for the purpose to seek any / all clarification / necessary advice for completion of procedural work such as filling labour challans, E. S. I., P. F. – declaration forms, covering their labour under Group Insurance Policy, etc. An Administrative charge @ Rs. 10/- per employee per month for such consultancy will be recovered

35. EMPLOYEES' STATE INSURANCE ACT

The Contractor / Bidder should also cover all the eligible contract labourers working on MDL jobs, under the Employees' State Insurance Act and Scheme by furnishing necessary returns to appropriate authority and pay both employees' and employers' contributions in respect of these employees to the concerned authorities within 20 days from the close of every month. The contractor shall produce copy of R. D. F. duly acknowledged by ESI local office for confirmation that the workmen are covered under ESI Act and Scheme.

Contractor / Bidder should produce proof of such remittances to Corporate Personnel Department of MDL along with full details of contributions etc. within 25 days from the close of month. He shall also give an undertaking that he will not engage any one on our work who is not duly covered under the said Act and Scheme. The contract employees who are out of coverage of ESI Act and Scheme should be covered under Group Insurance Policy linked with workman compensation Act. Those Bidders / contractors do not have their ESI Code No.; they should submit documentary evidence of application for obtaining ESI Code no to Corporate Personnel Department.

36. SAFETY:

The Contractor / Bidder must observe all safety precautions in connection with the work to be performed by him, his agents or labourers. In the event of any accident happening in our yard resulting in loss of lives or otherwise damaging any part of the property, the contractor shall be required to make good the loss to the Company and shall be responsible for all consequences that follow from the loss and / or injuries to the persons involved in such accidents. The standard of safety to be observed in the Company shall be decided by the Executive-in-Charge Safety, or any Executive appointed for the purpose before the commencement of work in the yard. It will be essential for contractor to ascertain the standard precautions which contractor is required to observe in discharging his work as per the standards prevalent in MDL. The decision of MDL in matters concerning Safety shall be final and binding on the contractor. The Contractor / Bidder shall be required to provide his workmen with Boiler Suits of any suitable colour other than blue or white, with the Name of the Contractor in prominent letters on the boiler suits along with personal protection gears like safety shoes, hand gloves etc. workmen of the Contractor / Bidder must wear throughout their working while in the premises of MDL. Contractor's workmen working without safety gears are to be disallowed for work.

37. POLICE VERIFICATION OF EMPLOYEES

Contractor / Bidder shall have to produce and submit to the Chief Security Executive of Purchaser, verification through Mumbai Police of Character and Antecedents of their employees / workers for while working on ships under construction in Purchaser's Yards, for working onboard ships under modernisation / refit / repairs at Mumbai ports / Naval Dockyard. Entry passes will not be issued in the absence of Police Verification Report and employees without Police Verification shall not be employed by them in Purchaser's Yard / Mumbai ports / Naval Dockyard and any lapse on the part of Contractor / Bidder shall be viewed seriously as per applicable laws of the land. Employment of any Foreign National

38. FORCE MAJEURE:

If at any time during the execution of the goods / service order, the performance in whole or in part by either Purchaser or and by the Bidder(s) / Supplier(s) / Contractor(s) is / are delayed by any reason of force majeure situations such as acts of civil war, civil commotion, sabotage, hostilities, war, fires, explosions, epidemics, natural calamities like floods, earthquakes, volcanoes, storms, acts of God and laws of respective governments or any other causes beyond the control of either parties, hereinafter referred to as "events", provided notice of the occurrence of such event/s is / are communicated by either party, to the other party within 21 days from the date of occurrence thereof, neither party shall by reason such events be entitled to terminate the contract nor shall either party have any claim for damages against the other in respect of such non-performance and or delay in performance of the contract / order. Executions on either side shall be resumed as soon as practicable after such event has come to an end or ceased to exist and the decision of Purchaser as to whether activities can resume or not, shall be conclusive and final. Occurrence of the events to be certified by Chamber of Commerce / Indian High Commission or Embassies / Government in that Country.

The performance in whole or in part under the captioned tender / contract is prevented or delayed by reason of any such event for a period exceeding sixty days either party may at its option terminate the contract / further processing of the tender. The relative obligations of both the parties remain suspended during the actual period of force majeure.

The Purchaser may extend the delivery schedule as mutually agreed, on receipt of written communication from the Bidder / Supplier / Contractor regarding occurrence of 'Force Majeure' conditions, but not exceeding six months from the scheduled delivery date. If the 'Force Majeure' conditions extend beyond this period, the Purchaser shall have the right to cancel the order without any financial implication to the Purchaser or on terms mutually agreed to.

39. CODE OF INTEGRITY IN PUBLIC PROCUREMENT

Procuring authorities (including indenter) as well as bidders, suppliers, contractors and consultants should observe the highest standard of ethics and should not indulge in the following prohibited practices, either directly or indirectly, at any stage during the procurement process or during execution of resultant contracts:

39.1 Corrupt practice

Making offers, solicitation or acceptance of bribe, rewards or gifts or any material benefit, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process or contract execution.

39.2 Fraudulent practice

Any omission or misrepresentation that may mislead or attempt to mislead so that financial or other benefits may be obtained or an obligation avoided. This includes making false declaration or providing false information for participation in a tender process or to secure a contract or in execution of the contract.

39.3 Anti-competitive practice

Any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of The Competition Act, 2002, between two or more bidders, with or without the knowledge of MDL, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels.

39.4 Coercive practice

Harming or threatening to harm, persons or their property to influence their participation in the procurement process or affect the execution of a contract.

39.5 Conflict of interest

Participation by a bidding firm or any of its affiliates that are either involved in the consultancy contract to which this procurement is linked; or if they are part of more than one bid in the procurement; or if the bidding firm or their personnel have relationships or financial or business transactions with any official of MDL who are directly or indirectly related to

tender or execution process of contract; or improper use of information obtained by the (prospective) bidder from MDL with an intent to gain unfair advantage in the procurement process or for personal gain.

39.6 Obstructive practice

Materially impede MDL's investigation into allegations of one or more of the above mentioned prohibited practices either by deliberately destroying, falsifying, altering; or by concealing of evidence material to the investigation; or by making false statements to investigators and/or by threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or by impeding MDL's rights of audit or access to information

TEF ACCEPTANCE FORMAT
(Bidders requested to fill complete details as)

To
 MAZAGON DOCK SHIPBUILDERS LIMITED
 COMMERCIAL DEPARTMENT (E. Y)
 TENDER ENQUIRY NO.:

TEF CLAUSE No.	BIDDER'S REMARK	TEF CLAUSE No.	BIDDER'S REMARK	TEF CLAUSE No.	BIDDER'S REMARK
	ACC/DEV		ACC/DEV		ACC/DEV
1.	ACC/DEV	2.	ACC/DEV	3.	ACC/DEV
4.	ACC/DEV	5.	ACC/DEV	6.	ACC/DEV
7.	ACC/DEV	8.	ACC/DEV	9.	ACC/DEV
10.	ACC/DEV	11.	ACC/DEV	12.	ACC/DEV
13.	ACC/DEV	14.	ACC/DEV	15.	ACC/DEV
16.	ACC/DEV	17.	ACC/DEV	18.	ACC/DEV
19.	ACC/DEV	20.	ACC/DEV	21.	ACC/DEV
22.	ACC/DEV	23.	ACC/DEV	24.	ACC/DEV
25.	ACC/DEV	26.	ACC/DEV	27.	ACC/DEV
28.	ACC/DEV	29.	ACC/DEV	30.	ACC/DEV
31.	ACC/DEV	32.	ACC/DEV	33.	ACC/DEV
34.	ACC/DEV	35.	ACC/DEV	36.	ACC/DEV
37.	ACC/DEV	38.	ACC/DEV	39.	ACC/DEV
40.	ACC/DEV	41.	ACC/DEV	42.	ACC/DEV
43.	ACC/DEV	44.	ACC/DEV	45.	ACC/DEV
46.	ACC/DEV	48.	ACC/DEV		ACC/DEV

COMPANY'S NAME & ADDRESS :
 SIGNATURE:

DATE:

NAME:

DESIGNATION:

BIDDER'S COMPANY SEAL:

NOTES:

- Bidder should carefully read the Terms & Conditions of the Tender Enquiry Form (TEF) prior to filling up this acceptance format.
- This format should be properly filled, signed and returned by the bidder(s) along with their technical offer for considering their Bid.
- Bidder should indicate "ACC" for Accepted, "DEV" for Deviation Taken for each clause number in the above table.
- Bidder to attach Separate Sheet indicating all relevant details such as Number & description of the Clause, Reasons for Deviation and Alternative suggested for any deviations taken by them.
- Clause numbers shown in the above format also includes the sub-clauses under these clauses. For example, Clause no. '3' means – Clause nos. 3.1, 3.1.1, 3.1.2

Acceptance Form for General Conditions of Contract (GCC) for Goods
(Bidders to fill, sign, stamp and return this form in PART- I bid)

To,
HOD (C-EY)
COMMERCIAL DEPARTMENT-EY
MAZAGON DOCK SHIPBUILDERS LIMITED MUMBAI-10

TENDER ENQUIRY No.:

