



CORRIGENDUM – 4 TO TENDER NOTICE

UNDERTAKING TURNKEY-BASED REPAIR WORK OF THE VESSEL

RV SAMUDRA SHAUDHIKAMA

Tender No. CSL/SRP/280/2025 dated 14.06.2025

1. Subsequent to the pre bid meeting (online) held on 23.06.2025, 1630 hrs, reply to the queries raised by the vendors who have participated in the meeting is placed at annexure II.
2. Also certain amendments/inclusions have been made in tender and the same is placed at annexure I.
3. Further, the rate format has also been amended by including an additional column for indicating total of each line item and also amending the scope for supply of materials/spares. Amended rate format is placed at annexure III. The bidders should submit price bid in the amended rate format.
4. All other terms and conditions and scope of services shall remain unchanged.

Thanking You,

For Cochin Shipyard Ltd.

Asst. General Manager (SRP)



Amendments/inclusions to the tender

SL No	Tender reference	Tender condition/reference	Amendment/inclusion
1	H – Terms and conditions of the contract	NA	<u>Inclusion</u> – All pipes that are included in the scope of work should be arranged by the contractor
2	H – Terms and conditions of the contract	NA	<u>Inclusion</u> – Tanks for storage of fuel oil shall be arranged by CSL.
3	R 1 – Performance guarantee	The complete work carried out by the contractor shall be guaranteed against performance of work and/or poor workmanship for a period of one year from the date of completion of work. Any damage or failure due to defects in execution of the work for a period of 12 months from the date of completion of work, should such damage or failure occur within the guarantee period, the contractor shall rectify/rework the defect as applicable without any extra expenditure to CSL and such repaired work shall be guaranteed for a further period of one year from the date of repair	<u>Amendment read as</u> - The complete work carried out by the contractor shall be guaranteed against <u>performance of work/ poor workmanship, material defects on repaired items for 06 months from the date of completion of work and new installations if any for 12 months.</u> <u>Any damage or failure due to defects in execution of the work for a period of 06 months for poor workmanship, material defects on repaired items and 12 months for new installations from the date of completion of work, should such damage or failure occur within the guarantee period, the contractor shall rectify/rework the defect as applicable without any extra expenditure to CSL.</u>
4	R 3 – Performance guarantee	PBG will be returned to the Contractor after one year from the date of completion of work on certification of nil liability to CSL by Officer-in charge.	PBG will be returned to the Contractor after six months from the date of completion of work on certification of nil liability to CSL by Officer-in charge. In case if there is any new installation, then the PBG shall be returned only after 01 year.



5	G 1 – Schedule of the project	The duration of the project is 30 days	<u>Read as</u> – Duration of the project is 30 days out of which 25 days shall be in dock and 05 days aloft
6	U 1 – Liquidated damages	In the event that the firm does not perform in accordance with the contract, including any delay in completion of work within the agreed schedule of 30 days due to reasons solely attributable to the firm & not on account of CSL, then CSL shall be entitled to charge Liquidated Damages @ 0.5% of the contract value for delay of each week or part thereof subject to a maximum of 10% of contract value in non-achieving the schedules of work unless such delay is duly approved by CSL	In the event that the firm does not perform in accordance with the contract, including any delay in completion of work within the agreed schedule of 30 days due to reasons solely attributable to the firm & not on account of CSL, then CSL shall be entitled to charge Liquidated Damages at the rate of Rs. 4,49,892.00 (Rupees Four Lakhs Forty Nine Thousand Eight Hundred and Ninety Two) per day subject to a maximum of 10% of contract value in non-achieving the schedules of work unless such delay is duly approved by CSL
5	Clause J – Payment terms	<p>Payment shall be as stage payments as follows:</p> <p>a) 50% of contract value after deducting deleted scope of work, if any after undocking of the vessel.</p> <p>b) 40% of contract value after deducting deleted scope of work, if any upon completion of all works and receipt of WCC from ship.</p> <p>c) Balance payment including that of additional works, if any after settlement of invoice with ship owner</p>	<p>Payment terms is revised as follows:</p> <p>(i) 10% of contract value on refit commencement subject to submission of bank guarantee for equal amount. BG shall be returned after completion of refit works (receipt of WCC from owner).</p> <p>(ii) 40% of contract value after deducting deleted scope of work, if any after undocking of the vessel.</p> <p>(iii) 40% of contract value after deducting deleted scope of work, if any upon completion of all works and receipt of WCC from ship</p> <p>(iv) Balance payment including that of additional works, if any after settlement of invoice with ship owner</p>
6	Annexure V – Rate format (also detailed scope of work)	Materials/spares referred as yard/shipyard supply	<u>Amendment - Read as</u> – All materials/spares should be supplied by the contractor. Revised rate format is placed at annexure III of corrigendum 4



