TENDER CORRIGENDUM-01

GEM/2026/B/8194510 DATED 29.10.2026

SUPPLY OF EXHAUST SYSTEMS FOR Y-16401-16406 (NGOPV)

Refer Document/SOTR No: - DR/E/NGOPV/ 3040 attached along with the bid.

Following are the corrigenda in technical specification of exhaust systems

1)

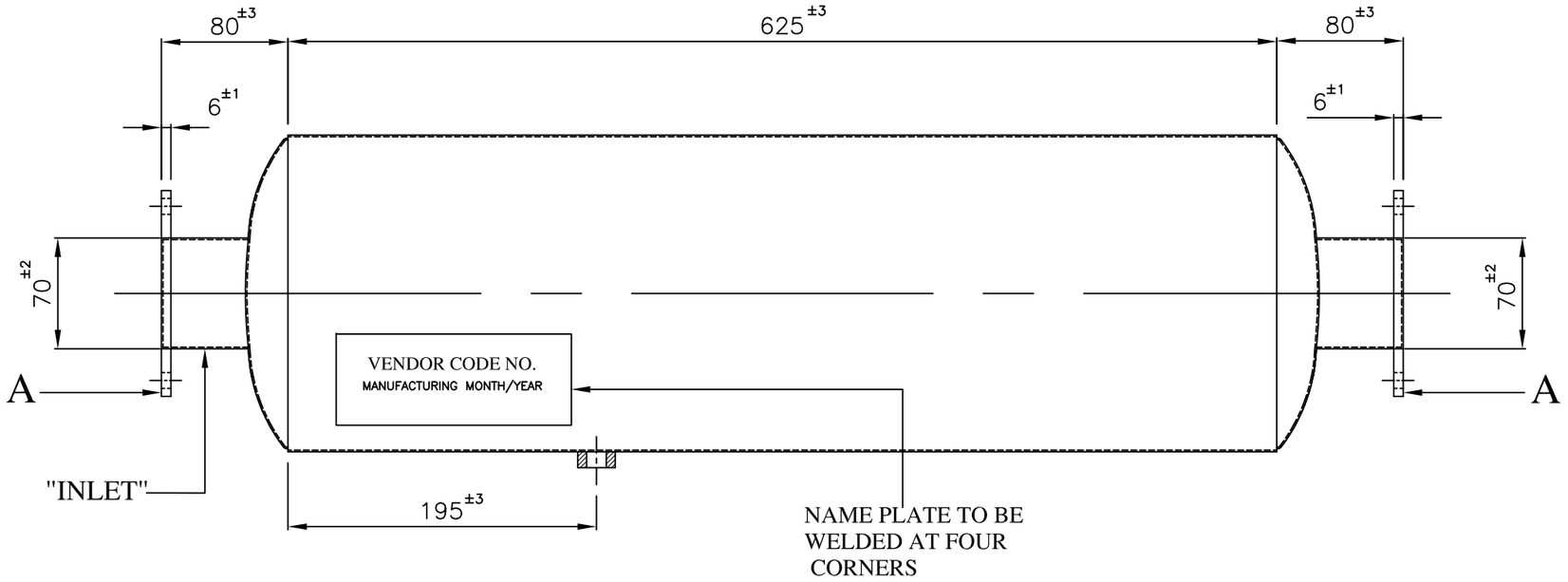
SOTR Clause	SOTR Description	To be read as
5.6	Insulation Material: Calcium silicate	Ceramic fibre blanket

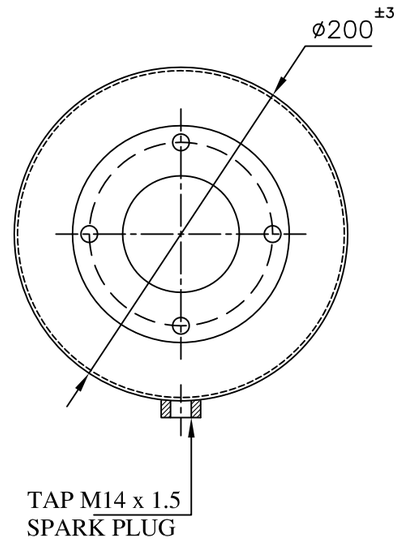
2) Incinerator exhaust flow rate:
Maximum 4200 m3/hour at 350 Deg C max.

3) Diesel driven compressor:
Exhaust bellow, Silencer and engine data sheet attached.

4) Emergency DG:
Engine data sheet attached at Annexure 15 is of DD compressor. Same shall not be referred for Emergency DG.

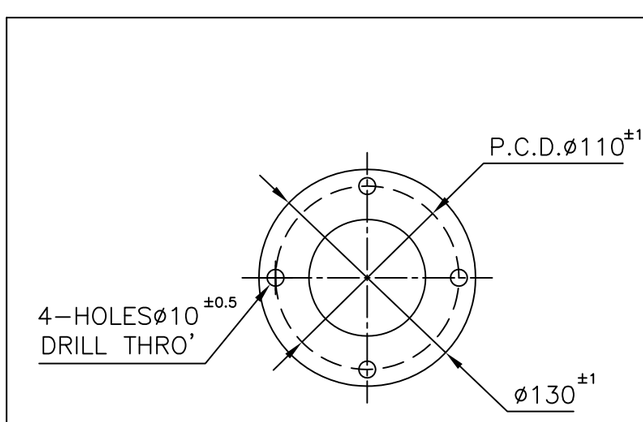
IF IN DOUBT ASK





NOTES:–

1) INSERTION LOSS : 22–25 dB.
2) BACK PRESSURE : 20mm OF Hg.
3) FINISH: HEAT RESISTANT BLACK PAINT WITHSTAND 600°C.
4) MATERIAL: MILD STEEL
5) WELDING SHOULD BE NEAT,CONTINOUS AND LEAK PROOF.
6) LEAK TEST AT 0.5 Kg/cm² OF AIR.
7) INLET/OUTLET PIPE THICKNESS : 1.2 ±0.2mm.
8) OUTER CYLINDER & END DISK : 1.4 ±0.2mm.
9) EXTRA FLANGE : 2 NOS.PER SILENCER(AS PER VIEW A)



MOUNTING FLANGE DETAIL
VIEW 'A'

LIFECYCLE STATE:- RELEASED

No	REVISION	ZONE	MODIFIED BY	REF. No. DATE
				MAE–03.0010 12/06/15
01	GASKET REMOVED			
00	NEW RELEASE.			25/04/15

PRINTS OF PREVIOUS REVISION NO. SHOULD BE SCRAPPED

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- UNMENTIONED TOLERANCES AS PER CO.STD.NO.11001.
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- DRAWING NOT TO BE SCALED.

UNMENTIONED	
RADII	–
CHAMFER	–
UNDERCUT	–

CAD DRG. FILE:-

CASTING/FORGING DRG. NO. –

MATERIAL :-	HEAT TREATMENT :-	WEIGHT :-
REF. NOTES	–	–

DRN	CDT
CHD.	
APPD.	
DATE	12/06/2015

TITLE
EXHAUST SILENCER WITH SPARK ARRESTOR

TYPE HA 294/394

SCALE 1 : 3.6

SHT. NO 1 of 1

KIRLOSKAR OIL ENGINES LTD., PUNE 411 003 (INDIA)

DRAWING NO. 03.M400.10.0.00

REV. NO. 01

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Engine Specifications

Physical Data		
Engine rpm		1500
Cylinders / Configuration		2 / Inline
Type		Four stroke
Bore x Stroke (mm)		100 x 120
Displacement (L)		1.88
Cooling		Air cooled
Aspiration		Naturally aspirated
Compression ratio		18 : 1
Piston speed (m/s)		6.0
Fuel consumption Prime power output (L/h)[1]	50%	2.3
	75%	3.1
	100%	4.0
	110%	4.5

Air System	
Air filter type	Dry replaceable
Air volume required for combustion (m^3/hr)	75
Air volume required for cooling (m^3/hr)	2600

Cooling System	
Cooling package	Air cooled

Fuel System	
Type of fuel filter	Two stage spin on type
Governor type	Mechanical
Class of governing	ISO 8528-5, Class G2
Recommended Fuel	Class A2, High speed diesel
Fuel solenoid	Energized to stop

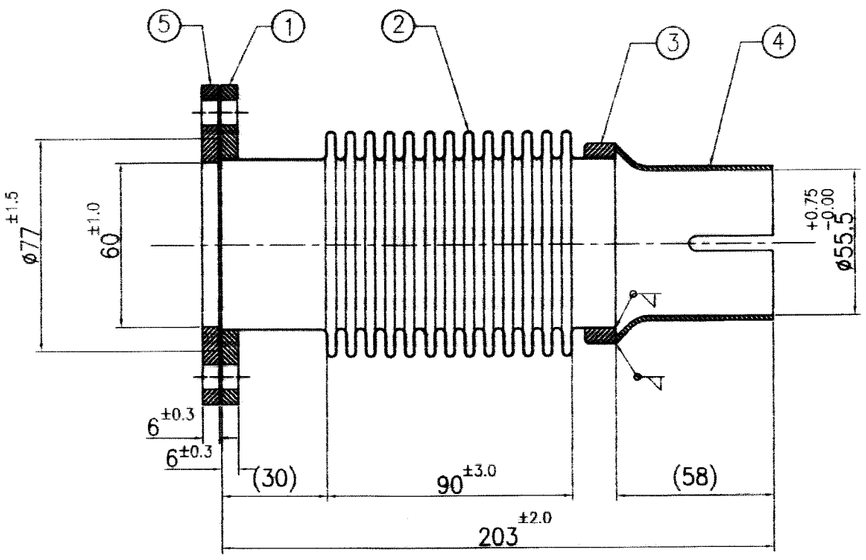
Exhaust System	
Exhaust gas flow rate (kg/hr)	110
Maximum exhaust gas temperature (°C)	500
Max. allowed back pressure (mm of Hg)	50

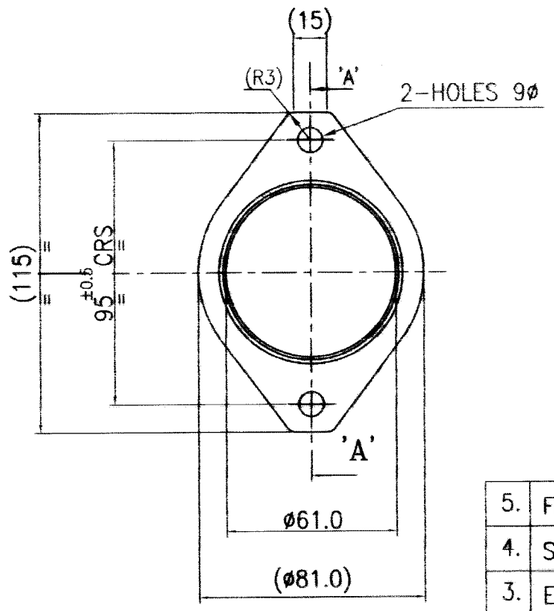
Electrical System	
Starting arrangement	12V Electric
Recommended Starter battery capacity	75Ah
Battery charging alternator	Engine mounted 12V
Battery charging alternator	35A

Lubrication System	
Type of lube oil filter	Full flow spin on type
Oil to be used	SAE 15W40 API:CI4
Oil pump type	Through G-rotor gear pump
Lube oil sump capacity (L) refill / first fill	5.0 / 5.5
Lube oil consumption	0.3% of fuel consumption

1. +5% production tolerance is applicable as per ISO3046. Fuel consumption is based on diesel fuel with a specific gravity of 0.85 and confirming to BS 2869, Class A2) and standard alternator efficiency. The fuel consumption may vary depending upon the alternator efficiency.

IF IN DOUBT ASK





SR. NO.	DESCRIPTION	QTY	MATL
5.	FLANGE (46.357.02.0)	1	M.S.
4.	SLOTTED CAP (18 SWG THK)	1	M.S.
3.	END RING	1	M.S.
2.	BELLOW	1	SS321
1.	END FLANGE (REVOLVING)	1	M.S.

** DATA:-

A. DESIGN SPECIFICATIONS:-

1) WORKING PRESSURE – 1.0kg/cm²
2) TEST PRESSURE – 1.5kg/cm²
3) DESIGN TEMPERATURE – 600°C
4) AXIAL COMPRESSION – 5 (MAX.)
5) AXIAL EXTENSION – 5 (MAX.)
6) LATERAL DEFLECTION – 8 (MAX.)

B. BELLOW DETAILS:-

1) BELLOW I.D. – ø61.0±1.0
2) BELLOW O.D. – ø79.0±2.0
3) NO. OF PLIES – 2
4) THICKNESS PER PLY – 0.3
5) NO. OF BELLOWS PER CONN. – 1
6) NO. OF CORRUGATIONS – 13
7) SPRING RATE OF BELLOW – 4 Kg/mm ±20%

* NOTES :-

1. ALL M.S. COMPONENTS TO BE PAINTED WITH HEAT RESISTANT ALUMINUM PAINT.
2. MATING FACE OF FLANGE TO BE COATED WITH RUST PREVENTIVE OIL.
3. ALL JOINTS TO BE TIG WELDED.
4. FOR SPRING RATE CHECKING REF DRAWING No.- -F6.315.03.0 SHEET 2 OF 2

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No	REVISION	ZONE	MODIFIED BY	REF. No. DATE
01	SHEET NO 2 OF 2 ADDED	--	ARUN	12765 01/10/09
00	'PR' TO CHANGE '00'	--	--	12370 06.08.09
PR	NEW RELEASE.	--	--	02.0996 26/06/09

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UNMENTIONED	
RADII	---
CHAMFER	---
UNDERCUT	---

CAD DRG. FILE:- PLM

MATERIAL :-	HEAT TREATMENT :-	WEIGHT :-
REFER TABLE	---	---

DRN	SHIVAJI
CHD.	
APPD.	
DATE	18/06/09

TITLE: EXPANSION BELLOW (2.5")

CASTING/FORGING DRG. NO.: ---

TYPE: HA294

SCALE: 1:2

SHT. NO: 1 OF 2

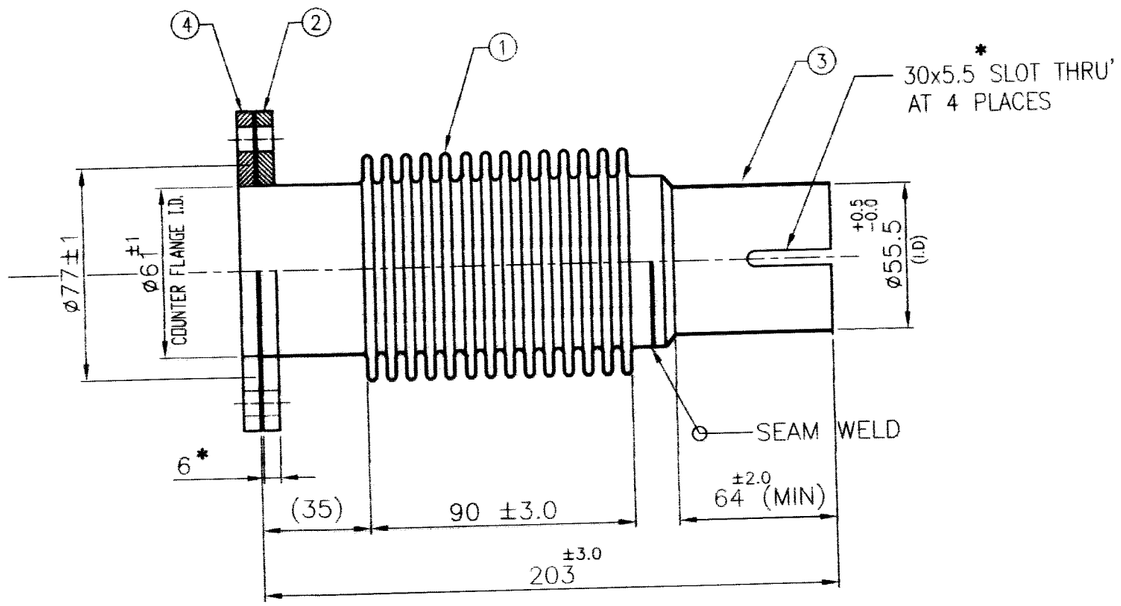
LIFECYCLE STATE:- RELEASED

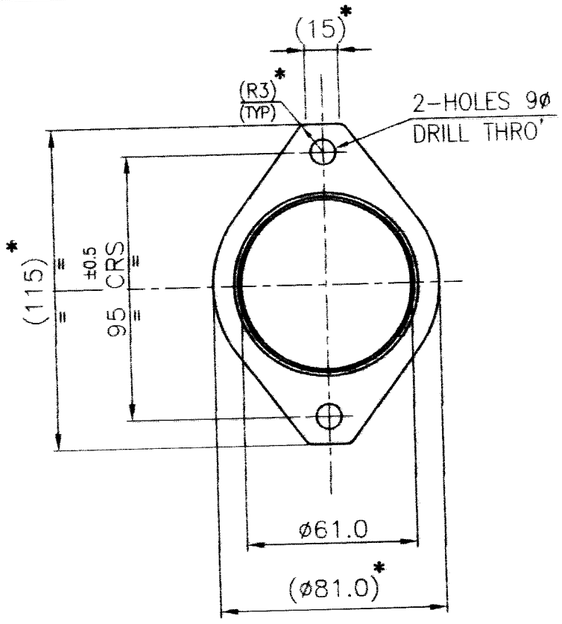
KIRLOSKAR OIL ENGINES LTD., PUNE 411 003 (INDIA)

DRAWING NO.: 02.545.06.0.00

REV NO.: 01

IF IN DOUBT ASK





** DATA:-

A. DESIGN SPECIFICATIONS:-

1)	WORKING PRESSURE	– 1.0kg/cm²
2)	TEST PRESSURE	– 1.5kg/cm²
3)	DESIGN TEMPERATURE	– 600°C
4)	AXIAL COMPRESSION	– 5 mm (MAX.)
5)	AXIAL EXTENSION	– 5 mm (MAX.)
6)	LATERAL DEFLECTION	– 8 mm (MAX.)
7)	SPRING RATE OF BELLOW	– 4.21 Kg/mm ±20%

B. BELLOW DETAILS:-

1)	BELLOW I.D.	– ø61.0±1.0
2)	BELLOW O.D.	– ø80.0±1.5
3)	NO.OF CONVE.	– 13 NOS.
4)	NO. OF PLIES	– 2 PLY
5)	THICKNESS PER PLY	– 0.3 mm

** NOTES :

1. APPROVED SUPPLIER : SENIOR INDIA PVT.LTD.
2. ALL M.S. COMPONENTS TO BE PAINTED WITH HEAT RESISTANT ALUMINUM PAINT.
3. MATING FACE OF FLANGE TO BE COATED WITH RUST PREVENTIVE OIL.
4. ALL DIMS MARKED * ARE ONLY FOR REFERANCE.
5. FOR SPRING RATE CHECKING REF DRAWING No.- – F6.315.03.0 SHEET 2 OF 2

LIFECYCLE STATE:- RELEASED

No	REVISION	ZONE	MODIFIED BY	REF. No DATE
01	SHEET NO 2 OF 2 ADDED	--	ARUN	12765 01/10/09
PR	NEW RELEASE.	--	--	02.0996 26/06/09

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UNMENTIONED	
RADII	---
CHAMFER	---
UNDERCUT	---

CAD DRG. FILE:- PLM

MATERIAL :-	HEAT TREATMENT :-	WEIGHT :-
REFER TABLE	---	---

DRN	SHIVAJI
CHD.	
APPD.	
DATE	18/06/09

TITLE: EXPANSION BELLOW (2.5")

CASTING/FORGING DRG. NO.: ---

TYPE: HA294

SCALE: 1:2

SHT. NO: 2 OF 2

KIRLOSKAR OIL ENGINES LTD., PUNE 411 003 (INDIA)

DRAWING NO.: 02.545.06.0.00

REV. NO.: 01

SIZE A3

FOLD 1

FOLD 2

FORMAT No.R&E/FORM/054/01 (REFER DOP No R&E 4.4/03)

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Bidder to note that the shortfall information/documents shall be sought only in case of historical documents which pre-existed at the time of the tender opening i.e submitted along with original bid and which have not undergone change since then.

After technical bid opening, bidders shall submit 02 sets of hard copy of their offer addressing to Mr. V Wagh, DGM (Design Depatment-CGP), Mazagon Dock Shipbuilders Limited , Dockyard Road, Mumbai 400010.

1. **DESCRIPTION & SCOPE OF SUPPLY / WORK**:

(a) **MAIN EQUIPMENT/ITEM/SYSTEM:** Procurement of exhaust system for NGOPV (Y 16401-16406) for ICGP Ships as per SOTR attached.

(b) **SERVICES OF ENGINEERS**:

(i) Technical assistance is to be provided as per the scope mentioned in SOTR.

(ii) Price for Services of Engineers to be quoted on Lump sum basis. The quoted price should be inclusive of To & Fro travelling expenses, board and lodging and local conveyance for each activity as per TSP.

(iii) Please note that it is the sole responsibility of the vendor to complete the trials till SATs including commissioning within quoted prices of services of Engineers.

(iv) While deputing Service Engineers for attending on board activity against MDL's call, checklist/prerequisites for that activity to be forwarded three working days in advance, to enable MDL to keep the system ready for that activity. Timely availability of Service Engineers shall be ensured.

Note:
a) Bidders shall quote for all line item in the tender, failing which offer of the firm falls under rejection criteria.

2. **PROCESS FOR FILLING BOQ:**
The bid comprises supply of following materials and services to be rendered in each yard:

Sl. No.	Description of items to be supplied and services to be rendered	Qty	Unit
1	Design, manufacture and supply of Diesel Engine Exhaust System	2	SET
2	Design, manufacture and supply of Main Diesel Generator Exhaust System	4	SET
3	Design, manufacture and supply of Harbour Diesel Generator Exhaust System	1	SET
4	Design, manufacture and supply of Incinerator Exhaust System	1	SET
5	Design, manufacture and supply of Diesel driven compressor Exhaust System	1	SET
6	Design, manufacture and supply of Emergency DA Exhaust System	1	SET
7	Vendor to carry out on-board installation (erection and Setting to Work) of all two (2) DIESEL ENGINE Exhaust System.	1	AU
8	Vendor to carry out on-board installation (erection and Setting to Work) of all four (04) Main Diesel Generator Exhaust System	1	AU
9	Vendor to carry out on-board installation	1	AU

	(erection and Setting to Work) of Harbour Diesel Generator Exhaust System		
10	Vendor to carry out on-board installation (erection and Setting to Work) of Incinerator Exhaust System	1	AU
11	Vendor to carry out on-board installation (erection and Setting to Work) of Diesel driven compressor Exhaust System	1	AU
12	Vendor to carry out on-board installation (erection and Setting to Work) of Emergency DA Exhaust System	1	AU
13	Assistance during Harbour Trials (HATs) and sea trials (SATs)	1	AU

In this GeM Bid, Sr. No. 1- 6 mentioned in above table are merged to make one line of items required in **exhaust system**, Sr. No. 7-12 mentioned in above table are merged to make one line of services required in **exhaust system**.

Hence, firm shall mention cumulative value of Sr. No. 1-6 and 7-12 in each yard and breakup of the total price quoted in percentage shall be mentioned in the blank rate sheet attached along with the bid.

3. **PRE-QUALIFICATION CRITERIA:**

a) Technical Pre-qualification: Suppliers shall provide details on their capability in Design, Supply, Installation & commissioning of Exhaust systems for Diesel Engine or Diesel generator of capacity of minimum 2000 KW and above. Supplier to provide PO copies along with proof of supply like Work Completion Certificate (WCC) or Inspection Report from Third Party Inspection Agency or Buyer Certified Invoice or Buyer Certified Delivery Challan.

b) Commercial Pre-qualification:

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 1,73,07,692/- 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.

Note:

a) **Applicability to 'Make in India':** Bidders (manufacturer or principal of authorised 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 meets 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 authorised 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.

b) **Authorized Representatives:** Bids of bidders quoting as authorised 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 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 authorised 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.

c) **Joint Ventures**: 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.

d) **Holding Companies:** Credentials of Holding Companies 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, the Financial Standing credentials of a Holding Company can be clubbed with only one of the fully owned subsidiary bidding company 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.

e) It is clarified that 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.

f) 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. MDL has a right to verify / cause verification of authenticity of the said documents whenever felt necessary.

4. **EARNEST MONEY DEPOSIT (EMD) / BID SECURITY:** Bidders shall furnish EMD of Rs. 10,00,000/- only (Rupees Ten Lakhs only) through NEFT / Demand Draft / Pay order / e-Bank Guarantee/Structural Financial Messaging System Bank Guarantee (SFMS BG)/ Insurance Security Bond drawn in favour of Mazagon Dock Shipbuilders Limited.

Offers with non-submission of EMD shall be categorically rejected other than exempted category. Bidder shall submit/upload the supporting documentary evidence along with Part I bid for claiming EMD exemption.

In addition to exemption list mentioned in GEM GTAC, EMD is exempted for following cases also:

(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 submit ted. 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 recognised 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 in Part-I offer/bid . Firms in process of obtaining this certificate will not be considered for EMD exemption.

Mode of EMD transaction: In case of Indigenous bidders, EMD shall be obtained by way of NEFT / Demand Draft / Pay order / e-Bank Guarantee /SFMS bank guarantee/ Insurance Security Bond 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 India n 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. Treasury section will obtain the list from SBI and post it on intranet. Bidders should be encouraged to advice their banker to send EMD directly to commercial department or through SWIFT 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. 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 (Commercial-NP)/ Dealing Executive within seven days of the tender closing date.

Structural Financial Messaging System Bank Guarantee (SFMS BG) in lieu of Bank Guarantee: In case the Indigenous Bidders intends to submit Bank Guarantee towards Performance security/EMD/Advance payment/Free Issue Material etc, the Bank Guarantee should be e-Bank Guarantee or Structural Financial Messaging System Bank Guarantee (SFMS BG).

(i)Mandatory Requirement: Whenever a bidder submits SFMS BG, the bidder will mandatorily be required to submit letter from issuing bank that it is unable to issue

NeSL(National e-Governance Service ltd) based e-BG as on date. Such letter should accompany the SFMS BG.

(ii)IFSC Code: While submitting the Structural Financial Messaging System Bank Guarantee (SFMS BG). IFSC: ICIC0000393 shall be used.

(iii)Authenticity of SFMS BG: Bidder shall get SFMS BG issued from SFMS enabled Bank as allowed by MDL in tender conditions. Bank shall issue the Bank Guarantee through SFMS system and send SFMS message to MDL's Bank confirming the authenticity of Bank Guarantee. Bidder will be required to submit SFMS BG along with SFMS delivery report/message copy which has been transmitted to MDL's bank by BG issuing bank through SFMS system.

(iv)Stamp Paper/Franking Receipt: The SFMS BG will have to be given on nonjudicial stamp paper/ with franking receipt e-stamping as per stamp duty applicable at the place from where the bid has emanated. The nonjudicial stamp paper/ franking receipt e-stamping should be either in the name of the issuing bank or the bidder.

(v) Receipt of SFMS BG: The Original SFMS BG in physical form, (along with SFMS delivery Report/Message copy which has been transmitted by issuing Bank through SFMS system to beneficiary's i.e., MDL Bank) should reach to MDL designated office on or before due date.

(vi)Mandatory Requisite Information: SFMS BG will not be acceptable unless details of the same is transmitted to the MDVs Bank through SFMS platform. Its
bidder's responsibility to ensure that BG issuing bank send the BG advicecorrectly in the fòrm of message format 760 COV vis SFMS (StructuredFinancial Messaging System) as provided by RBI while capturing all requisite fields including Beneficiary Account Name, Bank Name, Bank Account Number,IFSC Code etc.

(vii)Non-Acceptance of BG: In case of any error by the Bidder/contractor or BG issuing Bank while capturing the requisite field details / format or non-receipt of confirmation of BG through SFMS 760COV message format, the bidder/contractor shall be responsible for non-acceptance of the SFMS Bank Guarantee.

(viii)Amendment in BG: For any amendment of SFMS BG, message 767COV through SFMS should be used.

Address of Dealing commercial executive:
Arindam Ghosh Deputy Manager -Commercial P15B and CGP
Mazagon Dock Shipbuilders Limited (Ministry of Defence Undertaking) Dockyard Road, Mazagon, Mumbai- 400010
Phone - 022 23762773
Fax : (+91)22 2378 2302

Refund of EMD: Refund of EMD in all the cases shall be without interest as stated below:

(i) Earnest money of unsuccessful bidders shall be returned within 15 days after the award of contract or expiry of bid validity, whichever is earlier. However, in case of two packet or two stage bidding, Bid securities of unsuccessful bidders during first stage i.e. technical evaluation should be returned within 15 days of declaration of result of first stage itself i.e. technical evaluation. Earnest money of successful bidder shall be returned within 15 days after receipt of Performance Security / e-PBG.

(ii) In the event of cancellation of tender, the EMD will be refunded / returned to all the bidders.

(iii) If the validity of the offer of the firm has expired and if bidder is not willing to extend the validity of offer, the EMD of such bidders to be refunded without linking of the same to the Price Bid Opening but after the approval from CFA.

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) If it comes to notice that the information / documents furnished in its bid is false, misleading or forged.

(iii) Non-acceptance of order.

(iv) All the bids of a bidder who has submitted multiple bids, as per the clause, shall be rejected and Bid Security for all such bids shall be forfeited

(v) Fails to furnish requisite performance security within stipulated time required as per e-bid / RA conditions.

5. **VALIDITY PERIOD OF OFFER:**

(a) Bid / Offer shall have the validity period of **180 days** from the tender closing date/ extended tender closing date.
(b) In case the day up to which the bids are to remain valid falls on/ subsequently declared a holiday or closed day for MDL, the bid validity shall automatically be deemed to be extended upto the next working day.
(c) 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.

6. **DELIVERY PERIOD/CONTRACT PERIOD (FOR GOODS/SERVICES):**

(a) Delivery Period / Contract Period: Delivery/contract period shall be as per GeM tender.

(b) The given schedule for the services is tentative; the exact schedule will be communicated 15 days in advance.

7. **SUBMISSION OF OFFER IN TWO BID SYSTEM**: Offer must be submitted in two parts as follows:

(a) **Part I (Techno Commercial Bid):** The bidder shall ensure that following are essentially submitted in the Part-I bid as applicable:
(i) Declaration of Local Content, preference for MSE Order 2012 / PPP Order 2017 for purchase preference.
(ii) Compliance Certificate w.r.t. Land Border Clause
(iii) Blank rate sheet indicating quoted/not quoted against each line item, tax percentage, type of taxes and FE content.
(iv) Bank details for payment by RTGS/NEFT in the format enclosed.
(v) Bidder contact details as per attached annexure" Contact Details of the bidder.
(vi) Additional documents as applicable to this tender.

Note: In any case, prices are not to be mentioned in Part-I bid.

(b) **Part-II (Price Bid):** Prices for each of the listed items has to be uploaded strictly in the prescribed format provided in the GeM portal.

8. **BID REJECTION CRITERIA**:

(a) **Categorical rejection criteria:** The following conditions / deviations are non-negotiable and therefore any bid falling under these conditions / deviations shall be summarily rejected. Bidders to note that they shall not be provided any opportunity to rectify these conditions / deviations post Part-I bid opening:

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

(b) **Liable rejection criteria**: Non-compliance/non-acceptance to any of the terms and conditions of the tender other than following shall render the bid liable for rejection;

(i) Clause mentioned under loading criteria or terms not acceptable to firm.

Bidder to note that the shortfall information/documents shall be sought only in case of historical documents which pre-existed at the time of the tender opening i.e. submitted along with original bid and which have not undergone change since then.

9. **PERFORMANCE SECURITY (PS)**:

(a) Performance Security for an amount equal to 5% of contract value payable in Indian Rupees shall be submitted as per GeM terms.

(b) Performance Security is to be furnished as per GeM 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.

(c) Structural Financial Messaging System Bank Guarantee (SFMS BG) in lieu of Bank Guarantee: In case the Indigenous Bidders intends to submit Bank Guarantee towards Performance security/EMD/Advance payment/Free Issue Material etc, the Bank Guarantee should be e-Bank Guarantee or Structural Financial Messaging System Bank Guarantee (SFMS BG).

(i)Mandatory Requirement: Whenever a bidder submits SFMS BG, the bidder will mandatorily be required to submit letter from issuing bank that it is unable to issue NeSL(National e-Governance Service ltd) based e-BG as on date. Such letter should accompany the SFMS BG.

(ii)IFSC Code: While submitting the Structural Financial Messaging System Bank Guarantee (SFMS BG). IFSC: ICIC0000393 shall be used.

(iii)Authenticity of SFMS BG: Bidder shall get SFMS BG issued from SFMS enabled Bank as allowed by MDL in tender conditions. Bank shall issue the Bank Guarantee through SFMS system and send SFMS message to MDL's Bank confirming the authenticity of Bank Guarantee. Bidder will be required to submit SFMS BG along with SFMS delivery report/message copy which has been transmitted to MDL's bank by BG issuing bank through SFMS system.