GCC CLAUSE No.	BIDDER'S REMARK	GCC CLAUSE No.	BIDDER'S REMARK	GCC CLAUSE No.	BIDDER'S REMARK
1.	ACC/DEV	2.	ACC/DEV	3.	ACC/DEV
4.	ACC/DEV	5.	ACC/DEV	6.	ACC/DEV
7.	ACC/DEV	8.	ACC/DEV	9.	ACC/DEV
10.	ACC/DEV	11.	ACC/DEV	12.	ACC/DEV
13.	ACC/DEV	14.	ACC/DEV	15.	ACC/DEV
16.	ACC/DEV	17.	ACC/DEV	18.	ACC/DEV
19.	ACC/DEV	20.	ACC/DEV	21.	ACC/DEV
22.	ACC/DEV	23.	ACC/DEV	24.	ACC/DEV
25.	ACC/DEV	26.	ACC/DEV	27.	ACC/DEV
28.	ACC/DEV	29.	ACC/DEV	30.	ACC/DEV
31.	ACC/DEV	32.	ACC/DEV	33.	ACC/DEV
34.	ACC/DEV	35.	ACC/DEV	36.	ACC/DEV
37.	ACC/DEV	38.	ACC/DEV	39.	ACC/DEV

COMPANY'S NAME & ADDRESS:

SIGNATURE :
DATE :
NAME :
DESIGNATION :
BIDDER'S COMPANY SEAL:

NOTES:

1. Bidder confirms to have carefully read the General Terms & Conditions (GT&C) of the Tender Enquiry prior to filling up this acceptance format.
2. Bidder confirms to have indicated "ACC" for Accepted, "DEV" for Deviation Taken for each clause number in the above table.
3. In case of any deviations taken, **Bidder confirms to have attached Separate Sheet** indicating all relevant details such as Number & description of the Clause, Reasons for the Deviation and suggested Alternative(s).
4. Clause numbers shown in the above format also includes the sub-clauses under these clauses. For example, Clause no. A10 means – Clause nos. A11, A12, A13.

Format of Deviation Sheet

(To be made on Bidder's Company Letterhead, duly signed & stamped, dated and submitted along with the offer by the Bidder)

Deviation Sr. No.	Page Sr. No and Enclosure Reference No. as relevant of the Tender Enquiry	Clause Number for which the Deviation is Sought	Brief Text Description of the Clause	Reasons for Deviation	Suggested Alternative
1.					
2.					
& so on...					

COMPANY'S NAME & ADDRESS:

SIGNATURE :
DATE :
NAME :
DESIGNATION :
BIDDER'S COMPANY SEAL:

FORM OF CERTIFICATE OF CONFORMITY

In accordance with the Order N°..... Dated placed by MAZAGON DOCK SHIPBUILDERS LIMITED on (Bidder's Name) and corresponding to (Bidder's Name) invoice no dated.....

1. We herewith certify that corresponding to the Item description..... related to Yard Nos. 11878, 11879 & 11880

Item no as per PO	Item Description as per PO	Material Grade / Specs / Type/Part No.	Measurement Unit	Quantity as per PO	Quantity accepted

2. We further certify that:

- a. Each of the item supplied has been identified by permanent marks (such as Reference No.....) with appropriate method such as engraving / non erasable ink/punching where permissible.
- b. Each of the items supplied are manufactured with quality and are fully compatible and suitable for use with the respective main equipment ordered by MDL under Project-75.

List of waivers accepted by the Buyer	List of waivers not accepted by the Buyer
Bidders to specify:	Nil

3. All details listed below as applicable to each line item have been verified, found compliant and acceptable as per terms of above-mentioned order: -

Description, Quantity, Aspect, Technical Data Sheets, Calibration Reports, Shock indicators, Tilt indicators, Shelf-Life details indicating Date of Manufacture & Expiry and packaging in correlation with Packing List.

**For and on behalf
of**

**(Supplier's name)
In- charge of QUALITY
Seal signature & date**

DATE :
NAME :
DESIGNATION :
BIDDER'S COMPANY SEAL:

FORM OF WARRANTY CERTIFICATE

In accordance with the Order N°..... Dated placed by MAZAGON DOCK SHIPBUILDERS LIMITED on _____(Name of firm)

_____ (Name of firm) certify that the following Items identified by the following references related to Yard Nos 11878, 11879 & 11880

Description of B&D Spares /Item(s) and Manufacturer's Serial Number (OR any other such ID No) as per packing list no..... datedenclosed herewith

Bill of Lading/Air Way Bill no /Delivery Challan No. & Date.....

Covered by _____ (Name of firm) Invoice No & Date..... are warranted according to the terms and conditions as specified in the order.

The Date of issue of the certificate: DD/MM/YYYY

The Date of the end of validity of the guarantee: DD/MM/YYYY

For and on behalf of

COMPANY'S NAME & ADDRESS:

SIGNATURE :
DATE :
NAME :
DESIGNATION :
SUPPLIER'S COMPANY SEAL:

Order reference Number	
LC No.	
Corresponding to Invoice No & Date	
Packing List No. & Date	

PROFORMA BANK GUARANTEE FOR BID BOND / EMD

(On Non-Judicial stamp paper of value Rs. 500/-. However, the value of stamp paper to be confirmed from Legal Department, MDL.)

IN CONSIDERATION OF MAZAGON DOCK SHIPBUILDERS LIMITED, a company incorporated under the Companies Act 1956 and having its registered office at Dockyard Road, Mumbai 400010 (hereinafter referred to as the "the Company" which expression shall, unless it be repugnant or contrary to the subject or context thereof, be deemed to mean and include its successors and assigns) having agreed to accept the Earnest Money Deposit (EMD) of Rs----- (Rupees-----only) in the form of Bank Guarantee from Messers a partnership firm/sole proprietor business/a company registered under the Companies Act, 1956 having its office at(hereinafter called " the tenderer" which expression shall, unless it be repugnant or contrary to the subject or context thereof, be deemed to mean and include its successors and assigns) for participating in the Tender no.....dated..... (hereinafter called "the tender" which expression shall include any amendments/alterations to "the tender" issued by "the Company") for the supply, delivery at site, installation and commissioning of certain equipment, item/services/civil works etc., We, Bank having office at (hereinafter referred to as "the Bank" which expression shall include its successors and assigns) hereby agree to pay to the Company without any demur on first demand an amount not exceeding Rs..... (Rupees.....only) against any loss or damage, costs, charges and expenses caused to or suffered by the Company by reason of non performance and non-fulfilment or for any breach on the part of the tenderer of any of the terms and conditions of the said tender.

2. We, Bank further agree that the Company shall be sole judge whether the said tenderer has failed to perform or fulfil the said tender in terms thereof or committed breach of any terms and conditions of the tender the extent of loss, damage, cost, charges and expenses suffered or incurred or would be suffered or incurred by the Company on account thereof and we waive in the favour of the Company all the rights and defences to which we as guarantors may be entitled to.

3. We, Bank further agree that the amount demanded by the Company as such shall be final and binding on the Bank as to the Bank 's liability to pay and the amount demanded and the Bank undertake to pay the Company the amount so demanded on first demand and without any demur notwithstanding any dispute raised by the tenderer or any suit or other legal proceedings including arbitration pending before any court, tribunal or arbitrator relating thereto, our liability under this guarantee being absolute and unconditional.

4. We, Bank further agree with the Company that the Company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said tender/or to extend time of performance by the tenderer from time to time or to postpone for any time to time any of the powers exercisable by the Company against the tenderer and to forbear to enforce any of the terms and conditions relating to the tender and we shall not be relieved from our liability by reason of any such variation or extension being granted to the tenderer or for any forbearance, act or omission on the part of the Company or any indulgence by the Company to the tenderer or by any such matter or things whatsoever which under the law relating to sureties would have the effect of relieving us.

5. We, Bank further undertake not to revoke this guarantee during its currency except with the previous consent of the Company in writing.

6. We, Bank also agree that the Bank's liability under this guarantee shall not be affected by any change in the constitution of the tenderer or dissolution or winding up of the business of the tenderer.

7. Notwithstanding anything contained herein above:

i) Our liability under this guarantee shall not exceed Rs.....

ii) This Bank Guarantee shall be valid upto and including; and

iii) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before(validity + ---weeks from the date of expiry of this guarantee).

8. This Guarantee shall be governed by Indian laws and the Courts at Mumbai, India shall have the exclusive jurisdiction.

IN WITNESS WHEREOF the Bank has executed this document on this..... day of

.....