CSL's reply to pre bid queries

SL no	Tender reference	Bidder suggestion/query	Clarification by CSL
1	Clause G 1 – Schedule of the project	We strongly feel that completion period of the project of 30 days is very short considering quantum of the renewal of large quantity of steel including all in way jobs, In view of the same completion period extend for a period 60 days	The schedule of completion shall be 30 days out of which 25 days shall be in dock and 05 days afloat. No extension is possible.
2	Clause H 36 – Terms and conditions of the contract	As per tender notice Sr. No. 36 the Guarantee for workmanship and Material defects is six months however as para (R) performance guarantee BG to be submitted for a period of 12 months. Which needs to be amended to 6 months	After 06 months from the date of completion work or one year after installation of new equipment's if any, whichever is later based on certification by officer in charge. Please refer annexure 1 of corrigendum 4.
3	NA	The tender submission date may be extended for a period of 20 days from the date of pre-bid meeting to obtain the quote from the OEM / PAC Firms	Tender submission date has been extended till 30 th June 2025. Please refer corrigendum 3 dated 24.06.2025
4	Clause J – Payment terms	Request for Revision in Payment Terms & Conditions, We propose 20 percent, after submission of QAP and bar chart, with refit commencement, 30 percent after docking within 7 working days 40 percent undocking , 10 percent after cast off or successful Soti	Payment terms is revised as follows: a) 10% of contract value on refit commencement subject to submission of bank guarantee for equal amount. BG shall be returned after completion of refit works (receipt of WCC from owner). b) 40% of contract value after deducting deleted scope of work, if any after undocking of the vessel. c) 40% of contract value after deducting deleted scope of work, if any upon completion of all works and receipt of WCC from ship d) Balance payment including that of additional works, if

			any after settlement of invoice with ship owner
5	Clause H - Terms and conditions of the contract	Kindly confirm whether scaffolding will be provided by CSL or arranged through a contractor	Scaffolding materials and manpower for scaffolding should be arranged by the contractor. Please refer clause H – 8 of the tender in this regard.
6	D25003.2 of rate format – Annexure V	To arrange labour for shifting of stores/spares/equipment's from vessel to facilitate repair and place back on board after repair all-inclusive basis. Estimated qty to be removed is 08 tons Provide the list of items to be shifted	Quantity as mentioned in the tender is 8 ton. Nature of items shall be such as paint drums, ropes etc. The bidders may visit the ship for ascertaining the exact scope
7	D25004.1 of rate format – Annexure V	All external surfaces of the Hull to be cleaned with High pressure Fresh Water jets to remove all the fouling and salt deposits at a pressure. Approx. surface area is 570 Sq Mtrs. Payable as actual as prorated on prorated basis. Specify the pressure required	Pressure rating should range from 200 to 500 Bar.
8	D25005.21 of rate format – Annexure V	Before painting jobs on ship hull 15 No. Half round scuppers to be welded on port and stbd. Specify the Size of Scupper.	Maximum up to 100 NB The bidders may visit the ship for ascertaining the exact scope
9	D25005.22 of rate format – Annexure V	Approx 02 nos damaged big air craft type fender to be renewed including CHAIN securing pads to be bolted with inside locking plate with eye. 8mm plate Fender Supply Yard or CSL & Mention the size.	Fender should be supplied by the contractor. The bidders may visit the ship for ascertaining the size of fender
10	D25006.5 of rate format – Annexure V	RENEWAL of accommodation insulation. Approx area 100 sq mtrs. (Fire proof insulation). Material: yard supply. Insulation Material Supply Yard or CSL.	All materials/spares mentioned as yard supply shall be under the contractor's scope. Please refer annexure I of corrigendum 4



11	D25006.7 of rate format – Annexure V	Renewal of accommodation floor vinyl flooring. Approx area 350 sq mtrs. Material: yard supply. Location to be discuss with attd supdt prior to work. Material Supply Yard or CSL.	All materials/spares mentioned as yard supply shall be under the contractor's scope. Please refer annexure 1 of corrigendum 4
12	D25007.1 of rate format – Annexure V	Monkey deck Stbd side-Hydrography winch operating console pulleys and operating frame from boat deck stbd side to be cropped and removed. Specify the size.	The bidders may visit the ship for ascertaining the exact scope
13	D25007.9 of rate format – Annexure V	Boat deck -aft HIAB crane operating chair to be renewed with small suitable tent same required during sunlight. Specify the size.	The bidders may visit the ship for ascertaining the exact scope
14	D25009.7 of rate format – Annexure V	Roller bits 02 nos for vibrocorer lowering to sea and hoisting on deck need to be serviced size: dia-100mm length-1000mm. Modification required each end of rollers for avoiding entangling of vibro corer stay wire. 06 Inches length steel rod to be welded in slanted position(as per ship staff instruction on each end of roller. Total 04 positions. Mention the Dia of rod	The bidders may visit the ship for ascertaining the exact scope
15	D25009.8 of rate format – Annexure V	Main deck port and stbd and aft vibro corer area wooden gratings - damaged portion to be renewed (Yard supply). Approx size: 04 MTRS x04 MTRS Material Supply Yard or CSL.	All materials/spares mentioned as yard supply shall be under the contractor's scope. Please refer annexure 1 of corrigendum 4
16	D55010.2 of rate format – Annexure V	02 No. Fresh water tank gate valves 65 mm Dia to be overhauled and fitted back. Consider renewal of One no. Gate valve (yard supply). Material Supply Yard or CSL.	All materials/spares mentioned as yard supply shall be under the contractor's scope. Please refer annexure 1 of corrigendum 4
17	D55010.4 of rate format – Annexure V	Anchor chain bitter end cover - 2 NOS Specify the size.	The bidders may visit the ship for ascertaining the exact scope