(iv)Stamp Paper/Franking Receipt: The SFMS BG will have to be given on nonjudicial stamp paper/ with franking receipt e-stamping as per stamp duty applicable at the place from where the bid has emanated. The nonjudicial stamp paper/ franking receipt e-stamping should be either in the name of the issuing bank or the bidder.

(v) Receipt of SFMS BG: The Original SFMS BG in physical form, (along with SFMS delivery Report/Message copy which has been transmitted by issuing Bank through SFMS system to beneficiary's i.e., MDL Bank) should reach to MDL designated office on or before due date.

(vi)Mandatory Requisite Information: SFMS BG will not be acceptable unless details of the same is transmitted to the MDVs Bank through SFMS platform. Its

bidder's responsibility to ensure that BG issuing bank send the BG advicecorrectly in the fòrm of message format 760 COV vis SFMS (StructuredFinancial Messaging System) as provided by RBI while capturing all requisite fields including Beneficiary Account Name, Bank Name, Bank Account Number,IFSC Code etc.

(vii)Non-Acceptance of BG: In case of any error by the Bidder/contractor or BG issuing Bank while capturing the requisite field details / format or non-receipt of confirmation of BG through SFMS 760COV message format, the bidder/contractor shall be responsible for non-acceptance of the SFMS Bank Guarantee.

(viii)Amendment in BG: For any amendment of SFMS BG, message 767COV through SFMS should be used.

10. **WARRANTY/GUARANTEE**:
    (a) The equipment / item along with associated auxiliaries/components supplied shall be warranted / guaranteed for satisfactory Performance for the period of twelve (12) months post on board installation.
    (b) The Supplier cannot absolve their responsibility for warranty of material even though it is inspected by & approved by the inspection authorities.
    (c) If the defects are not remedied within a reasonable/stipulated time, MDL may proceed to rectify the defects at the supplier's risk & cost, but without prejudice to MDL's rights under the contract.
    (d) During the period of warranty / guarantee if any defect noticed in the equipment / item supplied, the supplier/ contractor will have to rectify such defects immediately at no extra cost to MDL.

11. **PRICING**:
    (a) Prices of all items/services shall be quoted for delivery of the items/services to the following destination including charges towards transportation, insurance, and other local costs incidental to the delivery of the Goods/Services.

Items/services	Delivery/Work Address
Exhaust System (Main Equipment)	Anik Chembur store, MDL, Mumbai
Services	Dockyard Road (Mumbai)/Nhava Yard

    (b) The prices quoted shall remain firm and fixed during the currency of the order / contract unless agreed otherwise by MDL.
    (c) **Price Variation Clause: (For Goods & Services):** Not Applicable

12. **TAXES & DUTIES**:
    (a) Bidders must clearly mention the applicable Taxes & Duties in the rate sheet enclosed in the tender. The item-wise rates (i.e. Basic + Packing, Forwarding, Freight & Insurance) quoted in the Rate sheet should exclude Taxes, Cess & Duties. Bidder should indicate GST rates as applicable separately under each of the head in the same rate sheet, which will be paid extra based on tax invoice to the extent applicable.
    (b) Supplier / contractor will not be entitled to any increase in rate of taxes occurring during the period of extended delivery completion schedule if there is delay in supplies / completion attributed to him. However, if there is a decrease in taxes, the same must be passed on to MDL.
    (c) Income tax applicable on cost of services rendered in India in relation to the contract, shall be payable by bidders.
    (d) **Custom Duty** will not be reimbursed to the vendor.

13. **PAYMENT TERMS**:
    (a) Advance payment is not applicable for this tender
    (b) **Main Equipment**:

(i) On receipt of Invoice, 95 % of Payment shall be made within 15 days of receipt & acceptance of material and as reduced by any deductibles and / or the amount leviable towards liquidated damages, if any plus 100% taxes, duties etc. as applicable.

(ii) Payment of the balance of the value of the supplies/services may be payable and as reduced by any deductibles and / or the amount leviable towards liquidated damages, if any, on submission & confirmation of PS of equivalent amount valid up to warranty period plus 60 days' claim period.

(c) **Services**: 100% payment for all kinds of services like STW, HAT, SAT, installation, commissioning assistance wherever included in the same order will be admissible for payment **within 15 days** against submission of original Work Completion Certificate & SAP Service Sheet signed by CM or above of production/planning dept. and ink signed invoice.
Payment will be made post completion of all services mentioned in that line item.

14. **PAYMENT MODE & REQUISITE DOCUMENTS FOR PAYMENT**:

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

(b) **Documents for Payments for Indian Bidders (Goods):**

(i) Suppliers invoice.
(ii) Confirmation of receipt and verification of Bank Guarantee for Performance security as the case may be.
(iii) Guarantee/Warrantee Certificate
(iv) Inspection release note (If applicable)

(c) **Documents for Payments for Services**:

(i) Set of Original + 2 Copies of signed Invoice showing item / activity wise prices as per the Contract / Order.
(ii) SAP Service Sheet signed by CM or above of production/planning dept.

Note: Invoices should be submitted at "Receipt Section" adjacent to the ARS Punching Section, South Yard MDL.

(d) **Alternate MSME vendor payment through TReDS:**

i) In order to address the financial needs of MSME firms, GoI has introduced a platform for facilitating the financing of trade receivables of MSMEs from buyers, through multiple financiers which is termed as Trade Receivables Discounting System (TReDS). At TReDS, auctioning of invoices at competitive & transparent environment is done by financers based on Buyer's credit profile.
ii) MDL is registered on the "Invoicemart" TReDS platform and M1xchange of M/s Mynd Solutions Pvt. Ltd.
iii) MSME bidders desirous to receive payments through TReDS platform may avail the facility if they are already registered on
   a) "Invoicemart" TReDS platform or by registering on it.
      Contact details at "Invoicemart" TReDS platform are as below:
      022 6235 7373 and a new mail id service@invoicemart.com.
   b) "M1xchange" TReDS platform or by registering on it.
      Contact details at "M1xchange" TReDS platform are as below:
      +91 9920455374 Ms Ashwathi Jayandran email id: ashwathi.jayandran@m1xchange.com
      +91 8839915724 Ms Priyanka Shah email id prinyaka.shah@m1xchange.com

(e) **E Invoice:** Wherever GST is applicable, payment will be released against e-Invoice, or Invoice accompanied with Vendor's Self Declaration that " We do not fall under the

category of registered persons notified under GST Act,2017 and as amended time to time and we are not required to comply with e-Invoicing provisions under GST Act,2017, as our aggregate turnover in any preceding financial year from 2017-18 onwards has not exceeded the limit as per GST Act,2017"

15. **EXCHANGE RATE VARIATION (ERV)**: **NOT APPLICABLE**

16. **MODE OF DISPATCH**: Road/Rail/Air/Sea.

17. **CONSIGNEE**:

(a) Material scheduled for delivery are to be delivered at MDL (Anik store located in Mumbai)

Note:-In order to avoid inconvenience during the delivery of material, it is advisable for supplier to depute their representative in their own interest to coordinate the activities between the transporter, and MDL stores.

(b) Following document should be submitted along with material:

- PO copy & subsequent amendments issued to it, if any.
- Inspection Release Note (IRN) issued by nominated inspection officer.
- Delivery Challans clearly indicating MDL Purchase Order No, Inspection Note Details and Packing List co-relating the items in the inspection report.
- Copy of Warranty Certificate, Preservation Certificate etc.
- Technical documentation, if applicable.
- E-Way bill (if applicable) details are to be submitted during the delivery of the items.

(c) Unloading of the equipment/ items will be arranged by MDL. In case of delivery of Large/ Bulky/ Heavy consignments, supplier is required to give 2 to 4 day's advance intimation to MDL clearly indicating approx. dimensions and weight of consignments for arranging fork lift/crane for unloading.

18. **WORK DONE CERTIFICATE (WDC) / COMPLETION CERTIFICATE (WCC):**

a. Work Completion certificate (WCC) (Service sheet in SAP) shall be issued on Satisfactory completion of respective work with inspection and acceptance reports. Agency responsible to issue WCC shall be Planning/user dept. (Chief manager & above).

b. The WDC shall include cumulative statement of work carried out till last WDC. The necessary service entry shall be made in SAP system by the WDC certifying authority & will be submitted to/collected by the contractor for further invoicing. The WDC shall bear relevant Service Entry Sheet No., PO No. and respective item Sr. No., sub service line item of the PO.

c. The WDC must clearly mention the mutually agreed completion schedule and actual work done schedule for start date & end date.

d. In case of delays, the duration along with numbers of delayed days shall be specified in respective WDCs to invoke LD clause and effect recoveries from sub contractor's invoice. LD to be clearly mentioned in the WDC

19. **INSPECTION & TESTING**:

For Goods:

It shall be as per SOTR. Other general conditions related to inspection of material are as under:

(a) The decision of the Inspecting Authority or their representatives, as the case may be, on any question of the intent, meaning and the scope of Specifications / Standards shall be final, conclusive and binding on the Bidder/ Supplier / Contractor.

(b) **Pre-Dispatch Inspection: Below is the details of MDL appointed TPIA:**

- Supplier Name: M/s RINA India Pvt Ltd, Mumbai
- Address: B-607-608 Everest Chambers, Marol, Andheri-Kurla Road, Andheri East - 400 059, MUMBAI - INDIA

- Contact Details of Project Coordinator for execution part:

Name: Mr. Raj Vinod Vaidya, MS, PMP
Designation: Project Coordinator
Email: raj.vaidya@rina.org
Mobile: +91 9137655906

(c) **Third Party Inspection (TPI) charges shall be borne by MDL & CGRPT.**

(d) The testing charges for samples (if applicable) should be borne by the supplier and this should be made clear at the enquiry stage itself to avoid claims at a later date/or effect on his position in comparative statement of offers. Any special testing involving financial implications shall be settled prior to placement of the order and such cost should form part of the evaluation.

(e) **Receipt Inspection: MDL and CGRPT** shall jointly carry out necessary inspection of the items **in the presence of OEM (if required)** on receipt in the MDL premises on the basis of appropriate Inspection system requirements & the Inspection documents submitted by suppliers. Any objection raised by MDL inspection team against quality of material or workmanship shall be satisfactorily corrected by the supplier at his expenses including replacement as may be required within shortest possible time within 30 days. Items damaged during transit shall also be rectified or replaced by the supplier within shortest possible time. Please refer SOTR for details.

(f) **Rejection of the material:** Any portion of the equipment found defective/rejected, the supplier shall collect the same at his cost from the MDL Yard, all incidental charges being born by supplier, (inclusive of custom duty, if payable), within 30 days from the date of intimation to the supplier of such rejection. The MDL reserves the rights to dispose-off the rejected item at the end of a total period of 90 days in any manner, to the best advantage to the MDL & recover storage charges & any consequential damages, from sale proceeds of such disposal.

For Services:

(a) The MDL / Vessel owner shall have at all reasonable time access to the contractor's premises and shall have the power at all reasonable time to inspect, examine and test the materials and workmanship of the work during its manufacture there and if a part of the work is being manufactured on other premises, the contractor shall obtain permission for MDL / Vessel owner to inspect as if the work was being manufactured on contractor's own premises.

(b) Only such work will be accepted and paid for as MDL / Vessel owner may certify to be strictly in accordance with the contract.

(c) MDL on giving seven days' notice in writing to the contractor setting out any ground of objections which may have in respect of the work shall be at liberty to reject all or any materials of workmanship, the subject of any of the said grounds of objection which are not in accordance with the contract.

(d) In all cases where the contract provides for tests whether at the premises of the contractor or any sub-contractor or elsewhere the contractor except where otherwise specified shall provide free of charges such labour, materials, electricity, fuel, water, stores, apparatus and instruments as may reasonably be demanded, to carry out efficiently such tests of the work in accordance with the contract and shall at all-time facilitate the MDL / Vessel owner to accomplish such testing.

(e) The cost of all tests and/or analysis effected at the contractor's or sub-contractor's work and on the site shall be borne by the contractor. The cost of independent test and/or analysis which MDL / Vessel owner may cause to be made and which prove satisfactory will be borne by the Employer but the contractor will be called upon to pay all expenses incurred by the Employer in respect of any work found to be defective or of inferior quality, adulterated or otherwise unacceptable.

(f) The contractor shall give MDL / Vessel owner, such reasonable notice of the progress of work (and in particular of any work being made ready for shipment or transportation) as will permit inspection, examination and testing and no work shall be painted or prepared for shipment or transportation as the case may be without the consent of the MDL / Vessel owner until the same has been passed by MDL / Vessel

owner as being ready for shipment or transportation but no such passing or consent shall relieve the contractor from the liability to complete the contract works in accordance with the contract.

20. **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 with tender documents. IP shall be submitted on plain paper.

    The 'Integrity pact' dully filled as per enclosed format 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:

    Commercial - CGP,
    5th Floor, Service Block,
    Mazagon Dock Shipbuilders Ltd,
    Dockyard Road,
    Mumbai-400010.

    (i) 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.

21. **BOOK EXAMINATION CLAUSE**: 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.

22. **PROGRESS MONITORING & REVIEW MECHANISM:** The required dates are indicated in tender. On placement of order a kick off meeting is to be held in MDL to chalk out the sequence and priority of the activities and the deliverables in line with the prevailing construction status of the ship. In this meeting, a progress monitoring team shall be constituted comprising vendor's representative engineer, MDL's executives (one each from Planning, Design and Ship Manager). This team shall carry out periodic reviews (initially quarterly followed by monthly reviews) to decide and chalk out the detailed sequence and priority of the completion of work and deliverables. The vendor would have to adhere to the recommendations and decisions of the said team while executing the work.

23. **HINDRANCE REGISTER**: All hindrances with date of occurrences and removal shall be noted in the Hindrance Register. The Hindrance Register shall document reasons for the delay vis-à-vis the mutually agreed schedule. All hindrances such as delay in MDL Inputs

(Drawings/Material/Documents/Services/ Inspection call), delay by TPI/Inspection Agency/Customer(Navy), delay on account of specialist services, non-performance by the contractor, delinquency by the vendor, force majeure or any other relevant reason shall be recorded. The Hindrance Register shall be signed by the reps. of both MDL as well as Contractor. Executive in the rank of Chief Manager and above shall be the nodal executive of the User Department.

24. **PUBLIC GRIEVANCE CELL**: A public grievance cell headed by Shri R. R. Kumar, ED (EY) has been set up in the company. Members of public having complaints or grievances are advised to contact above Authorities on Wednesday between 10.00 hours and 12.30 hours in his office at 3rd Floor, West Block, Mazagon Dock Shipbuilders Ltd or send their complaints / grievances to him in writing for redressal. Telephone No. is 022-23763512(MDL).

25. **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.

26. **NON-DISCLOSURE AGREEMENT: Not Applicable**

27. **BREACH OF OBLIGATION:** 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.

28. **WORKMEN SAFETY AND INSURANCE:** The service provider shall alone be fully responsible for safety and security and insurance or life insurance of their personnel who is working on the operation and maintenance works. The service providers shall take out and maintain, and shall cause any Subcontractors to take out and maintain, at their (or the Subcontractors', as the case may be) own cost but on terms and conditions approved by the MDL, insurance against the risks, and for the coverage, as shall be specified in the **SCC;** and at the MDL's request, the service providers shall provide evidence to the MDL showing that such insurance has been taken out and maintained and that the current premiums have been paid. The service provider shall provide and ensure sufficient protection gears like safety shoes, hand gloves, ladders, etc. are being used by their workers while carrying out works. The MDL shall not be liable for any compensation in case of any fatal injury/death caused to or by any man power while performing/discharging their duties/ for inspection or otherwise.

29. **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).

30. **CANCELLATION OF PROCUREMENT PROCESS/ REJECTION OF ALL BIDS/RE-TENDER:** If competition is lacking, then in such cases lack of competition shall not be determined solely on the basis of the number of Bidders. Even when only one Bid is submitted, the process may be considered valid provided following conditions are satisfied:
    a) The procurement was satisfactorily advertised and sufficient time was given for submission of bids.
    b) The qualification criteria were not unduly restrictive; and
    c) Prices are reasonable in comparison to market values

The decision to cancel the procurement and reasons for such a decision shall be communicated to all bidders that participated in the procurement process. During Re-tendering, all participated bidders of earlier tender shall be informed**.**

31. **CONFLICT OF INTEREST AMONG BIDDERS/ AGENTS:** A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of MDL's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:
    (i) they have controlling partner (s) in common; or
    (ii) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
    (iii) they have the same legal representative/agent for purposes of this bid; or
    (iv) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or
    (v) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid.
    (vi) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid from the following:
        1. The principal manufacturer directly or through one Indian agent on his behalf; and
        2. Indian/foreign agent on behalf of only one principal.
    (vii) Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid;
    (viii) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business
    Note: The undertaking by the bidders for above para (Conflict of Interest among Bidders/ Agents) shall be submitted/uploaded along with Part I bid.

32. **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.

33. **Limitation of Liability:**

(a) **Cap on Liability**: The total liability of the Vendor/Supplier, whether in contract, tort (including negligence), or otherwise, shall not exceed **100% of the total contract value.**

(b) **Exclusion of Certain Damages:** To the fullest extent permitted by applicable law, neither party shall be liable to the other for any indirect, incidental, consequential, special, punitive or exemplary damages, including but not limited to loss of Profits, loss of business opportunity, unused production, loss of product, damage to reputation, arising out or in connection with this agreement, whether in contract or tort (including negligence), strict liability, or otherwise.

(c) **Exclusions from Cap on Liability:** The cap on liability shall not apply to:

i. Liability arising from wilful misconduct, gross negligence, or fraud by the Vendor/Supplier.

ii. Breach of confidentiality obligations or infringement of intellectual property rights.

iii. Indemnity obligations for third-party claims.

iv. Non-compliance with applicable laws, regulations, or statutory obligations.

v. Liquidated Damages expressly agreed upon by the parties. Breach of obligations of Integrity Pact (IP).

vi. Any other liability that cannot be limited or excluded under Applicable Law.

vii. **Mutuality:** The liability cap shall apply mutually to both parties unless otherwise agreed in writing.

34. **REVERSE AUCTION:**

a) MDL reserves the right to extend, reschedule, postpone, suspend/pause, resume and extend the Reverse Auction, or cancel the Reverse Auction process at any time, before ordering, without assigning any reason, with intimation to bidders.

b) If the lowest price received during ERA is unreasonable or it is unacceptable on ground of being too high when compared with estimated price, MDL reserves the right to seek justification of the price from lowest bidder.

c) If the price is not considered reasonable, MDL may not accept such bid and can go for another tender process. MDL reserves the right to cancel the tender cum RA process.

35. **CONTACT DETAILS FOR QUERIES**: **All bidders are requested to get their queries, if any, clarified in advance (i.e. 7 days in advance to tender closing date) to avoid last minute delay.** In case of any clarifications regarding tender, bidders are requested to contact the following executives.

Technical :

1. Mr. Vinit S Wagh, DGM/PE(Design), Tel: 022 -23763017, emailid: vswagh@mazdock.com

2. Mr. Rohan Patil, M(Design), Tel: 022 -23763045, emailid: psbanerjee@mazdock.com

Commercial:

1. Mr. D S Chavan, DGM/PE(Commercial-CGP), Tel: 022 -23762782, emailid: dschavan@mazdock.com

2. Mr. Arindam Ghosh, DM (Commercial- CGP), Tel: 022 -23762773, emailid: aghosh@mazdock.com

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

Yours faithfully,
For MAZAGON DOCK SHIPBUILDERS LIMITED

Enclosures: -

Enclosure-1	SOTR no: DR/E/NGOPV/3040, Rev 0, dated 08.10.2026
Enclosure-2	General Conditions of Contract for Goods & Services (GCC)- **Not Applicable**
Enclosure-3	EMD Format
Enclosure-4	Integrity Pact(IP)Format
Enclosure-5	Performance Security format (PS)
Enclosure-6	RTGS format
Enclosure-7	Details for remittance towards PS
Enclosure-8	Shipping Instruction - **Not Applicable**
Enclosure-9	Letter of Credit format **- Not Applicable**
Enclosure-10	Official Secret Act 1923
Enclosure-11	Contact Details of the bidder
Enclosure-12	Blank rate sheet
Enclosure-13	TEF & GCC Acceptance form- **Not Applicable**
Enclosure-14	Declaration for Local Content
Enclosure 15	Actual Local Content Certificate
Enclosure 16	Non-Disclosure Format - **Not Applicable**
Enclosure 17	Annexure "C" towards compliance of Public Order on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs)
Enclosure 18	Deed of Guarantee

ANNEXURE-C

ACTUAL LOCAL CONTENT CERTIFICATE

Note 1: This certificate shall be submitted by the successful bidder post execution of the contract.
Note 2: In cases of PO / Contract value in excess of Rs. 10 Crores, the supplier 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.

LOCAL CONTENT DECLARATION (post execution of contract / PO) BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF CONTRACT No./ PO No......
ISSUED BY: (Name of Firm):.....

NB: The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

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

(a) The facts contained herein are within my own personal knowledge.
(b) My/our company has declared the local content at the time of tender as under

Tender Item Sr No	Local content calculated as above %	Imported content including all custom duties (%)	Bid price in percentage only, excluding net domestic indirect taxes (%)	Location of value addition

(c) I declare the following in respect of the goods/services/works delivered in terms of the above-specified PO / Contract

(i) It contains the import content (including Customs duties) to the tune of --- Percent

(ii) The relevant rate(s) of exchange against the appropriate currency used in execution of this PO / Contract are given in the table below:

Currency	Rates of exchange	Date of exchange rate
US Dollar		
Euro		
Others		

(f) The local content calculated using the declaration given at the time of Bid, and the above rates of exchange is as under:

Tender Item Sr No	Actual Price, excluding net domestic indirect taxes (%)	Actual Imported content including all custom duties (%)	Declared minimum Local content at the time of bidding (%)	Achieved Local content of delivered items (%)	Location of value addition

NB: Local content percentage shall strictly be declared item wise or tender wise as was declared at the time of bid / tender.

(g) 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 04.06.2020 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. I undertake to retain the relevant documents for 7 years from date of execution.

(h) 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 04.06.2020.

SIGNATURE: _____ **DATE:** _____

Stamp / Seal of the company

GUIDELINES ON BANNING OF BUSINESS DEALINGS

CONTENTS

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

1. Introduction

1.1	Mazagon Dock Shipbuilders 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	Wilful 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. 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

10.1	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.
10.2	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

12.1	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.
12.2	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.
12.3	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 inter-connected Agencies.

Name of Bidder:	
Address:	
Contact Number:	
email id:	

Details of Authorised Representatives; (Three Levels)

1.

Name:	
Designation	
Direct Landline Number:	
Mobile Number:	
Email id:	

2.

Name:	
Designation	
Direct Landline Number:	
Mobile Number:	
Email id:	

3.

Name:	
Designation	
Direct Landline Number:	
Mobile Number:	
Email id:	

APPENDIX – 36

(to be executed on non judicial stamp paper of requisite value as per place of execution in India)

DEED OF GUARANTEE

THIS DEED OF GUARANTEE ("Deed") made and executed at (*) on this the _____ day of _____ **20** by:

(*), a (*) existing under the laws of (*) and having its registered at (*) (hereinafter referred to as **"the Principal Manufacturer"/ "Original Equipment Manufacturer(OEM)",** which expression shall unless it be repugnant to the subject or context thereof be deemed to include their respective heirs, executors, administrators and legal representatives) being the Party of the FIRST PART;

IN FAVOUR OF

MAZAGON DOCK SHIPBUILDERS LIMITED, a company existing under the laws of India, having its registered office at Dockyard Road, Mazagon, Mumbai 400010, India (hereinafter referred to as the **(MDL)**, which expression, unless excluded by or in contradiction to the subject or context, shall mean and include its successors and assigns) being the Party of the OTHER PART;

Whereas:

A. MDL has floated a Tender bearing Tender No. (*) dated (*) ("**Tender**"), wherein quotations were invited for supplying of (*) ("**Goods&/or Services"**) as stipulated in the Tender at locations as specified in the Tender.

B. The Principal Manufacturer /OEM has agreed to submit its bid through an authorised representative namely (*) (hereinafter referred to as "**Authorised Representative**"), for the aforesaid Tender.

C. The Principal Manufacturer/OEM has represented that it has authorised the Authorised Representative to act on its behalf herein for submitting the bid and to act as an intermediary for supplying the Goods &/or Services to MDL as per the terms of the Tender, as mentioned herein this Deed.

D. The Tender condition No. (*) requires that the Principal Manufacturer furnishes a legally enforceable document, i.e. this Deed, for the purpose of ensuring smooth execution of the Contract if awarded to the Authorised Representative (pursuant to the Tender) and for assuring that all obligations as stated in the Contract will be fulfilled therein, including warranty and guarantee obligations contained in the Tender. It is further clarified that MDL shall award the contract and sign the relevant transaction documents ("**Transaction Documents**") with the Authorised Representative (in the event of its bid qualifying as per the criteria stipulated in the Tender).

E. Thus, the Principal Manufacturer/OEM has agreed to execute this Deed in favour of MDL.

NOW THIS INDENTURE WITNESSETH THAT IN CONSIDERATION OF THE ABOVE PREMISES IT IS HEREBY COVENANTED AND AGREED (THE PRINCIPAL MANUFACTURER /OEM COVENANTING AND AGREEING JOINTLY AND SEVERALLY) AS FOLLOWS:

1. As per Tender condition No. (*), the Principal Manufacturer /OEM hereby, absolutely, irrevocably and unconditionally guarantees to MDL, the performance by the Principal Manufacturer /OEM of all of the obligations in/under the said Tender and Transaction Documents whether executed by the Principal Manufacturer /OEM directly or the Authorised Representative or both, to the satisfaction of MDL in the event of failure of the Authorised Representative or otherwise upon the occurrence of an event of default under the said Tender and/or Transaction Documents.

2. Any such demand made by MDL on the Principal Manufacturer /OEM shall be final, conclusive and binding notwithstanding any contractual arrangement, difference or any dispute between Principal Manufacturer /OEM and MDL and/or MDL and the Authorised Representative or any other legal proceedings, pending before any court, tribunal, arbitrator or any other authority. The Principal

Manufacturer /OEM shall be bound by the terms and conditions of the Tender and/or Transaction Documents.

3. The Principal Manufacturer /OEM shall indemnify and hold harmless MDL from any claim made against MDL or any third party for injury, damage, loss or expenses attributable to the breach /non-performance of responsibilities by the Authorised Representative.

4. In order to give effect to the Guarantee herein contained MDL shall be entitled to act as if the Principal Manufacturer /OEM was originally liable to MDL for all the obligations of the Authorised Representative as mentioned in the Tender and/or Transaction Documents.

5. Notwithstanding MDL's rights herein or under the Tender and/or Transaction Documents, MDL shall have fullest liberty to call upon the Principal Manufacturer /OEM to perform the obligation of the Authorised Representative under the Tender and/or Transaction Documents and pay together with interest as well as the costs (including reasonable attorney costs) charges and expenses, and/or other money for the time being due to MDL in respect of the aforesaid.

6. The Guarantee herein contained shall not be determined or in any way prejudiced by any absorption of or by any amalgamation thereof of MDL but shall enure and be available for and by the absorbing or amalgamated entity.

7. The Guarantee shall be irrevocable and enforceable against the Principal Manufacturer /OEMs notwithstanding any dispute between the Principal Manufacturer /OEM and the Authorised Representative.

8. The Principal Manufacturer /OEM hereby agrees that notwithstanding any variation made in the terms of the Transaction Documents, the Principal Manufacturer /OEM shall not be released or discharged of their obligation under this Guarantee provided that in the event of such variation the liability of the Principal Manufacturer /OEM shall notwithstanding anything herein contained be deemed to have accrued and the Principal Manufacturer /OEM shall be deemed to have become liable hereunder on the date or dates on which the Authorised Representative become liable to perform its obligations which became due under the said Transaction Documents.

9. The Guarantee hereby given is independent and distinct from any security that the MDL have taken or may take in any manner whatsoever whether it is by way of a performance guarantee or security Deposit as per provisions of the Tender and Transaction Documents.

10. The Principal Manufacturer /OEM shall pay all stamp duty, other duties, Taxes, fees, penalties or other charges payable on or in connection with the execution, issue, delivery, registration of this Deed, and any document, act and registration performed pursuant hereto, if and when the same has become payable according to the Applicable Law.

11. The Principal Manufacturer /OEM declares that the information and data furnished by it to MDL and the Authorised Representative pursuant to the Tender is true and correct.

12. This Deed shall be governed by and construed in all respects with the Indian laws and the parties hereto agree that any matter or issues arising hereunder or any dispute hereunder shall be subject to the jurisdiction of the competent Courts/Tribunals of the city of Mumbai in India.

13. This Deed may be executed in 2 (two) counterparts, each of which so executed will be deemed to be an original and such counterparts together will constitute one and the same Deed.

IN WITNESS WHEREOF the Principal Manufacturer /OEM (abovementioned) has executed these presents the day and year first hereinabove written.

Signed, Sealed and Delivered on behalf of

By:

Name: (*)

Title: (*)

Witness

1.

2.

APPENDIX – 1

PROFORMA OF UNCONDITIONAL AND IRREVOCABLE INSURANCE SURETY BOND 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.)

Ref. No. .....
Insurance Surety Bond No. .....
Dated: .....

1. IN CONSIDERATION OF MAZAGON DOCK SHIPBUILDERS LIMTED, 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 an unconditional and irrevocable Insurance Surety Bond (ISB) 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, ... Surety Insurer having office at ..... (hereinafter referred to as "the Surety" which expression shall includes 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, ... the Surety 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 sureties may be entitled to.

3. We, ... the Surety further agree that the amount demanded by the Company as such shall be final and binding on the Surety as to the Surety's liability to pay and the amount demanded and the Surety 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 Bond being absolute and unconditional.

4. We, ... the Surety 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, ... the Surety further undertake not to revoke this Bond during its currency except with the previous consent of the Company in writing.

6. We, ... Surety also agree that the Surety's liability under this Bond 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 Bond shall not exceed Rs.....

(ii) This Surety Bond shall be valid upto and including .....; and

(iii) We are liable to pay the Bond amount or any part thereof under this Surety 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 Bond).

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

IN WITNESS WHEREOF the Surety has executed this document on this.....
day of .....
For .....
(Signature of a person authorised
to sign on behalf of "the Surety")

Format for remittance towards EMD/Performance Security

1. **MDL'S BANK ACCOUNT DETAILS:**

NAME OF BANK A/C HOLDER: **MAZAGON DOCK SHIPBUILDERS LTD**

BANK AND BRANCH : **STATE BANK OF INDIA, COMMERCIAL BRANCH, FORT, MUMBAI-400023**

TYPE OF ACCOUNT : **CURRENT**

BANK ACCOUNT NO : **11079519138**

IFSC CODE : **SBIN0006070**

SWIFT CODE : **SBININBB101**

2. **DETAILES OF REMITTANCE TO MDL'S BANK ACCOUNT:**

(To be filled in by the vendors/firms making remittance of funds in MDL'S Bank Account)

Date of Remittance	Name of Firm	Vendor Code	MDL tender/ PO. Ref No.	Nature of Remittance viz. EMD/SD etc.	Amount Remitted (`)

Signature of Vendor/Representative

3. SAP Parked Document No: _____ Date: _____

(To be filled in by MDL's Commercial Executive)

Sr. No.2 and 3 above will be filled in by the Vendor and MDL commercial Executive respectively and the form forwarded to Treasury Section for posting of SAP Document to the respective Bank Account.

APPENDIX – 14

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 LIMTED, 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 includes 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")

APPENDIX - 34

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

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 / is from such a country*** **and registered with the Competent Authority** *(strike out whichever is not applicable)*. 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

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:	
	2.1.1	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.	

Integrity Pact (IP) Format

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

And.....hereinafter 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 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 tender 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 if 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 Annexure-A.
	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 tender 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 outlines above or be an accessory to such offences.	
(3)	A person signing IP shall not approach to 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 Annexure-B.	
	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 en-cash 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 sector 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 of 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 entitle 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 (For MDL). 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

(Office Seal)
Place_____
Date_____
Witness 1:
(Name & Address)
_____

For & on behalf of
Bidder/Contractor

(Office Seal)

Witness 2:
(Name & Address
_____

ANNEXURE-B-2

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 [redacted] 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 :

1) PPP MSE Order 2012 ☐ [redacted]

2) PPP MII 2017 ☐ [redacted]

(Note: If not declared / selected it shall be deemed that purchase preference benefit is sought under PPP MII 2017 policy.

(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

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: _____
of Competent Authority

Seal / Stamp of Bidder

APPENDIX – 15

PROFORMA BANK GUARANTEE FOR PERFORMANCE SECURITY

(ILLUSTRATIVE FORMAT)

(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 LIMTED, 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 with the Contractor/Supplier to accept a Bank Guarantee in lieu of Performance Security payable under the said order for the fulfillment and performance of the said order, 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 5% (10% in case of Capital Procurement) 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 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 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 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 + 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 authorised
to sign on behalf of "the Bank")

APPENDIX –2

PROFORMA OF UNCONDITIONAL AND IRREVOCABLE INSURANCE SURETY BOND FOR PERFORMANCE SECURITY

(ILLUSTRATIVE FORMAT)

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

1. IN CONSIDERATION OF MAZAGON DOCK SHIPBUILDERS LIMTED, 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 with the Contractor/Supplier to accept an unconditional and irrevocable Insurance Surety Bond in lieu of Performance Security payable under the said order for the fulfillment and performance of the said order, We, ... Surety Insurer having office at ..... (hereinafter referred to as "the Surety" 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 5% (10% in case of Capital Procurement) 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, ...the Surety 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 surety may be entitled to.