For Bank
(by its constituted attorney
or the person authorised to sign)
(Signature of a person authorised
to sign on behalf of "the Bank")

PROFORMA BANK GUARANTEE FOR PERFORMANCE SECURITY

(ILLUSTRATIVE FORMAT)

(On Non-Judicial stamp paper of value Rs. 500/-)

IN CONSIDERATION OF MAZAGON DOCK SHIPBUILDERS LIMITED (Formerly known as MAZAGON DOCK LIMITED) a company incorporated under the Companies Act 1956 and having its registered office at Dockyard Road, Mumbai 400010 (hereinafter referred to as the "the Purchaser" which expression shall, unless it be repugnant or contrary to the subject or context thereof, be deemed to mean and include its successors and assigns) having placed an order on Messers a partnership firm/sole proprietor business/a company registered under the Companies Act, 1956 having its Registered office at(hereinafter called the Contractor/ Supplier which expression shall, unless it be repugnant or contrary to the subject or context thereof, be deemed to mean and include its successors and assigns) vide order No..... dated..... (hereinafter called "the order" which expression shall include any amendments/alterations to "the order" issued by "the Purchaser") for the supply , delivery at site, installation and commissioning of certain equipment, item/services/civil works etc. as stated in the said Order and the Purchaser having agreed that the Contractor / Supplier shall furnish a security for the performance of the Contractor's / Supplier's obligations and/or discharge of the Contractor's / Supplier's liability in connection with the said order and the Purchaser having agreed with the Contractor/Supplier to accept a performance guarantee, We,Bank having office at (hereinafter referred to as "the Bank" which expression shall include its successors and assigns) hereby agree to pay to the Purchaser without any demur on first demand an amount not exceeding Rs..... (Rupees.....only) being 5% of the order value against any loss or damage, costs, charges and expenses caused to or suffered by the Purchaser by reason of non-performance and non-fulfillment or for any breach on the part of the Contractor / Supplier of any of the terms and conditions of the said order.

2. We, Bank further agree that the Purchaser shall be sole judge whether the said Contractor/Supplier has failed to perform or fulfill the said order in terms thereof or committed breach of any terms and conditions of the order and the extent of loss, damage, cost, charges and expenses suffered or incurred or would be suffered or incurred by the Purchaser on account thereof and we waive in the favour of the Purchaser all the rights and defences to which we as guarantors may be entitled to.

3. We, Bank further agree that the amount demanded by the Purchaser as such shall be final and binding on the Bank as to the Bank 's liability to pay and the amount demanded and the Bank undertake to pay the Purchaser the amount so demanded on first demand and without any demur notwithstanding any dispute raised by the Contractor/Supplier or any suit or other legal proceedings including arbitration pending before any court, tribunal or arbitrator relating thereto, our liability under this guarantee being absolute and unconditional.

4. We, Bank further agree with the Purchaser that the Purchaser shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said order/or to extend time of performance by the Supplier from time to time or to postpone for any time to time any of the powers exercisable by the Purchaser against the Contractor/ Supplier and to forbear to enforce any of the terms and conditions relating to the order and we shall not be relieved from our liability by reason of any such variation or extension being granted to the Contractor/ Supplier or for any forbearance, act or omission on the part of the Purchaser or any indulgence by the Purchaser to the Contractor/Supplier or by any such matter or things whatsoever which under the law relating to sureties would have the effect of relieving us.

5. We, Bank further undertake not to revoke this guarantee during its currency except with the previous consent of the Purchaser in writing.

6. We, Bank also agree that the Bank's liability under this guarantee shall not be affected by any change in the constitution of the Contractor / Supplier or dissolution or winding up of the business of the contractor/ supplier.

7. Notwithstanding anything contained herein above:

- i) Our liability under this guarantee shall not exceed Rs.....
- ii) This Bank Guarantee shall be valid up to and including; and
- iii) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before

(validity + 4 weeks from the date of expiry of this guarantee).

8. This Guarantee shall be governed by Indian laws and the Courts at Mumbai, India shall have the exclusive jurisdiction.

IN WITNESS WHEREOF the Bank has executed this document on this..... day of

For Bank
(By its constituted attorney)

(Signature of a person authorized to sign on behalf of "the Bank")

NOTE:

- 1. Indigenous supplier or Foreign Supplier through Indian Bank to submit BG.
- 2. If foreign supplier submits BG through Foreign Bank the same should be submitted by SWIFT.MDL Bank SWIFT A/c.No.is SBININBB101.

INTEGRITY PACT
(On Company Letterhead)

Mazagon Dock Shipbuilders Limited (MDL) hereinafter referred to as "The Principal/Buyer" Andhereinafter referred to as "The Bidder/ Contractor"

Preamble

The Principal/Buyer intends to award, under laid down organizational procedures, contract/s for.....The Principal/Buyer values full compliance with all relevant laws of the Land and, rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and /or Contractor(s).

In order to achieve these goals, the Principal/Buyer will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal/Buyer:

- (1) The Principal/Buyer commits itself to take all measures necessary to prevent corruption and to observe the following principles:
- a) No employee of the Principal/Buyer, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - b) The Principal/Buyer will during the tender process treat all Bidder(s) with equity and reason. The Principal/Buyer will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
 - c) The Principal/Buyer will exclude from the process all known prejudiced persons.
 - d) The Principal/Buyer undertakes to scrupulously follow the Purchase Manual containing Standard Terms & Conditions (STAC) and General Terms & Conditions (GT&C) in respect of procurement contracts for goods, services and civil works.
- (2) If the Principal/Buyer obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or it there be a substantive suspicion in this regard, the Principal/Buyer will inform the Chief Vigilance Officer, MDL and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/Contractor(s):

- (1) The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- a) The Bidder(s)/Contractor(s) will not, directly or through any other persons or firm, offer promise or give to any of the Principal/Buyer's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage or any kind whatsoever during the tender process or during the execution of the contract
 - b) The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant Anti-Corruption Laws of India; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to other, any information or document provided by the Principal/Buyer as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. All payments made to the Indian Agent/representative have to be in Indian Rupees only. Further details as mentioned in the "Guidelines of Indian Agents of Foreign suppliers" shall be disclosed by the Bidders(s)/Contractor(s). Copy of the "Guidelines on Indian Agents of Foreign Suppliers" as annexed and marked as Enclosure-21a.
 - e) The Bidder(s)/Contractor(s) will when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
 - f) The Bidder (s)/Contractor(s), their agents, representatives shall not do such things so as to interfere with the procedures laid down in the Principal/Buyer's Purchase Manual containing the Standard Terms and Conditions (STAC) and General Terms and Conditions (GT&C) in respect of procurement contracts for goods, services and civil works.
 - g) The Bidder commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.

- (2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- (3) A person signing IP shall not approach the courts while representing the matters to IEMs and he/she will await their decision in the matter.

Section 3 - Disqualification from tender process and exclusion from future contracts:

If the Bidder(s)/Contractor(s) before contract award or during execution of contract has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility as Bidder(s) in question, the Principal/Buyer is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or to terminate the contract, if already signed for such reason, as per the procedure mentioned in the "Guidelines on Banning of business dealings" Copy of the "Guidelines on Banning of business dealings" is annexed and marked as Enclosure-21b.

- 1) If the Bidder(s)/Contractor(s) has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal/Buyer is entitled also to exclude the Bidder(s)/Contractor(s) from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder(s) and the amount of the damage. The exclusion will be imposed for a minimum of six months and maximum of five years, which may be further extended at the discretion of the Principal/Buyer.
- 2) A transgression is considered to have occurred, if the Principal/Buyer after due consideration of the available evidence, concludes that no reasonable doubt is possible.
- 3) The Bidder (s) accepts and undertakes to respect and uphold the Principal/Buyer's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining legal advice.
- 4) If the Bidder(s)/Contractor(s) can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Buyer may revoke the exclusion prematurely.

Section 4 – Sanctions for Violation:

- (1) Any breach of the aforesaid provisions by the Bidder or any one employed by him or acting on his behalf (whether with or without the knowledge of the Bidder) or the commission of any offence by the Bidder or any one employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act 1988 or any other Act enacted for the prevention of corruption shall entitle the Principal/Buyer to take all or any one of the following actions, wherever required –
 - a) 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.
 - b) The Earnest Money Deposit/Security Deposit/Performance Bond shall stand forfeited either fully or partially, as decided by the Principal/Buyer, and the Principal/Buyer shall not be required to assign any reason there for.
 - c) To immediately cancel the contract, if already signed, without giving any compensation to the Bidder.
 - d) To recover all sums already paid by the Principal/Buyer, in case of an Indian Bidder with interest thereon at 2% higher than the prevailing Base Rate of SBI, and 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 Defence stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
 - e) 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 Principal/Buyer, along with interest.
 - f) To cancel all or any other contracts with the Bidder.
 - g) To debar the Bidder from entering into any bid from Principal/Buyer for a minimum period of five years, which may be further extended at the discretion of the Principal/Buyer.
 - h) 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.
 - i) If the Bidder or any employee of the Bidder or any person acting on behalf of the Bidder, either directly or indirectly, is closely related to any of the officers of the Buyer, or alternatively, if any close relative of an officer of the Buyer has financial interest/stake in the Bidder's firm, the same shall be disclosed by the Bidder at the time of filing of tender. Any failure to disclose the interest involved shall entitle the Buyer to rescind the contract without payment of any compensation to the Bidder. The term 'close relative' for this purpose would mean spouse whether residing with the Principal/Buyer's employee/employees or not, but not include a spouse separated from the Principal/Buyer's employee/employees by a decree or order of a competent court; son or daughter or step son or step daughter and wholly dependent upon Principal/Buyer's employee/employees, but does not include a child or step child who is no longer in any way dependent upon the Principal/Buyer's employee/employees or of whose custody the Principal/Buyer's employee/employees has been deprived

of by or under any law; any other person related, whether by blood or marriage, to the Principal/Buyer's employee/employees or to the Principal/Buyer's employee/employees wife or husband and wholly dependent upon Principal/Buyer's employee/employees.