18	D25019.8 of rate format – Annexure V	Wooden stands for keeping MS barrels 05 no's (03small & 2 big) to renew Specify the size.	Height: 620mm; Width: 300 mm; Thickness: 100 mm, Groove height : 120 mm ; Groove width : 100 mm, Material : Teak wood. All wooden stands are identical & similar size. Wood material & fitment in frame shall be contractors scope.
19	D25020.1 of rate format – Annexure V	New heavy duty Pilot chair to be fabricated for bridge. Specify the size.	The bidders may visit the ship for ascertaining the exact scope
20	D25020.6 of rate format – Annexure V	Scientists cabin wall paper damaged same to be renewed (Approx area: 50 sqm) Specify the Material.	The bidders may visit the ship for ascertaining the exact scope
21	D25020.8 of rate format – Annexure V	Cabin door locks with handle need to be changed- Total 5 Nos. (Chief Scientist cabin No.10 Mess room Cabin No.5 Cabin No.3). Specify the Material.	The material of cabin door locks is Stainless Steel
22	D25020.9 of rate format – Annexure V	Cabins NO 17 and 4EO cabin cupboard door not closing properly to be repaired and wash basin soap tray to be renewed. Specify the Door Material.	The material of cabin cupboard door is Wood/Plywood
23	D25020.10 of rate format – Annexure V	Crew toilet stbd side bidet shower pipe clamps 1 No damaged soap holder 1 No and cloth hanger-2 Nos to be installed. Specify the Material.	The material of bidet shower pipe clamps, soap holder and cloth hanger is Stainless Steel 304 grade
24	D25020.11 of rate format – Annexure V	02 NOS Toilet European system full set need to be renewed (01 in officers' toilet & 01 in Ladies toilet) Specify the Material.	Standard EWc of reputed brand such as Cera/Jaquar with seat cover
25	D25020.12 of rate format – Annexure V	4 Nos Self door closing arrangements to be changed (Chart room Chief off cabin officers' recreation room mess room). Specify the Material.	The bidders may visit the ship for ascertaining the exact scope



26	E25001.7 of rate format – Annexure V	Arrangement to be made for 10kl (approx) of ISHF HSD grade FO transfer to shore storage tank from ship bunker tank & kept till completion of dry dock job. same to transfer to ship bunker tank after completion of dry dock job. Tank Provision Yard or CSL	Shall be under CSL scope Please refer annexure I of corrigendum 4
27	E25003.11 of rate format – Annexure V	SME exhaust leakage from uptake pipe inside funnel to be rectified. Job involves removal and refit of funnel flaps removal and refit of exhaust lagging approx 5m2. New lagging to be provided. Pipe dia:8" Specify the Material.	The bidders may visit the ship for ascertaining the exact scope
28	E25017.4 of rate format – Annexure V	Rudder bushes condition to be checked if required same to be renewed (Bush to be arranged by ship yard) Specify the type of Bush.	The bidders may visit the ship for ascertaining the exact scope All materials/spares mentioned as yard supply/shipyard shall be under the contractor's scope. Please refer annexure I of corrigendum 4
29	E25019.3 of rate format – Annexure V	Both tail shafts' couplings to overhaul worn out parts to renew. Material Supply Yard or CSL.	All materials/spares mentioned as yard supply shall be under the contractor's scope. Please refer annexure I of corrigendum 4
30	Z.16 – General conditions	The firm should not subcontract the work as part of the work to any other agency if awarded the contract. An undertaking as per annexure III to be submitted along with the technical bid. Is it possible for us to involve subcontractors and OEM	The successful bidder may engage OEM and other authorized agencies to service the equipment's as necessary. However subcontracting of scope of work is not permitted
31	D 2 - Prequalification criteria of the firm	We understand that one of the eligibility criteria includes an average annual financial turnover of ₹2 Crore. While we may not meet the average turnover over the specified period, we would like to respectfully submit that our annual turnover for the financial year 2024–2025 stands at ₹2.20 Crore, and we are on a consistent growth path	No change in prequalification criteria is possible. Tender criteria shall prevail