3. We, ... the Surety further agree that the amount demanded by the Purchaser as such shall be final and binding on the Surety as to the Surety's liability to pay and the amount demanded and the Surety 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 Bond being absolute and unconditional.

4. We, ... the Surety 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, ... the Surety further undertake not to revoke this Bond during its currency except with the previous consent of the Purchaser in writing.

6. We, ... the Surety also agree that the Surety's liability under this Bond 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 Bond shall not exceed Rs.....

(ii) This Surety Bond shall be valid upto and including .....; and

(iii) We are liable to pay the Bond amount or any part thereof under this Surety Bond 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 Bond).

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

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

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

MAZAGON DOCK SHIPBUILDERS LIMITED

(A Govt. of India Undertaking)

SHIPBUILDING DESIGN ENGINEERING
DOCKYARD ROAD, MUMBAI - 400 010

STATEMENT OF TECHNICAL REQUIREMENTS
FOR
Exhaust systems for the Main engine, Main diesel generator, Harbour Diesel Generator, Diesel driven compressor, Incinerator and Emergency DA for NGOPV

PROJECT	:	**06 Next generation offshore patrol vessel (NGOPV)**
YARD NOS MDL	:	**16401 to 16406**
CLIENT	:	**INDIAN COAST GUARD**
DOCUMENT NO	:	**DR/E/NGOPV/ 3040**
ICG HQ REFERENCE / APPROVAL	:	**Not applicable**
CLASSIFICATION NOTATION	:	**+A1 HSC(E)(Special Government Service)+AMS NIBS +ACC +DPS-1 FFV1-NS CS-Ready HELIDK (SRF) by ABS or equivalent of LRS/DNV/GL/BV/IRS/NK**

00	First Issue	08-10-2026	
REV	**DESCRIPTION**	**DATE**	**AUTHORISED BY**
		9/10/26.	
ROHAN PATIL **M (D-E)**	**RAVINDRA MANWATKAR** **CM (D-E)**	**D Sathiyamurthy** **AGM/HOS (D-E)**	
Prepared By	**Checked By**	**Approved By**	

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Next Generation Offshore Patrol Vessel (NGOPV)
TECHNICAL REQUIREMENTS

1. **SCOPE OF SUPPLY:-**

To design, manufacture, supply, install & testing on board the ship of exhaust system of the main Diesel Engine (required for ship propulsion), Main Diesel Generator, Harbour Diesel Generator, Incinerator, diesel driven compressor and Emergency DA in the Next generation offshore patrol vessels built for Indian coast guard. This is a turnkey job (design, built, supply, complete installation and made ready for operation on board ship).

1.1. Exhaust system of each equipment shall be separate and led to atmosphere through the funnel.

1.2. Exhaust systems are required for the following equipment:

Sr. No	Equipment	Make	Model	Quantity per ship
(i)	Main Engine	Rolls Royce (MTU)	20V8000M71L 9100 KW	2
(ii)	Main Diesel Generator	GRSE-DEP, Ranchi Prime mover: Cummins	VTA28-D(M) 500 KW	4
(iii)	Harbour Diesel Generator	KOEL Prime mover: KOEL	DV 10 350 KW	1
(iv)	Incinerator	Haat Incinerators India Pvt Limited	210 KW	1
(v)	Diesel driven compressor	Elgi Sauer Compressors Prime mover: KOEL	Engine Model: HA 294 Power: 23 BHP.	1
(vi)	Emergency DA	KOEL Prime mover: 6SL1500TA SR2-M(A), KIRLOSKAR MAKE	135 KW	1

1.3. The design of the complete system shall have to be supported with relevant pressure loss calculations. Allowable Back pressure details are as follows:

i) Main Engine: 30 mbar
ii) Main DG: 75 mm of Hg
iii) Harbour DG: 11.5 KPA
iv) Incinerator: 25 mmWC (after Chimney and flame arrester).
v) Diesel driven compressor: Less than 50 mm of Hg
vi) Emergency DA: 30 mm of Hg

1.4. Material is MDL scope:

Sr. No	Equipment	Material in MDL scope
(i)	Main Engine	➢ Dry type silencer with Spark arrester along with supports for silencer and drain valve: 01 Nos per engine.

		Silencers are supplied with counter flanges. The fasteners and gasket will be supplied by Exhaust system vendor. ➢ Expansion Bellows (stainless steel): 01 set per engine. (02 Nos at engine exhaust and 02 nos at Silencer) with counter flanges, fasteners and gasket. ➢ Flexible supporting assembly / Mounting brackets with fixed and sliding supports for Exhaust line from turbocharger to atmosphere: 06 Nos fixed and 06 Nos flexible per engine. ➢ Exhaust hood/Y piece: 01 set per engine. The counter flanges, fasteners and gasket will be supplied by Exhaust system vendor.
(ii)	Main Diesel Generator	➢ Silencer, spark arresting type with counter flanges, fasteners, and gaskets: 01 Nos per DG. ➢ Expansion bellows (Stainless Steel) with counter flanges, fasteners, and gaskets: 05 Nos per DG ➢ Flexible supporting assembly / Mounting brackets with fixed and sliding supports for Exhaust line from turbocharger to atmosphere: 02 fixed and 02 flexible per DG. ➢ Y piece (Stainless Steel) for connecting turbocharger in exhaust with counter flanges, fasteners, and gaskets.: 01 No per DG
(iii)	Harbour Diesel Generator	➢ Silencer spark arresting type with counter flanges, fasteners, and gaskets: 01 No ➢ Expansion bellows (Stainless Steel) with counter flanges, fasteners, and gaskets: 04 No ➢ Flexible supporting assembly/Mounting brackets with fixed and Sliding supports for Exhaust line from turbocharger to atmosphere: 01 set ➢ Y piece (Stainless Steel) with counter flanges, fasteners, and gaskets for connecting turbocharger in exhaust :01 No.
(iv)	Incinerator	➢ Chimney with Damper and Flame arrester
(v)	Diesel driven compressor	➢ Silencer ➢ Expansion bellows The gaskets and fasteners of Exhaust silencer of Diesel driven Compressor are in scope of exhaust supplier.
(vi)	Emergency DA	➢ Silencer ➢ SS Expansion bellow – 1 No ➢ Fixed and sliding support as required.

1.5. The details on items/fittings supplied by MDL through DG manufacturer and Engine manufacturer are given in the drawing enclosed as **Annexure-11** and **Annexure-12.**

1.6. **During designing of systems, if any additional requirement of bellows/supports required, deck/bulkhead compensators emerged than the quantity mentioned in MDL scope. Then same shall be supplied by vendor. Also, all**

other items/fittings (including additional bellows/supports required, deck/bulkhead compensators, compartment sealing, pipes/Y-pipe with bend flanges, trunking, asbestos free gasket, fasteners, Insulation material, brackets, drain valves etc.) required for the system shall be supplied by the exhaust vendor.

1.7. A steel plate (deck) will be installed by MDL at top of funnel around exhaust system pipes, to prevent the ingress of rain water. A suitable bulkhead seals shall be provided by vendor where the exhaust pipes will penetrate the deck inside the funnel to avoid leakage of fire fighting gas to the external environment. Rain cap for Exhaust pipes shall be supplied by the vendor. Brackets (ship structure to supports) material supply and installation in vendor scope.

1.8. The guidance drawing showing tentative route of exhaust systems for Main engine and main DG enclosed at **Annexure-5,** for Harbour DG and Incinerator enclosed at **Annexure-6.** The drawing is enclosed for better understanding and appreciation of the complete system within the ship. However, the actual design and manufacturing details of the items/fittings required for the complete system will have to be done by the Vendor.

1.9. To correct the fabrication, installation & other practical errors likely to occur in the process/system, suitable pieces of the system will have to be fabricated in situ. All consumable required for fabrication and installation will also be in vendor scope.

1.10. All items for exhaust system designed and manufactured by the Vendor, shall be installed on board the ship, properly supported & insulated by the Vendor. Same has to be proved for the desired performance during HATs and SATs by the Vendor. Changes in the systems, if any, required to meet the deficiencies observed during the trials, shall be done by the Vendors and corrected items shall be supplied and installed by the Vendor for/on all Ships free of cost.

1.11. The Electric power supply / Crane facility to carry out the work inside the Shipyard will be provided by Shipyard.

1.12. Vendor has to inter-act with Main Engine, Diesel generators, DD compressor and Incinerator suppliers to check & confirm the interface requirement and to meet the stipulated overall performance of exhaust systems. Relevant design calculations, analysis, data etc. can be shared with them to achieve the stipulated end results.

1.13. A suitable draining arrangement along with isolating valves shall be provided in the system, as required.

1.14. On receipt of the Purchase Order, the vendor has to do the design calculations, analysis as required and prepare the detailed arrangement drawings and submit them to MDL for approval. The vendor will have to submit QAP, drawings and details of the welder's qualification (by class). In order to correct the fabrication, installation & other practical errors likely to be occurred in the process/system, suitable pieces of system will have to be fabricated in situ.

1.15. Exhaust systems are required to be supported with fixed and sliding supports/hangers, as required. Supporting calculations in this regard will have to be submitted by the Vendor. Arrangement and installation of additional structures if required to hold supports shall be done by vendor.

1.16. Exhaust gas from different engines are not to be interconnected.

1.17. Instrumentation: Test instruments will be required for the trials and Commissioning of the system on board the ship during HATs and SATs will be in vendor scope.

2. **Material of Construction:**

Following material shall be used:
Pipes: SS to AISI 304
Flanges: Steel to IS 2062 Slip on flange or equivalent
Valves GM to BS 1400LG 4C.

For other parts materials used in the exhaust system are to be capable of withstanding the maximum permissible exhaust gas temperature, and are to be suitable for the life period called up in this TSP.

3. **Welding Qualification:**

3.1 Welding is to be is in accordance with Section IX of ASME code and weld inspection to be in accordance with Section V, Article 6 of the ASME code or other suitable specifications.
3.2 Welding should be carried out by qualified welders by any IACS.

4. **Vibration & ABN Requirement:**

4.1 Flexible steel bellows pieces and special fitting shall be provided so that the trunking is vibration free.
4.2 Design of system shall be carefully considered with a view to minimize air borne noise and vibration, thereby improving habitability. The design measures on noise control must address aspects like hearing, conversation, habitability and audibility.
4.3 The design measures on vibration must consider aspects to counter excessive stresses in structural and mechanical components.
4.4 Due to the flow and load changes, especially with high air velocities, the exhaust pipe is subject to vibrations. This has to be considered within the overall layout.

5. **Insulation: -**

5.1 Exhaust systems (including silencer) are required to be insulated with suitable acoustic and thermal insulation of required thickness, as required, to meet the operational requirement stipulated in this technical specification. Relevant calculations to arrive at the required thickness will have to be submitted by the Vendor. The vendor has to mention the material specifications for both types of insulation in the technical offer. The offered material specifications shall be universally accepted (IMO compliant) latest materials. The same shall require Shipyards approval.
5.2 Exhaust piping shall be covered with suitable insulation material to protect personnel from injuries due to heat. Sufficient number of layers of suitable insulating material to be applied to the exhaust piping and silencer.
5.3 Bellows, when insulated, must expand & contract freely within the applied insulation. Soft insulation material or insulation sleeves to be used to encase the connection.
5.4 The insulation is to be of a type and so supported that it will not crack or deteriorate when subjected to vibration.
5.5 The insulation of exhaust systems is to be non-asbestos type.

5.6 Exhaust pipes and fittings shall be suitably lagged.

Insulation Material: Calcium silicate with glass fibre Cloth.
Cladding shall be applied on the insulation.
Rockwool as per IS 9842, Grade A60 preformed section up to 50NB pipes shall be used as insulation material. Calcium silicate shall be used for pipes above 50 NB size.

6. **Equipment Parameters: -**

Please refer Annexures 7 to 11 for engine, main DG, Harbour DG, Incinerator and diesel driven compressor parameters for reference.

7. **Performance Guarantee: -**

7.1 The exhaust systems are to be guaranteed for the following performance requirements.
   a) **Exhaust Gas Items:** Vendor has to prove that back pressure of the system is less than permissible pressure loss.
   b) Exhaust systems are to be designed to withstand the exhaust gas temperatures corresponding with the full specified duty of the diesel engine, including overload, under all environmental conditions specified in this TSP. The surface temperature at outer surface of insulation should not exceed 60 ℃. Engine room temperature 50 ℃ and air velocity 2 m/s.
   c) The use of acoustic absorptive material should be considered to ensure that the noise produced from the ducting should be within 90 db as per IS 13161-3. When silencing equipment is fitted to the exhaust system, silencers are to be supported in such a way that their weight, and that of associated exhaust ducting, is not borne by the exhaust manifold or the engine.

7.2 System is to be designed to perform satisfactorily for the design life of the ship, as detailed in this TSP, when operating in damp, salt and/or sand laden air, over the range of environmental conditions specified in this TSP.

7.3 Static loads from uptake and displacement of resiliently mounted parts including those resulting from specified ship motions have to be provided.

7.4 The system is to accommodate thermal expansion and movement of the duct due to the effects of operating of diesel engine, such that the stresses imposed on the exhaust manifold or the exhaust system structure under any of the environmental conditions specified in the TSP, are less than any static or cyclical failure limits for the exhaust system.

8. **Exhaust System: -**

8.1. A separate gastight exhaust system is to be fitted for each equipment. To minimize the effect that the system has on the engine performance and maintenance requirements, the system should convey exhaust gases to atmosphere by the most direct practicable path consistent with the arrangement of adjacent systems and equipment.

8.2. The maximum back-pressure across the system, including filters and silencers, etc. should not exceed the limits specified in this TSP. The results of calculations performed to demonstrate that the losses in the system are acceptable, are to be submitted to the Shipyard.

8.3. Pipe/duct sizes are to be based on gas speeds at the design maximum flow to ensure that the maximum allowable back pressure requirement of the engine manufacturer at the engine exhaust turbo/supercharger outlet is not exceeded.

8.4. The use of splitters in bends and appropriate designs of diffusers or transition pieces should be considered.

8.5. The following measures are to be taken to minimize the accumulation of exhaust deposits:

a) The design of exhaust gas ducting and associated equipment is to prevent the possibility of soot collecting at any points other than those specifically intended for soot removal. The length of horizontal ducting is to be minimized.

b) Inspection and access openings are to be fitted as necessary taking account of any potential obstruction. All openings are to be fitted with gas-tight cover plates.

8.6. It is to be ensured that water and sand that enters the exhaust pipe via its outlet or condensate particles from exhaust are prevented from reaching the engine, and is not allowed to form stagnant puddles in the exhaust system. Catchment pots and drains are a standard way of satisfying this requirement. Water traps shall be installed at the lowest point of the exhaust system, near the exhaust outlet, to prevent rainwater from reaching the Engine. The exhaust line shall be sloped away from the Engine, towards the trap, so that condensation will drain properly. U seal type arrangement shall be provided.

8.7. Joints for exhaust systems are to be manufactured from a suitable Non-hazardous (IMO compliant) material which will give life and performance consistent with the requirements laid down in the TSP.

8.8. To achieve the above requirement, the following may be used appropriately:

(i) Stainless Steel expansion joints (Bellows)–Type tested & unit certified by any IACS.

(ii) Fixed points/supports

(iii) Sliding points/supports

(iv) Deck conduit/Deck piece (if applicable)

8.9. Exhaust systems are required to be supported with fixed and sliding supports/hangers, as required. Supporting calculations in this regard will have to be submitted by the Vendor.

8.10. Fixed supports are to be used to carry the weight of the exhaust system. The first fixed support is to be located as close as possible to the engine but after the first compensator (Bellow), to protect the engine from the system expansion.

8.11. Fixed supports are to ensure that vibrations are not transmitted to the rest of the ship/structure. They are to be capable to withstand the static and dynamic forces. A fixed support may be used to keep the ends of a long pipe run fixed in place, forcing all thermal growth toward the expansion joints.

8.12. Sliding supports are to be used to allow longitudinal movement within the system caused by the thermal expansion and contraction in the exhaust line. Sliding supports are to ensure that vibrations are not transmitted to the rest of the ship/structure. They are to be capable of handling both tension and contraction forces.

8.13. Thermal growth must not lead to unacceptable loads within the exhaust system and to the interfaces. The thermal growth is to be expanded away from the Engine.

8.14. When the exhaust line is placed horizontally the sliding supports are to be capable of carrying the weight of the system.

8.15. The flexible connection/bellows used in the system should be pre-stretched during installation to allow for expected thermal growth.

8.16. Isolation cocks/valves must be fitted with a locking device to prevent their being opened unintentionally.

8.17. The suspending element/ special hangers of the elastically mounted exhaust gas piping must be designed to avoid further weights which influence the turbocharger dynamic and static load restrictions.

8.18. Gas-tightness of the ducts must be ensured.

8.19. No additional weight than the exhaust gas compensator weight is allowed to load the respective interface to the engine. Hence the piping/routing needs to be designed accordingly.

8.20. Miter/Elbow joints are allowed.

9. **Safety & Regulatory Compliance:**

9.1. System shall ensure compliance with SOLAS (Safety of Life at Sea) regulations regarding exhaust system design and fire safety.

9.2. Also comply with Classification Society (ABS & IRS) standards.

10. **Harbour Acceptance Trials/Sea Acceptance Trials: -**

10.1. On board trials shall be conducted by Shipyard based upon HATs/SATs documentation and ship's trials schedule, which would be planned by shipyard in consultation of equipment suppliers and Indian coast guard. Draft HATs/SATs procedure to be submitted by the Vendor for concurrence of Shipyard.

10.2. During equipment setting to work and HATs/SATs, equipment suppliers shall assist and offer the respective equipment trials for their successful completion. System testing and defect rectification, if any during on board trials shall be undertaken by the equipment supplier in efficient and effective manner.

10.3. HATs/SATs shall be carried out to the satisfaction of shipyard and Indian coast guard. HATs/SATs will be carried out as per the final mutually agreed document.

10.4. Suitable connections/ports to be provided on the exhaust system parts to install the measuring devices to measure the back pressure/pressure losses etc. to validate the design of the exhaust system on board the ship when the engine is in running at full load. Exhaust back pressure shall be measured and measurement will be taken at Engine and DA running at full load condition.

10.5. The tools, accessories etc. required to carry out the HATs and SATs on board the Ship are to be included in the Vendor's scope of supply.

10.6. HATs and SATs are to be conformed to design calculations.

11. **Maintenance: -**

11.1. Since the exhaust system is passive systems, negligible maintenance is expected. However, periodic inspection routines to check for soot build-up, foreign objects, gap blockage etc. need to be recommended.

11.2. All maintenance and repair between major overhauls will be carried out in situ. The design therefore is to provide accessibility to all working parts. Along with a maintenance schedule, the Vendor shall define the planned maintenance intervals and procedure for the equipment/system.

11.3. Maintenance of turbocharger must be possible.

12. In case of any discrepancy, deficiency, failure, etc., related to the scope of supply, the Shipyard/Indian coast guard or any agency designated by Shipyard/Indian coast guard will be entitled to investigate the subject matter and the system supplier would be bound

to take corrective actions, as necessary, for fulfilling the contractual specifications & requirements.

13. Inspection Authority: MDL nominated third party inspectors (TPI) for work done at vendor premise and MDL QC &/or ICG for on board work. Cost of inspection will be borne by MDL.
    Receipt Inspection Agency- MDL & CGRPT.

14. Following to be submitted to MDL –
    i) Strength and vibration assessment of exhaust support hangars.
    ii) Thermal insulation calculation.

Annexure - 1

DEVIATION LIST

The Supplier shall fill in this form for the deviations of their bid from the requirements as stated in the Material Requisition. If no deviation is required Supplier shall fill in "NIL" in the 'Deviation column. Supplier shall sign/date and affix their company seal.

SR. No.	DOCUMENT No./ CLAUSE No.	REQUIREMENT	DEVIATION WITH REASONS	CGHQ / MDL REACTIONS

SUPPLIER'S COMPANY SEAL DATE **SUPPLIER'S SIGNATURE &**

A-ACCEPTED N-NOT ACCEPTED C-CONDITIONAL ACCEPTANCE (SEE ATTACHED SHEET)

Annexure - 2

WEIGHT CONTROL DATA SHEET

EQUIPMENT DESCRIPTION		EQUIPMENT NO.	
COMPARTMENT		LOCATION	

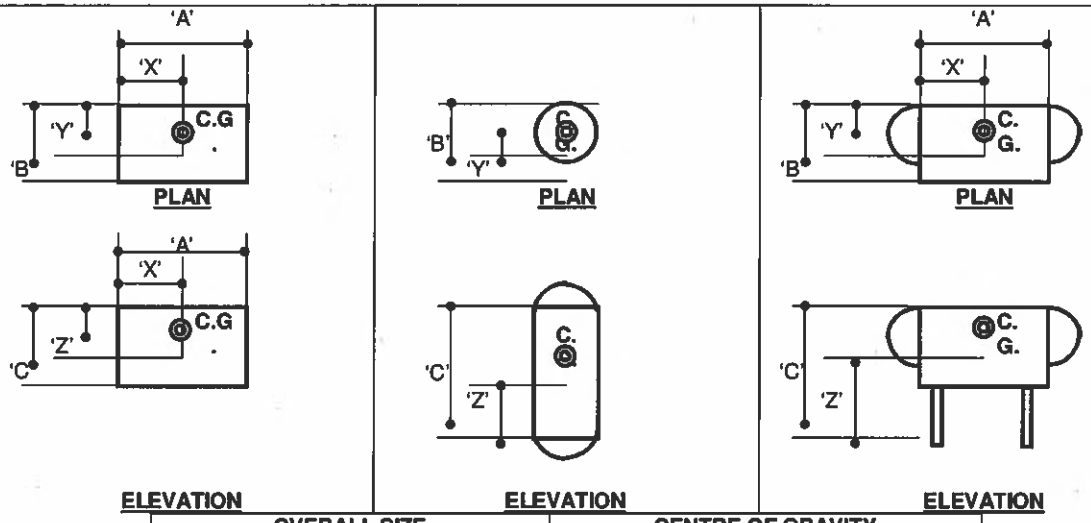
SWBD :

☐ TOLERANCE CODE ☐ PRELIMINARY EST. ☐ DESIGN EST. ☐ M.T.O (CALC) ☐ WEIGHED ☐ TOLERANCE ± %

1. WEIGHT (Kg.)

(a)	DRY	Kg ±	%
(b)	FLUID	Kg ±	%
(c)	OPERATING	Kg ±	%
(d)	TEST	Kg ±	%
(e)	TOTAL	Kg ±	%

2. EQUIPMENT DIMENSIONAL DATA (mm) & Co-ordinates of CoG



OVERALL SIZE		CENTRE OF GRAVITY	
'A'		'X'	
'B'		'Y'	
'C'		'Z'	

NOTE :

- ALL OFFERS SHALL INCLUDE THIS DATA SHEET DULY FILLED IN BY THE SUPPLIER (SIGNED, DATED & SEAL AFFIXED).
- ALL FINISHED ITEMS SHALL BE WEIGHED & A CERTIFICATE SHALL BE PROVIDED AS PER ATTACHED SHEET.
- SEPARATE SHEETS SHALL BE COMPLETED FOR EACH INSTALLED EQUIPMENT.
- ORIGIN OF 'X', 'Y' AND 'Z' TO BE INDICIATED.

SUPPLIER'S SEAL **SUPPLIER'S SIGNATURE & DATE**

Annexure - 3

WEIGHT CERTIFICATE

EQUIPMENT DESCRIPTION:		EQUIPMENT NO. :	
The form shall be completed by Supplier & shall be supplied along with the equipment.			
SUPPLIER'S NAME		**Ref. Drg. No.**	
ADDRESS		**Part No.**	
TELEPHONE NO.			
ORDER NO.		**EQPT. NO.**	

METHOD OF WEIGHING:
Supplier shall prescribe Method & Equipment Used:

	DATE OF LAST CALIBRATION	**SPECIFIED ACCURACY REQUIREMENT**
	NOTE :-	

RESULT OF WEIGHING TOTAL EQUIPMENT DRY WEIGHT
(Excluding packing, temporary protection etc.)

ALLOCATED WEIGHT
(Weight estimate agreed by purchaser and supplier based on order specs).

REASONS FOR VARIATION BETWEEN ALLOCATED WEIGHT AND CERTIFIED WEIGHT:

WEIGHING ADDRESS:	**WITNESSED BY**	
	FOR SUPPLIER	**FOR PURCHASER**
	Representative	**Representative**
Date:	**Signature / Date & Seal**	**Signature/Date & Seal**

Annexure - 4

COMPLIANCE MATRIX

EQUIPMENT DESCRIPTION:	**EQUIPMENT NO. :**

The form shall be completed by Supplier & shall be supplied along with the equipment.

SUPPLIER'S NAME		**Ref. Drg. No.**	
ADDRESS		**Part No.**	
TELEPHONE NO.			
ORDER NO.		**EQPT. NO.**	

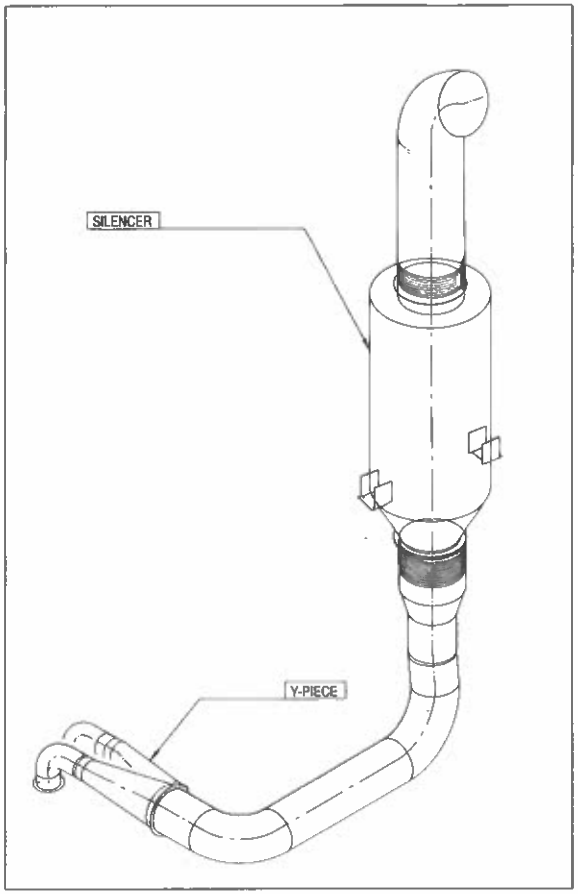
S No.	Tender Specifications Para reference	Brief Description as per Relevant Tender Specifications	Compliance to Tender Specifications	Deviations if any, with Reasons	Remarks if any

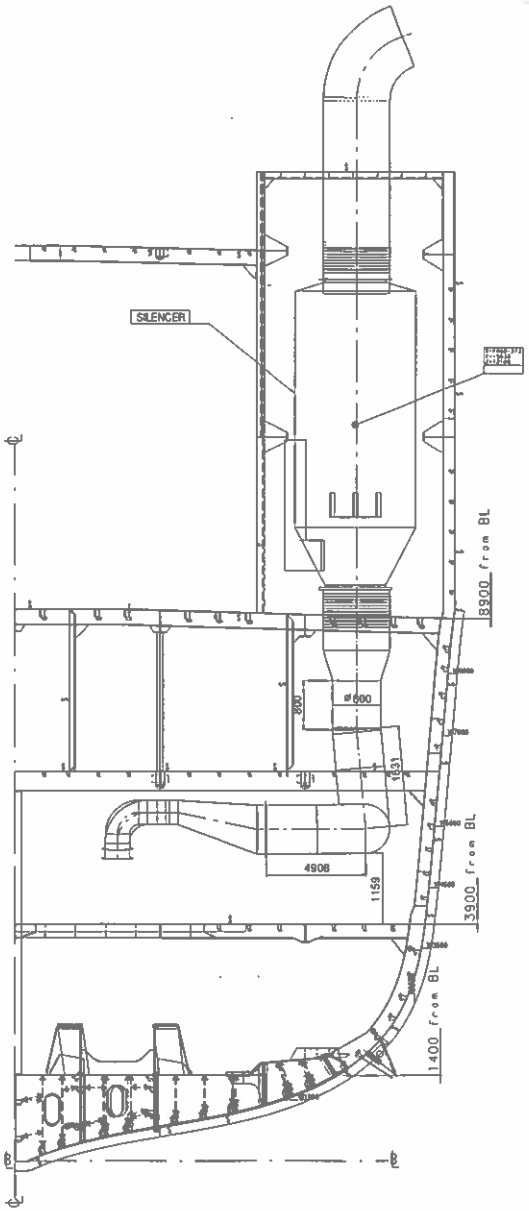
SUPPLIER'S COMPANY SEAL		SUPPLIER'S SIGNATURE & DATE

NOTE :

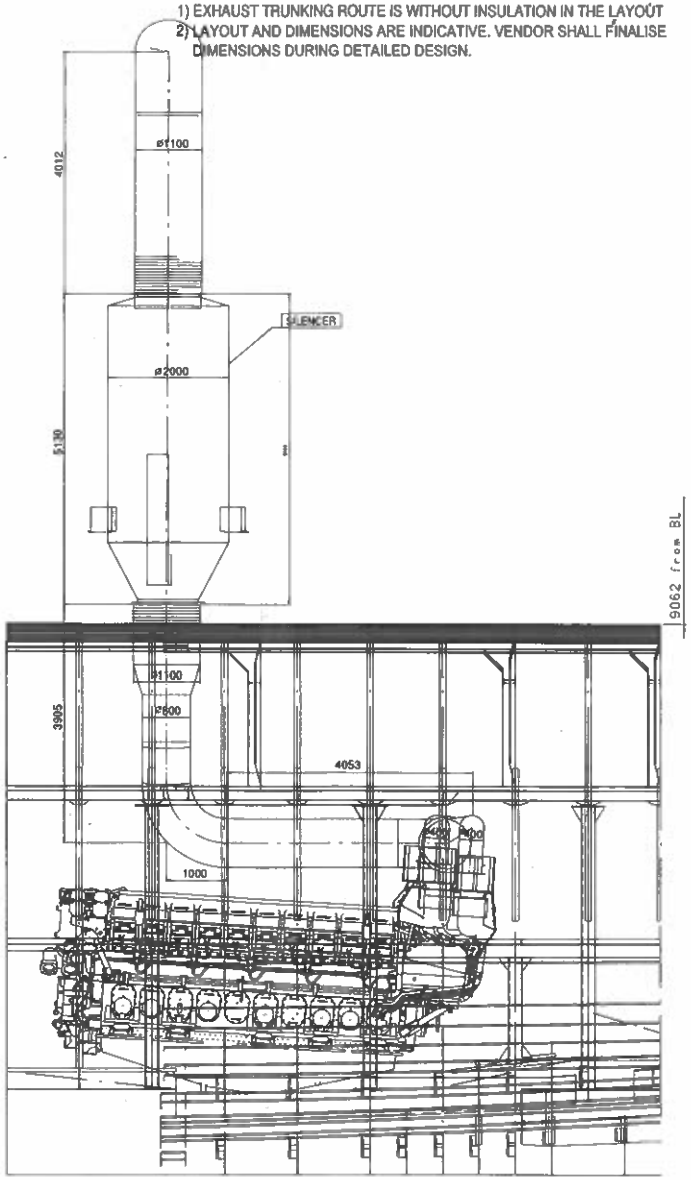
1) EXHAUST TRUNKING ROUTE IS WITHOUT INSULATION IN THE LAYOUT
2) LAYOUT AND DIMENSIONS ARE INDICATIVE. VENDOR SHALL FINALISE DIMENSIONS DURING DETAILED DESIGN.