- j) 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 Principal/Buyer, and if he does so, the Principal/Buyer shall be entitled forthwith to rescind the contract and all other contracts with the Bidder. The Bidder shall be liable to pay compensation for any loss or damage to the Principal/Buyer resulting from such rescission and the Principal/Buyer shall be entitled to deduct the amount so payable from the money(s) due to the Bidder.
 - k) In cases where Irrevocable Letters of Credit have been received in respect of any contract signed by the Principal/Buyer with the Bidder, the same shall not be opened.
- (2) The decision of the Principal/Buyer to the effect that a breach of the provisions of this Integrity Pact has been committed by the Bidder shall be final and binding on the Bidder, however, the same Bidder can approach the Monitor(s) appointed for the purposes of this Pact.

Section 5 - Previous Transgression:

- (1) The Bidder declares that no previous transgressions occurred in the last three years with any other company in any country conforming to the anti-corruption approach or with any other public section enterprise in India that could justify his exclusion from the tender process.
- (2) If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process or further action can be taken.

Section 6 - Equal treatment of all Bidders/Contractor(s)/Subcontractors:

- (1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this integrity Pact, and to submit it to the Principal before contract signing.
- (2) The Principal/Buyer will enter into agreements with identical conditions as this one with all bidders, contractors and subcontractors. In case of a joint venture, all the partners of the joint venture should sign the Integrity Pact. In case of subcontracting, the principle contractor shall be solely responsible for the adherence to the provisions of IP by the subcontractor(s).
- (3) The Principal/Buyer will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 - Criminal charges against violation Bidder(s)/Contractor(s)/ Subcontractor(s):

- (1) If the Principal/Buyer obtains knowledge of conduct of a Bidder, Contractor or subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or subcontractor which constitutes corruption or if the Principal has substantive suspicion in this regard, the Principal/Buyer will inform the same to the Chief Vigilance Officer, MDL.

Section 8 - Independent External Monitor/Monitors:

- (1) The Principal/Buyer appoints competent and credible independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively whether and to what extent the parties comply with the obligations under this agreement.
- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairman & Managing Director of the Principal/Buyer.
- (3) The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all project documentation of the Principal/Buyer including that provided by the Contractor. The Contractor 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 is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality.
- (4) The Principal/Buyer 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 Principal/Buyer and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal/Buyer and request the Management to discontinue or take corrective action, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the Monitor shall give an opportunity to the Bidder(s)/Contractor(s) to present its case before making its recommendation to the Principal/Buyer.
- (6) The Monitor will submit a written report to the Chairman & Managing Director of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the Principal/Buyer and, should the occasion arise, submit proposals for correcting problematic situations.
- (7) Monitor shall be entitling to compensation on the same terms as being extended to / provided to

Independent Directors on the Board of Principal/Buyer.

- (8) If the Monitor has reported to the Chairman & Managing Director of the Principal, a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India and the Chairman & Managing Director of the Principal/Buyer has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- (9) The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration:

This pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract and for all other Bidders 06 months after the contract has been awarded. If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above unless it is discharged / determined by Chairman & Managing Director of the Principal/Buyer.

Section 10 - Other provisions:

- (1) This agreement is subject to Indian Law, place of performance and jurisdiction is the Registered Office of the Principal/Buyer, i.e. Mumbai. The Arbitration clauses provided in the main tender document/ contract shall not be applicable for any issue/dispute arising under this Integrity pact.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

Section 11 – Fall Clause:

“The Bidder undertakes that it has not supplied/is not supplying similar products/ systems or subsystems 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 product/systems or sub systems was supplied 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 of elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the Bidder to the Principal/Buyer, if the contract has already been concluded.”

For & on behalf of
MAZAGON DOCK Shipbuilders LIMITED

for & on behalf of
Bidder/Contractor

(Office Seal)

Place _____

Date _____

(Office Seal)

Place _____

Date _____

Witness 1:

(Name & Address)

Witness 2:

(Name & Address)

GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS

1.0 There shall be compulsory registration of agents for all Global (Open) Tender and Limited Tender. An agent who is not registered with MDL shall apply for registration.

1.1 An agent shall represent only one Foreign Supplier and not represent two suppliers or quote on their behalf in the same tender.

However, either the Indian Agent on behalf of the Foreign Suppliers (also includes foreign manufacturers) or the Foreign Suppliers (also includes foreign manufacturers) directly could bid in a tender, but not both. In cases where an agent participates in a tender on behalf of one manufacturer, shall not quote on behalf of another manufacturer along with the first Manufacturer in a subsequent/parallel tender for the same item.

1.2 Registered agents will file an authenticated Photostat copy duly attested by a Notary Public/Original certificate of the principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/remuneration/salary/ retainer ship being paid by the principal to the agent before the placement of order by MDL.

1.3 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.

2.0 DISCLOSURE OF PARTICULARS OF AGENTS/ REPRESENTATIVES IN INDIA, IF ANY.

2.1 Tenderers of Foreign nationality shall furnish the following details in their offer:

2.1.1 The name and address of the agents/representatives in India, if any and the extent of authorization and authority given to commit the principals. In case the agent/representative be a foreign Company, it shall be confirmed whether it is real substantial Company and details of the same shall be furnished.

2.1.2 The amount of commission/remuneration included in the quoted price(s) for such agents/representatives in India.

2.1.3 Confirmation of the Tenderer that the commission/ remuneration if any, payable to his agents/ representatives in India, may be paid by MDL in Indian Rupees only.

2.2 Tenderers of Indian Nationality shall furnish the following details in their offers:

2.2.1 The name and address of the foreign principals indicating their nationality as well as their status, i.e, whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents/representatives.

2.2.2 The amount of commission/remuneration included in the price (s) quoted by the Tenderer for himself.

2.2.3 Confirmation of the foreign principals of the Tenderer that the commission/remuneration, if any, reserved for the Tenderer in the quoted price (s), may be paid by MDL in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items.

2.3 In either case, in the event of contract materializing, the terms of payment will provide for payment of the commission /remuneration, if any payable to the agents/representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.

2.4 Failure to furnish correct and detailed information as called for in paragraph-2.0 above will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by MDL. Besides this there would be a penalty of banning business dealings with MDL or damage or payment of a named sum.

GUIDELINES ON BANNING OF BUSINESS DEALINGS**CONTENTS**

Sr.	Description	Pages
1.	Introduction	2
2.	Scope	2
3.	Definitions	2 - 3
4.	Initiation of Banning / Suspension	3
5.	Suspension of Business Dealings	3 - 4
6.	Ground on which Banning of Business Dealing can be initiated	4 - 5
7.	Banning of Business Dealings	5 - 6
8.	Removal from List of Approved Agencies-Suppliers/ Contractors etc.	6
9.	Procedure for issuing Show-cause Notice	6
10.	Appeal against the Decision of the Competent Authority	7
11.	Review of the Decision by the Competent Authority	7
12.	Circulation of the names of Agencies with whom Business Dealings have been banned	7

1. Introduction

- 1.1 Mazagon Dock Limited (MDL), being a Public Sector Enterprise and 'State', within the meaning of Article 12 of Constitution of India, has to ensure preservation of rights enshrined in Chapter III of the Constitution. MDL as also to safeguard its commercial interests. MDL deals with Agencies, who have a very high degree of integrity, commitments and sincerity towards the work undertaken. It is not in the interest of MDL to deal with Agencies who commit deception, fraud or other misconduct in the execution of contracts awarded / orders issued to them. In order to ensure compliance with the constitutional mandate, it is incumbent on MDL to observe principles of natural justice before banning the business dealings with any Agency.
- 1.2 Since banning of business dealings involves civil consequences for an Agency concerned, it is incumbent that adequate opportunity of hearing is provided and the explanation, if tendered, is considered before passing any order in this regard keeping in view the facts and circumstances of the case.

2. Scope

- 2.1 MDL reserves its rights to remove from list of approved suppliers / contractors or to ban business dealings if any Agency has been found to have committed misconduct and also to suspend business dealings pending investigation.
- 2.2 Similarly, in case of sale of material there is a clause to deal with the Agencies / customers / buyers, who indulge in lifting of material in unauthorized manner.
- 2.3 However, absence of such a clause does not in any way restrict the right of MDL to take action / decision under these guidelines in appropriate cases.
- 2.4 The procedure of (i) Removal of Agency from the List of approved suppliers / contractors; (ii) Suspension and (iii) Banning of Business Dealing with Agencies, has been laid down in these guidelines.
- 2.5 These guidelines apply to all the Divisions/Yards of MDL.
- 2.6 It is clarified that these guidelines do not deal with the decision of the Management not to entertain any particular Agency due to its poor / inadequate performance or for any other reason.
- 2.7 The banning shall be with prospective effect, i.e., future business dealings.