Rate format

SL No	Description of work	Location	Unit of measurement	Quantity (A)	Rate per unit before GST (B)	Total before GST C = A X B	GST %
	Deck defects						
	<u>Stores/ spares shifting ;</u>						
D25003. 1	To arrange two nos 20 feet containers with lighting and locking arrangement to keep ships stores (deck & engine) and degutting items /dry dock paints.	DECK	NOS	2			
D25003. 2	To arrange labour for shifting of stores/spares/equipment's from vessel to facilitate repair and place back on board after repair all inclusive basis. Estimated qty to be removed is 08 tons	DECK	TON	8			
D25003. 3	All ventilation intakes on the main deck to be covered prior grit blasting and all port holes/windows to be covered before grit blasting and during painting and cleaned after completion of works.	DECK	LS	1			
	<u>Underwater hull washing</u>						
D25004. 1	All external surfaces of the Hull to be cleaned with High pressure Fresh Water jets to remove all the fouling and salt deposits at a pressure . Approx. surface area is 570 Sq Mtrs. Payable as actual as prorated on prorated basis.	DECK	SQM	570			
	Above water area 145 Sq Mtrs. (approx)						
	Under water area 425 Sq Mtrs. (approx)						

D25004. 2	Normal light scraping to be carried out on 30% of under water area mentioned in the above H.P washing.	DECK	SQM	130			
	Thickness determination						
D25004. 3	Thickness determination (UTG) hull/all decks/tanks and accommodation. As per survey scope.	DECK	NOS	5000			
D25004. 4	To carry out ultra-sonic scanning of ships hull(acoustic) at side shell deck plating interface. Location as per surveyor recommendations . Area approx.: 100mx1.0m	DECK	SQM	100			
	<u>Grit blasting and painting :</u>						
	Grit blasting to be carried out to sa 2.5 standard and edge of grit blasted areas to be smoothened back to a firm edge. Owners representative will inspect all blasted areas before application of any paint. Before painting all port hole glasses window glasses antennas nav.lights radar scanner and all other exposed items on deck etc to be properly covered and after all jobs completed everything to be kept as normal. If any damage occurs yard has to renew the things with out any extra charges						
	Painting as per painting scheme paints ship supply.						
	ABOVE WATER AREA : 50 Sq M (approx)						
D25005. 1	Grit blasting 50 sq.mtrs	DECK	M2	50			
D25005. 2	Primer coat	DECK	M2	50			
D25005. 3	WHITE 1st COAT	DECK	M2	50			
D25005. 4	Polyurethane white - 2nd coat	DECK	M2	145			
	UNDER WATER AREA : 120 SQ M (approx)						
D25005. 5	Underwater area grit blasting 120 sq m	DECK	M2	120			

D25005. 6	Primer 1 st coat	DECK	M2	120			
D25005. 7	Anticorrosive 2 nd coat	DECK	M2	120			
D25005. 8	Tie coat	DECK	M2	120			
D25005. 9	Antifouling 1 st coat	DECK	M2	120			
D25005. 10	Antifouling 2 nd coat	DECK	M2	425			
	Hull						
D25005. 11	To paint ships name in hindi & english on port and starboard bows and also on stern port of registry owners logo on funnel and imo number(port & stbd) plimsol marks draft (p & s) and draft line cutting. Consider tabular staging for work height 10 mtr x 2 mtrs approx	DECK	LS	1			
D25005. 12	To remove re-fit and seal bottom plugs 07 Nos.to carry out satisfactory vacuum test as per class requirement	DECK	NOS	7			
D25005. 13	To Renew damaged bottom plugs as required. Material: contractor supply	DECK	NOS	3			
D25005. 14	20 NOS Wasted zinc anodes to be replaced . Size: 300mmx90mmx40mm. ZINC ANODES ships supply	DECK	NOS	20			
D25005. 15	Shifting of dry dock keel blocks to facilitate painting/steel renewal etc. Apprx 5 nos.	DECK	NOS	15			
D25005. 16	Ships bottom two nos. Net cutters at fwd and aft to be sharpened . Total length - 04 mtrs.approx	DECK	MTRS	4			

D25005. 17	Port & Stbd 14 nos Tyre fenders attached with chain & shackle same to be removed & chain and shackles to be copper grid blasted / swepted & washed with fresh water. Same to be applied two coats of primer & one coat of finish black. Chain size 22 mm dia	DECK	NOS	14			
D25005. 18	Damaged "D"shackles to be renewed. Each fender have six no"s shackles. Approx - 24 nos. Size: 22 mm dia GI "D"shackles. Material: contractor supply.	DECK	NOS	24			
D25005. 19	All damaged fender chain securing pads to be bolted with inside locking plate Assume : total 15nos	DECK	NOS	15			
D25005. 20	Damaged fender to be renewed consider 10 nos used air craft tyres	DECK	NOS	10			
D25005. 21	Before painting jobs on ship hull 15 No. Half round scuppers to be welded on port and stbd.	DECK	NOS	15			
D25005. 22	Approx 02 nos damaged big air craft type fender to be renewed including CHAIN securing pads to be bolted with inside locking plate with eye . 8mm plate	DECK	NOS	2			
D25005. 23	Consider tabular staging for above works - Height 10 mtrs x 2 mtrs Approx movable type and/or cherry picker as per yard convenience. -	DECK	LS	1			
D25005. 24	Forwd and aft existing draft markings to be removed and new draft markings to be welded as per new plan(already stencilled in place with with paint).All draft marking letters and numbers available onboard ship supply. Tabular staging required-: 04 MTRS x 02 MTRS AT 04 Locations. (Letters -- ship supply)	DECK	LS	1			