ANNEXURE 5



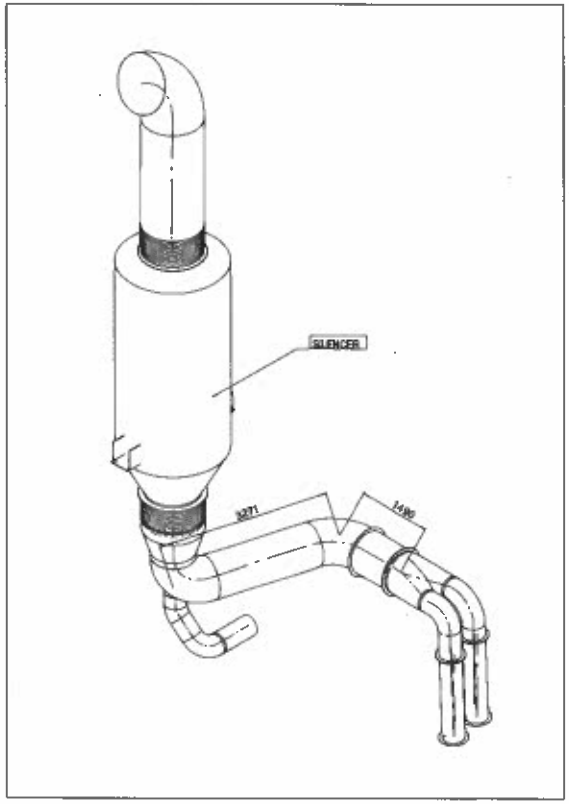


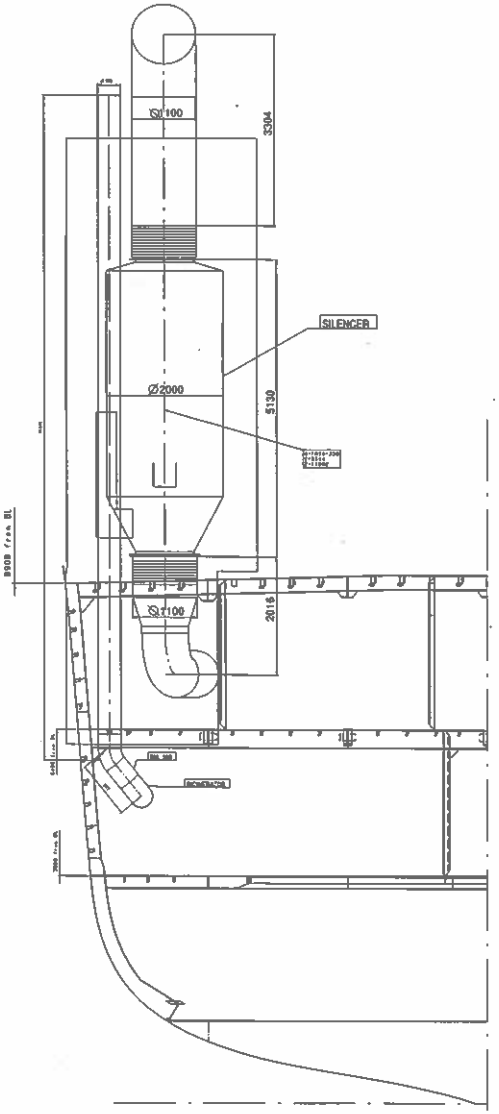
VIEW LOOKING AFT.
SECTION AT FR.64



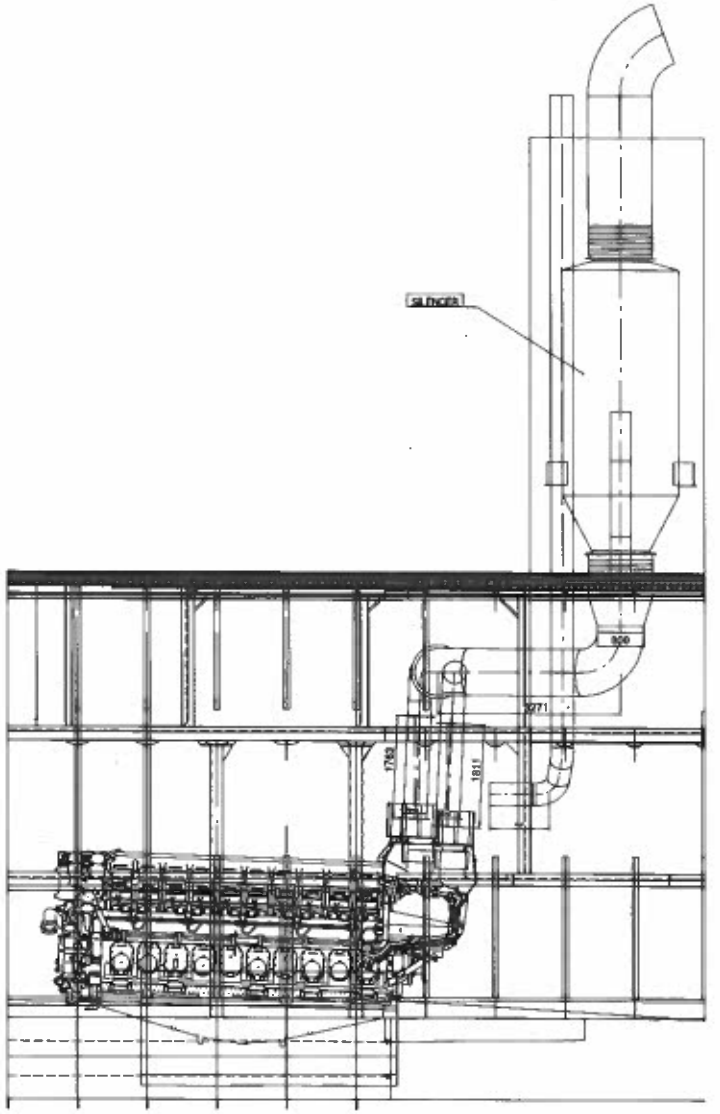
VIEW LOOKING PORT

Mazagon Dock Shipbuilders Limited					Ship: NGOPV		
					Title: ARRANGEMENT OF ME EXHAUST AFT ENG ROOM		
Initiated	Drawn	Checked	Approved	Yard Number: 16401	Governing Specification: REFERENCE	Sht: 2	
Date: 23-01-2020						Sheet: 1 of 1	





VIEW LOOKING AFT.
SECTION AT FR.56



VIEW LOOKING STBD.

Hanjin Heavy Industries & Construction Co., Ltd.

Class: NGOPV

Title: ARRANGEMENT OF ME EXHAUST FWD ENG ROOM

Drawn: 22-04-2026

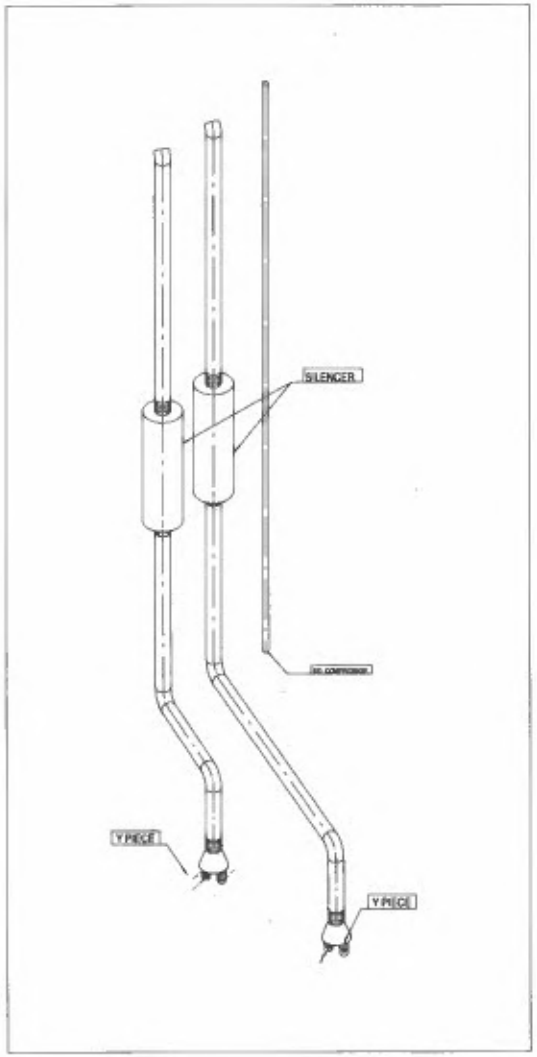
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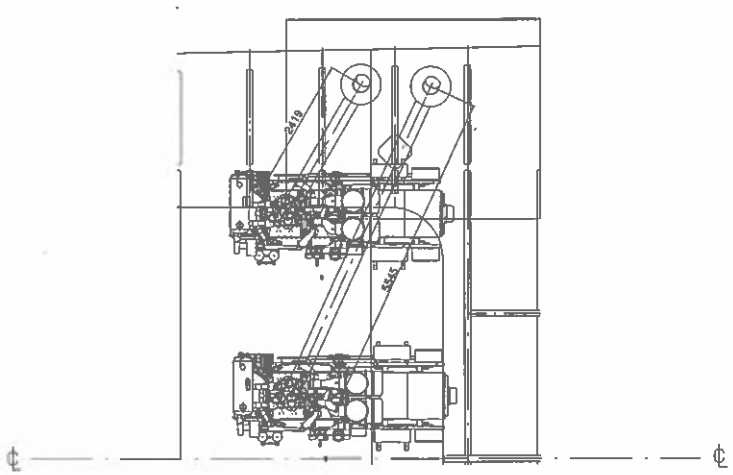
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Size: A3

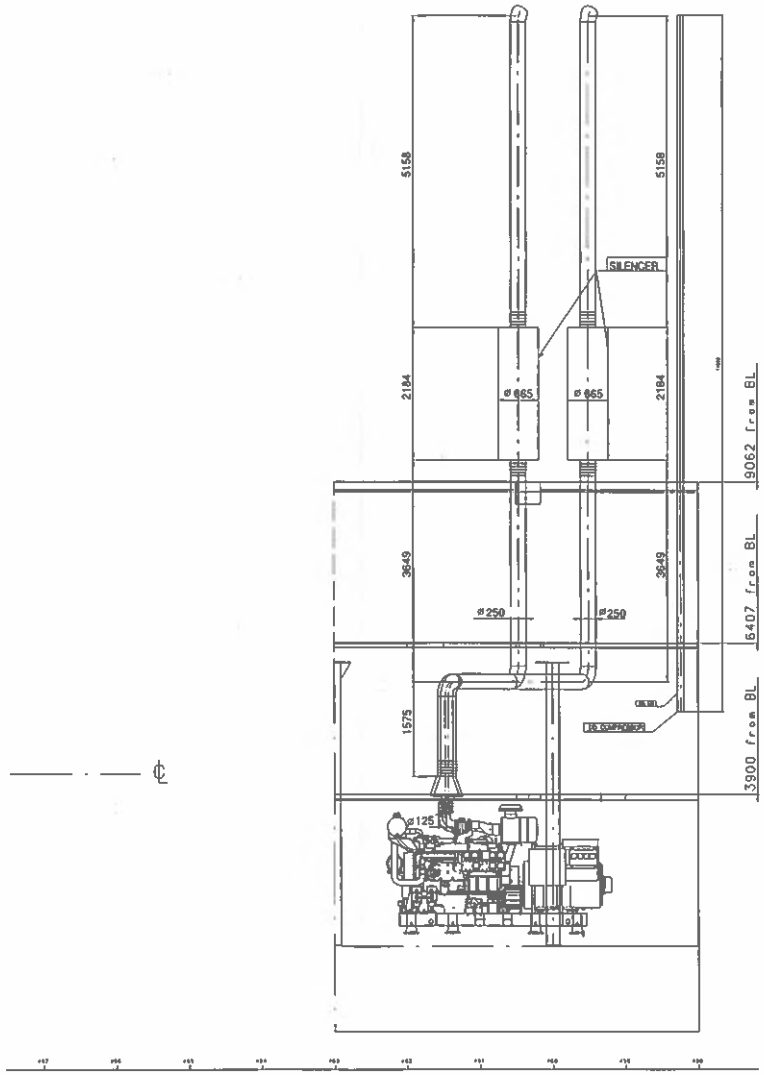
ANNEXURE 6

NOTE :
1) EXHAUST TRUNKING ROUTE IS WITHOUT INSULATION IN THE LAYOUT
2) ALAYOUT AND DIMENSION ARE INDICATIVE. VENDOR SHALL FINALISE DIMENSION DURING DETAILED DESIGN.



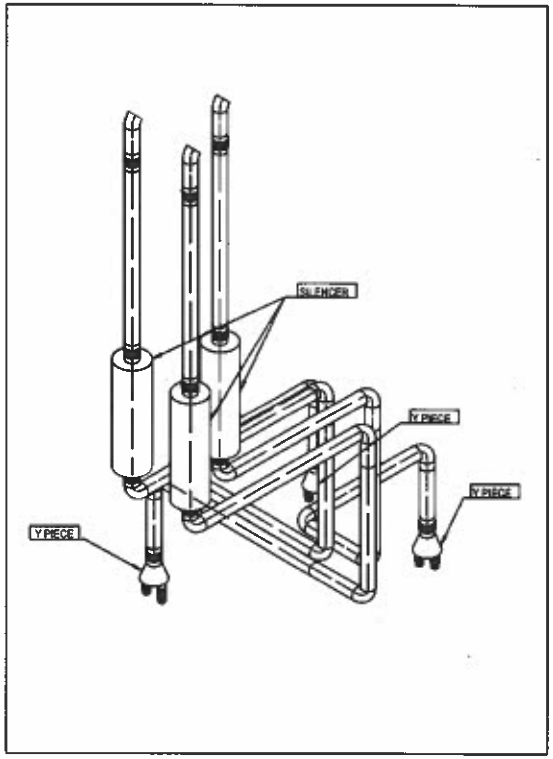


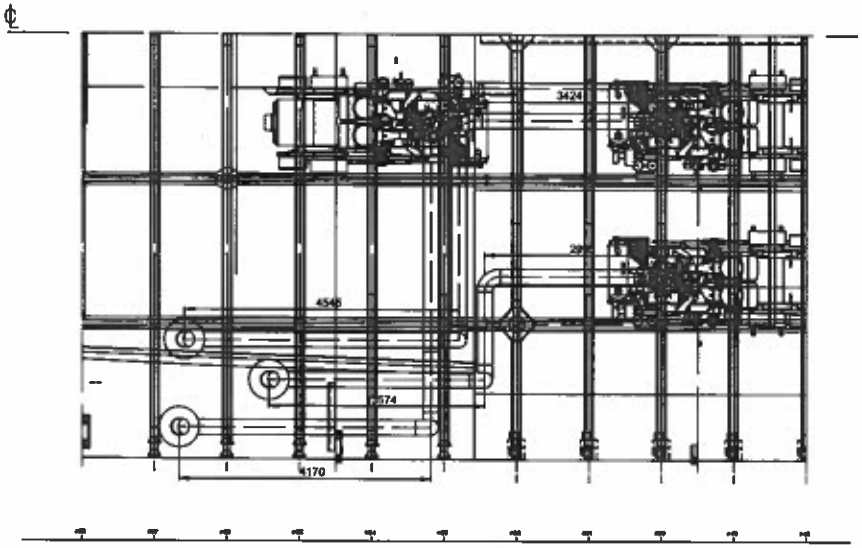
PLAN VIEW



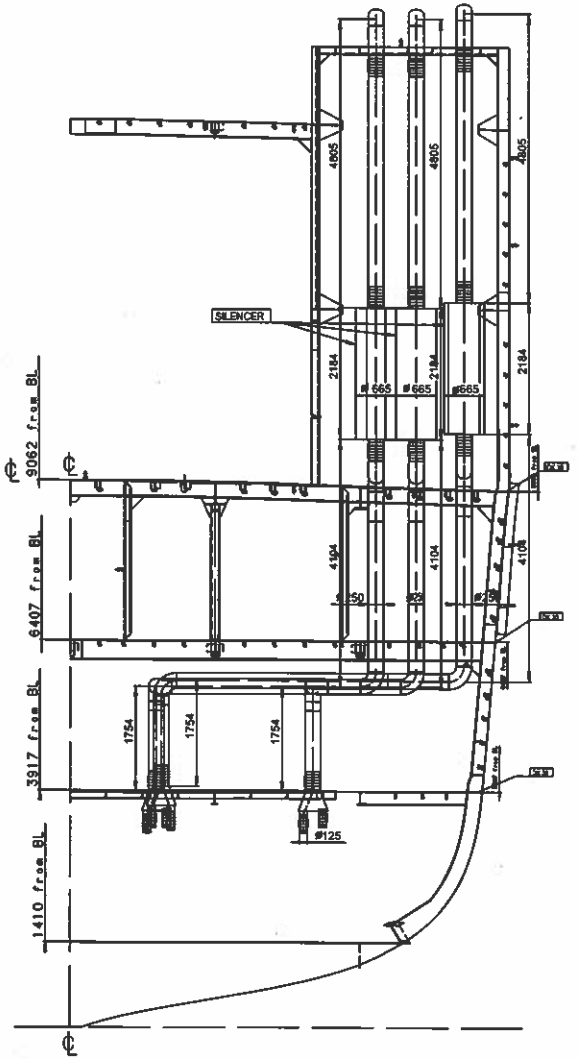
VIEW LOOKING PORT.

Mazagon Dock Shipbuilders Limited
ICG
NGOPV
ARRANGEMENT OF DA EXHAUST AFT ENG ROOM
16401
REFERENCE
0





PLAN VIEW

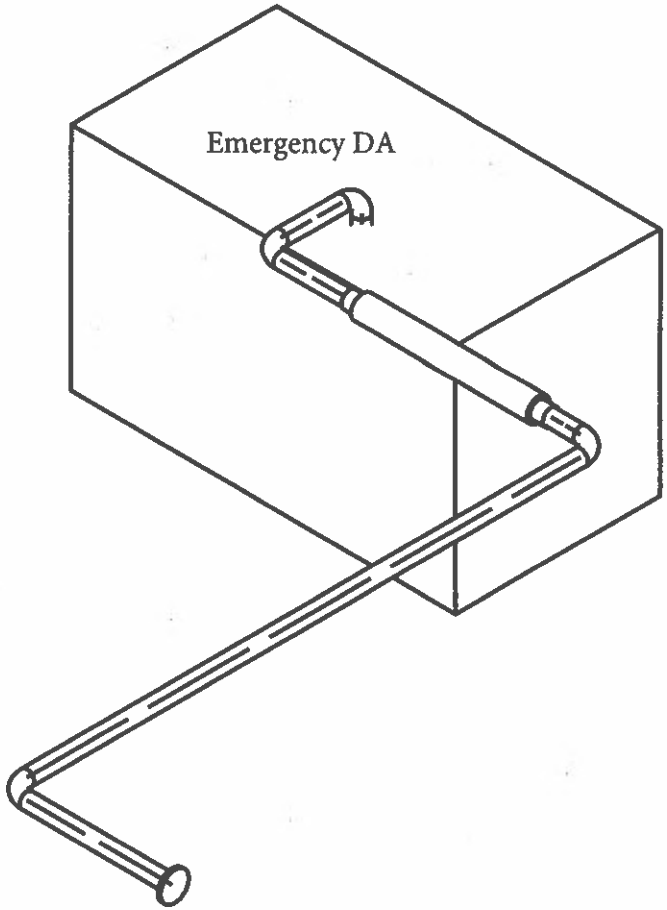


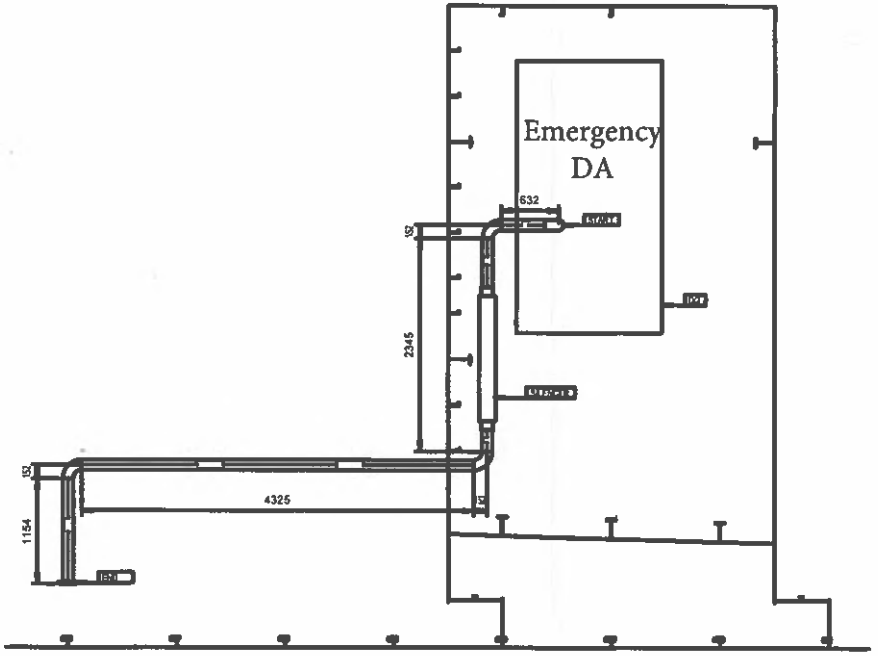
VIEW LOOKING AFT.
SECTION AT FR.56

Mazagon Dock Shipbuilders Limited	Client: ICG
	Ship: NGOPV
	ARRANGEMENT OF DA EXHAUST PWD ENG ROOM
	Drawing No: 16401
	Sheet: REFERENCE

NOTE

1. DIMENSIONS INDICATED ARE IN REFERENCE TO CENTRE/BASE LINE OR TO NEAREST FRAME NO.
2. ARROW INDICATES REFERENCE TO CL/BL
3. DECK COVERING TO BE PROVIDED AS PER DRG NO 1807-01
4. PAINTING TO BE DONE AS PER PAINTING SCHEME DRG NO 1802-01
5. ALL PENETRATIONS TO FACILITATE PASSAGE OF PIPES/TRUNKS TO BE SUITABLY COMPENSATED AS PER STRUCTURAL DRG NO. 1101-00
6. ALL DIMENSIONS ARE IN mm
7. ALL 'C' CLASS EQUIPMENTS ARE TO BE MOUNTED ON BRACKETS. ITEMS SUCH AS: MICROPHONE, CONNECTION BOX, SPEAKERS,TELEPHONE, DIRECTORY, SWITCH, SOCKETS, LIGHT FITTINGS ETC.
8. OUTSTANDING ITEMS TO BE MODELLED - NIL





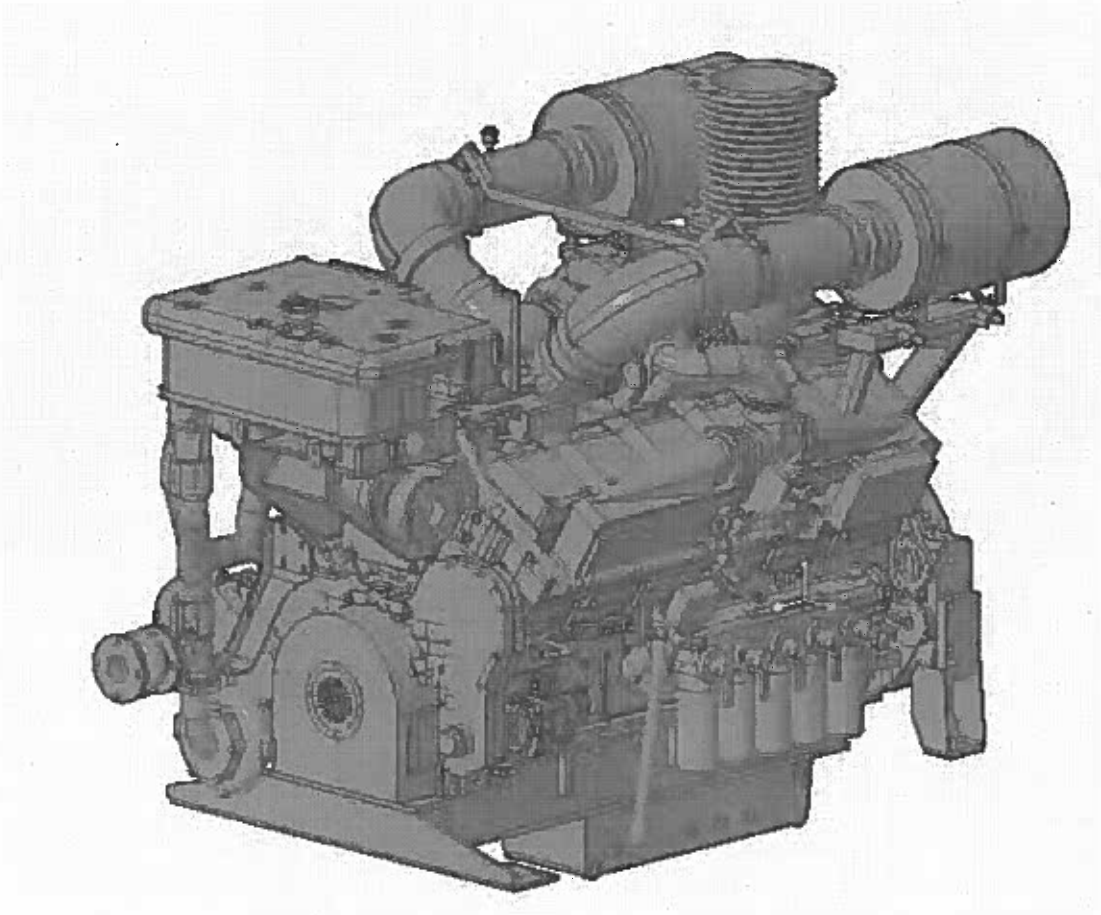
DECKPLAN VIEW

KEYPLAN

COMPT NO. : 208311
MODULE NO. : 134

EMERGENCY D A COMPARTMENT

Engine Specifications – VTA28-D(M)
Configuration V12 cylinder, 4 stroke diesel.
Bore & Stroke 139 mm X 152 mm [5.5 in x 6 in]
Displacement 28 L (1710 in3)
Rotation Counterclockwise facing flywheel.
Aspiration Turbocharged / Aftercooled
Emissions IMO Tier II
Fuel System: Pressure Time (PT)



Cummins Engine Company, Inc.

Marine Engine General Data Sheet

Engine Model: VTA28-M2

Data Sheet: DS - 4965
Date: 02Feb02

General Engine Data	Metric [U.S. Customary]	
Type		4 cycle, 40° Vee, 12 cylinder
Bore & Stroke	mm [in]	139 [5.5] x 152 [6]
Displacement	litre [in^3]	28 [1710]
C.G. Distance from Front Face of Block (Engine Only)	mm [in]	502 [19.8]
C.G. Distance above Crankshaft Centerline (Engine Only)	mm [in]	32 [1.25]
Engine Mounting		
Maximum Allowable Bending Moment at Rear Face of Block	N•m [lb-ft]	1356 [1000]
Minimum/Maximum Static Installation Angle for In-line Drives (Front Up)	Degrees	0 / 8
Minimum/Maximum Static Installation Angle for V drives (Front Up)	Degrees	3 / 8
Note: Front up refers to front of engines. In V-Drives it faces the back of the boat.		
Fuel System		
Maximum Allowable Restriction to Fuel Pump - With Clean Filter	mm Hg [in Hg]	100 [4]
Maximum Allowable Restriction to Fuel Pump - With Dirty Filter	mm Hg [in Hg]	200 [8]
Maximum Allowable Return Line Pressure	mm Hg [in Hg]	102 [4]
Exhaust System		
Maximum Allowable Back Pressure	mm Hg [in Hg]	75 [3]
Air Induction System		
Maximum Allowable Intake Restriction		
Clean/Dirty Element	mm H_2O [in H_2O]	380 / 635 [15 / 25]
Maximum Allowable Engine Intake ΔT		
Engine Intake Air-Ambient Air At Rated Condition	°C [°F]	17 [30]
Lubrication System		
Oil Pressure		
At Idle Speed-Minimum	kPa [PSI]	140 [20]
Normal Operating Range	kPa [PSI]	345 - 620 [50 - 90]
Maximum Allowable Oil Temperature **(Sump)**	°C [°F]	120 [250]
Oil Pan Capacity (shallow) High/Low	litre [U.S. gallon]	68 / 61 [18 / 16]
Total System Capacity (Excluding By-pass Filter)	litre [U.S. gallon]	74 [20]
By-pass Oil Filter Capacity (1-LF777)	litre [U.S. gallon]	5.3 [1.4]
Maximum Operational Angularity of Oil Pan (See Engine Mounting)		
Front Down	Degrees	30
Front Up	Degrees	35
Side to Side	Degrees	35
Cooling System		
Coolant Capacity Engine Only	litre [U.S. gallons]	88 [23]
Engine with Heat Exchanger	litre [U.S. gallons]	114 [30]
Maximum External Pressure Loss in Cooling System	kPa [PSI]	35 [5]
Maximum Static Pressure of Coolant (exclusive of Pressure Cap)	kPa [PSI]	103 [15]
Standard Thermostat (modulating) Range	°C [°F]	80 - 90 [175 - 195]
Maximum Coolant Temperature	°C [°F]	96 [205]
Minimum Allowable Coolant Expansion Space	-% of System Capacity	5
Minimum Coolant Makeup Capacity	litre [U.S. gallons]	17.6 [4.6]
Maximum Sea Water Pressure	kPa [PSI]	103 [15]
Sea Water Pump Specifications		**Refer to MAB 0.08.17-07/16/2001**

CUMMINS ENGINE COMPANY, INC.
COLUMBUS, INDIANA

All Data is Subject to Change Without Notice - consult the following Cummins Intranet site for most recent data:
http://marketingtechdata.cummins.com/curves/database/htmlfiles/curvemainpage.htm

Auxiliary Marine Engine Performance Data

Curve No. FR 5304
CPL : 3854
DATE : 23Jun11

General Engine Data			
Engine Model		VTA28-D(M)	
Rating Type		Prime Power	Overload
Power	kW [HP]	560 [750]	615 [825]
Governed Engine Speed	RPM	1500	1500
Rated HP Production Tolerance	%	±1	
Rated Engine Torque	N-m [ft./lb]	3560 [2626]	3915 [2889]
Idle Speed Range	RPM	575 - 650	
Brake Mean Effective Pressure	kPa [PSI]	1600 [232]	1751 [254]
Compression Ratio		13.5:1	
Piston Speed	m/sec [ft./min]	7.6 [1496]	
Firing Order		1L-6R-2L-5R-4L-3R -5L-1R-5L-2R-3L-4R	
Friction Power	kW [HP]	56 [75]	
Steady State Stability Band at any Constant Load	%	± 0.25	
Fuel System			
Fuel Consumption	litre/hr [GPH]	137.2[36.3]	149[39.4]
Approximate Fuel Flow to Pump	litre/hr [GPH]	295 [78]	
Maximum Allowable Fuel Supply to Pump Temperature	°C [°F]	60 [140]	
Maximum restriction at lift pump	mm Hg [inch Hg]	155 [41]	159 [42]
Weight			
Dry - Engine Only	kg [lb]	2901 [6395]	
Dry - Engine With Heat Exchanger System	kg [lb]	2981 [6571]	
Wet - Engine Only	kg [lb]	3104 [6843]	
Wet - Engine With Heat Exchanger System	kg [lb]	3184 [7020]	
Air System			
Intake Manifold Pressure	mm Hg [in Hg]	1371 [53.98]	1530 [60 25]
Intake Air Flow	Litre/Sec [CFM]	763 [1617]	812 [1721]
Heat Rejection to Ambient	KWm[BTU/min]	85 [4814]	92 [5226]
Exhaust system			
Exhaust Gas Flow	litre/sec[CFM]	1760 [3730]	1896 [4017]
Exhaust Gas Temperature (Turbine Out)	°C [°F]	453 [847]	461 [862]
Exhaust Gas Temperature (Turbine In (exh. Manifold))	°C [°F]	588 [1090]	607 [1124]
Heat Rejection to Exhaust	kWm [BTU/min]	427 [24256]	465 [26404]
Emissions (In accordance with ISO8178 Cycle D2)			
NOx (Oxides of Nitrogen)	g/kw-hr [g/bhp-hr]	7.45 [5.55]	
HC (Hydrocarbons)	g/kw-hr [g/bhp-hr]	0.43 [0.32]	
CO (Carbon Monoxide)	g/kw-hr [g/bhp-hr]	0.83 [0.62]	
PM (Particulate Matter)	g/kw-hr [g/bhp-hr]	0.174 [0.130]	
Cooling system			
Coolant Flow to Engine Heat Exchanger/Keel Cooler			
At 3 psi Friction Head External to Engine	litre/min[GPM]	734 [194]	
At 8 psi Friction Head External to Engine	litre/min[GPM]	655 [173]	
Standard Thermostat Operating Range (Min.)	°C [°F]	74 [166]	
Standard Thermostat Operating Range (Max.)	°C [°F]	78 [173]	
Heat Rejection to Engine Coolant	kWm [BTU/min]	288 [16344]	328 [18611]
Sea Water Flow @ 50 psi Pump discharge Pressure	litre/min [GPM]	231 [61]	
Pressure Cap Rating (With Heat Exchanger Option)	kPa [PSI]	48 [7]	
Installation Drawings		Consult Application Engg.	
Engine General Data Sheet			

TBD : To Be Decided NA : Not Applicable N.A. : Not Available

1. All data at Rated condition
2. Consult Installation Direction Booklet for Limitations
3. Heat rejection to coolant values are based on 50% water / 50% Ethylene Glycol mix and do NOT include fouling factors. If sourcing your own cooler, a service fouling factor should be applied according to the cooler manufacturer's recommendations
4. Consult option notes for flow specifications of optional Cummins sea water pump, if applicable

CUMMINS INDIA LTD
KOTHRUD, PUNE

All data is subject to Change Without Notice - Consult the following Cummins Internet site for most recent data
http://www.cummins.com

haat

SHIPBOARD INCINERATOR

Rev	2	EQUIPMENT DATA SHEET 2425-006-ME-ED-001	SHEET 7 OF 14

DIESEL TANK	
Make	HAAT
Drain plug	Provided
Tank capacity	400 litres
Gear pump with motor	1 no.
Level Switch	1 no.