3. Definitions

In these Guidelines, unless the context otherwise requires:

- i) 'Bidder / Contractor / Supplier / Purchaser / Customer' shall mean and include a public limited company or a private limited company, a firm whether registered or not, an individual, a cooperative society or an association or a group of persons engaged in any commerce, trade, industry, etc. 'Bidder / Contractor / Supplier / Purchaser / Customer' in the context of these guidelines is indicated as 'Agency'.
- ii) 'Inter-connected Agency' shall mean two or more companies having any of the following features:
 - a) If one is a subsidiary of the other.
 - b) If the Director(s), Partner(s), Manager(s) or Representative(s) are common;
 - c) If management is common;
 - d) If one owns or controls the other in any manner;
- iii) 'Competent Authority' and 'Appellate Authority' shall mean the following:
 - a) Functional Director shall be the 'Competent Authority' for the purpose of these guidelines. CMD, MDL shall be the 'Appellate Authority'.
 - b) CMD, MDL shall have overall power to take suo-moto action on any information available or received by him and pass such order(s) as he may think appropriate, including modifying the order(s) passed by any authority under these guidelines.
- iv) 'Investigating Department' shall mean any Department or Unit investigating into the conduct of the Agency and shall include the Vigilance Department, Central Bureau of Investigation, the State Police or any other department set up by the Central or State Government having powers to investigate.
- v) 'List of approved Agencies – 'Bidder / Contractors / Suppliers / Purchasers / Customers shall mean and include list of approved / registered Agencies - 'Bidder / Contractors / Suppliers / Purchasers / Customers, etc.

4. Initiation of Banning / Suspension

Action for banning / suspension business dealings with any Agency should be initiated by the department having business dealings with them after noticing the irregularities or misconduct on their part. Besides the concerned department, Vigilance Department may also be competent to initiate such action.

5. Suspension of Business Dealings

- 5.1 If the conduct of any Agency dealing with MDL is under investigation by any department, the Competent Authority may consider whether the allegations under investigation are of a serious nature and whether pending investigation, it would be advisable to continue business dealing with the Agency. If the Competent Authority, after consideration of the matter including the recommendation of the Investigating Department, if any, decides that it would not be in the interest to continue business dealings pending investigation, it may suspend business dealings with the Agency. The order to this effect may indicate a brief of the charges under investigation. If it is decided that inter-connected Agencies would also come within the ambit of the order of suspension, the same should be specifically stated in the order. The order of suspension would operate for a period not more than six months and may be communicated to the Agency as also to the Investigating Department. The Investigating Department may ensure that their investigation is completed and whole process of final order is over within such period.
- 5.2 The order of suspension shall be communicated to all Commercial Departmental Heads. During the period of suspension, no business dealing may be held with the Agency.
- 5.3 As far as possible, the existing contract(s) with the Agency may continue unless the Competent Authority, having regard to the circumstances of the case, decides otherwise.
- 5.4 If the gravity of the misconduct under investigation is very serious and it would not be in the interest of MDL, as a whole, to deal with such an Agency pending investigation, the Competent Authority may order suspension of business dealing with Agency and send his recommendation to Chief Vigilance Officer (CVO), MDL along with the material available, copy of which may be issued to the Agency concerned with intimation to CVO MDL. Such an order would operate for a period of six months from the date of issue.
- 5.5 If the Agency concerned asks for detailed reasons of suspension, the Agency may be informed that its conduct is under investigation. It is not necessary to enter into correspondence or argument with the Agency at this stage.
- 5.6 It is not necessary to give any show-cause notice or personal hearing to the Agency before issuing the order of suspension. However, if investigations are not complete in six months time, the Competent Authority may extend the period of suspension by another three months, during which period the investigations must be completed.

6. Ground on which Banning of Business Dealings can be initiated

- 6.1 If the security consideration, including questions of loyalty of the Agency to the State, so warrants;
- 6.2 If the Director / Owner of the Agency, proprietor or partner of the firm, is convicted by a Court of Law for offences involving moral turpitude in relation to its business dealings with the Government or any other public sector enterprises or MDL, during the last five years;
- 6.3 If there is strong justification for believing that the Directors, Proprietors, Partners, owner of the Agency have been guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolations, etc;
- 6.4 If the Agency continuously refuses to return / refund the dues of MDL without showing adequate reason and this is not due to any reasonable dispute which would attract proceedings in arbitration or Court of Law;
- 6.5 If the Agency employs a public servant dismissed / removed or employs a person convicted for an offence involving corruption or abetment of such offence;
- 6.6 If business dealings with the Agency have been banned/blacklisted by Government Agencies/ Statutory bodies, DGQA, Defence Shipyards, DPSUs or with whom commercial transactions have been suspended for sufficient and justifiable reasons.

If the Agency having same promoters/Directors /Partners as the barred/blacklisted Company as at 6.6 above for the duration for which the barring/ blacklisting of sister concern persists.

- 6.7 If the Agency has resorted to Corrupt, fraudulent practices including misrepresentation of facts; If the agency who had fraudulently dealt with the Company for pecuniary gains or had connived with dealing officers for mutual benefit.

- 6.8 If the Agency uses intimidation / threatening or brings undue outside pressure on the MDL or its official in acceptance / performances of the job under the contract;
- 6.9 If the Agency indulges in repeated and / or deliberate use of delay tactics in complying with contractual stipulations;
- 6.10 Willful indulgence by the Agency in supplying sub-standard material irrespective of whether pre-dispatch inspection was carried out by MDL or not;
- 6.11 Based on the findings of the investigation report of CBI / Police against the Agency for malafide / unlawful acts or improper conduct on his part in matters relating to the MDL or even otherwise;
- 6.12 Established litigant nature of the Agency to derive undue benefit;
- 6.13 Continued poor performance of the Agency in several contracts;
- 6.14 If the Agency misuses the premises or facilities of the MDL, forcefully occupies, tampers or damages the Company's properties including land, water resources, forests / trees, etc.
- 6.15 If the Agency who knowingly collude to defeat competition with the aim of deriving undeserved profit or gain from doing business with MDL.

(Note: The examples given above are only illustrative and not exhaustive. The Competent Authority may decide to ban business dealing for any good and sufficient reason).

7. Banning of Business Dealings

- 7.1 Decision to ban business dealings with any Agency would apply throughout the Company.
- 7.2 There will be a Standing Committee to be appointed by the CMD which may include HOD of respective Commercial Section/Capital Works/OTS, HOD (M), rep of Legal Dept. and OIC (SR&R) for processing the cases of "Banning of Business Dealings". The functions of the committee shall, inter-alia include:
 - i) To study the report of the Investigating Agency and decide if a prima-facie case for banning exists, if not, send back the case to the Competent Authority.
 - ii) To recommend for issue of show-cause notice to the Agency by the concerned department.
 - iii) To examine the reply to show-cause notice and call the Agency for personal hearing, if required.
 - iv) To submit final recommendation to the Competent Authority for banning or otherwise.
- 7.3 If the Competent Authority is prima-facie of view that action for banning business dealings with the Agency is called for, a show-cause notice may be issued to the Agency as per paragraph 9.1 and an enquiry held accordingly.

8. Removal from List of Approved Agencies - Suppliers / Contractors, etc.

- 8.1 If the Competent Authority decides that the charge against the Agency is of a minor nature, it may issue a show-cause notice as to why the name of the Agency should not be removed from the list of approved Agencies - Suppliers / Contractors, etc.
- 8.2 The effect of such an order would be that the Agency would not be disqualified from competing in Open Tender Enquiries but LTE may not be given to the Agency concerned.
- 8.3 Past performance of the Agency may be taken into account while processing for approval of the Competent Authority for awarding the contract.

9. Show-cause Notice

- 9.1 In case where the Competent Authority decides that action against an Agency is called for, a show-cause notice has to be issued to the Agency. Statement containing the imputation of misconduct or misbehavior may be appended to the show-cause notice and the Agency should be asked to submit within 15 days a written statement in its defence.
- 9.2 If the Agency requests for inspection of any relevant document in possession of MDL, necessary facility for inspection of documents may be provided.

- 9.3 The Competent Authority may consider and pass an appropriate speaking order:
- a) For exonerating the Agency if the charges are not established;
 - b) For removing the Agency from the list of approved Suppliers / Contactors, etc.
 - c) For banning the business dealing with the Agency.

9.4 If it decides to ban business dealings, the period for which the ban would be operative may be mentioned. The order may also mention that the ban would extend to the interconnected Agencies of the Agency.

10. Appeal against the Decision of the Competent Authority

9.5 The Agency may file an appeal against the order of the Competent Authority banning business dealing, etc. The appeal shall lie to Appellate Authority. Such an appeal shall be preferred within one month from the date of receipt of the order banning business dealing, etc.

9.6 Appellate Authority would consider the appeal and pass appropriate order which shall be communicated to the Agency as well as the Competent Authority.

11. Review of the Decision by the Competent Authority

Any petition / application filed by the Agency concerning the review of the banning order passed originally by Competent Authority under the existing guidelines either before or after filing of appeal before the Appellate Authority or after disposal of appeal by the Appellate Authority, the review petition can be decided by the Appellate Authority upon disclosure of new facts / circumstances or subsequent development necessitating such review. The Competent Authority may refer the same petition to the separate Standing Committee which may be constituted by Appellate Authority for examination and recommendation.

12. Circulation of the names of Agencies with whom Business Dealings have been banned

9.7 Depending upon the gravity of misconduct established, the Competent Authority may direct HOD (Materials)/OIC (SR&R) to circulate the names of Agency with whom business dealings have been banned, to the Government Departments, other Public Sector Enterprises, etc. for such action as they deem appropriate.