	Steel renewal-hull / decks/tanks and super structure						
D25006. 1	After the docking as per UT gauging & recommended by the class surveyor thin down plate to be renewed as and where required. Quote an estimated 10 tons steel renewal. Cropping and renewal of Hull decks and super structure Steel : (Plate 6 to 10 mm thick assorted sizes) steel Gr. IS 2062 and should have approval from the IRS class. PLEASE NOTE:Cost to include staging/lighting testing charges. Material contractor supply.	DECK	TON	10			
D25006. 2	During bottom plate renewal if found any frames/grirders and longitudinal corroded / thin down to be renewed. Approx 2 Ton. Material: contractor supply. Assorted sizes.	DECK	TON	2			
D25006. 3	Removal and refitment of accommodation bottom flooring. Bottom flooring consists total five layers- Bottom 25 mm marine water proof ply + GI sheet + Rubber mat + 25 mm marine water proof ply and top covered with linoleum sheet. Approx area - 200 sq mtrs.	DECK	SQM	200			
D25006. 4	Renewal of accommodation bottom flooring. Bottom flooring consists total five layers- Bottom 25 mm marine water proof ply + GI sheet + Rubber mat + 25 mm marine water proof ply and top covered with linoleum sheet. Approx area - 100 sq mtrs. Material contractor supply All related accessories jobs in way of panelling to be included.	DECK	SQM	100			
D25006. 5	RENEWAL of accommodation insulation. Approx area 100 sq mtrs. (Fire proof insulation). Material: contractor supply.	DECK	SQM	100			

D25006. 6	Removal and refitment of accommodation bulk head panels and deck head panels. Approx area 400 sq mtrs. All related accessories jobs in way of panelling to be included.	DECK	SQM	400			
D25006. 7	Renewal of accommodation floor vinyl flooring. Approx area - 350 sq mtrs. Material: contractor supply. Location to be discuss with attd supdt prior to work.	DECK	SQM	350			
D25006. 8	Removal and refitment of accommodation bunks -06 cupboards - 06 tables - 4 Sofas - 4 tube lights - 06 and electrical power points - 10 including electrical cables - 200 rmts.	DECK	LS	1			
D25006. 9	For facilitating painting jobs of FWD AFT and mid ship draft markings tubular staging to be provide approx 4.0 mtr X 2 MTR at each location	DECK	LS	1			
	Monkey island						
D25007. 1	Monkey deck Stbd side-Hydrography winch operating console pullies and operating frame from boat deck stbd side to be cropped and removed.	DECK	LS	1			
D25007. 2	Monkey deck main mast bottom area- all cables to be covered with proper sealing fabricated with tin sheet structure. Approx Size: 1000 MM x 1000 MM.	DECK	NO	1			
D25007. 3	Monkey deck aft top AWS box corroded and wasted same to be renewed.	DECK	LS	1			
D25007. 4	Monkey deck pipe supporting U-clamps with foundation plate found damaged. 10MM rod and pipe dia 60mm	DECK	NOS	6			

D25007. 5	Guard railings bottom rod on main deck port and stbd. Sides corroded and wasted at various locations. To C/R. Approx. Size: Dia 25mm MS Rod	DECK	MTRS	10			
D25007. 6	Guard rail pipes on main deck port and stbd. Sides corroded and wasted at various locations. To C/R .Approx Size: Dia 40mm Schedule 40 pipes	DECK	MTRS	10			
D25007. 7	Boat deck aft stbd side-Old corer winch console and old cable drum to be cropped-Old corer winch console and old cable drum to be cropped and removed from place(APPROX SIZE: 1500 MM x 1000 MM x 700 MM - 01 NO 400 mmx 400 mm X 300 mm - 01 NO) and New 'L' Shape steel box to be fabricated with three layer shelf keeping stores from monkey deck.(Approx Size: 1600 MM x 2000MM x 700 mm X 4 mm - 01 NO 1600 mmx 1000 MM x 700 MM X 4 MM - 01 NO.) .	DECK	LS	1			
D25007. 8	Boat deck aft - removable type tent to be fabricated nearby corer winch joystick for day time operation(04 Nos steel pipe shoes to be welded on floor and 02mtr height 2 Inches dia steel pipe 04 Nos with welded hooks on top suitable for shoes).	DECK	LS	1			
D25007. 9	Boat deck -aft HIAB crane operating chair to be renewed with small suitable tent same required during sunlight.	DECK	LS	1			
	Maindeck						
D25008. 1	Main deck stbd side in front of chief officer cabin dented deck plate to be cropped and renewed. Approx area:1500mm X 1000mm X 8 mm.As this area is coming top of fresh water tank soon after completion of job apt	DECK	LS	1			