FLUE GAS FAN	
Gas handled and delivered	Atmospheric air
Type / model	Centrifugal / forced draught fan
Impeller mounting /type	Direct mounting / backward curved.
Drive type	Direct drive
Number of fan	1 no.
Fan	With suction damper and simple support frame mounted
Inlet damper position	Parallel to flow
Motor	CI
Painting	As per HAAT standard procedure
Inlet damper	1 no.
Outlet reducer	1 no.

CHIMNEY	
Design temperature	700^0 C
Operating temperature	300 - 350^0 C
Type	Chamber supported
Material of construction	SS 316
Internal insulation type	Refractory lining
Damper MOC	SS 316
Damper operation	Pneumatic cylinder with SOV
Spark arrester	1 no. (SS 316)
Painting	As per painting procedure
Temperature element	1 no.
Temperature transmitter	1 no.

A Rolls-Royce solution

India_NGOPV_Indian Coastguard



Technical Specification

and

Scope of Supply

DIESEL ENGINE
20V8000M71L

Customer:	Mazagon Dock Limited
MTU Project:	201280014
Quotation:	IND 290019-Q01-1

A Rolls-Royce solution

I. Engine Description

Engine Model	20V8000M71L DIESEL ENGINE
Application Group	1B - Contin. operation, variable, high load

Power as per MTU Sales Program

Power per engine (ISO 3046)	9.100	kW
Engine speed	1.150	rpm
Intake air temperature	25	°C
Coolant temperature	25	°C
Altitude	100	m

On-site Power

Power per engine (ISO 3046)	9.100	kW
Engine speed	1.150	rpm
Intake air temperature	25	°C
Coolant temperature	25	°C
Altitude	100	m

A Rolls-Royce solution

Technical Data:

1. POWER-RELATED DATA			
Engine rated speed	A	rpm	1150
Mean piston speed		m/s	12.1
Fuel stop power ISO 3046	A	kW	9100
Mean effective pressure (MEP)		bar	27.3
Performance map, amendment index		-	a
2. GENERAL CONDITIONS (FOR MAXIMUM POWER)			
Intake air depression (new filter)	A	mbar	25
Intake air depression, max.	L	mbar	40
Exhaust back pressure	A	mbar	30
Exhaust back pressure, max.	L	mbar	50
Fuel temperature at fuel feed connection	R	°C	25
Fuel temperature at fuel feed connection, max. (w/o power reduction)	L	°C	45
Fuel temperature at fuel feed connection, max.	L	°C	50
3. CONSUMPTION			
Specific fuel consumption (be) - FSP with raw water pump (+ 5 %; EN 590; 42.8 MJ/kg)	R	g/kWh	196
Specific fuel consumption (be) with raw water pump (EN 590; 42.8M J/kg) - optimum value in map -	R	g/kWh	185
Low-idle fuel consumption	R	kg/h	30
Lube oil consumption after 100 h of operation (B = fuel consumption per hour)	R	% of B	0.25
Lube oil consumption after 100 h of operation, max. (B = fuel consumption per hour)	L	% of B	0.7
5. COMBUSTION AIR / EXHAUST GAS			
Charge-air pressure before cylinder (abs.)	R	bar abs	4.0
Combustion air mass flow rate	R	kg/s	14.3
Exhaust mass flow rate	R	kg/s	14.8
Exhaust temperature after turbocharger	R	°C	520
Exhaust temperature after engine (turbocharger), max.	L	°C	580
6. HEAT DISSIPATION			
Heat dissipation by engine coolant with oil heat, with charge-air heat	R	kW	6030
Heat dissipated by return fuel flow	A	kW	37
Radiation and convection heat, engine	A	kW	120
9. RAW WATER CIRCUIT (OPEN CIRCUIT)			
Raw water pump: flow rate	R	m³/h	400
Raw water: flow rate through engine coolant heat exchanger	R	m³/h	370
Raw water: Pressure in raw water system, max.	L	bar	4
Raw water pump: pressure differential, max.	L	bar	3.1
Raw water pump: performance map No.		-	X569207
Raw water pump: performance map No. (cont.)		-	00005
Raw water pump inlet pressure, min.	L	bar	-0.3
Raw water pump inlet pressure, max.	L	bar	0.5
Pressure loss in off-engine raw water system	R	bar	1.5

		valid for engine No.
	(Filters supplied loose, to be mounted to the engine prior to first start up)	
	– Charge air ducts drain with hydraulic control valves	1-2,
	– 2 Hose lines; sea-water resistant (supplied loose)	1-2,
1.7	**Exhaust System**	1-2,
	– Exhaust manifold after cylinders with insulation, screening and step protection cover	1-2,
	– Turbochargers installed in water cooled carrier housing	
	– Screen turbocharger SOLAS conform	
	– Water cooled compressor screening	
	– Exhaust flaps for turbo A1, B1 with control cylinder	
	Connection for Ship Exhaust Pipes (all parts supplied loose)	1-2,
	– 2 Metal bellows (DN 400, L = 462 mm) with counter flanges and heat resistant bolts	1-2,
	– Isolation with bellows side contact shielding	
	Exhaust silencer Exhaust silencer for vertical installation. Insertion loss of ca. 25dB(A) Silencer body length: ca. 5100mm Silencer body diameter: ca. 2000mm Material: mild steel Rigid installation Compensators on in- and outlet made of 1.4541 or similar	1-2,
1.8	**Engine Mounting**	1-2,
	Resilient engine mounts, engine mounts with effective damping of structure-borne noise for direct mounting on ship´s foundation, engine motion limiter, vertically adjustable, engine jackscrew	1-2,
	– 10 resilient engine mounts (make Rubber Design) vertical tuning frequency about 6 Hz; vertically adjustable with integrated deflection limiter and foot fixing plates – one (1) vertically adjustable set down bolt each mount bracket (engine support during mount chocking)	1-2,

Annexure 10 : Harbour DG parameters

1 – GENERAL

The purpose of this document is to:

- Define KOEL's complete scope of supply.
- Define the technical characteristics of Generating set, associated auxiliaries and controls.

We have pleasure in introducing our indigenously manufactured class approved KIRLOSKAR Marine Harbour Diesel Generating set (HDG) for project of **NGOPV** of **MDL Shipyard**.

Our scope of supply for each ship set broadly includes the following:

- 350 kWe, 415 V, 50 Hz Marine Diesel Generating set employed with indigenously designed and manufactured 'DV-series' Kirloskar Marine diesel engine and alternator, together mounted on a common base frame. Engine and alternator will be flexibly coupled. The complete DG set assembly shall be mounted on ship girder.

2 – MAIN CHARACTERISTICS

2.1 Engine

The DG set will be equipped with indigenously designed and manufactured 'DV-series' Kirloskar Marine diesel Engine. The Engine design is based on the same DV series family being supplied for Naval OPVs.

- Maker	: Kirloskar
- Type	: DV-series
- Cycle	: 4 stroke, Single acting, Direct injection, Turbocharged, Charge Air Cooled.
- Number of cylinders	: 10
- Arrangement of cylinders	: Vee
- Cylinder bore	: 130 mm
- Piston stroke	: 150 mm

Lub Oil Temperature at Engine outlet at rated Load 110 Deg C.

5.4 Exhaust gas emissions:

The engine used for the DG set complies with IMO tier II / MARPOL 73/78 Annex-VI, Regulations for the prevention of Air pollution from ships and NOx technical code.

6– INSTALLATION DATA

6.1Electric power and Pneumatic supply

The Shipyard to provide following:

- Electrical Supplies : 415 V AC – 50 Hz – 3 phases
  230 V AC – 50 Hz – 1 phase
  24V DC
- Compressed air : 40 bar

6.2 Combustion Air supply

Engine air cleaners shall be mounted in Engine room. Combustion air shall be taken from engine room.

7– OPERATIONAL DATA FOR ENGINE

The data given below concerns an engine operating at **M**aximum **C**ontinuous **R**ating under the ISO 3046/1 ambient conditions.

7.1 Fuel oil

- Fuel pump suction head	1	meter

7.2 Exhaust gas

- Exhaust gas temperature at turbocharger outlet	600	°C
- Max. allowable exhaust back pressure -(At manifold outlet)	11.5	kPA

7.3 Compressed air

- Max. starting air pressure	40	bar
- Min. starting air pressure	14	bar
- Air consumption per start @ 40 bar inlet pressure	890	N liters

- Air Quality - The recommend minimum filtering degree is 600 microns (um). Recommended content of humidity and oil, is acceptable to a quality 4 as per ISO 8573-1.

- One duplex fuel filter.
- Fuel consumption Meter

8.5 Exhaust and air intake

- Lagged exhaust manifolds with expansion bellows.
- Two turbocharger
- Two connection piece for exhaust outlet from turbocharger and expansion bellow
- Two air cleaner with rubber hose connection for air inlet to turbocharger
- Exhaust Silencer Spark Arrestor Type (loose supply)

8.6 Various:

- One flywheel.
- One set of flexible pipes/bellows with counter flanges and fasteners for connection on engine.
- One barring assembly (loose supply)

8.7 Monitoring equipment

- One electronic speed governor.
- Two exhaust gas temperature sensor on turbocharger outlet.
- One sensor for speed sensing.
- Set of temperature and pressure sensors / switches
- Two fuel leak-off switch for high-pressure injection pipe.

Note: All electric equipment installed on the engine are wired up to one junction box.

9 – DG SET MODULE DESIGN AND CONFIGUARATION:

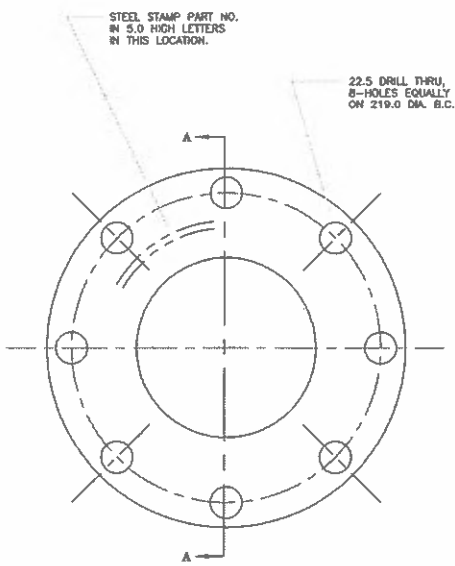
Each DG set module includes the following:

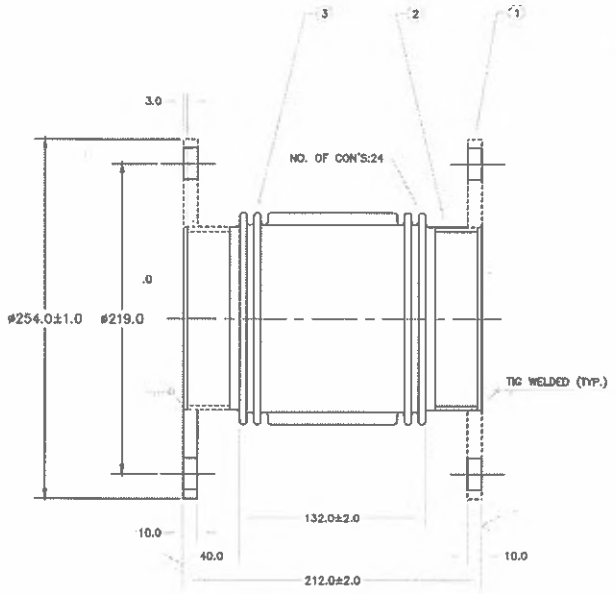
9.1 Basic Engine:

- One 'DV-series' engine as described in § 8 above.

9.2 Alternator:

- One Alternator as described in point no. 2.2.





SECTION A-A

4. TO BE PURCHASED FROM:
RANFLEX INDIA PVT LTD
67 A/1, CHAKLET BAGLUR ROAD
BANGALORE-NORTH-562149,INDIA.
THEIR DRG. NO. A3-01-CIL-432-4

3. VARIATION IN OUTER DIA. OF A PARTICULAR BELLOW FROM CONVOLUTION TO CONVOLUTION NOT TO EXCEED 0.25 mm.

2. TOTAL CONVOLUTED LENGTH OF BELLOW ASSEMBLY IS TO BE MADE FROM SINGLE TUBE AND CONVOLUTION TO CONVOLUTION WELDING IS NOT PERMISSIBLE.

1. NO TOOLING DENT MARKS PERMITTED ON INNER AND OUTER CONFIGURATION OF BELLOW CONVOLUTION.

3. BELLOW DETAILS :-
a) BELLOW I.D. - 129.0±1.0
b) BELLOW O.D. - 150.0±1.0
c) PITCH FOR CONVOLUTIONS - 5.5±1.0
d) NO. OF PLIES - 1
e) THICKNESS PER PLY -0.3
f) NO. OF BELLOWS PER CONN. FLEX. - 1

2. DESIGN AND TESTING DATA :-
a) TEST PRESSURE - 30 P.S.I.
b) DESIGN TEMPERATURE - 750°C
c) AXIAL COMPRESSION - 40MM MAX.
d) LONGITUDINAL EXTENSION - 15MM ±20%
e) SPRING RATE - 2.5KG/MM±20% @8.5MM COMP.
f) LATERAL DEFLECTION - 25 MM MAX.

REF.NO.	DESCRIPTION	QTY.	MATERIAL	REMARKS
3	BELLOW	1	SS-304	-
2	FUSING SLEEVE 1.6 THK.	2	SS-304	-
1	FLANGE	2	M.S.	ASTM A29

Annexure 11 : Main DG exhaust accessories

GARDEN REACH SHIPBUILDERS & ENGINEERS LTD.
DIESEL ENGINE PLANT,RANCHI

		ACAD	Date	Name
Project:	DEP/CTS-500KW-DG	Drawn	24.04.2025	PSM
Engine Type:	CUMMINS VTA28-M2	Checked	24.04.2025	ST
Gen Type:	STAMFORD 500KW	Approved		
Reference No:	3392372	Drawing No.	GD-003-008-000-000	
Scale NTS	Title: 500KW-DG PRIMARY EXHAUST BELLOW	REV: 0	SIZE: A3	Sheet 1 of 1

ALL DIMENSIONS ARE IN MM OTHERWISE MENTIONED SEPARATELY.

REV.NO	ZONE	BRIEF RECORD	DATE

Customer:	Sub Vendor:	PO No:	Yard:
MDL	Cummins	MDL- 3450000155 DT.19.11.2024.	MDL : 16101

Main Diesel Generator exhaust accessories additional information

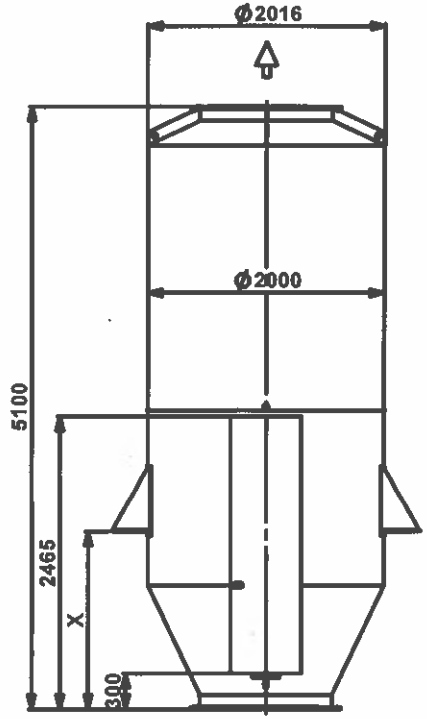
Weight of Y-piece: 40 Kg. (Y piece drawing provided, Y piece back pressure shall be calculated by exhaust supplier)

Weight of silencer: 190 Kg.

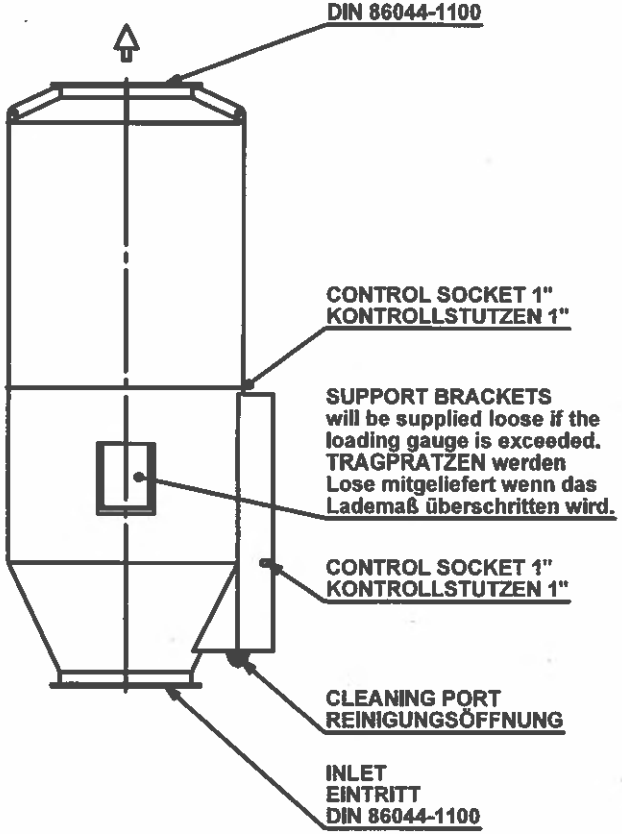
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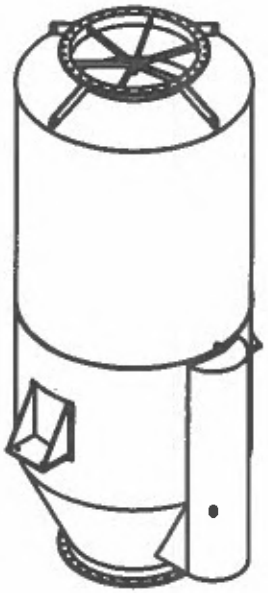
The right to make engineering refinements on all products is reserved. Dimensions and details are subject to change without prior notice. When dimensions are critical, the dimensions should be confirmed by LUHE-STAHL GmbH.

FRONT VIEW

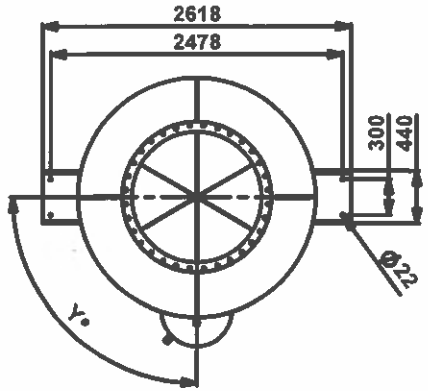


SIDE VIEW





TOP VIEW



Dimension X and Y
ACC. TO CUSTOMERS INSTRUCTION
NACH KUNDENANGABE

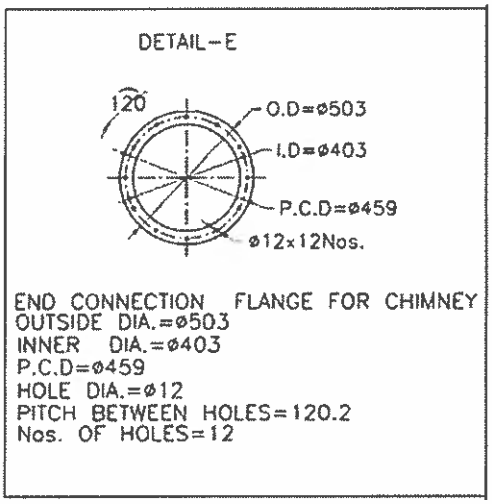
Annexure 12

Annexure 13

Incinerator exhaust accessories

Chimney

Description	MOC	Size	Weight	Quantity
Chimney	ASTM Gr. 70	D =400, L= 2135	0.75 Ton	1 set

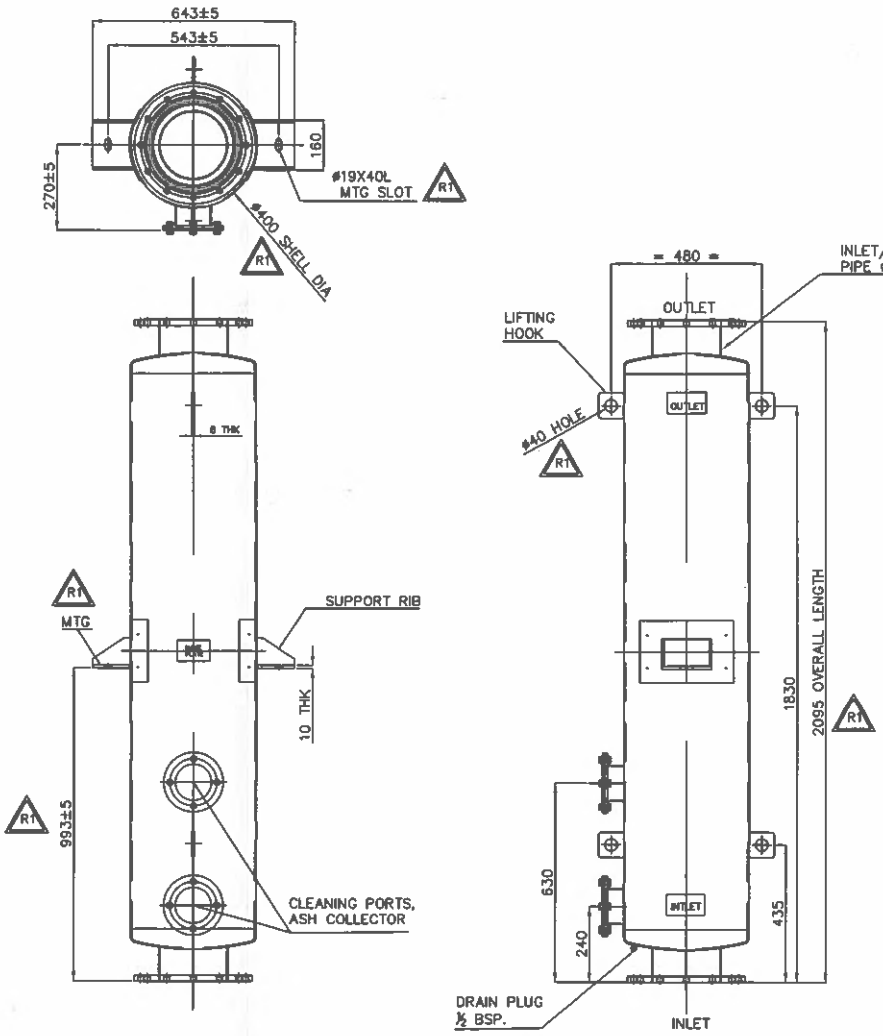


FOLD 2 FOLD 1

IF IN DOUBT ASK

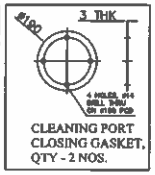
Annexure 14

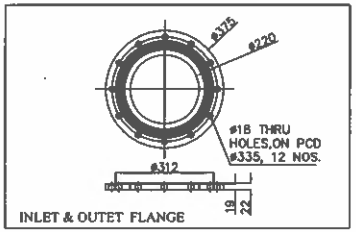
Harbour DG exhaust accessories











GENSET DATA:-

1) GENSET RATING –439 KWe @ 1500 RPM.
2) ENGINE RATING – DV 10

TECHANICAL DATA:-

1) EXHAUST GAS FLOW–2850 Kg/Hr. MAX.
2) EXHAUST GAS TEMPERATURE– 600° C.
3) BACK PRESSURE MAX .– 1.0 Inch of Hg.
4) INSERTATION LOSS– 25 dB.
5) TOTAL WEIGHT OF SILENCER ASSY :160 KG APPROX.
6) SILENCER SUITABLE FOR IN SHOCK GRADE A

NOTE:-

1) BODY SEAM & TUBE JOINTS MAY BE AT RANDOM ANGULAR ROTATIONS.
2) ALL JOINTS ARE TO BE FULL WELDED WITH ZERO LEAKPROOF.
3) PRIMER – ANTICORROSIVE MARINE PAINT.
   PAINT – HEAT RESISTANT BLACK 600° C.

R1 MATERIAL SPECIFICATIONS:

1) SHELL AS PER IS 513; DISC END IS 513/IS 2062
2) MTG PLATE & FLANGES : IS 2062
3) LOOSE FLANGES : SS 304

SR. NO.	PART NAME	MATERIAL	QTY.
1.	COUNTER FLANGE INLET & OUTLET IN LOOSE SUPPLY	SS304	2
2.	GASKET	NON ASBESTOS	2
3.	M16X 65 L-BOLT,NUT,WASHER SPRING & PLAN ASSEMBLY	GRADE - 8.8	24

LIFECYCLE STATE:- RELEASED

No.	REVISION	ZONE	MODIFIED BY	REF. No. / DATE
01	1) DIMENSIONS 1900,360,950 & 23 CHANGED TO 2095,400,993,40 RESPECTIVELY. 2) MOUNTING ARRANGEMENT MODIFIED. 3) MATERIAL SPECIFICATION UPDATED			23.06.2022
00	NEW RELEASE.	--	--	23.10.2021

PRINTS OF PREVIOUS REVISION NO. SHOULD BE SCRAPPED

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- ALL DIMENSIONS ARE IN mm.
- SURFACE ROUGHNESS AS PER CO. STD.NO.10501.
- UNMENTIONED TOLERANCES AS PER CO.STD.NO.11001.
- REMOVE ALL SHARP BURRS AND SHARP EDGES.
- DRAWING NOT TO BE SCALED.

UNMENTIONED	
RADII	--
CHAMFER	--
UNDERCUT	--

CAD DRG. FILE:- PLM

MATERIAL :-	HEAT TREATMENT :-	WEIGHT :-
REFER NOTE	--	REFER NOTE

DRN	RSD
CHD.	ARC
APPD.	JN
DATE	23.10.2021

TITLE: EXHAUST SILENCER

CASTING/FORGING DRG. NO.: --

TYPE: DV10

SCALE: NTS

SHT. NO: 1 OF 1

KIRLOSKAR OIL ENGINES LTD., PUNE 411 003 (INDIA)

DRAWING NO.: DV0.M413.10.0.00

REV. NO.: 01

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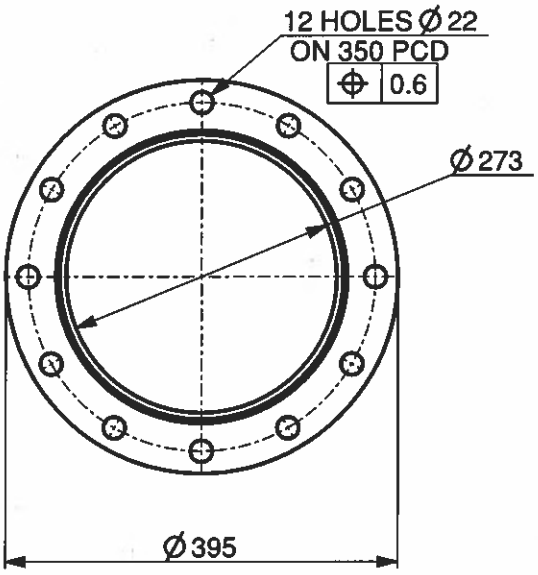
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- ALL DIMENSIONS ARE IN mm.
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- UNMENTIONED TOLERANCES AS PER CO.STD.NO.11001/M.
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- DRAWING NOT TO BE SCALED.

UNMENTIONED	
RADII	--
CHAMFER	--
UNDERCUT	--

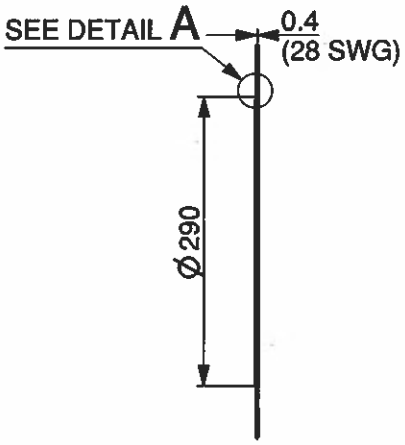
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00	NEW RELEASE			DV2.0659 11.11.2025

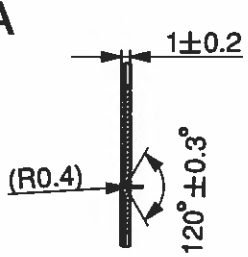
PRINTS OF PREVIOUS REVISION NO. SHOULD BE SCRAPPED

Annexure 14



SCALE 3:20





DETAIL A
SCALE 4:5

Material :- Anti Magnetic stainless steel :- AISI:302/304
THICKNESS:- 0.4 ±0.05mm

THIS DRAWING IS SAME AS
KOEL PART NO :- DV2.M425.38.0.PR

LIFECYCLE STATE:- RELEASED

CAD DRG. FILE:-	WINDCHILL		CASTING/FORGING DRG. NO.
MATERIAL :- REFER NOTE	HEAT TREATMENT :- --	WEIGHT (Kg) :- 0.47	--
DRN AGS	TITLE		TYPE DV2
CHD. RC	S.S.JOINT Y PIECE		SCALE 1:1
APPD. JN			SHT. NO 1 OF 1
DATE 11.11.2025			

	DRAWING NO.	REV. NO.
KIRLOSKAR OIL ENGINES LTD.. PUNE 411 003 (INDIA)	DV2.M457.45.0.PR	00

SIZE A4

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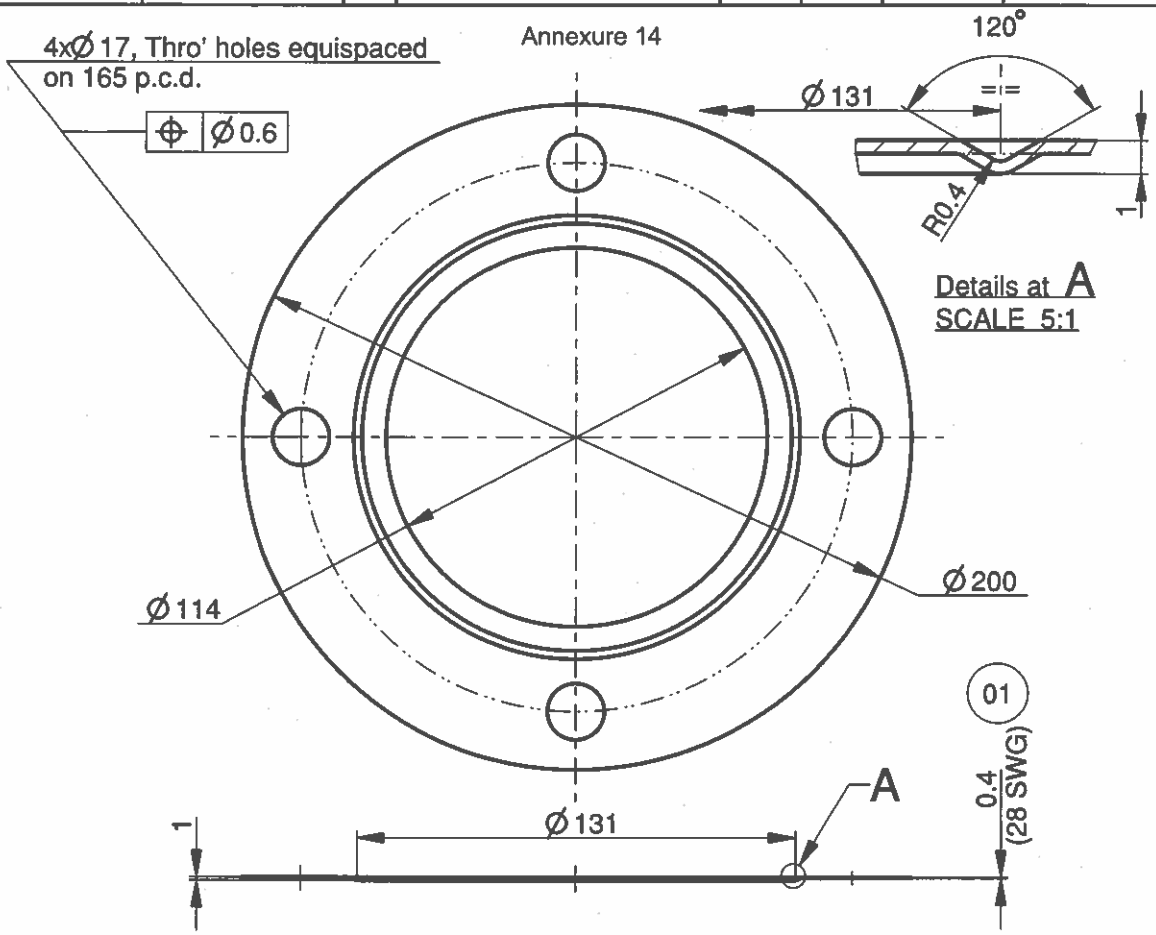
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- SURFACE ROUGHNESS AS PER CO. STD.NO.10501.
- UNMENTIONED TOLERANCES AS PER CO.STD.NO.11001/M.
- REMOVE ALL SHARP BURRS AND SHARP EDGES.
- DRAWING NOT TO BE SCALED.