9.8 If Government Departments or a Public Sector Enterprise request for more information about the Agency with whom business dealings have been banned, a copy of the report of Inquiring Authority together with a copy of the order of the Competent Authority / Appellate Authority may be supplied.

9.9 If business dealings with any Agency have been banned by the Central or State Government or any other Public Sector Enterprise, MDL may, without any further enquiry or investigation, issue an order banning business dealing with the Agency and its interconnected Agencies.

COMPANY NAME on letter Head

Date: -

TO WHOMSOEVER IT MAY CONCERN

Subject: Declaration in relation to New Provision under Section 194Q, 206AB & 206CC of the Income tax act 1961.

We, company name, registered office at _____ having Permanent Account number (PAN) _____, Tax Deduction Account number (TAN) _____, hereby confirm that, we have duly filed the Income-tax Returns for the following Financial Years within the time limit of filing of Return u/s 139(1) of the Income tax Act, 1961.

S.No.	Particulars	Reference No. / Acknowledgement No. & date
1	ITR filed for AY 2019-20 (FY 2018-19)	Data to be filled by company
2	ITR filed for AY 2020-21 (FY 2019-20)	Data to be filled by company

We understand that Tax is to be deducted at source as per provisions of Chapter XVIIIB of the Income Tax Act, 1961 at higher of the following rates, if the Return of Income is not filed during any of these preceding financial years: -

- (a) at twice the rate specified in the relevant provision of the Act; or
- (b) at twice the rate or rates in force; or
- (c) at the rate of 5 percent

Total sales which will be made by company name during the FY 2021-22 is exceeding/ not exceeding Rs 50 lakhs.

We do hereby declare that to the best of our knowledge and belief what is stated above is correct, complete and is truly stated. In case the declaration founds incorrect / incomplete / untrue, we undertake to fully indemnify you on account of any additional tax liability, interest or penalty imposed / levied / recovered from you by the Income Tax Authorities.

Signature & Stamp of Authorized representative of Company

Declaration of Compliance of Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017

This declaration must form part of all tenders & it contains general information and serves as a declaration form for all bidders. (Before completing this declaration, bidders must study the General Conditions, Definitions, Govt Directives applicable in respect of Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017& prescribed tender conditions).

DECLARATION BY AUTHORISED SIGNATORY OF THE FIRM

I, the undersigned, (full names),
do hereby declare, in my capacity as
of M/s(name of bidder entity), that:

- 1) The facts contained herein are within my own personal knowledge.
- 2) I have read the Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 on the subject of Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 regarding restrictions on procurement from a bidder of a country which shares a land border with India and comply to all the provisions of the Order
- 3) I certify that M/s(name of bidder entity) ***is not from such a country or, is from such a country (strike out whichever is not applicable)***, has been registered with the Competent Authority. I hereby certify that this SUPPLIER fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority is attached]
- 4) I understand that the submission of incorrect data and / or if certificate / declaration given by M/s(name of bidder entity) is found to be false, this would be a ground for immediate termination and further legal action in accordance with law as per Clause 12 of the Public Order on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017

AUTHORISED SIGNATURE: _____

DATE: _____

Seal / Stamp of Bidder

DECLARATION CERTIFICATE FOR LOCAL CONTENT
(Tender value More than Rs 10 Crores)

This declaration must form part of all tenders & it contains general information and serves as a declaration form for all bidders. (Before completing this declaration, bidders must study the General Conditions, Definitions, Govt Directives applicable in respect of Local Content & prescribed tender conditions).

THE BIDDERS SHALL PROVIDE THIS CERTIFICATE FROM STATUTORY AUDITOR OR COST AUDITOR OF THE COMPANY (IN CASE OF COMPANIES) OR FROM A PRACTICING COST ACCOUNTANT OR PRACTICING CHARTED ACCOUNTANT (IN RESPECT OF SUPPLIER OTHER THAN COMPANIES) GIVING THE PERCENTAGE OF LOCAL CONTENT.

IN RESPECT OF BID / TENDER No.
ISSUED BY: (Name of Firm):.....

I, the undersigned, (full names),
do hereby declare, in my capacity as
of(name of bidder
entity), the following:

(a) The facts contained herein are within my own personal knowledge.

(b) I have read and understood the requirement of local content (LC) and same is specified as percentage calculated in accordance with the definition provided at clause 2 of revised Public Procurement (preference to Make in India) Order 2017.

“Local content” as per above order means the amount of value added in India which shall be the total value of items procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value in percent.”

(c) I have satisfied myself that the goods/services/works to be delivered in terms of the above-specified bid comply with the local content requirements as specified in the tender for 'Class-I Local Supplier' / 'Class-II Local Supplier', and as above.

(d) I understand that a bidder can seek benefit of either Public Procurement Policy for MSEs –Order 2012 or Public Procurement (preference to Make in India) Order 2017 and not both and once the option is declared / selected it is not permitted to be modified subsequently. Accordingly, I seek the benefit from the below declared purchase preference policy only.

i) I seek benefits against the following policy only (Select only one Option):

1) PPP MSE Order 2012 (applicable for MSE manufacturers)

2) PPP MII 2017 (applicable for Class I suppliers as well as MSE manufacturers)

(Note: If not declared / selected it shall be deemed that purchase preference benefit is sought under PPP MII 2017 policy. However, selection of both the options will be treated as ambiguous and will result in rejection of bid)

(e) The local content calculated using the definition given above are as under:

Tender Item Sr No	Local content calculated as above %	Location of local value addition (Location shall be the specified as name of city or district, etc. Location as name of country will be considered as ambiguous and such bids shall be rejected.)

Attach separate sheet duly signed if space is not sufficient

NB: Local content percentage shall be declared item wise or tender wise strictly as per the terms of the tender.

(f) I accept that the Procurement Authority / Institution / MDL / Nodal Ministry has the right to request that the local content be verified in terms of the requirements of revised Public Procurement (preference to Make in India) Order 2017 dtd 16.09.2020 and I shall furnish the document / information on demand. Failure on my part to furnish the data will be treated as false declaration as per PPP MII Order 2017. In case of contract being awarded, I undertake to retain the relevant documents for 7 years from date of execution.

(g) I understand that the submission of incorrect data, or data that are not verifiable as described in revised Public Procurement (preference to Make in India) Order 2017, may result in the Procurement Authority / Nodal Ministry / MDL imposing any or all of the remedies as provided for in Clause 9 of the Revised Public Procurement (preference to Make in India) Order 2017 dated 16.09.2020

SIGNATURE: _____

DATE: _____

Seal / Stamp of Bidder

LIST OF BANKS

Nationalized Banks/Public Sector Bank

1. Allahabad Bank
2. Andhra Bank
3. Bank of Baroda
4. Bank of India
5. Bank of Maharashtra
6. Canara Bank
7. Central Bank of India
8. Corporation Bank
9. Dena Bank
10. IDBI Bank
11. Indian Bank
12. Indian Overseas Bank
13. Oriental Bank of Commerce
14. Punjab & Sind Bank
15. Punjab National Bank
16. Syndicate Bank
17. State Bank of India
18. CO Bank
19. Union Bank of India
20. United Bank of India
21. Vijaya Bank
22. State Bank of India

List of Private Banks

1. Axis Bank
2. Federal Bank
3. HDFC Bank
4. ICICI Bank
5. IndusInd Bank
6. Kotak Mahindra Bank
7. Yes Bank
8. Karur Vysya Bank
9. IDFC Bank

Bidders are requested to check and fill up the followings before they submit their bids: -

Document Confirmatory Matrix (CHECK LIST)				
Sr No	Description	Tender Requirement	Supplier	
			Scratch where ever necessary & fill up the blank space	Remark
1	Offer Ref. No.	Supplier has to mention their offer no.	Mentioned /Not mentioned	
2	Technical Acceptance	Supplier has to mention about total technical acceptance of Tender	Accepted / not accepted	
3	Document as per TEF	Whether supplier submitted copies in Triplicate as per Tender Enquiry duly signed & attested along with company seal	submitted /not submitted	
4	Blank Price bid format ((Encl-2)	Whether supplier/contractor submitted Blank Price-Bid Format (stating only quoted/not quoted) in Part 1st. (i.e., RATE SHEET)	submitted /not submitted	
5	Offer Validity as per Tender	Supplier accepted validity of the offers as per tender	Yes / No	
6	Delivery Period / Contract validity	Delivery/Services period as per tender (as per scope mentioned in tender)	Yes/ No	
7	Payment Terms	Supplier accepted or not accepted payment terms as per Tender. If any deviation is there, same having to be mentioned in remark.	Accepted /Not accepted / Accepted but deviation sought	
8	TEF Acceptance (Encl-4)	Whether Supplier accepted/ not accepted /accepted but deviation seeks for TEF Clause no.----.	Accepted / Not accepted /Accepted but deviation sought for TEF Clause no.-	
9	GCC Acceptance ((Encl-5)	Whether Supplier accepted/ not accepted GT & C	Accepted/Not Accepted	
10	Deviation (Encl. no.06)	Whether supplier submitted/Not submitted Deviation form. If any deviation seeks, same has to be mention in Remark.	Submitted /Not submitted/Nil deviation	
11	Taxes/Duties /Levies	Supplier has to confirm, applicable taxes/duties/levies are indicated in Tech Bid	Confirmed / not confirmed	
12	Vendor declaration (Encl-20)	Whether Supplier accepted / not accepted	Accepted/Not Accepted	
13	Performance Security 5% of PO value (i.e., e-PBG)	Whether Supplier accepted / not accepted	Accepted/Not Accepted	
14	Compliance certificate wrt Land Border clause (Encl-13)	Whether Supplier submitted / not submitted	submitted/ not submitted	
15	Local content declaration (Encl-14)	Whether Supplier submitted / not submitted	submitted/ not submitted	