	or vacuum test to be shown to IRS surveyor and ship staff.						
D25008. 2	Main deck stbd side entrance wooden in deck stbd side wooden door to accommodation to be renewed with new one (Approx Size:1800mm X 800mm).Door to be fabricated with round viewing glass.	DECK	NO	1			
D25008. 3	06 No. Scuppers choked same to be cleared. Scupper mouth 4" screen plate Drain pipe: 10 mtr long (3" dia MS SCH 40) including bend - .	DECK	NOS	6			
D25008. 4	Main deck Fwd 02 no MULTI ANGLE FAIRLEAD assembly to be serviced and make it free.	DECK	NOS	2			
D25008. 5	Fire line on maindeck to be properly chipped. Fire line to be renewed flange to flange DAI 2.0 " - 10 MTR MS SCH 80 - FLANGE size:OD 120 MM THICKNESS 12 MM - 05 NOS	DECK	MTRS	10			
D25008. 6	MAIN DECK CONTAINER W/T DOOR both side accommodation entrance door compression bar corroded and wasted to be cropped and renewed approx size: 1500 mmx65 mmx 8mm	DECK	LS	1			
	Lifting appliances:						
	The following to be Annual inspection to be carried out by competent person and same to be Endorsed in Ships Chain Register.						
D25009. 1	1) hiab crane swl -02 tons	DECK	NO	1			
D25009. 2	2) A Frame with its accessories/construction SWL-5 Tons	DECK	NO	1			
D25009. 3	3) Single Sheave block with bow shackle SWL - 5 Tons	DECK	NOS	3			

D25009. 4	Three nos survey blocks to be overhauled.(5T cap - 2 nos & 2.5 T cap - 1 no.) Location - 2 nos fitted on "A frame and 1 no. Spare in sediment container.	DECK	NOS	3			
D25009. 5	Corer winch hydrographic winch & HIAB crane wires to be inspected wrp to be applied. Approx. Size: 220 mtrs long x 18 mm dia.(One side connected to drum and other side thimble spliced) Wire End to End to be changed.	DECK	LS	1			
D25009. 6	Before grit blasting Rescue boat - 1 and 04 nos life raft to be shifted to ashore and kept covered in safe location after the completion of all deck repairs and painting same to be fitted back on vessel in same location .	DECK	LS	1			
D25009. 7	Roller bits 02 nos for vibrocorer lowering to sea and hoisting on deck need to be serviced size: dia-100mm length-1000mm . Modification required each end of rollers for avoiding entangling of vibro corer stay wire. 06 Inches length steel rod to be welded in slanted position(as per ship staff instruction)on each end of roller. Total 04 positions.	DECK	NOS	4			
D25009. 8	Main deck port and stbd and aft vibro corer area wooden gratings - damaged portion to be renewed (Contractor supply).Approx size: 04 MTRS x04 MTRS	DECK	SQM	16			
D25009. 9	Below deck accommodation wash basin line chocked in various cabins same to be cleared. Pipe to be renewed with flange to flange 2.5" DIA X 15 MTR -	DECK	MTR	15			
	Load line items						



D25010. 1	<p>Air vent hoods 08 No. To be dismantled wire mesh to be renewed with SS mesh (contractor supply). Float and guard plates cleaning to be done.</p> <p>Fuel tanks 04 No. Size: 90mm dia OD SCH 80 700mm long each. SS wire mesh: 180 mm x 150 mm - 08 sets.</p> <p>FW tanks 02 No. Size: 70 mm dia OD SCH 80 700 mm long each. SS wire mesh: 190mm x 150 mm - 04 sets.</p> <p>01 No. Each Sludge tank and Harbour Generator mushroom Air vent: 60mm dia OD 700 mm long each. SS wire mesh: 150mm x 130mm - 04 sets.</p> <p>Damaged hoods to be repaired (02 sets). Approx. Area -01 SQM x 4mm thick MS Plate.</p>	DECK	NOS	8			
D55010. 2	02 No. Fresh water tank gate valves 65 mm dia to be overhauled and fitted back. Consider renewal of One no. Gate valve (contractor supply).	DECK	NOS	2			
D25010. 3	24 No. Port holes and deadlight covers rubber packing to be renewed. Above main deck port holes chalk tested & below main deck port holes to be hose tested. Rubber packing size 10mm x 10mm x 20 MTR approx. (Contractor supply). Appropriate locking arrangements for cover should be provided inside the cabins by cleats/ butterfly nuts. Before hose testing side shell port holes compression lips to be properly chipped/scrapped and if any damage to the lips same to be repaired/renewed.	DECK	NOS	24			
	<p>The following weather tight doors and booby hatch covers to be checked for proper closing. Rubber packing to be renewed(Ship supply-available at monkey deck store) . Approx size of rubber bedding: Breadth-40mm Thickness-25mm.If any channels and compression bars corroded and wasted to be cropped and renewed.</p>						