UNMENTIONED	
RADII	--
CHAMFER	--
UNDERCUT	--

No.	REVISION	ZONE	MODIFIED BY	REF. No. / DATE
01	THICKNESS MODIFIED.		ASJ	34206 09.05.23
00	NEW RELEASE			F6.0001 22/9/93

PRINTS OF PREVIOUS REVISION NO. SHOULD BE SCRAPPED

Annexure 14



Matl :- Anti Magnetic stainless steel :- AISI:302/304

(01) THICKNESS:- 0.4±0.05mm

LIFECYCLE STATE:- Released

CAD DRG. FILE:-	PLM		CASTING/FORGING DRG. NO.
MATERIAL :- REF. NOTE	HEAT TREATMENT :- --	WEIGHT (Kg) :- 0.063	--
DRN PRABHUNE	TITLE		TYPE 6SL9088
CHD. PAT	S.S. JOINT (4")		SCALE 1:2
APPD. JGJ			SHT. NO 1 OF 1
DATE 3/9/93			

KIRLOSKAR OIL ENGINES LTD., PUNE 411 003 (INDIA)	DRAWING NO.	REV. NO.
	F6.503.02.0.00	01

SIZE A4

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UNLESS OTHERWISE SPECIFIED

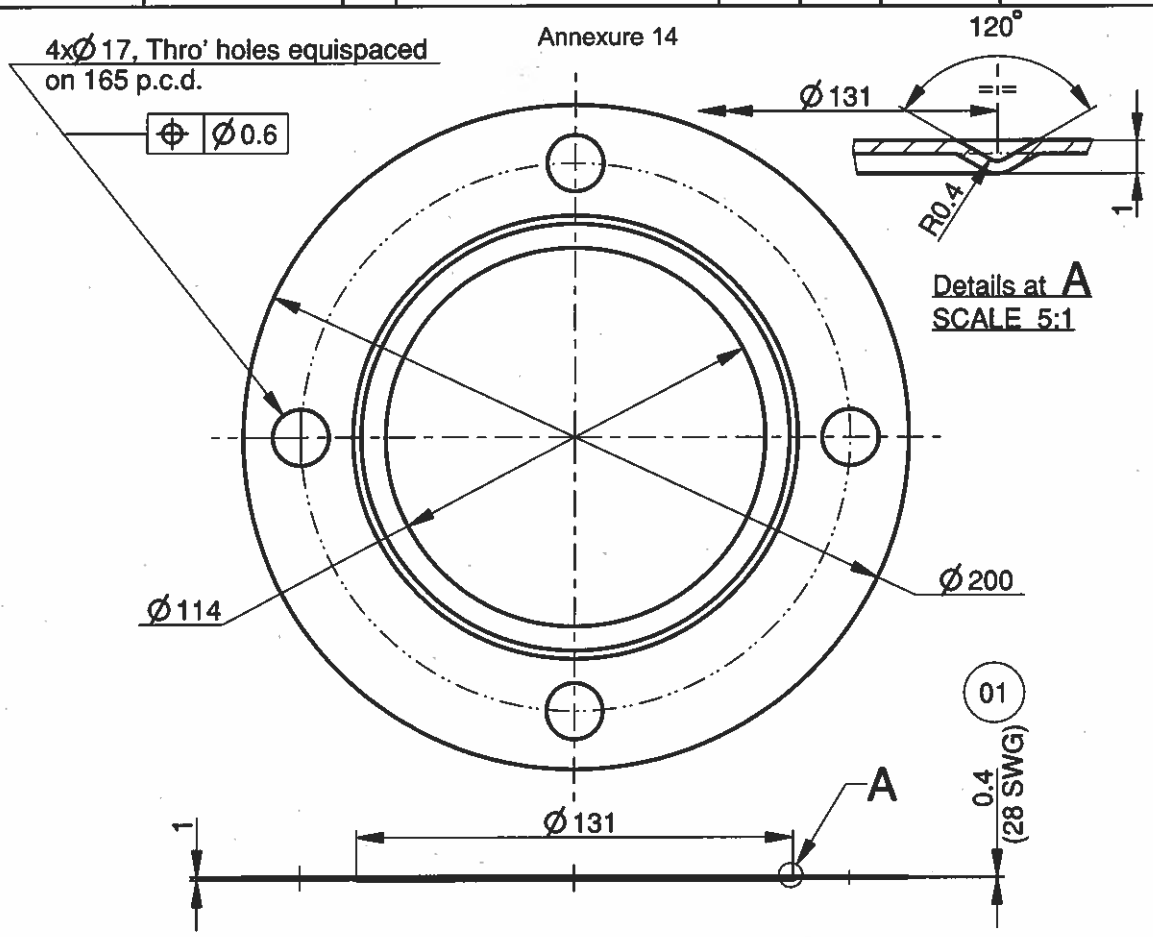
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- UNMENTIONED TOLERANCES AS PER CO.STD.NO.11001/M.
- REMOVE ALL SHARP BURRS AND SHARP EDGES.
- DRAWING NOT TO BE SCALED.

UNMENTIONED	
RADII	--
CHAMFER	--
UNDERCUT	--

No.	REVISION	ZONE	MODIFIED BY	REF. No. / DATE
01	THICKNESS MODIFIED.		ASJ	34206 09.05.23
00	NEW RELEASE			F6.0001 22/9/93

PRINTS OF PREVIOUS REVISION NO. SHOULD BE SCRAPPED

Annexure 14



Matl :- Anti Magnetic stainless steel :- AISI:302/304

(01) THICKNESS:- 0.4±0.05mm

LIFECYCLE STATE:- Released

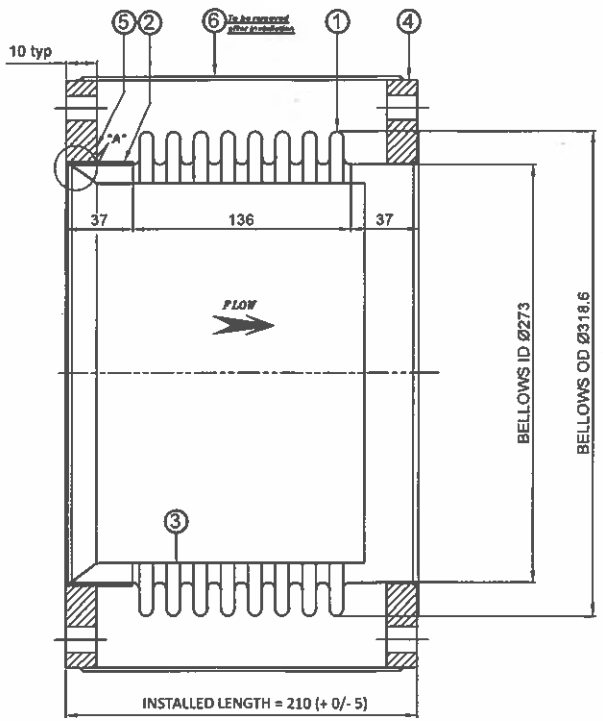
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MATERIAL :- REF. NOTE	HEAT TREATMENT :- --	WEIGHT (Kg) :- 0.063	--
DRN PRABHUNE	TITLE S.S. JOINT (4")		TYPE 6SL9088
CHD. PAT			SCALE 1:2
APPD. JGJ			SHT. NO 1 OF 1
DATE 3/9/93			

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	F6.503.02.0.00	01

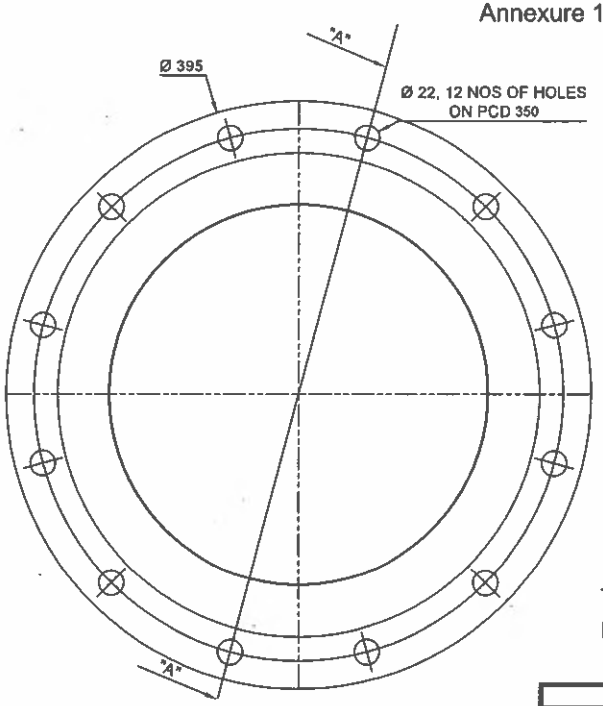
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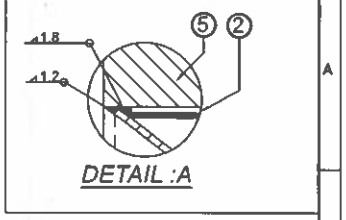
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Annexure 14



Section : A-A





DETAIL :A

THIS DRAWING IS SAME AS
KOEL PART NO :- DV2.M425.35.0.PR

NOTE:

* Manufacturing requirement:
  Acid pickling to be carried out on all the welds which are from inside the bellow. All parts in carbon steel to be protected from acid. No acid should stay in the retention zone.
* Painting : Bellows assembly painted with heat resistance black or aluminum paint.
* Tack welded shipment bars will be provided with Bellows assembly. these shipment bars to be removed after installation and before commissioning.
* Exhaust piping should be properly supported to avoid excessive stress on exhaust Bellows for proper operation.

KOEL PART NO : DV2.M425.35.0.PR
DESIGN / MANUFACTURING CODE : EJMA NINTH EDITION / ASME

DESIGN DATA	
SIZE [NB]	250 NB
DESIGN PRESSURE [BAR(g)]	0.50
HYDRO TEST PRESSURE [BAR(g)]	1.50
DESIGN TEMPERATURE [°C]	650
MOVEMENT	
AXIAL MOVEMENT [MM]	±12
LATERAL MOVEMENT [MM]	6
ANGULAR MOVEMENT [DEG.]	0.5
SPRING RATE	
AXIAL SPRING RATE [KG/MM]	4.73
LATERAL SPRING RATE [KG/MM]	40.41
ANGULAR SPRING RATE [KG-M/DEG]	0.45
FATIGUE LIFE IN CYCLES	17011
NO OF CONVOLUTION	08 NOS
APPROX WEIGHT [KGS]	17

1. Engine type : DV2SR1-M(A)
2. Engine rating : 544 kW / 1500 rpm
3. Application : Marine DG set

REV	DATE	REVISION	BY	APP

APPROVAL

DEPT	BY	DATE

P.NO.	QTY.	DESCRIPTION	MATERIAL
06	04	SHIPPING BRACKET	MS
05	01	FLANGE (10 mm thk)	MS
04	01	SWIVEL FLANGE (10 mm thk)	MS
03	01	LINER (1.5 mm thk)	AISI 321
02	01	COLLAR (1.5 mm thk)	AISI 321
01	01	BELLOWS (0.4 x 2 plies)	AISI 321

BILL OF MATERIAL

NOTES :-
1) ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
2) FABRICATION TOLERANCES SHALL BE AS PER SECTION 6.17 OF EJMA STANDARD
3) PIPING SYSTEM MUST BE PROPERLY ANCHORED AND GUIDED FOR EXPANSION BELLOWS TO OPERATE PROPERLY
4) NO OF CONVOLUTION SHOWN IN DRAWING ARE INDICATIVE ONLY
5) SHIPPING BRACKET TO BE REMOVED AFTER INSTALLATION.

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TECHNOFLEX
B-29, ZAVERI INDUSTRIAL ESTATE, KATHWADA SINGARVA ROAD, KATHWADA, AHMEDABAD-382430, GUJARAT, INDIA.
E-MAIL : info@technoflexgroup.in

Customer's Name:-	KIRLOSKAR OIL ENGINES LIMITED			
DRG.BY.	K.C.P.	"TECHNOFLEX" SINGLE EXPANSION BELLOWS	SCALE:-	NTS
CHKD.BY	A.N.P.		QTY:-	44
DATE:-	30/05/24	DRG. NO:- TF/KOEL-27	REV.- 0	
REF NO : E-MAIL		DATED : 30/05/2024		
JOB NO : –		INSPECTION BY :- TF/CLIENT		
SIZE : 250 NB				

IF IN DOUBT ASK

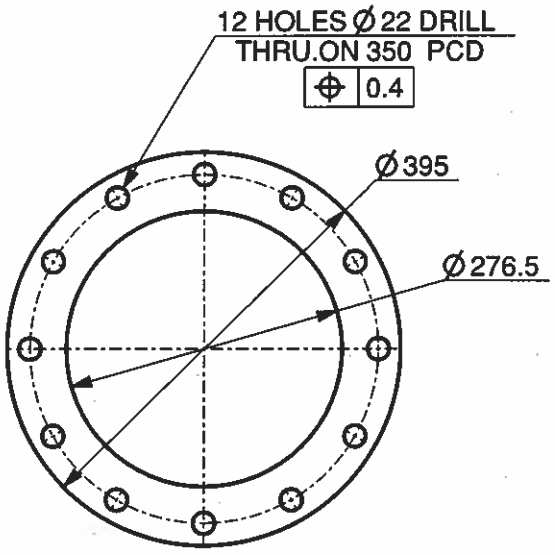
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- ALL DIMENSIONS ARE IN mm.
- SURFACE ROUGHNESS AS PER CO. STD.NO.10501.
- UNMENTIONED TOLERANCES AS PER CO.STD.NO.11001/M.
- REMOVE ALL SHARP BURRS AND SHARP EDGES.
- DRAWING NOT TO BE SCALED.

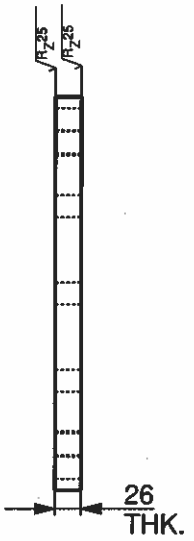
UNMENTIONED	
RADII	--
CHAMFER	--
UNDERCUT	--

No.	REVISION	ZONE	MODIFIED BY	REF. No. / DATE
00	NEW RELEASE			DV2.0659 10.11.2025

PRINTS OF PREVIOUS REVISION NO. SHOULD BE SCRAPPED



Annexure 14



SCALE 3:20

NOTES:
1) ~ ALL OVER
2) REMOVE ALL BURRS & SHARP EDGES.
3) MATERIAL :IS 2062
4) APPLY RUST PREVENTIVE OIL

THIS DRAWING IS SAME AS KOEL PART NO :- DV2.M452.87.0.PR

LIFECYCLE STATE:- RELEASED

CAD DRG. FILE:-	WINDCHILL		CASTING/FORGING DRG. NO.
MATERIAL :- REFER NOTE	HEAT TREATMENT :- --	WEIGHT (Kg) :- 11.64	--
DRN AGS	TITLE: FLANGE FOR EXPANSION BELOW		TYPE DV2
CHD. RC			SCALE 1:1
APPD. JN			SHT. NO 1 OF 1
DATE 05.11.2025			

KIRLOSKAR OIL ENGINES LTD.., PUNE 411 003 (INDIA)

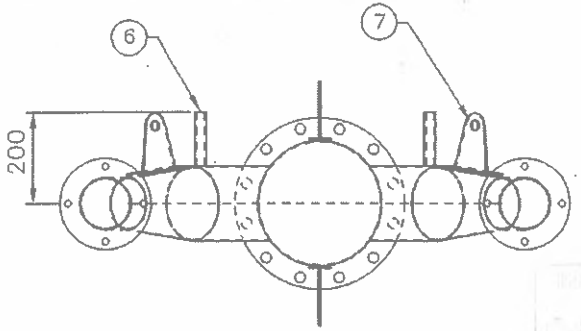
DRAWING NO. DV2.M457.33.0.PR

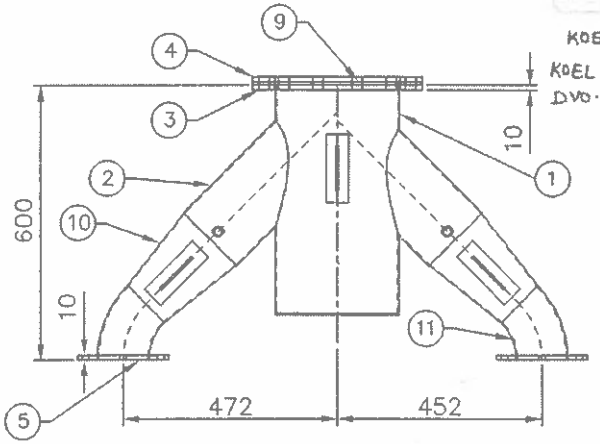
REV. NO. 00

SIZE A4

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Annexure 14

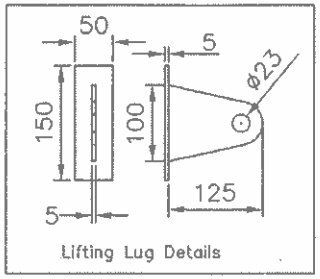




28/03/2023

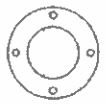
KOEL PART NO.: DVO-M413-20-0-00

KOEL DRAWING No.: DVO-M413-20-0-00 REV03.



Lifting Lug Details

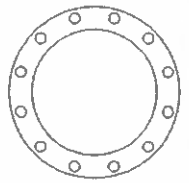
Y Piece Inlet Flange Details



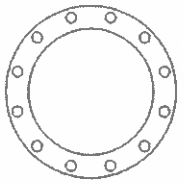
Flange Details
1. Flange OD: 200 mm
2. Flange ID : 116 mm
3. Flange PCD : 165 mm
4. Hole Diameter : 15 x 4no
5. Flange Thk : 10 mm

TECHNICAL DATA:
1. Engine Make: Kirloskar
2. Exhaust Gas Flow Rate : 2850 Kg/Hr
3. Exhaust Temperature : 600 °C
4. Back Pressure across Y Piece : 1.9 kPa
5. Primer: Anti Corrosive
6. Paint: HR Black 600°C

Y Piece Outlet Flange & Gasket Details



Flange Details
1. Flange OD: 375 mm
2. Flange ID : 275 mm
3. Flange PCD : 335 mm
4. Hole Diameter : 18 x 12no
5. Flange Thk : 10 mm



Gasket Details
1. Gasket OD: 375 mm
2. Gasket ID: 275 mm
3. Gasket PCD : 335 mm
4. Hole Diameter : 18x12no
5. Gasket Thk: 3 mm
6. Gasket Material: Composite Graphite with inside setting in stainless steel(316TI or Inconel 600).

Sr.No	Qty/sil	Description	Material
1	1	Exhaust common pipe OD273 x 4.19 mm thk	IS 3074 ERW–1
2	2	Y Piece Branch Pipe OD 219 X 3.76MM THK	IS 3074 ERW–1
3	1	Outlet Flange	IS2062 E250 GR A
4	1	Counter Flange for Outlet	SS 304
5	2	Inlet Flange	IS2062 E250 GR A
6	2	Back Pressure measurement socket size G ¼ with plug	MS
7	4	lifting lugs	IS2062 E250 GR A
8	12	fasteners for outlet flange M16x50mm L (8.8) (Nut,Bolt with 1plain and 1spring washer)	MS
9	1	Non Asbestos Gasket for Outlet Flange	Composite Graphite with inside setting in stainless steel(316TI or Inconel 600).
10	2	Reducer OD219 x OD 114 X 3mm thk	IS2062 E250 GR A
11	2	Elbow OD114 x 3mm thk	MS
Total Weight			55 Kg (Approx)

FOR ANGULAR DIMENSIONS					FOR LINEAR DIMENSIONS					
FOR UNSPECIFIED TOLERANCE					FOR UNSPECIFIED TOLERANCE					
UPTO 10	10 UPTO 50	50 UPTO 120	120 UPTO 400	ABOVE 400	0 UPTO 6	6 UPTO 30	30 UPTO 120	120 UPTO 400	400 UPTO 1000	1000 UPTO 2000
'2'	'1'30'	±1'	±0'.30'	±0'.15'	±0.5	±1.0	±1.5	±2.0	±3.0	±3.5

NAME	DATE	REV.	
SSS	27-03-22	2	Outlet Flange Gasket Material Changed.
SSS	24-08-22	1	Changed Bolt length of sr no 8, Changed Thk of sr no 1&2, Updated Material specifications

PROJECT NAME: Y-PIECE

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ALL DIMENSIONS IN MM

TITLE:- Y-PIECE

CUST NAME: KOEL | SCALE: NTS | PROJ NO:-

DR.NO.:-SPI-DVO.M413.20.0.00 REV 01 | SHEET NO.:- 1 OF 1

	NAME	SIGN	DATE
APPD.	ASK		22-06-2022
CHKD.	ASK		22-06-2022
DRN.	SSG		22-06-2022

SHIVPARWATI INDUSTRIES
A/P SHIRALE VILLAGE PHASE II CHAKAN
TAL.: KHED DIST.: PUNE 410501 MAHARASHTRA INDIA
E-mail: shivparwati.sales@gmail.com

Kirloskar Oil Engines

Engine Specifications

Physical Data		
Engine rpm		1500
Cylinders / Configuration		2 / Inline
Type		Four stroke
Bore x Stroke (mm)		100 x 120
Displacement (L)		1.88
Cooling		Air cooled
Aspiration		Naturally aspirated
Compression ratio		18 : 1
Piston speed (m/s)		6.0
Fuel consumption Prime power output (L/h)[1]	50%	2.3
	75%	3.1
	100%	4.0
	110%	4.5

Air System	
Air filter type	Dry replaceable
Air volume required for combustion (m^3/hr)	75
Air volume required for cooling (m^3/hr)	2600

Cooling System	
Cooling package	Air cooled

Fuel System	
Type of fuel filter	Two stage spin on type
Governor type	Mechanical
Class of governing	ISO 8528-5, Class G2
Recommended Fuel	Class A2, High speed diesel
Fuel solenoid	Energized to stop

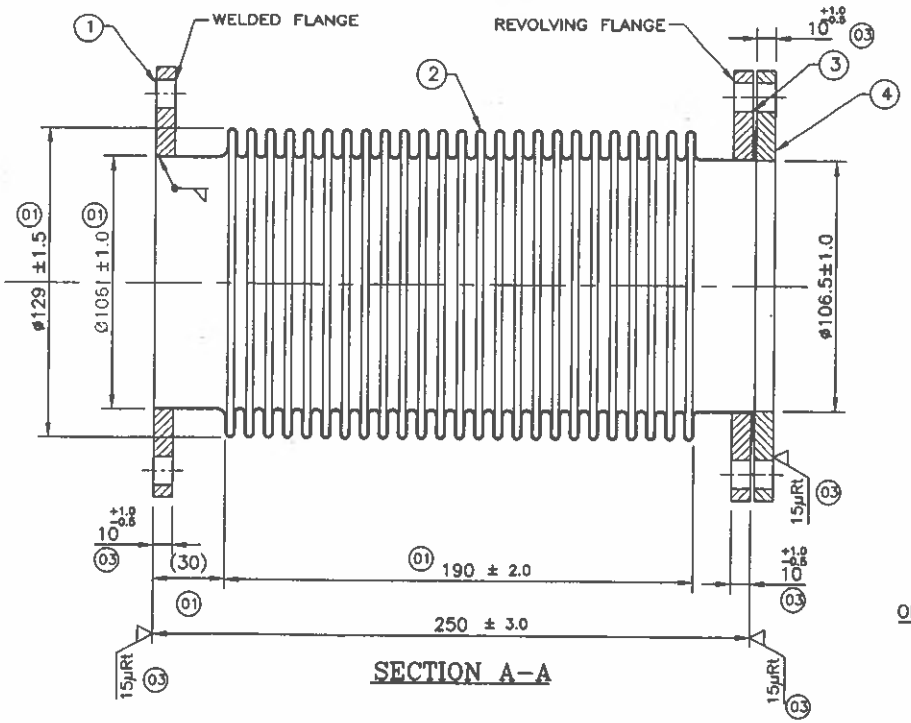
Exhaust System	
Exhaust gas flow rate (kg/hr)	110
Maximum exhaust gas temperature (°C)	500
Max. allowed back pressure (mm of Hg)	50

Electrical System	
Starting arrangement	12V Electric
Recommended Starter battery capacity	75Ah
Battery charging alternator	Engine mounted 12V
Battery charging alternator	35A

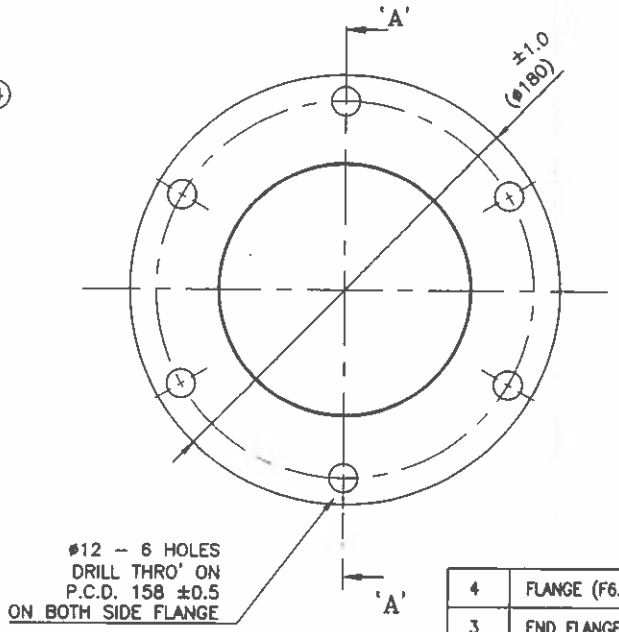
Lubrication System	
Type of lube oil filter	Full flow spin on type
Oil to be used	SAE 15W40 PI:CI4
Oil pump type	Through G-rotor gear pump
Lube oil sump capacity (L) refill / first fill	5.0 / 5.5
Lube oil consumption	0.3% of fuel consumption

1. +5% production tolerance is applicable as per ISO3046. Fuel consumption is based on diesel fuel with a specific gravity of 0.85 and confirming to BS 2869, Class A2) and standard alternator efficiency. The fuel consumption may vary depending upon the alternator efficiency.

IF IN DOUBT ASK



SECTION A–A



SR.NO.	DESCRIPTION	QTY.	MATL
4	FLANGE (F6.618.07.0)	1	M.S.
3	END FLANGE (REVOLVING)	1	M.S.
2	EXPANSION BELLOW	1	SS321
1	END FLANGE (FIXED)	1	M.S.

** DATA :–

A. DESIGN SPECIFICATIONS :–

1. WORKING PRESSURE – 1.0 kg/sq.cm.
2. TEST PRESSURE – 1.5 kg/sq.cm.
3. DESIGN TEMPERATURE – 600°C
4. AXIAL COMPRESSION – 20 (MAX)
5. AXIAL EXTENSION – 15 (MAX)
6. LATERAL DEFLECTION – 15 (MAX)

B. BELLOW DETAILS :–

1. BELLOW I.D. – ø106.0 ± 1.0
2. BELLOW O.D. – ø129.0 ± 1.5
3. LENGTH OF SINGLE BELLOW – 190 ± 2.0
4. NO. OF PLIES – 2
5. THICKNESS PER PLY – 0.3
6. NO. OF BELLOWS PER CONN. – 1 (01)
7) SPRING RATE OF BELLOW – 2.4 kg/mm ±20%
(02) 8) NO.OF CONVOLUTION – 24

** NOTES :

1. APPROVED SUPPLIER : M/s ACCUFERROUS, PUNE
2. ALL M.S. COMPONENTS TO BE PAINTED WITH HEAT RESISTANT ALUMINUM PAINT.
3. MATING FACE OF FLANGE TO BE COATED WITH RUST PREVENTIVE OIL.
4. ALL JOINTS TO BE TIG WELDED.
5. FOR SPRING RATE CHECKING REF DRAWING No.– – F6.315.03.0 SHEET 2 OF 2

No	REVISION	ZONE	MODIFIED BY	REF. No DATE
03	FLANGE THK CHANGED FROM 8 TO 10 mm & SURFACE FINISH VALUE ADDED.	–	DAVINCI NBK	02380 23/02/06
02	SHEET NO. 2 OF 2 ADDED BELLOW DETAILS ADDED.	–	–	00630 24/07/07
01	DESIGN & RELATED DIM CHANGE NOTE UPDATE	–	DAVINCI NBK	F6.1027 15/05/07
00	NEW RELEASE.			F6.0322 16/07/96

PRINTS OF PREVIOUS REVISION NO. SHOULD BE SCRAPPED

UNLESS OTHERWISE SPECIFIED
- ALL DIMENSIONS ARE IN mm.
- SURFACE ROUGHNESS AS PER CO. STD.NO.10501.
- UNMENTIONED TOLERANCES AS PER CO.STD.NO.11001.
- REMOVE ALL SHARP BURRS AND SHARP EDGES.
- DRAWING NOT TO BE SCALED.

UNMENTIONED
RADII –
CHAMFER –
UNDERCUT –

CAD DRG. FILE:– PLM

MATERIAL :– REFER NOTE | HEAT TREATMENT :– – | WEIGHT :– –

CASTING/FORGING DRG. NO. –

DRN S.H.CHITALE | CHD. | APPD. | DATE 25/10/95

TITLE: EXPANSION BELLOW (4.0")

TYPE 6SL9088T

SCALE 1:2

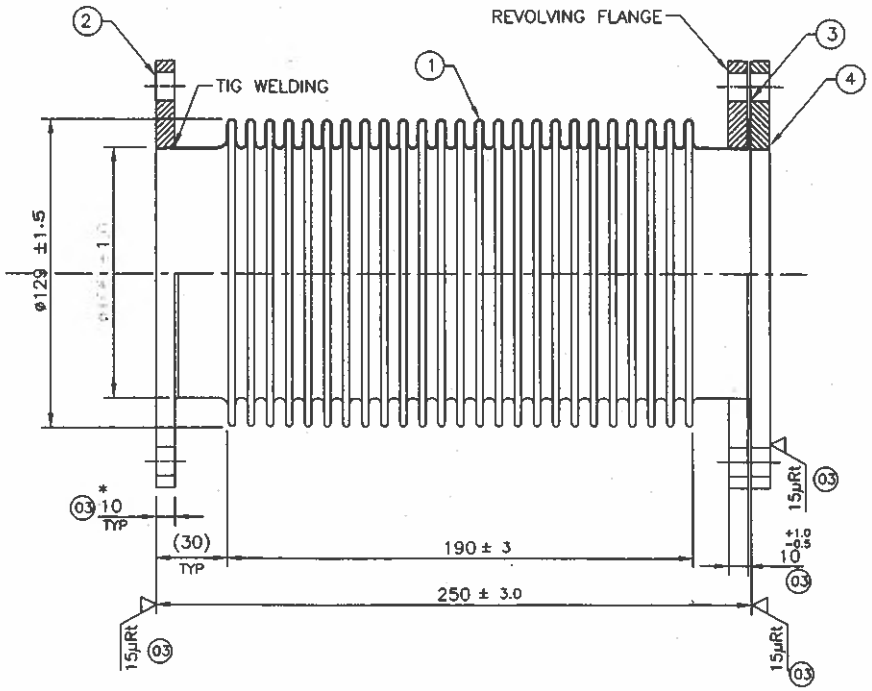
SHT. NO 1 OF 2

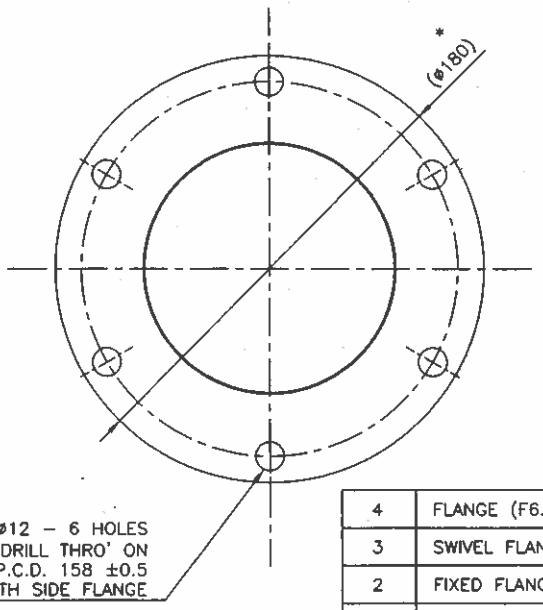
KIRLOSKAR OIL ENGINES LTD., PUNE 411 003 (INDIA)

DRAWING NO. F6.618.01.0.04

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Annexure 15

SR.NO.	DESCRIPTION	QTY.	MATL.
4	FLANGE (F6.618.07.0)	1	M.S.
3	SWIVEL FLANGE	1	M.S.
2	FIXED FLANGE	1	M.S.
1	BELLOW (0.3 x 2 PLY)	1	SS321

** NOTES :

1. APPROVED SUPPLIER : SENIOR INDIA PVT.LTD.(DRG.NO.SIPL/BA–105)
2. ALL M.S. COMPONENTS TO BE PAINTED WITH HEAT RESISTANT ALUMINUM PAINT.
3. MATING FACE OF FLANGE TO BE COATED WITH RUST PREVENTIVE OIL.
4. SUITABLE FOR USE WITH 69L 9088T AND 69L 9088TA ENGINES.
5. MAXIMUM DEFLECTION VALUES TO BE CHECKED ON SAMPLE BASIS
6. GREEN DOT WILL BE PROVIDED ON BELLOW ASSY. FOR LEAK TESTING O.K. PCS.
7. LATERAL TILT IN BELLOW ASSY WILL BE 5.0 mm. MAX.
8. ALL DIMNS MARKED * ARE ONLY FOR REFERENCE.
9. BELLOW SHEET THICKNESS Tol. ±0.05 mm.