15	Extract of provisions of the official secrets act, 1923 (Encl-18)	Whether Supplier submitted / not submitted	submitted/ not submitted	
16	Purchase preference under MII clause	Whether Supplier submitted / not submitted	submitted/ not submitted	
17	NDA for drawings (Encl-19)	Whether Supplier submitted / not submitted	submitted/ not submitted	
18	Document conformity matrix (Encl-16)	Whether Supplier submitted / not submitted	submitted/ not submitted	
19	Conflict of Interest among Bidders/ Agents (Encl-17)	Whether Supplier submitted / not submitted	submitted/ not submitted	
20	Certificate of Conformity (CoC) format (Encl-07)	Required only at the time of delivery	Accepted/Not Accepted	
21	warranty certificate (Encl-08)	Required only at the time of delivery	Accepted/Not Accepted	

Conflict of Interest among Bidders/ Agents

DECLARATION BY AUTHORISED SIGNATORY OF THE FIRM FOR CONFLICT OF INTEREST AMONG BIDDERS/ AGENTS

"I..... have read the clause regarding Conflict of interest among bidders/ agents. I hereby certify that this bidder fulfils all requirements in this regard & do not have any conflict of interest with other parties"

AUTHORISED SIGNATURE: _____ **DATE:** _____

Seal / Stamp of Bidder

EXTRACT OF PROVISIONS OF THE OFFICIAL SECRETS ACT, 1923

SECTION 2(B); "PROHIBITED PLACE"

It is defined as the place of any work of Defence Dockyard and other so belonging or occupied and used for the purpose of building, repairing, making or storing any ammunitions of war.

For the purpose of the above definition, sketch includes any photograph or other mode of representing any place or thing.

SECTION 3: "PENALTIES FOR SPYING"

If any person unlawfully - approaches, inspects, passes over or is in the vicinity of any clear place; or make any sketches intended to be directly or indirectly useful to an enemy; or c) Obtains collects records or communicates to any other person any secret official code.

Shall be liable for imprisonment of 14 years in case of Defence Installation.

SECTION 4: "COMMUNICATION WITH FOREIGN AGENTS"

If any person has been in communication with or attempted to communicate with foreign agents regarding the vital information of any "PROHIBITED PLACE" would be guilty of violating the provisions of this Act.

SECTION 5: "WRONGFUL COMMUNICATION OF INFORMATION"

If any person having in his possession or control any official document;

- a) Willfully communicates to any person, other than a person, who is authorised to communicate it.
- b) Used the information in his possession for the benefit of any foreign power.
- c) Retain in his possession when he has no power to retain it
- d) Fails to take reasonable care of it.

Shall be guilty of an offence under this Act.

SECTION 6: "UNAUTHORISED USE OF UNIFORMS"

If any person for the purpose of gaining admission or of assisting any other person to gain admission to a "PROHIBITED PLACE" wears uniforms without lawful authority shall be guilty of offence under this Section.

SECTION 7: "INTERFERING WITH OFFICERS OF POLICE"

No person in the vicinity of any "PROHIBITED PLACE" shall abstract any Police Officer engaged on guard, sentry or similar duty. If any people move in the provisions of this section, shall be punishable with imprisonment, which may extend up to 3 years.

SECTION 8: "DUTY OF GIVING INFORMATION"

It shall be duty of every person to give on demand to a superintendent of Police or any other Police Officer not below the rank of Inspector, any information in his power relating to an offence under this Act. If any person fails to give such information, shall be punishable with imprisonment to 3 years or fine or with both.

SECTION 9: "INCITEMENT"

Any person who attempts to commit or debate the commission of an offence under this Act shall be punishable with the same punishment and be liable to be proceeded against in the same manner as if he had committed such offence.

SECTION 10: "PENALTY FOR HARBOURING SPIES"

If any person whom he knows or has reasonable grounds for supposing to be person who is about to commit or who has committed offence under this Act shall be guilty of offence under this Section.

SECTION 11: "SEARCH WARRANTS"

If a presidency Magistrate, Magistrate First Class or Sub-Divisional magistrate is satisfied with the information that there is reasonable ground for suspecting that an offence under this Act has been or is about to be committed, he may grant search warrant to any Police Officer to enter at any time any premises to force to search premises or the places.

We accept and comply by the above clauses of EXTRACT OF PROVISIONS OF THE OFFICIAL SECRETS ACT, 1923.

Bidder's Signature.....

Bidder's Name.....

Company Seal.....

NON-DISCLOSURE AGREEMENT

THIS NON DISCLOSURE Agreement made at Mumbai, India on this _____ day of _____ 2014 between Mazagon Dock Shipbuilders Limited a company registered under the Companies Act, 1956 and having its registered office at Dockyard Road, Mumbai-400 010 (hereinafter referred to as "MDL") and _____ a company registered under the Companies Act, 1956 and having its registered office at _____ (hereinafter referred to as "_____"). MDL and _____ shall hereinafter be collectively referred to as "the Parties" and individually as "a Party". WHEREAS

A*. MDL has floated a tender and is required to provide certain information to (name of the bidder) to prepare his bid and/or AA **. The Parties are considering to enter into a _____ for which each Party shall provide information ("Disclosing Party") to the other Party ("Receiving Party") which at present is confidential and not in the public domain.

B. The Parties intend that the aforesaid information be kept confidential as between the Parties. The Parties undertake and declare that they shall not divulge, publish or reproduce the same before any party or person except in accordance with the terms of this Agreement. NOW THEREFORE the Parties agree as follows:

1. As used in this Agreement (hereinafter referred to as the "Agreement") the term "Confidential Information" shall mean any technical, confidential, proprietary or trade secret information or data disclosed by the Disclosing Party in connection with the _____ to the Receiving Party including without limitation any written or printed documents,

specifications for the vessel, plans, general arrangement plans, production schedules, drawings, samples, models, information regarding business operations, financial information, marketing strategies, either in writing or orally or any means of disclosing such Confidential Information that the Disclosing Party may elect to use prior to the execution or during the validity of this Agreement. The Receiving Party agrees that all Confidential Information shall be treated as absolute confidential and the Receiving Party shall not disclose to any person such information otherwise than in terms of this Agreement. The Receiving Party will impose a similar duty of confidentiality on any person to whom the Receiving Party is permitted to transfer such information in accordance with the terms hereof. For the purposes of this Agreement, the term "Receiving Party" shall mean and include its officers, employees, directors, agents, contractors, representatives, affiliated companies, successors and assigns.

2. Nothing in this Agreement may be construed as compelling the Disclosing Party to disclose any Confidential Information to the Receiving Party or to enter into any contractual relationships with the Receiving Party.

3. Any information or data in whatever form disclosed by the Disclosing Party to the Receiving Party and which (i) is clearly identified as Confidential Information by an appropriate and conspicuous marking or (ii) has been identified as Confidential Information at the time of disclosure shall be subject to the relevant terms and conditions of this Agreement. The Disclosing Party's decision whether any information disclosed by it under this Agreement is confidential or not shall be final and binding on the Receiving Party.

4. The Receiving Party hereby covenants that the Confidential Information received from the Disclosing Party shall:

(a) Be safely kept by the Receiving Party; the Receiving Party shall protect the Confidential Information with the same degree of care as the Receiving Party uses with its own confidential information in order to prevent its disclosure, copy and / or its use (but in no event less than reasonable care) for purposes other than the Proposal.

(b) Be only disclosed to, and used by, those employees or directors who have a need to know.

(c) Not be disclosed to a third party except those with a need to know provided they receive such information subject to the same restrictions as are contained in this Agreement.

(d) Be used by the Receiving Party directly or indirectly, solely for the purpose of considering, evaluating and effecting the tender/bid/contract.

5. The Receiving Party shall promptly upon requests by the Disclosing Party at any time return all copies of the Confidential Information communicated to it hereunder together with all copies and extracts made thereof and shall not retain any copies of the same, in any form whatsoever.

6. The Receiving Party shall have no obligations or restrictions with respect to:

(a) Information publicly known through no wrongful act of the Receiving Party.

(b) Information rightfully disclosed by a third party without breach of this Agreement by the Receiving Party and which can be communicated without restriction.

(c) Information which was already known or which was independently developed by the Receiving Party (provided that the Receiving Party can demonstrate the same).

(d) Information, the disclosure of which the Disclosing Party authorizes in writing.

7. Nothing in this Agreement shall be construed as granting to the Receiving Party any patent, copyright or design license, or rights of use under similar intellectual property rights in respect of the Confidential Information.