D25010. 4	E/R-01No. Size-1440mm x 650mm	DECK	NO	1			
D25010. 4.1	W/Shop-01no.Size-2050mm x 850mm.	DECK	NO	1			
D25010. 4.2	Accommodation 03 nos-Size-1700mm x 740 mm	DECK	NOS	3			
D250104 .3	Booby hatch to forepeak void space-Dia-660mm.	DECK	NO	1			
D25010. 4.4	Emergency escape from steering compartment-Size-290mm x 190mm.	DECK	NO	1			
D25010. 4.5	Emergency escape from fwd accommodation area to fore castle deck-Size-550mm x 750mm.	DECK	NO	1			
D25010. 4.6	Galley exhaust-Size-420mm x 420mm.	DECK	NO	1			
D25010. 4.7	Ventilation of blower-Size-2100mm x 1100mm.	DECK	NO	1			
D25010. 4.8	One No. Electrical junction box door. Size-2000mm x 820 mm	DECK	NO	1			
D25010. 4.9	Steering flat entrance door size - 700mm x 650mm	DECK	NO	1			
D25010. 4.10	02 No. Harbour Generator doors size - 2050mm x 1100mm	DECK	NOS	2			
D25010. 4.11	BT compartment door size - 1800mm x 720mm	DECK	NO	1			
D25010. 4.12	BT bobby hatch door 1000mm x 900mm	DECK	NO	1			
D25010. 4.13	BT compartment door size - 1800mm x 720mm	DECK	NO	1			
D25010. 4.14	BT bobby hatch door 1000mm x 900mm	DECK	NO	1			
D25010. 4.15	Anchor chain bitter end cover - 2 NOS	DECK	NOS	2			

D25010. 5	Total 14 No. Port Hole dead light covers (square type) on Main deck and Boat deck to be made free and top and bottom securing butter fly nuts to be provided (Material - Contractor supply). Consider renewal of 01 No. Approx. Size of cover: 300mm x 300mm (Thickness: 06mm).	DECK	NOS	14			
	Painting jobs (all paints ship supply) -						
	Painting jobs (all paints ship supply)						
	A "frame"						
D25011. 1	"A" frame body and top railings to be spot chipped wire brushed washed thoroughly and painted with two coats of primer and two coats of finish paint. 48 No. Rungs fitted on "A" frame with safe guard to be thoroughly chipped washed and touched up with two coats of primer and applied overall with two coats of finish paint. Total Area 30 sq.meter. This job involves 12 mtrs x 2 mtrs height of tabular staging.	DECK	SQM	30			
	Hiab crane						
D25011. 2	Hiab Crane on Nav deck: To be thoroughly washed and applied with one coat of finish paint. tubular staging to be provided if required .2 mtrs x 2 mtrs height of tabular staging.	DECK	SQM	20			
	Rescue boat davit						
D25011. 3	Rescue boat davit to be throughly washed and applied with one coat of Grey paint. This job involves 5 mtrs x 2 mtrs height of tabular staging.	DECK	SQM	10			
	Monkey deck						

D25011. 4	Monkey island deck to be thoroughly cleaned copper grit blasted/swept washed with fresh water. 02 coats of primer & 01 coat of deck green paint to be applied. Approx. Area: 90 SQM	DECK	SQM	90			
D25011. 5	Monkey island Main Mast and stay pipes/radar platform to be cleaned and washed with FW and painted with one overall coat of finish paint.	DECK	SQM	90			
D25011. 6	Monkey island awning railings with vertical support pipes to be thoroughly cleaned and applied with one coat of blue paint approx 50 RMT of 50mm dia pipe. Work including top cover to be removed and fit back after completion of work.	DECK	MTR	50			
D25011. 7	Monkey island deck railings to be spot chipped wire brushed thoroughly washed touched up with two coats of primer and applied with one overall coat of white /blue size: MS pipe 1" dia x 80MTR(approx) & 40mm MS pipe 40 MTR approx.	DECK	MTR	120			
	Nav deck						
D25011. 9	Nav/deck area to be cleaned & same to be applied with two coats of primer & one coat of deck green. Area - 55 sqm.	DECK	SQM	55			
D25011. 10	Steel ladders from main deck to boat deck and boat deck to Monkey Island deck to be HP water washed with FW and to be applied with two coats of primer & one coat of deck green. Area- 07 SQM - 2 No.	DECK	SQM	14			