** DATA :–

A. DESIGN SPECIFICATIONS :–

1. WORKING PRESSURE – 1.0 kg/sq.cm.
2. TEST PRESSURE – 1.5 kg/sq.cm. (04)
3. DESIGN TEMPERATURE – 550°C
4. AXIAL COMPRESSION – 20 (MAX)
5. AXIAL EXTENSION – 15 (MAX)
6. LATERAL DEFLECTION – 15 (MAX)

B. BELLOW DETAILS :–

1. BELLOW I.D. – ø106.0 ± 1.0
2. BELLOW O.D. – ø129.0 ±1.5
3. NO. OF CONVOLUTIONS – 24 NOS
4. NO. OF PLIES – 2 PLY
5. THICKNESS PER PLY – 0.3 mm
6. CONV.VARIATIONS – 1.5 mm. ±0.44 (04)
7. SPRING RATE OF BELLOW – 2.20 kgf/mm

No	REVISION	ZONE	MODIFIED BY	REF. No / DATE
04	CONV.VARIATIONS SPECIFICATION ADDED SPRING RATE 2.4 kg/mm±20% CHANGED TO 2.20 Kgf/mm. TOL ON BELLOW O.D CHANGED NOTES ADDED	–	DAVINCI NBK	03436 12/04/08
03	FLANGE THK CHANGED FROM 8 TO 10 mm & SURFACE FINISH VALUE ADDED.	–	DAVINCI NBK	02380 23/02/08
00	NEW RELEASE.			00530 24/07/07

PRINTS OF PREVIOUS REVISION NO. SHOULD BE SCRAPPED

UNLESS OTHERWISE SPECIFIED
- ALL DIMENSIONS ARE IN mm.
- SURFACE ROUGHNESS AS PER CO. STD.NO.10501.
- UNMENTIONED TOLERANCES AS PER CO.STD.NO.11001.
- REMOVE ALL SHARP BURRS AND SHARP EDGES.
- DRAWING NOT TO BE SCALED.

UNMENTIONED	
RADII	--
CHAMFER	--
UNDERCUT	--

CAD DRG. FILE:- PLM

MATERIAL :-	HEAT TREATMENT :-	WEIGHT :-
REFER NOTE	--	--

DRN	DAVINCI/NBK
CHD.	
APPD.	
DATE	24/07/07

TITLE: EXPANSION BELLOW (4.0")

CASTING/FORGING DRG. NO.: --

TYPE: 6SL9088T

SCALE: 1:2

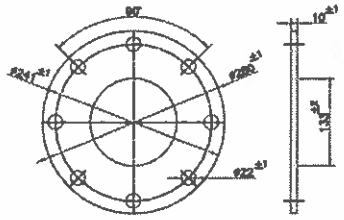
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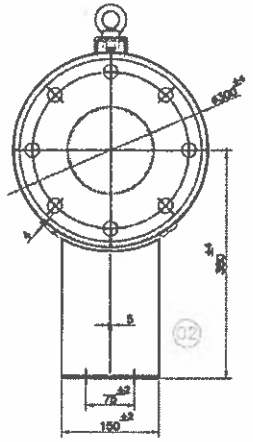
KIRLOSKAR OIL ENGINES LTD., PUNE 411 003 (INDIA)

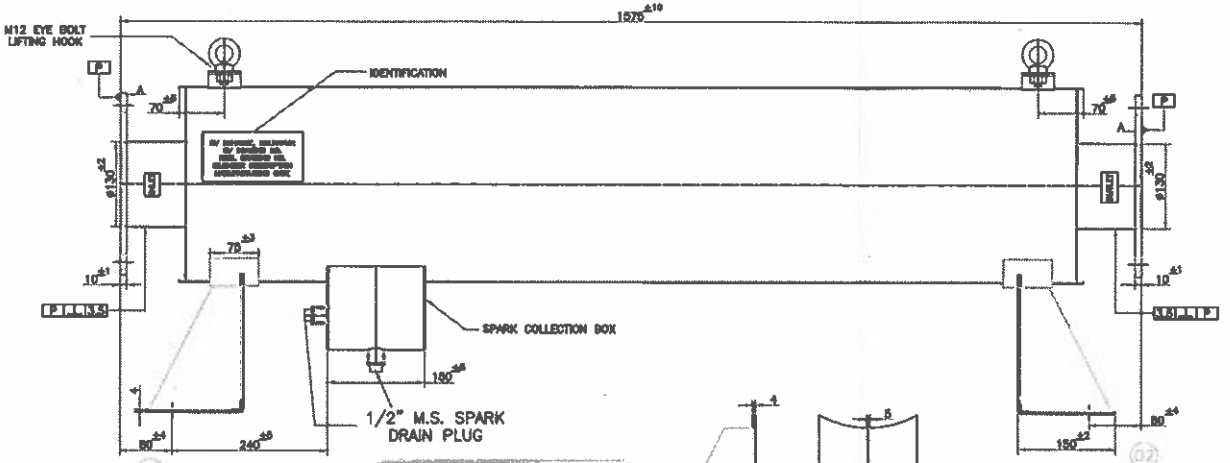
DRAWING NO.: F6.618.01.0.04

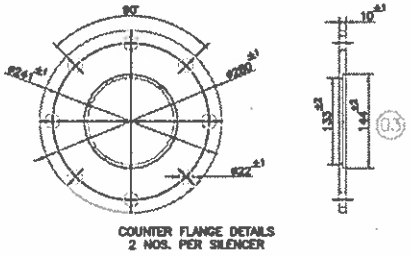
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Annexure 15

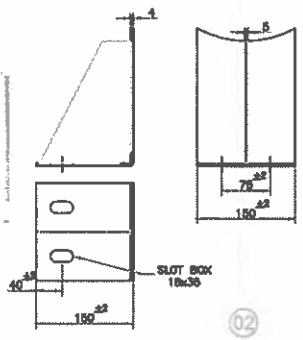








KIRLOSKAR OIL ENGINES LTD.
Engg. (LE)
APPROVED
Sign.
Date 21.02.2023



NOTE :

1. CUSTOMER NAME : KIRLOSKAR OIL ENGINE LTD. (NASIK)
   CUSTOMER PART NO.:
2. MATERIAL : MILD STEEL.
3. FINISH : HEAT RESISTANT BLACK PAINT WITHSTAND 550°C (BOTH INSIDE/OUTSIDE).
4. WELDING SHOULD BE NEAT, CONTINUOUS AND LEAK PROOF.
5. LEAK TEST AT 2.0 Kg/cm² OF AIR.
6. EXHAUST GAS FLOW RATE : 1380 Kg/hr.
7. ALL DIMENSIONS ARE IN MM.
8. SILENCER TYPE : SPARK ARRESTOR CUM ABSORPTIVE SILENCER FOR MARINE APPLICATION.
9. THEORETICAL INSERTION LOSS : 20 – 25 dBA.
10. THEORETICAL BACK PRESSURE : MAX. 25MM OF Hg.
11. SILENCER CAN BE MOUNTED BOTH VERTICALLY OR HORIZONTALLY.

KOEL PART NO. :- F6.M409.04.0.00
KOEL DWG NO. :- F6.M409.04.0.00 REV 01

NOTE :

TO BE SUPPLIED WITH TWO COUNTER FLANGES, BOLTED ON EITHER SIDE USING M20 NUT & M20x50MM BOLT GRADE 8.8 (8 NOS. NUT BOLTS ON EACH SIDE).

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NOT BE COPIED FOR ANY DIMENSIONS

NO.	REVISION	MODIFIED BY	DATE
03	Counter Flange ID changed	RAHUL	09.03.23
02	Mounting Bracket changed and shifted on bottom	RAHUL	11.12.22
01	Mounting Bracket Added, Spark Collection Box Added, Note Updated	RAHUL	07.12.22

MATERIAL: MILD STEEL | COATING: HR PAINT | WEIGHT: APPROX. 75 KGS.
DWN. RAHUL | CHD. SURAYWANSHI | APPD. R. TODKAR | DATE 28/01/2020
TITLE: SPARK ARRESTOR CUM SILENCER FOR 165 KVA
MARINE APPLICATION | TYPE: REACTIVE/ABSORPTIVE | SCALE 1:1 | SHT. NO. 1 OF 2

RV EXHAUST SYSTEMS PVT.LTD.
KOLHAPUR

DRAWING NO. RVE.66.160.04.00 | REV. NO 03

IF IN DOUBT ASK

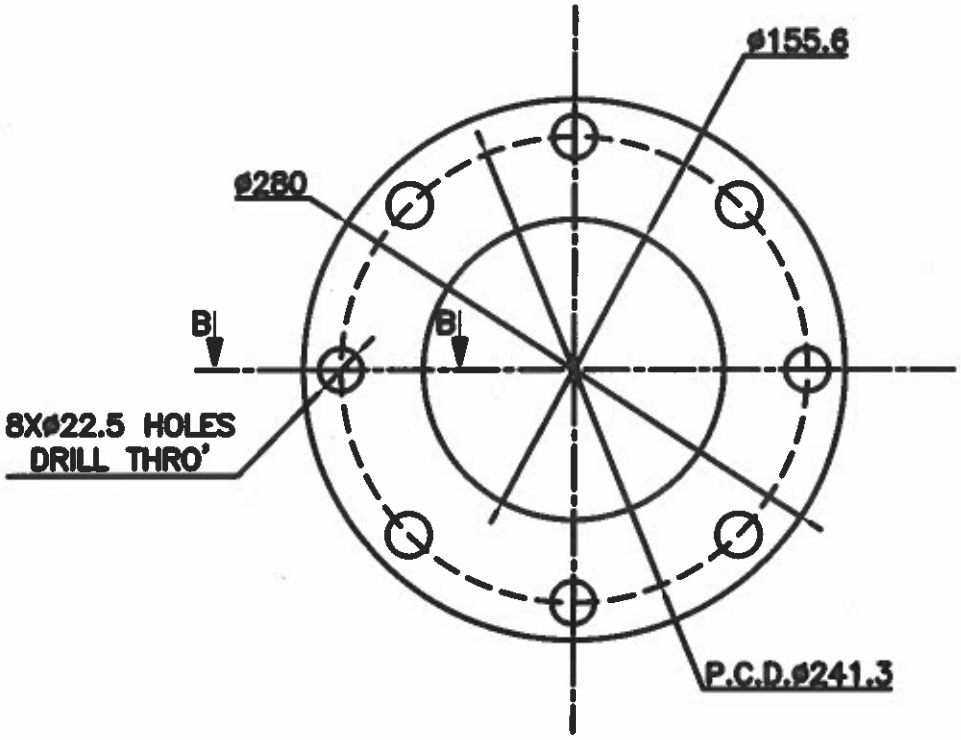
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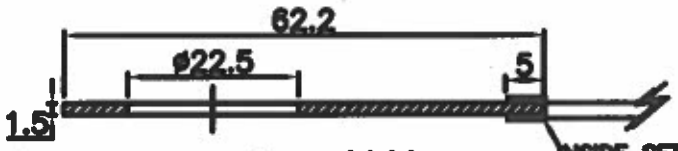
UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN mm.
• SURFACE ROUGHNESS AS PER CO. STANDARDS.
UNMENTIONED TOLERANCES AS PER CO. STANDARDS.
REMOVE ALL SHARP BURRS AND SHARP EDGES.
DRAWING NOT TO BE SCALED.

UNMENTIONED	
RADII	—
CHAMFER	—
UNDERCUT	—

No.	REVISION	ZONE	MODIFIED BY	REF. No. DATE
00	NEW RELEASE			

PRINTS OF PREVIOUS REVISION NO. SHOULD BE SCRAPPED





MATERIAL :
COMPOSITE GRAPHITE WITH INSIDE SETTING IN STAINLESS STEEL (316TI or INCONEL 600). INSIDE SETTING ACCORDING TO DETAIL SECTION B–B.

LIFECYCLE STATE– RELEASED

CAD DRG. FILE–			CASTING/FORGING DRG. NO.
MATERIAL ⊢ REFER NOTE	HEAT TREATMENT ⊢ —	WEIGHT (Kg) ⊢ —	—
DRN GAC	TITLE EXHAUST GASKET		TYPE SL90
CHK.			SCALE 1:1
APPD.			SHT. NO 1 OF 1
DATE 26/08/2017			

KIRLOSKAR OIL ENGINES LTD., PUNE 411 003 (INDIA)	DRAWING NO.	REV. NO.
	F6.M422.03.0.00	00

SIZE A4

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BLANK RATE SHEET FOR GEM BID
(Manufacture, Supply, Installation off Exhaust system for Yard 16401 to Yard 16406 (06 NGOPV)

ITEM NO	MATERIAL DESCRIPTION	Total Qty	UNIT	Yard No
1	Design, manufacture and supply of Diesel Engine Exhaust System as per TSP ICG NGOPV	2	SET	16401
2	Design, manufacture and supply of Main Diesel Generator Exhaust System as per TSP ICG NGOPV	4	SET	16401
3	Design, manufacture and supply of Harbour Diesel Generator Exhaust System as per TSP ICG NGOPV	1	SET	16401
4	Design, manufacture and supply of Incinerator Exhaust System as per TSP ICG NGOPV	1	SET	16401
5	Design, manufacture and supply of Diesel driven compressor Exhaust System as per TSP ICG NGOPV	1	SET	16401
6	Design, manufacture and supply of Emergency DA Exhaust System as per TSP ICG NGOPV	1	SET	16401
7	Vendor to carry out on-board installation (erection and Setting to Work) of all two (2) DIESEL ENGINE Exhaust System.	1	AU	16401
8	Vendor to carry out on-board installation (erection and Setting to Work) of all four (04) Main Diesel Generator Exhaust System	1	AU	16401
9	Vendor to carry out on-board installation (erection and Setting to Work) of Harbour Diesel Generator Exhaust System	1	AU	16401
10	Vendor to carry out on-board installation (erection and Setting to Work) of Incinerator Exhaust System	1	AU	16401
11	Vendor to carry out on-board installation (erection and Setting to Work) of Diesel driven compressor Exhaust System	1	AU	16401
12	Vendor to carry out on-board installation (erection and Setting to Work) of Emergency DA Exhaust System	1	AU	16401
13	Assistance during Harbour Trials (HATs) and sea trials (SATs)	1	AU	16401
14	Design, manufacture and supply of Diesel Engine Exhaust System as per TSP ICG NGOPV	2	SET	16402
15	Design, manufacture and supply of Main Diesel Generator Exhaust System as per TSP ICG NGOPV	4	SET	16402
16	Design, manufacture and supply of Harbour Diesel Generator Exhaust System as per TSP ICG NGOPV	1	SET	16402
17	Design, manufacture and supply of Incinerator Exhaust System as per TSP ICG NGOPV	1	SET	16402
18	Design, manufacture and supply of Diesel driven compressor Exhaust System as per TSP ICG NGOPV	1	SET	16402
19	Design, manufacture and supply of Emergency DA Exhaust System as per TSP ICG NGOPV	1	SET	16402
20	Vendor to carry out on-board installation (erection and Setting to Work) of all two (2) DIESEL ENGINE Exhaust System.	1	AU	16402
21	Vendor to carry out on-board installation (erection and Setting to Work) of all four (04) Main Diesel Generator Exhaust System	1	AU	16402
22	Vendor to carry out on-board installation (erection and Setting to Work) of Harbour Diesel Generator Exhaust System	1	AU	16402
23	Vendor to carry out on-board installation (erection and Setting to Work) of Incinerator Exhaust System	1	AU	16402
24	Vendor to carry out on-board installation (erection and Setting to Work) of Diesel driven compressor Exhaust System	1	AU	16402
25	Vendor to carry out on-board installation (erection and Setting to Work) of Emergency DA Exhaust System	1	AU	16402
26	Assistance during Harbour Trials (HATs) and sea trials (SATs)	1	AU	16402
27	Design, manufacture and supply of Diesel Engine Exhaust System as per TSP ICG NGOPV	2	SET	16403
28	Design, manufacture and supply of Main Diesel Generator Exhaust System as per TSP ICG NGOPV	4	SET	16403
29	Design, manufacture and supply of Harbour Diesel Generator Exhaust System as per TSP ICG NGOPV	1	SET	16403
30	Design, manufacture and supply of Incinerator Exhaust System as per TSP ICG NGOPV	1	SET	16403
31	Design, manufacture and supply of Diesel driven compressor Exhaust System as per TSP ICG NGOPV	1	AU	16403
32	Design, manufacture and supply of Emergency DA Exhaust System as per TSP ICG NGOPV	1	AU	16403
33	Vendor to carry out on-board installation (erection and Setting to Work) of all two (2) DIESEL ENGINE Exhaust System.	1	AU	16403

BLANK RATE SHEET FOR GEM BID
(Manufacture, Supply, Installation off Exhaust system for Yard 16401 to Yard 16406 (06 NGOPV)

ITEM NO	MATERIAL DESCRIPTION	Total Qty	UNIT	Yard No
34	Vendor to carry out on-board installation (erection and Setting to Work) of all four (04) Main Diesel Generator Exhaust System	1	AU	16403
35	Vendor to carry out on-board installation (erection and Setting to Work) of Harbour Diesel Generator Exhaust System	1	SET	16403
36	Vendor to carry out on-board installation (erection and Setting to Work) of Incinerator Exhaust System	1	SET	16403
37	Vendor to carry out on-board installation (erection and Setting to Work) of Diesel driven compressor Exhaust System	1	SET	16403
38	Vendor to carry out on-board installation (erection and Setting to Work) of Emergency DA Exhaust System	1	SET	16403
39	Assistance during Harbour Trials (HATs) and sea trials (SATs)	1	SET	16403
40	Design, manufacture and supply of Diesel Engine Exhaust System as per TSP ICG NGOPV	2	SET	16404
41	Design, manufacture and supply of Main Diesel Generator Exhaust System as per TSP ICG NGOPV	4	SET	16404
42	Design, manufacture and supply of Harbour Diesel Generator Exhaust System as per TSP ICG NGOPV	1	SET	16404
43	Design, manufacture and supply of Incinerator Exhaust System as per TSP ICG NGOPV	1	SET	16404
44	Design, manufacture and supply of Diesel driven compressor Exhaust System as per TSP ICG NGOPV	1	SET	16404
45	Design, manufacture and supply of Emergency DA Exhaust System as per TSP ICG NGOPV	1	SET	16404
46	Vendor to carry out on-board installation (erection and Setting to Work) of all two (2) DIESEL ENGINE Exhaust System.	1	AU	16404
47	Vendor to carry out on-board installation (erection and Setting to Work) of all four (04) Main Diesel Generator Exhaust System	1	AU	16404
48	Vendor to carry out on-board installation (erection and Setting to Work) of Harbour Diesel Generator Exhaust System	1	AU	16404
49	Vendor to carry out on-board installation (erection and Setting to Work) of Incinerator Exhaust System	1	AU	16404
50	Vendor to carry out on-board installation (erection and Setting to Work) of Diesel driven compressor Exhaust System	1	AU	16404
51	Vendor to carry out on-board installation (erection and Setting to Work) of Emergency DA Exhaust System	1	AU	16404
52	Assistance during Harbour Trials (HATs) and sea trials (SATs)	1	AU	16404
53	Design, manufacture and supply of Diesel Engine Exhaust System as per TSP ICG NGOPV	2	SET	16405
54	Design, manufacture and supply of Main Diesel Generator Exhaust System as per TSP ICG NGOPV	4	SET	16405
55	Design, manufacture and supply of Harbour Diesel Generator Exhaust System as per TSP ICG NGOPV	1	SET	16405
56	Design, manufacture and supply of Incinerator Exhaust System as per TSP ICG NGOPV	1	SET	16405
57	Design, manufacture and supply of Diesel driven compressor Exhaust System as per TSP ICG NGOPV	1	SET	16405
58	Design, manufacture and supply of Emergency DA Exhaust System as per TSP ICG NGOPV	1	SET	16405
59	Vendor to carry out on-board installation (erection and Setting to Work) of all two (2) DIESEL ENGINE Exhaust System.	1	AU	16405
60	Vendor to carry out on-board installation (erection and Setting to Work) of all four (04) Main Diesel Generator Exhaust System	1	AU	16405
61	Vendor to carry out on-board installation (erection and Setting to Work) of Harbour Diesel Generator Exhaust System	1	AU	16405
62	Vendor to carry out on-board installation (erection and Setting to Work) of Incinerator Exhaust System	1	AU	16405
63	Vendor to carry out on-board installation (erection and Setting to Work) of Diesel driven compressor Exhaust System	1	AU	16405
64	Vendor to carry out on-board installation (erection and Setting to Work) of Emergency DA Exhaust System	1	AU	16405
65	Assistance during Harbour Trials (HATs) and sea trials (SATs)	1	AU	16405
66	Design, manufacture and supply of Diesel Engine Exhaust System as per TSP ICG NGOPV	2	SET	16406

BLANK RATE SHEET FOR GEM BID (Manufacture, Supply, Installation off Exhaust system for Yard 16401 to Yard 16406 (06 NGOPV)				
ITEM NO	**MATERIAL DESCRIPTION**	**Total Qty**	**UNIT**	**Yard No**
67	Design, manufacture and supply of Main Diesel Generator Exhaust System as per TSP ICG NGOPV	4	SET	16406
68	Design, manufacture and supply of Harbour Diesel Generator Exhaust System as per TSP ICG NGOPV	1	SET	16406
69	Design, manufacture and supply of Incinerator Exhaust System as per TSP ICG NGOPV	1	SET	16406
70	Design, manufacture and supply of Diesel driven compressor Exhaust System as per TSP ICG NGOPV	1	SET	16406
71	Design, manufacture and supply of Emergency DA Exhaust System as per TSP ICG NGOPV	1	SET	16406
72	Vendor to carry out on-board installation (erection and Setting to Work) of all two (2) DIESEL ENGINE Exhaust System.	1	AU	16406
73	Vendor to carry out on-board installation (erection and Setting to Work) of all four (04) Main Diesel Generator Exhaust System	1	AU	16406
74	Vendor to carry out on-board installation (erection and Setting to Work) of Harbour Diesel Generator Exhaust System	1	AU	16406
75	Vendor to carry out on-board installation (erection and Setting to Work) of Incinerator Exhaust System	1	AU	16406
76	Vendor to carry out on-board installation (erection and Setting to Work) of Diesel driven compressor Exhaust System	1	AU	16406
77	Vendor to carry out on-board installation (erection and Setting to Work) of Emergency DA Exhaust System	1	AU	16406
78	Assistance during Harbour Trials (HATs) and sea trials (SATs)	1	AU	16406

Bid Number: GEM/2026/B/8194510
Dated: 17-11-2026

Bid Corrigendum

GEM/2026/B/8194510-C3

Following terms and conditions supersede all existing “Buyer added Bid Specific Terms and conditions” given in the bid document or any previous corrigendum. Prospective bidders are advised to bid as per following Terms and Conditions:

Buyer Added Bid Specific Additional Terms and Conditions

1. Bidder shall submit the following documents along with their bid for Vendor Code Creation:

   a. Copy of PAN Card.

   b. Copy of GSTIN.

   c. Copy of Cancelled Cheque.

   d. Copy of EFT Mandate duly certified by Bank.

2. OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 50 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity up to 50% of the contracted quantity during the currency of the contract at the contracted rates. The delivery period of quantity shall commence from the last date of original delivery order and in cases where option clause is exercised during the extended delivery period the additional time shall commence from the last date of extended delivery period. The additional delivery time shall be (Increased quantity ÷ Original quantity) × Original delivery period (in days), subject to minimum of 30 days. If the original delivery period is less than 30 days, the additional time equals the original delivery period. The Purchaser may extend this calculated delivery duration up to the original delivery period while exercising the option clause. Bidders must comply with these terms.
3. Without prejudice to Buyer’s right to price adjustment by way of discount or any other right or remedy available to Buyer, Buyer may terminate the Contract or any part thereof by a written notice to the Seller, if:
   i) The Seller fails to comply with any material term of the Contract.
   ii) The Seller informs Buyer of its inability to deliver the Material(s) or any part thereof within the stipulated Delivery Period or such inability otherwise becomes apparent.
   iii) The Seller fails to deliver the Material(s) or any part thereof within the stipulated Delivery Period and/or to replace/rectify any rejected or defective Material(s) promptly.
   iv) The Seller becomes bankrupt or goes into liquidation.
   v) The Seller makes a general assignment for the benefit of creditors.
   vi) A receiver is appointed for any substantial property owned by the Seller.
   vii) The Seller has misrepresented to Buyer, acting on which misrepresentation Buyer has placed the Purchase Order on the Seller.
4. While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the screenshot of GST portal confirming payment of GST.
5. Scope of supply (Bid price to include all cost components) : Supply Installation Testing and Commissioning of Goods
6. Buyer Added text based ATC clauses

   Bidder to note that the shortfall information/documents shall be sought only in case of historical documents which pre-existed at the time of the tender opening i.e submitted along with original bid and which have not undergone change since then.

After technical bid opening, bidders shall submit 02 sets of hard copy of

their offer addressing to Mr. V Wagh, DGM (Design Depatment-CGP), Mazagon Dock Shipbuilders Limited , Dockyard Road, Mumbai 400010.

1. **DESCRIPTION & SCOPE OF SUPPLY / WORK**:

(a) **MAIN EQUIPMENT/ITEM/SYSTEM:** Procurement of exhaust system for NGOPV (Y 16401-16406) f or ICGP Ships as per SOTR attached.

(b) **SERVICES OF ENGINEERS**:

(i) Technical assistance is to be provided as per the scope mentioned in SOTR.

(ii) Price for Services of Engineers to be quoted on Lump sum basis. The quoted price should be i nclusive of To & Fro travelling expenses, board and lodging and local conveyance for each act ivity as per TSP.

(iii) Please note that it is the sole responsibility of the vendor to complete the trials till SATs inclu ding commissioning within quoted prices of services of Engineers.

(iv) While deputing Service Engineers for attending on board activity against MDL's call, checklist/ prerequisites for that activity to be forwarded three working days in advance, to enable MDL to keep the system ready for that activity. Timely availability of Service Engineers shall be en sured.

Note:
a) Bidders shall quote for all line item in the tender, failing which offer of the firm falls under rejection criteria.

2. **PROCESS FOR FILLING BOQ:**

The bid comprises supply of following materials and services to be rendered in each yard:

Sl. No.	**Description of items to be supplied and services to be rendered**	**Qty**	**Unit**
1	Design, manufacture and supply of Diesel Engine Exhaust System	2	SET
2	Design, manufacture and supply of Main Diesel Generator Exhaust System	4	SET
3	Design, manufacture and supply of Harbour Diesel Generator Exhaust System	1	SET
4	Design, manufacture and supply of Incinerator Exhaust System	1	SET
5	Design, manufacture and supply of Diesel driven compressor Exhaust System	1	SET
6	Design, manufacture and supply of Emergency DA Exhaust System	1	SET
7	Vendor to carry out on-board installation (erection and Setting to Work) of all two (2) DIESEL ENGINE Exhaust System.	1	AU

8	Vendor to carry out on-board installation (erection and Setting to Work) of all four (04) Main Diesel Generator Exhaust System	1	AU
9	Vendor to carry out on-board installation (erection and Setting to Work) of Harbour Diesel Generator Exhaust System	1	AU
10	Vendor to carry out on-board installation (erection and Setting to Work) of Incinerator Exhaust System	1	AU
11	Vendor to carry out on-board installation (erection and Setting to Work) of Diesel driven compressor Exhaust System	1	AU
12	Vendor to carry out on-board installation (erection and Setting to Work) of Emergency DA Exhaust System	1	AU
13	Assistance during Harbour Trials (HATs) and sea trials (SATs)	1	AU

In this GeM Bid, Sr. No. 1- 6 mentioned in above table are merged to make one line of items required in **exhaust system**, Sr. No. 7-12 mentioned in above table are merged to make one line of services required in **exhaust system**.

Hence, firm shall mention cumulative value of Sr. No. 1-6 and 7-12 in each yard and breakup of the total price quoted in percentage shall be mentioned in the blank rate sheet attached along with the bid.

3. **PRE-QUALIFICATION CRITERIA:**

a) Technical Pre-qualification: Suppliers shall provide details on their capability in Design, Supply, Installation & commissioning of Exhaust systems for Diesel Engine or Diesel generator of capacity of minimum 2000 KW and above. Supplier to provide PO copies along with proof of supply like Work Completion Certificate (WCC) or Inspection Report from Third Party Inspection Agency or Buyer Certified Invoice or Buyer Certified Delivery Challan.

b) Commercial Pre-qualification:

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 1,73,07,692/- 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.

Note:

a) **Applicability to 'Make in India':** Bidders (manufacturer or principal of authorised 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 Pa

st Performance above, would also be considered to be qualified provided:

(i) their foreign 'Make-in-India' associates meets all the criteria above without exemptio n, and

(ii) the Bidder submits appropriate documentary proof for a valid/approved on going 'Mak e in India' agreement/program.

(iii) the bidder (manufacturer or principal of authorised representative) furnishes alon g with the bid a legally enforceable undertaking jointly executed by himself and such foreign Manufacturer for satisfactory manufacture, Supply (and erection, commissioni ng if applicable) and performance of 'The Product' offered including all warranty oblig ations as per the general and special conditions of contract.

b) **Authorized Representatives:** Bids of bidders quoting as authorised representative of a pr incipal 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 authorizatio n in the prescribed form assuring full guarantee and warranty obligations and all cont ractual obligation as per the tender terms and conditions; and

(iii) the bidder himself should have been associated, as authorised representative of t he same or other Principal Manufacturer for same set of services as in present bid (su pply, installation, satisfactorily commissioning, after sales service as the case may be) for same or similar 'Product' for past three years.

c) **Joint Ventures**: Credentials of the partners of Joint ventures cannot (repeat cannot) be club bed for the purpose of compliance of PQC in supply of Goods/Equipment, and each partner mu st comply with all the PQC criteria independently.

c)

d) **Holding Companies:** Credentials of Holding Companies cannot (repeat cannot) be clubbed for the purpose of compliance of PQC in supply of Goods/Equipment, and each subsidiary biddi ng company must comply with all the PQC criteria independently.

d)However, the Financial Standing Credentials of a holding, the Financial Standing credentials of a Hol ding Company can be clubbed with only one of the fully owned subsidiary bidding company ha ving 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 holdi ng company shall also provide a corporate guarantee on the subsidiary bidding company.

e) It is clarified that 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.

f) Bidders need to upload / submit supporting documentary evidence in support of the Pre-Qua lification Criteria viz. Work / Purchase Order, Work Completion Certificate/ Proof of payment wi th Tax Invoice / Store Receipt and Acceptance Report or any other evidence that confirms tha t the work is completed which is issued by the party for whom the work is done. MDL has a rig ht to verify / cause verification of authenticity of the said documents whenever felt necessary.

4. **EARNEST MONEY DEPOSIT (EMD) / BID SECURITY:** Bidders shall furnish EMD of Rs. 10,00,000/- only (Rupees Ten Lakhs only) through NEFT / Demand Draft / Pay order / e-Bank Guarantee/Structural Financial Messaging System Bank Guarantee (SFMS BG)/ Insurance Security Bond drawn in favour of Mazagon Dock Shipbuilders Limited.

Offers with non-submission of EMD shall be categorically rejected other than exempted category. Bidder s hall submit/upload the supporting documentary evidence along with Part I bid for claiming EMD exemptio n.

In addition to exemption list mentioned in GEM GTAC, EMD is exempted for following cases also:

(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 co py of the Registration Certificate issued by MDL, for the items for which the offer is being submit ted. 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 recognised 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 in Part-I offer/bid . Firms in process of obtaining this certificate will not be considered for EMD exemption.

Mode of EMD transaction: In case of Indigenous bidders, EMD shall be obtained by way of NEFT / Demand Draft / Pay order / e-Bank Guarantee /SFMS bank guarantee/ Insurance Security Bond 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 India n 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. Treasury section will obtain the list from SBI and post it on intranet. Bidders should be encouraged to advice their banker to send EMD directly to commercial department or through SWIFT 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. 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 (Commercial-NP)/ Dealing Executive within seven days of the tender closing date.

Structural Financial Messaging System Bank Guarantee (SFMS BG) in lieu of Bank Guarantee: In case the Indigenous Bidders intends to submit Bank Guarantee towards Performance security/EMD/Advance payment/Free Issue Material etc, the Bank Guarantee should be e-Bank Guarantee or Structural Financial Messaging System Bank Guarantee (SFMS BG).