8. The Receiving Party shall not without prior written consent of the Disclosing Party:

(a) Disclose to any person, directly or indirectly:

i) The fact that the Confidential Information has been made available to the Receiving Party by the Disclosing Party or that the Receiving Party has inspected any portion of the Confidential Information; or

ii) The fact that any discussion or negotiation is taking place concerning the Proposal; or

iii) Any of the terms, conditions or other facts with respect to the Proposal, including the status thereof;

or

(b) Make any private or public announcement or statement concerning or relating to the Proposal.

09. The Disclosing Party represents and warrants that save as otherwise notified in writing to the Receiving Party:

a) Disclosure of information by it to the Receiving Party does not infringe the rights of any third party nor is it under any restriction with regard to the disclosure of any information, and that where applicable,

it has obtained all licenses and consents necessary to enable the lawful disclosure of information by it to the Recipient; and

b) It is not aware of any restriction on the use of such information by the Receiving Party, save as provided in this Agreement.

c) To the effect that the foregoing representations and warranties shall be deemed to be given at the date of this Agreement and after that date upon and in respect of each disclosure. The Disclosing Party makes no warranty or representation whatsoever as to the accuracy, completeness, suitability or adequacy of any information or as to the results obtained from it and assumes no responsibility in respect of the use of the information by the Receiving Party.

10. The Receiving Party shall indemnify and hold harmless the Disclosing Party from and against any action, claim or proceeding and any loss, damage, costs, expenses or liabilities arising out of any such action, claim or proceeding, brought by any third party pursuant to any unauthorized disclosure or use of any information by the Receiving Party, or by any person for whom the Receiving Party is responsible under this Agreement, or pursuant to any breach of any undertaking, warranty or representation contained in this Agreement.

11. For the purposes of this Agreement 'Classified Information' shall mean information, documents and material of any kind which the respective Government i.e. Indian Government has given or caused to be given a security classification irrespective of whether the same is transmitted orally, electronically, in writing or by hand. Notwithstanding any other provision of this Agreement:

a) Each Party hereto undertakes to follow security procedures prescribed for military purposes with respect to disclosure, receipt, production, use and handling of Classified Information.

b) Any Classified Information, disclosed by one Party hereto shall be, whatever the method of disclosure be, identified by the Disclosing Party as Classified Information at the time of disclosure.

c) The provisions of this Clause are to remain in full force and effect notwithstanding any termination by expiration or otherwise of this Agreement.

12. In the event the Receiving Party is required to disclose Confidential Information under any provision of law or upon an action, subpoena or order of a court of competent jurisdiction or of any requirement of legal process regulation or governmental order, decree, regulation or rule, the Receiving Party will immediately notify the Disclosing Party of its having received a request to so disclose (alongwith the terms and circumstances thereof), unless otherwise prohibited by law and consult with the Disclosing Party on action or steps to be taken in response to such request.

13. This Agreement represents the entirety of the agreement of the Parties relating to the disclosure of the Confidential Information and shall not be waived, amended or assigned by the Receiving Party except by prior written consent of the Disclosing Party. No failure or delay by any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof nor shall any single or partial exercise of any right, power or privilege. The rights and remedies herein provided shall be cumulative and not exclusive of any rights or remedies provided by law.

14. This Agreement shall be valid for a period of _____ (_____) years from the date of its execution between the parties. Notwithstanding the aforesaid, the obligations of Parties in connection with confidentiality under this Agreement shall survive in perpetuity.

15. The foregoing constitutes the entire Agreement between the Parties with respect to the subject matter hereof and supersedes and cancels any prior representation, understanding and commitment (whether oral and written) made between the Parties with respect to or in connection with any of the matter of things to which this Agreement applies.

16. This Agreement shall be governed by and shall be interpreted in accordance with the laws of India.

17. Any dispute arising in connection with or out of the validity, performance or the interpretation of this Agreement shall be finally settled by the competent jurisdiction in Mumbai.

18. The Receiving Party acknowledges that any breach of the terms and conditions of this Agreement may cause the Disclosing Party irreparable damage for which recovery of money damages would be inadequate. Therefore, the Receiving Party agrees that the Disclosing Party shall be entitled, in addition to any other remedies available to it, to seek injunctive relief and/or other equitable relief to prevent or restrain any breach by the Receiving Party or its employees/officials, or otherwise to protect its rights, under this Agreement.

19. Unless otherwise provided herein, all notices or other communications under or in connection with this Agreement shall be given in writing and may be sent by personal delivery or post or courier or facsimile at the address as specified herein below:

To MDL

Address:

Phone No.:

Fax:

E-mail:

To _____

Address:

Phone No.:

Fax No. :

E-mail:

Any such notice or other communication will be deemed to be effective if sent by personal delivery, when delivered, if sent by post, 4 (four) days after being deposited in the post and if sent by courier, one day after being deposited with the courier, and if

sent by facsimile, when sent (on receipt of a confirmation to the correct facsimile number).IN WITNESS WHEREOF, this Agreement is executed by authorized representatives of both the Parties in two (2) originals.

Signed by the within named Signed by the within named MDL

In the presence of In the presence of

Note: The above Agreement is to be drawn up by the contractor on non-judicial stamped paper of value Rs.100/-, if it executed in Maharashtra. However, for other places stamp duty is to be levied as per Stamp Act of respective States. The value of stamp paper to be confirmed from Legal Department, MDL

VENDOR DECLARATION

We have well understood the scope of work given in the tender and confirm herewith that our quoted price / rates are in line with the above scope of work.

M/s
SIGNATURE
NAME
DESIGNATION
SEAL OF THE COMPANY
DATE

PROFORMA BANK GUARANTEE FOR ADVANCE PAYMENT

(On Non-Judicial stamp paper of value Rs. 500/- . However, the value of stamp paper to be confirmed from Legal Department, MDL.)

IN CONSIDERATION OF MAZAGON DOCK SHIPBUILDERS LIMITED, a company incorporated under the Companies Act 1956 and having its registered office at Dockyard Road, Mumbai 400010 (hereinafter referred to as the "the Purchaser" which expression shall, unless it be repugnant or contrary to the subject or context thereof, be deemed to mean and include its successors and assigns) having placed an order on Messers a partnership firm/sole proprietor business/a company registered under the Companies Act, 1956 having its office at (hereinafter called "the Contractor/ Supplier" which expression shall, unless it be repugnant or contrary to the subject or context thereof, be deemed to mean and include its successors and assigns) vide order No..... dated..... (hereinafter called "the order" which expression shall include any amendments/alterations to "the order" issued by "the Purchaser") for the supply , delivery at site, installation and commissioning of certain equipment, item/services/civil works etc. as stated in the said Order and the Purchaser having agreed to make an advance payment of Rs.....being% of the order value, in pursuance of the terms and conditions of the said order, to the Contractor / Supplier against Bank Guarantee for the equivalent amount, We, Bank having office at (hereinafter referred to as "the Bank" which expression shall includes its successors and assigns) hereby agree to pay to the Purchaser without any demur on first demand an amount not exceeding Rs..... (Rupees.....only) being% of the order value against any loss or damage, costs, charges and expenses caused to or suffered by the Purchaser by reason of non performance and non-fulfilment or for any breach on the part of the Contractor / Supplier of any of the terms and conditions of the said order.

2. We, Bank further agree that the Purchaser shall be sole judge whether the said Contractor/Supplier has failed to perform or fulfil the said order in terms thereof or committed breach of any terms and conditions of the order and the extent of loss, damage, cost, charges and expenses suffered or incurred or would be suffered or incurred by the Purchaser on account thereof and we waive in the favour of the Purchaser all the rights and defences to which we as guarantors may be entitled to.

3. We, Bank further agree that the amount demanded by the Purchaser as such shall be final and binding on the Bank as to the Bank's liability to pay and the amount demanded and the Bank undertake to pay the Purchaser the amount so demanded on first demand and without any demur notwithstanding any dispute raised by the Contractor/Supplier or any suit or other legal proceedings including arbitration pending before any court, tribunal or arbitrator relating thereto, our liability under this guarantee being absolute and unconditional.

4. We, Bank further agree with the Purchaser that the Purchaser shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said order/or to extend time of performance by the Supplier from time to time or to postpone for any time to time any of the powers exercisable by the Purchaser against the Contractor/ Supplier and to forbear to enforce any of the terms and conditions relating to the order and we shall not be relieved from our liability by reason of any such variation or extension being granted to the Contractor/ Supplier or for any forbearance, act or omission on the part of the Purchaser or any indulgence by the Purchaser to the Contractor/Supplier or by any such matter or things whatsoever which under the law relating to sureties would have the effect of relieving us.

5. We, Bank further undertake not to revoke this guarantee during its currency except with the previous consent of the Purchaser in writing.

6. We, Bank also agree that the Bank's liability under this guarantee shall not be affected by any change in the constitution of the Contractor / Supplier. 7. Notwithstanding anything contained herein above: i) Our liability under this guarantee shall not exceed Rs..... ii) This Bank Guarantee shall be valid upto and including; and iii) We are liable to pay the guarantee amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before(validity + ---weeks from the date of expiry of this guarantee). 8. This Guarantee shall be governed by Indian laws and the Courts at Mumbai, India shall have the exclusive jurisdiction. IN WITNESS WHEREOF the Bank has executed this document on this..... day of..... For Bank (by its constituted attorney) (Signature of a person authorised to sign on behalf of "the Bank")