(i)Mandatory Requirement: Whenever a bidder submits SFMS BG, the bidder will mandatorily be required to submit letter from issuing bank that it is unable to issue NeSL(National e-Governance Service ltd) based e-BG as on date. Such letter should accompany the SFMS BG.

(ii)IFSC Code: While submitting the Structural Financial Messaging System Bank Guarantee (SFMS BG). IFSC: ICIC0000393 shall be used.

(iii)Authenticity of SFMS BG: Bidder shall get SFMS BG issued from SFMS enabled Bank as allowed by MDL in tender conditions. Bank shall issue the Bank Guarantee through SFMS system and send SFMS message to MDL's Bank confirming the authenticity of Bank Guarantee. Bidder will be required to submit SFMS BG along with SFMS delivery report/message copy which has been transmitted to MDL's bank by BG issuing bank through SFMS system.

(iv)Stamp Paper/Franking Receipt: The SFMS BG will have to be given on nonjudicial stamp paper/ with franking receipt e-stamping as per stamp duty applicable at the place from where the bid has emanated. The nonjudicial stamp paper/ franking receipt e-stamping should be either in the name of the issuing bank or the bidder.

(v) Receipt of SFMS BG: The Original SFMS BG in physical form, (along with SFMS delivery Report/Message copy which has been transmitted by issuing Bank through SFMS system to beneficiary's i.e., MDL Bank) should reach to MDL designated office on or before due date.

(vi)Mandatory Requisite Information: SFMS BG will not be acceptable unless details of the same is transmitted to the MDVs Bank through SFMS platform. Its

bidder's responsibility to ensure that BG issuing bank send the BG advicecorrectly in the fòrm of messag e format 760 COV vis SFMS (StructuredFinancial Messaging System) as provided by RBI while capturing all requisite fields including Beneficiary Account Name, Bank Name, Bank Account Number,IFSC Code etc .

(vii)Non-Acceptance of BG: In case of any error by the Bidder/contractor or BG issuing Bank while capturi ng the requisite field details / format or non-receipt of confirmation of BG through SFMS 760COV messag e format, the bidder/contractor shall be responsible for non-acceptance of the SFMS Bank Guarantee.

(viii)Amendment in BG: For any amendment of SFMS BG, message 767COV through SFMS should be use d.

Address of Dealing commercial executive:
Arindam Ghosh Deputy Manager -Commercial P15B and CGP
Mazagon Dock Shipbuilders Limited (Ministry of Defence Undertaking) Dockyard Road,
Mazagon, Mumbai- 400010
Phone - 022 23762773
Fax : (+91)22 2378 2302

Refund of EMD: Refund of EMD in all the cases shall be without interest as stated below:

(i) Earnest money of unsuccessful bidders shall be returned within 15 days after the award of contract or expiry of bid validity, whichever is earlier. However, in case of two packet or two stage bidding, Bid securities of unsuccessful bidders during first stage i.e. technical evaluation should be returned within 15 days of declaration of result of first stage itself i.e. technical evaluation. Earnest money of successf ul bidder shall be returned within 15 days after receipt of Performance Security / e-PBG.

(ii) In the event of cancellation of tender, the EMD will be refunded / returned to all the bidders.

(iii) If the validity of the offer of the firm has expired and if bidder is not willing to extend the validity of offer, the EMD of such bidders to be refunded without linking of the same to the Price Bid Opening but after the approval from CFA.

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) If it comes to notice that the information / documents furnished in its bid is false, misleading or for ged.

(iii) Non-acceptance of order.

(iv) All the bids of a bidder who has submitted multiple bids, as per the clause, shall be rejected and B id Security for all such bids shall be forfeited

(v) Fails to furnish requisite performance security within stipulated time required as per e-bid / RA con ditions.

5. **VALIDITY PERIOD OF OFFER:**

(a) Bid / Offer shall have the validity period of **180 days** from the tender closing date/ extended tender closing date.
(b) In case the day up to which the bids are to remain valid falls on/ subsequently declared a hol iday or closed day for MDL, the bid validity shall automatically be deemed to be extended up to the next working day.
(c) In exceptional circumstances, before the expiry of the original time limit, MDL may request t he 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 cas e, he shall be permitted to modify his bid.

6. **DELIVERY PERIOD/CONTRACT PERIOD (FOR GOODS/SERVICES):**

(a) Delivery Period / Contract Period: Delivery/contract period shall be as per GeM tender.

(b) The given schedule for the services is tentative; the exact schedule will be communicated 15 da ys in advance.

7. **SUBMISSION OF OFFER IN TWO BID SYSTEM**: Offer must be submitted in two parts as follows:

(a) **Part I (Techno Commercial Bid):** The bidder shall ensure that following are essentially submitte d in the Part-I bid as applicable:

(i) Declaration of Local Content, preference for MSE Order 2012 / PPP Order 2017 for purch ase preference.

(ii) Compliance Certificate w.r.t. Land Border Clause

(iii) Blank rate sheet indicating quoted/not quoted against each line item, tax percentage, ty pe of taxes and FE content.

(iv) Bank details for payment by RTGS/NEFT in the format enclosed.

(v) Bidder contact details as per attached annexure" Contact Details of the bidder.

(vi) Additional documents as applicable to this tender.

Note: In any case, prices are not to be mentioned in Part-I bid.

(b) **Part-II (Price Bid):** Prices for each of the listed items has to be uploaded strictly in the prescribed format provided in the GeM portal.

8. **BID REJECTION CRITERIA**:

(a) **Categorical rejection criteria:** The following conditions / deviations are non-negotiable and the refore any bid falling under these conditions / deviations shall be summarily rejected. Bidders to n ote that they shall not be provided any opportunity to rectify these conditions / deviations post Pa rt-I bid opening:

(i) Bids received after tender closing date and time.

(ii) Bids received other than through e-portal (in case of e-tender)

(iii) Bidders who are debarred under PPP MII order 2017, GeM, CPPP including Tender holiday i ssued by MDL.

(iv) Bids received without EMD (other than those who are exempted from payment of EMD). –

(b) **Liable rejection criteria**: Non-compliance/non-acceptance to any of the terms and conditions of the tender other than following shall render the bid liable for rejection;

(i) Clause mentioned under loading criteria or terms not acceptable to firm.

Bidder to note that the shortfall information/documents shall be sought only in case of historical documents which pre-existed at the time of the tender opening i.e. submitte d along with original bid and which have not undergone change since then.

9. **PERFORMANCE SECURITY (PS)**:

(a) Performance Security for an amount equal to 5% of contract value payable in Indian Rupees shall be submitted as per GeM terms.

(b) Performance Security is to be furnished as per GeM after notification of the award of contract and it s hould remain valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligat ions of the supplier, including warranty obligations.

(c) Structural Financial Messaging System Bank Guarantee (SFMS BG) in lieu of Bank Guarantee: In case the Indigenous Bidders intends to submit Bank Guarantee towards Performance security/EMD/Advance p ayment/Free Issue Material etc, the Bank Guarantee should be e-Bank Guarantee or Structural Financial Messaging System Bank Guarantee (SFMS BG).

(i)Mandatory Requirement: Whenever a bidder submits SFMS BG, the bidder will mandatorily be required to submit letter from issuing bank that it is unable to issue NeSL(National e-Governance Service ltd) bas ed e-BG as on date. Such letter should accompany the SFMS BG.

(ii)IFSC Code: While submitting the Structural Financial Messaging System Bank Guarantee (SFMS BG). IF SC: ICIC0000393 shall be used.

(iii)Authenticity of SFMS BG: Bidder shall get SFMS BG issued from SFMS enabled Bank as allowed by MD L in tender conditions. Bank shall issue the Bank Guarantee through SFMS system and send SFMS messa ge to MDL's Bank confirming the authenticity of Bank Guarantee. Bidder will be required to submit SFMS BG along with SFMS delivery report/message copy which has been transmitted to MDL's bank by BG issu ing bank through SFMS system.

(iv)Stamp Paper/Franking Receipt: The SFMS BG will have to be given on nonjudicial stamp paper/ with f ranking receipt e-stamping as per stamp duty applicable at the place from where the bid has emanated. The nonjudicial stamp paper/ franking receipt e-stamping should be either in the name of the issuing ba nk or the bidder.
(v) Receipt of SFMS BG: The Original SFMS BG in physical form, (along with SFMS delivery Report/Messag e copy which has been transmitted by issuing Bank through SFMS system to beneficiary's i.e., MDL Bank) should reach to MDL designated office on or before due date.
(vi)Mandatory Requisite Information: SFMS BG will not be acceptable unless details of the same is trans mitted to the MDVs Bank through SFMS platform. Its
bidder's responsibility to ensure that BG issuing bank send the BG advicecorrectly in the fòrm of messag e format 760 COV vis SFMS (StructuredFinancial Messaging System) as provided by RBI while capturing all requisite fields including Beneficiary Account Name, Bank Name, Bank Account Number,IFSC Code etc .
(vii)Non-Acceptance of BG: In case of any error by the Bidder/contractor or BG issuing Bank while capturi ng the requisite field details / format or non-receipt of confirmation of BG through SFMS 760COV messag e format, the bidder/contractor shall be responsible for non-acceptance of the SFMS Bank Guarantee.
(viii)Amendment in BG: For any amendment of SFMS BG, message 767COV through SFMS should be use d.

10. **WARRANTY/GUARANTEE**:
    (a) The equipment / item along with associated auxiliaries/components supplied shall be warranted / gua ranteed for satisfactory Performance for the period of twelve (12) months post on board installation.
    (b) The Supplier cannot absolve their responsibility for warranty of material even though it is inspected b y & approved by the inspection authorities.
    (c) If the defects are not remedied within a reasonable/stipulated time, MDL may proceed to rectify the d efects at the supplier’s risk & cost, but without prejudice to MDL’s rights under the contract.
    (d) During the period of warranty / guarantee if any defect noticed in the equipment / item supplied, the s upplier/ contractor will have to rectify such defects immediately at no extra cost to MDL.

11. **PRICING**:
    (a) Prices of all items/services shall be quoted for delivery of the items/services to the following destinatio n including charges towards transportation, insurance, and other local costs incidental to the delivery of the Goods/Services.

Items/services	Delivery/Work Address
Exhaust System (Main Eq uipment)	Anik Chembur store, MDL, Mumbai
Services	Dockyard Road (Mumbai)/Nhava Yard

    (b) The prices quoted shall remain firm and fixed during the currency of the order / contract unless agree d otherwise by MDL.
    (c) **Price Variation Clause: (For Goods & Services):** Not Applicable

12. **TAXES & DUTIES**:
    (a) Bidders must clearly mention the applicable Taxes & Duties in the rate sheet enclosed in the tender. T he item-wise rates (i.e. Basic + Packing, Forwarding, Freight & Insurance) quoted in the Rate sheet s hould exclude Taxes, Cess & Duties. Bidder should indicate GST rates as applicable separately under each of the head in the same rate sheet, which will be paid extra based on tax invoice to the extent a pplicable.
    (b) Supplier / contractor will not be entitled to any increase in rate of taxes occurring during the period of extended delivery completion schedule if there is delay in supplies / completion attributed to him. Ho wever, if there is a decrease in taxes, the same must be passed on to MDL.
    (c) Income tax applicable on cost of services rendered in India in relation to the contract, shall be payabl e by bidders.
    (d) **Custom Duty** will not be reimbursed to the vendor.

13. **PAYMENT TERMS**:
    (a) Advance payment is not applicable for this tender
    (b) **Main Equipment**:
        (i) On receipt of Invoice, 95 % of Payment shall be made within 15 days of receipt & acceptance o f material and as reduced by any deductibles and / or the amount leviable towards liquidated d amages, if any plus 100% taxes, duties etc. as applicable.
        (ii) Payment of the balance of the value of the supplies/services may be payable and as reduced b y any deductibles and / or the amount leviable towards liquidated damages, if any, on submissi

on & confirmation of PS of equivalent amount valid up to warranty period plus 60 days' claim p eriod.

(c) **Services**: 100% payment for all kinds of services like STW, HAT, SAT, installation, commissioning ass istance wherever included in the same order will be admissible for payment **within 15 days** against submission of original Work Completion Certificate & SAP Service Sheet signed by CM or above of pro duction/planning dept. and ink signed invoice.
Payment will be made post completion of all services mentioned in that line item.

14. **PAYMENT MODE & REQUISITE DOCUMENTS FOR PAYMENT**:

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

(b) **Documents for Payments for Indian Bidders (Goods):**

(i) Suppliers invoice.
(ii) Confirmation of receipt and verification of Bank Guarantee for Performance security as the ca se may be.
(iii) Guarantee/Warrantee Certificate
(iv) Inspection release note (If applicable)

(c) **Documents for Payments for Services**:

(i) Set of Original + 2 Copies of signed Invoice showing item / activity wise prices as per the Con tract / Order.
(ii) SAP Service Sheet signed by CM or above of production/planning dept.

Note: Invoices should be submitted at “Receipt Section” adjacent to the ARS Punching Section, Sout h Yard MDL.

(d) **Alternate MSME vendor payment through TReDS:**

i) In order to address the financial needs of MSME firms, GoI has introduced a platform for facilitati ng the financing of trade receivables of MSMEs from buyers, through multiple financiers which is termed as Trade Receivables Discounting System (TReDS). At TReDS, auctioning of invoices at c ompetitive & transparent environment is done by financers based on Buyer’s credit profile.
ii) MDL is registered on the "Invoicemart" TReDS platform and M1xchange of M/s Mynd Solutions Pv t. Ltd.
iii) MSME bidders desirous to receive payments through TReDS platform may avail the facility if they are already registered on
a) "Invoicemart" TReDS platform or by registering on it.
Contact details at "Invoicemart" TReDS platform are as below:
022 6235 7373 and a new mail id service@invoicemart.com.
b) "M1xchange" TReDS platform or by registering on it.
Contact details at "M1xchange" TReDS platform are as below:
+91 9920455374 Ms Ashwathi Jayandran email id: ashwathi.jayandran@m1xchange.com
+91 8839915724 Ms Priyanka Shah email id prinyaka.shah@m1xchange.com

(e) **E Invoice:** Wherever GST is applicable, payment will be released against e-Invoice, or Invoice accom panied with Vendor's Self Declaration that " We do not fall under the category of registered persons n otified under GST Act,2017 and as amended time to time and we are not required to comply with e-In voicing provisions under GST Act,2017, as our aggregate turnover in any preceding financial year fro m 2017-18 onwards has not exceeded the limit as per GST Act,2017"

15. **EXCHANGE RATE VARIATION (ERV)**: **NOT APPLICABLE**

16. **MODE OF DISPATCH**: Road/Rail/Air/Sea.

17. **CONSIGNEE**:

(a) Material scheduled for delivery are to be delivered at MDL (Anik store located in Mumbai)
Note:-In order to avoid inconvenience during the delivery of material, it is advisable for supplier t o depute their representative in their own interest to coordinate the activities between the transp orter, and MDL stores.

(b) Following document should be submitted along with material:
· PO copy & subsequent amendments issued to it, if any.

- Inspection Release Note (IRN) issued by nominated inspection officer.
- Delivery Challans clearly indicating MDL Purchase Order No, Inspection Note Details and Packing List co-relating the items in the inspection report.
- Copy of Warranty Certificate, Preservation Certificate etc.
- Technical documentation, if applicable.
- E-Way bill (if applicable) details are to be submitted during the delivery of the items.

(c) Unloading of the equipment/ items will be arranged by MDL. In case of delivery of Large/ Bulky/ Heavy consignments, supplier is required to give 2 to 4 day's advance intimation to MDL clearly indicating approx. dimensions and weight of consignments for arranging fork lift/crane for unloading.

18. **WORK DONE CERTIFICATE (WDC) / COMPLETION CERTIFICATE (WCC):**

a. Work Completion certificate (WCC) (Service sheet in SAP) shall be issued on Satisfactory completion of respective work with inspection and acceptance reports. Agency responsible to issue WCC shall be Planning/user dept. (Chief manager & above).

b. The WDC shall include cumulative statement of work carried out till last WDC. The necessary service entry shall be made in SAP system by the WDC certifying authority & will be submitted to/collected by the contractor for further invoicing. The WDC shall bear relevant Service Entry Sheet No., PO No. and respective item Sr. No., sub service line item of the PO.

c. The WDC must clearly mention the mutually agreed completion schedule and actual work done schedule for start date & end date.

d. In case of delays, the duration along with numbers of delayed days shall be specified in respective WDCs to invoke LD clause and effect recoveries from sub contractor's invoice. LD to be clearly mentioned in the WDC

19. **INSPECTION & TESTING**:
For Goods:

It shall be as per SOTR. Other general conditions related to inspection of material are as under:

(a) The decision of the Inspecting Authority or their representatives, as the case may be, on any question of the intent, meaning and the scope of Specifications / Standards shall be final, conclusive and binding on the Bidder/ Supplier / Contractor.

(b) **Pre-Dispatch Inspection: Below is the details of MDL appointed TPIA:**

- Supplier Name: M/s RINA India Pvt Ltd, Mumbai
- Address: B-607-608 Everest Chambers, Marol, Andheri-Kurla Road, Andheri East - 400 059, MUMBAI - INDIA
- Contact Details of Project Coordinator for execution part:

Name: Mr. Raj Vinod Vaidya, MS, PMP
Designation: Project Coordinator
Email: raj.vaidya@rina.org
Mobile: +91 9137655906

(c) **Third Party Inspection (TPI) charges shall be borne by MDL & CGRPT.**

(d) The testing charges for samples (if applicable) should be borne by the supplier and this should be made clear at the enquiry stage itself to avoid claims at a later date/or effect on his position in comparative statement of offers. Any special testing involving financial implications shall be settled prior to placement of the order and such cost should form part of the evaluation.

(e) **Receipt Inspection: MDL and CGRPT** shall jointly carry out necessary inspection of the items **in the presence of OEM (if required)** on receipt in the MDL premises on the basis of appropriate Inspection system requirements & the Inspection documents submitted by suppliers. Any objection raised by MDL inspection team against quality of material or workmanship shall be satisfactorily corrected by the supplier at his expenses including replacement as may be required within shortest possible time within 30 days. Items damaged during transit shall also be rectified or replaced by the supplier within shortest possible time. Please refer SOTR for details.

(f) **Rejection of the material:** Any portion of the equipment found defective/rejected, the supplier shall collect the same at his cost from the MDL Yard, all incidental charges being born by supplier, (inclusive of custom duty, if payable), within 30 days from the date of intimation to the supplier of such rejection. The MDL reserves the rights to dispose-off the rejected item at the end of a total period of 90 days in any manner, to the best advantage to the MDL & recover storage charges & any consequential damages, from sale proceeds of such disposal.

For Services:

(a) The MDL / Vessel owner shall have at all reasonable time access to the contractor's premises and shall have the power at all reasonable time to inspect, examine and test the materials and workmanship of the work during its manufacture there and if a part of the work is being manufactured on other premises, the contractor shall obtain permission for MDL / Vessel owner to inspect as if the work was being manufactured on contractor's own premises.

(b) Only such work will be accepted and paid for as MDL / Vessel owner may certify to be strictly in accordance with the contract.

(c) MDL on giving seven days' notice in writing to the contractor setting out any ground of objections which may have in respect of the work shall be at liberty to reject all or any materials of workmanship, the subject of any of the said grounds of objection which are not in accordance with the contract.

(d) In all cases where the contract provides for tests whether at the premises of the contractor or any sub-contractor or elsewhere the contractor except where otherwise specified shall provide free of charges such labour, materials, electricity, fuel, water, stores, apparatus and instruments as may reasonably be demanded, to carry out efficiently such tests of the work in accordance with the contract and shall at all-time facilitate the MDL / Vessel owner to accomplish such testing.

(e) The cost of all tests and/or analysis effected at the contractor's or sub-contractor's work and on the site shall be borne by the contractor. The cost of independent test and/or analysis which MDL / Vessel owner may cause to be made and which prove satisfactory will be borne by the Employer but the contractor will be called upon to pay all expenses incurred by the Employer in respect of any work found to be defective or of inferior quality, adulterated or otherwise unacceptable.

(f) The contractor shall give MDL / Vessel owner, such reasonable notice of the progress of work (and in particular of any work being made ready for shipment or transportation) as will permit inspection, examination and testing and no work shall be painted or prepared for shipment or transportation as the case may be without the consent of the MDL / Vessel owner until the same has been passed by MDL / Vessel owner as being ready for shipment or transportation but no such passing or consent shall relieve the contractor from the liability to complete the contract works in accordance with the contract.

20. **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 with tender documents. IP shall be submitted on plain paper.

    The 'Integrity pact' dully filled as per enclosed format 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:

    Commercial - CGP,
    5th Floor, Service Block,
    Mazagon Dock Shipbuilders Ltd,
    Dockyard Road,
    Mumbai-400010.

    (i) 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.

21. **BOOK EXAMINATION CLAUSE**: 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 re

lating to Agents/Agency Commission and penalty for use of undue influence, the supplier, on a specific re quest of MDL shall provide necessary information/inspection of the relevant financial documents/informati on.

22. **PROGRESS MONITORING & REVIEW MECHANISM:** The required dates are indicated in tender. On pla cement of order a kick off meeting is to be held in MDL to chalk out the sequence and priority of the activi ties and the deliverables in line with the prevailing construction status of the ship. In this meeting, a progr ess monitoring team shall be constituted comprising vendor's representative engineer, MDL's executives (one each from Planning, Design and Ship Manager). This team shall carry out periodic reviews (initially q uarterly followed by monthly reviews) to decide and chalk out the detailed sequence and priority of the co mpletion of work and deliverables. The vendor would have to adhere to the recommendations and decisio ns of the said team while executing the work.

23. **HINDRANCE REGISTER**: All hindrances with date of occurrences and removal shall be noted in the Hindr ance Register. The Hindrance Register shall document reasons for the delay vis-à-vis the mutually agreed schedule. All hindrances such as delay in MDL Inputs (Drawings/Material/Documents/Services/ Inspection call), delay by TPI/Inspection Agency/Customer(Navy), delay on account of specialist services, non-perfor mance by the contractor, delinquency by the vendor, force majeure or any other relevant reason shall be recorded. The Hindrance Register shall be signed by the reps. of both MDL as well as Contractor. Executiv e in the rank of Chief Manager and above shall be the nodal executive of the User Department.

24. **PUBLIC GRIEVANCE CELL**: A public grievance cell headed by Shri R. R. Kumar, ED (EY) has been set up in the company. Members of public having complaints or grievances are advised to contact above Authorit ies on Wednesday between 10.00 hours and 12.30 hours in his office at 3rd Floor, West Block, Mazagon D ock Shipbuilders Ltd or send their complaints / grievances to him in writing for redressal. Telephone No. is 022-23763512(MDL).

25. **WORKING ON MDL HOLIDAYS:** Intimation for working on Saturday / Sunday / holidays if required, shou ld be submitted 2 working days prior to the date of holiday indicating names of personnel to Personnel De partment and Security through concerned Department.

26. **NON-DISCLOSURE AGREEMENT: Not Applicable**

27. **BREACH OF OBLIGATION:** In case of breach of any obligation mentioned under, the bidder shall be disq ualified / 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 t he period of bid validity.

28. **WORKMEN SAFETY AND INSURANCE:** The service provider shall alone be fully responsible for safety a nd security and insurance or life insurance of their personnel who is working on the operation and mainten ance works. The service providers shall take out and maintain, and shall cause any Subcontractors to take out and maintain, at their (or the Subcontractors', as the case may be) own cost but on terms and conditi ons approved by the MDL, insurance against the risks, and for the coverage, as shall be specified in the **S CC;** and at the MDL's request, the service providers shall provide evidence to the MDL showing that such i nsurance has been taken out and maintained and that the current premiums have been paid. The service provider shall provide and ensure sufficient protection gears like safety shoes, hand gloves, ladders, etc. a re being used by their workers while carrying out works. The MDL shall not be liable for any compensation in case of any fatal injury/death caused to or by any man power while performing/discharging their duties/ for inspection or otherwise.

29. **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 a nother tender for the same or similar Goods/Services at any time before the award of the contract. It woul d have no liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidd ers of the grounds for such action(s).

30. **CANCELLATION OF PROCUREMENT PROCESS/ REJECTION OF ALL BIDS/RE-TENDER:** If competitio n is lacking, then in such cases lack of competition shall not be determined solely on the basis of the num ber of Bidders. Even when only one Bid is submitted, the process may be considered valid provided followi ng conditions are satisfied:
    a) The procurement was satisfactorily advertised and sufficient time was given for submission of bid s.

b) The qualification criteria were not unduly restrictive; and
c) Prices are reasonable in comparison to market values

The decision to cancel the procurement and reasons for such a decision shall be communicated to all bidders that participated in the procurement process. During Re-tendering, all participated bidders of earlier tender shall be informed**.**

31. **CONFLICT OF INTEREST AMONG BIDDERS/ AGENTS:** A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of MDL's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:
(i) they have controlling partner (s) in common; or
(ii) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
(iii) they have the same legal representative/agent for purposes of this bid; or
(iv) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or
(v) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid.
(vi) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid from the following:
1. The principal manufacturer directly or through one Indian agent on his behalf; and
2. Indian/foreign agent on behalf of only one principal.
(vii) Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid;
(viii) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business
Note: The undertaking by the bidders for above para (Conflict of Interest among Bidders/ Agents) shall be submitted/uploaded along with Part I bid.

32. **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.

33. **Limitation of Liability:**
(a) **Cap on Liability**: The total liability of the Vendor/Supplier, whether in contract, tort (including negligence), or otherwise, shall not exceed **100% of the total contract value.**

(b) **Exclusion of Certain Damages:** To the fullest extent permitted by applicable law, neither party shall be liable to the other for any indirect, incidental, consequential, special, punitive or exemplary damages, including but not limited to loss of Profits, loss of business opportunity, unused production, loss of product, damage to reputation, arising out or in connection with this agreement, whether in contract or tort (including negligence), strict liability, or otherwise.

(c) **Exclusions from Cap on Liability:** The cap on liability shall not apply to:

i. Liability arising from wilful misconduct, gross negligence, or fraud by the Vendor/Supplier.

ii. Breach of confidentiality obligations or infringement of intellectual property rights.

iii. Indemnity obligations for third-party claims.

iv. Non-compliance with applicable laws, regulations, or statutory obligations.

v. Liquidated Damages expressly agreed upon by the parties. Breach of obligations of Integrity Pact (IP).

vi. Any other liability that cannot be limited or excluded under Applicable Law.

vii. **Mutuality:** The liability cap shall apply mutually to both parties unless otherwise agreed in writing.

34. **REVERSE AUCTION:**

a) MDL reserves the right to extend, reschedule, postpone, suspend/pause, resume and extend the Reverse Auction, or cancel the Reverse Auction process at any time, before ordering, without assigning any reason, with intimation to bidders.
b) If the lowest price received during ERA is unreasonable or it is unacceptable on ground of being too high when compared with estimated price, MDL reserves the right to seek justification of the price from lowest bidder.
c) If the price is not considered reasonable, MDL may not accept such bid and can go for another tender process. MDL reserves the right to cancel the tender cum RA process.

35. **CONTACT DETAILS FOR QUERIES**: **All bidders are requested to get their queries, if any, clarified in advance (i.e. 7 days in advance to tender closing date) to avoid last minute delay.** In case of any clarifications regarding tender, bidders are requested to contact the following executives.

Technical :

1. Mr. Vinit S Wagh, DGM/PE(Design), Tel: 022 -23763017, emailid: vswagh@mazdock.com

2. Mr. Rohan Patil, M(Design), Tel: 022 -23763045, emailid: psbanerjee@mazdock.com

Commercial:

1. Mr. D S Chavan, DGM/PE(Commercial-CGP), Tel: 022 -23762782, emailid: dschavan@mazdock.com

2. Mr. Arindam Ghosh, DM (Commercial- CGP), Tel: 022 -23762773, emailid: aghosh@mazdock.com

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

Yours faithfully,

For MAZAGON DOCK SHIPBUILDERS LIMITED

Enclosures: -

Enclosure-1	SOTR no: DR/E/NGOPV/3040, Rev 0, dated 08.10.2026
Enclosure-2	General Conditions of Contract for Goods & Services (GCC)- **Not Applicable**

Enclosure-3	EMD Format
Enclosure-4	Integrity Pact(IP)Format
Enclosure-5	Performance Security format (PS)
Enclosure-6	RTGS format
Enclosure-7	Details for remittance towards PS
Enclosure-8	Shipping Instruction - **Not Applicable**
Enclosure-9	Letter of Credit format **- Not Applicable**
Enclosure-10	**Official Secret Act 1923**
Enclosure-11	**Contact Details of the bidder**
Enclosure-12	**Blank rate sheet**
Enclosure-13	TEF & GCC Acceptance form- **Not Applicable**
Enclosure-14	Declaration for Local Content
Enclosure 15	Actual Local Content Certificate
Enclosure 16	Non-Disclosure Format - **Not Applicable**
Enclosure 17	Annexure “C” towards compliance of Public Order on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs)
Enclosure 18	Deed of Guarantee

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7. Buyer uploaded ATC document Click here to view the file.

Disclaimer

The Additional Terms and Conditions (ATC) have been incorporated by the Buyer after approval of their Competent Authority. The Buyer ,is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any restriction arising in the bidding process due to these ATCs and including the modification of technical specifications and / or terms and conditions governing the bid.All representations / grievances pertaining to the ATC clauses shall be raised with the buyer organization directly and not with GeM.If any of the clause(s) is/are incorporated by the Buyer regarding the following, the bid & resultant contract shall be treated as null & void. Further, GeM reserves the right, at its sole discretion, to cancel the bid forthwith, without issuance of any prior notice or intimation :-

1. Publishing Custom / BOQ bids for items for which regular GeM categories are available (unless such Custom / BOQ item is bunched with the major regular product Category Item).
2. Mandating procurement of / from specific Brand / Make / Model / Manufacturer / Dealer except in case of Single Bid / Proprietary Article Certificate (PAC) Buying.
3. Inclusion of disqualification criteria related to suspension of seller / service provider, where such suspension period has already expired.
4. Mandating submission of documents (other than EMD and signed Integrity Pact - which can be submitted within 5 days of bid opening) in physical form as a pre-requisite to qualify bidders.
5. Publishing bids on GeM for procurement of works.

6. Procurement of Goods by creating a Service bid on GeM & vice-versa.
7. Seeking sample with bid or approval of samples during bid evaluation process. However, trial / sample, as the case may be, shall be permitted in cases where trial / sample are allowed as per approved and published procurement policy of the Buyers' controlling Ministry / Department / State / Public Sector Enterprises Headquarters. If there is any violation of trial / sample clause with regard to approved policy of the Buyers' Ministry / Department / State / Public Sector Enterprises Headquarters, then this is to be determined and redressed by the concerned Buyer Organisation only.
8. Seeking experience from specific organization / department / institute only or from foreign / export experience.
9. Creating bid for items from incorrect categories.
10. Reference of conditions published on any external site or reference to external documents/clauses.
11. Asking for any Tender fee / Bid Participation fee, as the case may be.
12. Buyer added ATC Clauses which are in contravention of clauses defined in bid detail section, including specifications, EMD Detail, ePBG Detail and MII and MSE Purchase Preference sections of the bid, unless otherwise allowed by the applicable GeM GTC.
13. Any ATC clause in contravention with GeM GTC Clause 4 (xiii) (h) will be invalid. In case of multiple L1 bidders against a service bid, the buyer shall place the Contract by selection of a bidder amongst the L-1 bidders through a Random Algorithm executed by GeM system.
14. In a category based bid, adding additional items, through buyer added, additional scope of work/ additional terms and conditions/or any other document. If buyer needs more items along with the main item, the same must be added through bunching category based items or by bunching custom catalogues or bunching a BoQ with the main category based item, the same must not be done through ATC or Scope of Work.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

*This document shall overwrite all previous versions of Bid Specific Additional Terms and Conditions.

This Bid is also governed by the General Terms and Conditions

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Your corrigendum has been published successfully.

Bid Number: GEM/2026/B/8194510

Bid Status: Active
Quantity: 102
Bid Validity (From End Date): 180 (Days)
Competent Authority Document: View

Bid Start Date / Time: 29-10-2026 10:25:38
Bid End Date / Time: 26-11-2026 14:00:00
Bid Opening Date / Time: 27-11-2026 14:00:00

Consignees / Reporting Officer / Delivery Location(S)
EMD: Required Track EMD

Buyer Details

Name: Arindam Ghosh
Address: Arindam Ghosh,Aghosh@Mazdock.Com,MAZAGON DOCK SHIPBUILDERS LIMITED, DOCKYARD ROAD, MUMBAI - 400010,Mumbai,MAHARASHTRA,400010,India,022-23762772-

Ministry: Ministry Of Defence
Department: Department Of Defence Production

Organisation: Mazagon Dock Shipbuilders Limited
Office: Mumbai

Corrigendum Details

Modified On: 2026-11-17 10:05:15

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Hash Value (Algorithm - SHA256):
58caee470e3a8a11f9fff7277e2b107891c7901278b8662e11caa3b2513c2bfa

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Bid extended to **2026-11-26 14:00:00**

Bid Opening Date : **2026-11-27 14:00:00**

Cancel Bid | Extend Bid | Edit Terms | Edit Pre Bid

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