D25011. 11	Deck head on main deck and Nav deck to be spot chipped wire brushed thoroughly washed touched up with two coats of primer one coat of finish white and applied with one overall coat of finish white paint. Area: Deck head area on main deck - 30 sq.mtrs approx. Deck head area on Nav.Deck: 25 sq.mtrs approx.	DECK	SQM	55			
D25011. 12	Funnel outside area to be spot chipped wire brushed cleaned touched up with two coats of primer one coat of blue & painted overall with one coat of blue; approx. Area 23 sqm.	DECK	SQM	23			
D25011. 13	Vibrocore winch to be thoroughly washed & applied one coat of golden yellow paint.	DECK	SQM	10			
D25011. 14	Nav deck railings (including awning railings) to be spot chipped wire brushed thoroughly washed touched up with two coats of primer and applied with one overall coat of white/blue. Size: MS pipe 1" dia x 80MTR (approx) & 40mm MS pipe 40 MTR approx.	DECK	MTR	120			
D25011. 15	Life Raft craddles (P & S) to be cleaned and painted Orange.	DECK	SQM	4			
D25011. 16	Wheel house/ accommodation bulkheads to be cleaned and to be applied with one coat primer and one coat white finish. Area - 60 sqm	DECK	SQM	60			
	Main deck						
D25011. 17	05 No. Multiangle fairleads on main dk fwd thoroughly swept applied with two coats of primer and 1 coat of black finish. All 05 No. Fairleads to be freed.	DECK	SET	5			



D25011. 18	Windlass to be thoroughly chipped wire brushed applied with two coats of primer and one coat of grey finish	DECK	LS	1			
D25011. 19	Main deck area to be swept applied with two coats of primer & one coat of deck green. Area - 60 sqm. Before commencement wooden gratings to be removed & refitted.	DECK	SQM	60			
D25011. 20	Main deck Port & Stbd bulwarks with stays area to be swept and cleaned applied with two coats of primer & one coat of white paint. Area 50 sqm.	DECK	SQM	50			
D25011. 21	Main deck port & Stbd gunwale area to be cleaned swept to be applied with two coat of primer & one coat of finish blue. Approx 70 Rmts	DECK	MTR	70			
D25011. 22	FWD awning railings with vertical support pipes to be thoroughly cleaned and applied with one coat of blue paint approx 30 RMT of 50mm dia pipe. Work including removal of awning cover and fit back after completion of work.	DECK	MTR	30			
D25011. 23	Six numbers Bollards on Main deck (Ford & Aft) grit blasted & swept and to be applied with two coats of primer & one coat of black finish paint.	DECK	SQM	9			
D25011. 24	Main deck accommodation bhd including containers and aft E/R entrance bhd /wksp bhd to be cleaned & applied with one coat primer and one coat white finish. Area - 160 sqm	DECK	SQM	160			
D25011. 25	Main dk railings & entrance opening chains / aft opening chain to be spot chipped wire brushed thoroughly washed touched up with two coats of primer and applied with one overall	DECK	SQM	30			

	coat of white /blue size: 40mm MS pipe 80 MTR approx.						
D25011. 26	To facilitate deck painting following items to be removed from deck and same to be kept back after painting. 1) Mooring Rope coils -08 No. 2) Waste Oil drums - 12 No. 3) Wooden deck gratings- 50 SQM 4) Gang way-1 No.	DECK	LS	1			
D25011. 27	Steering compartment to be spot chipped and scrapped/wire brushed same to be applied 1 coat primer and finished paint.	DECK	Sqm	18			
D25011. 28	BT compartment to be spot chipped & cleaned same to be painted with touched up with two coats of primer and one overall coat of finish paint.. Area 3 SQ mtrs. (approx)	DECK	SQM	3			
D25011. 29	Forward void space to be thoroughly scrapped wire brushed & cleaned and applied with two coats of primer & one coat of buff finish. area 16sq mtr.	DECK	SQM	16			
D25011. 30	15 nos toilets and bathrooms to be cleaned scrapped primer Touch up and one final coat to be painted. Approx 80 sqm	DECK	SQM	80			
D25011. 31	Area between outside masters and ch scientists cabin to be thoroughly cleaned and applied with one coat of white paint. Area approx.--14 sqm	DECK	SQM	14			
	ACCOMMODATION						



D25012. 1	Five numbers Storm valves to be removed from place overhauled pressure tested and fitted back in place after surveyor's inspection. Size:100 NB PIPE:2700 MM- 3 Nos. (Junior Off & Eng Cabin) & 100 NB PIPE 1600 MM - 2 Nos. (Deck tandel cabin). All five numbers storm valves location below accommodation side bulk head port side. For removing storm valves approx 10 sq mtrs bulk head side panel to be removed for access and to be refitted back after fitment of storm valves.	DECK	NOS	5			
D25012. 2	Accommodation washbasin bottle traps (15 No.) To be cleaned. Damaged bottle traps (03 No.) To be renewed. Size: 32 mm dia CP coated with 32 mm dia waste coupling.	DECK	SQM	15			
D25012. 3	In lower accommodation 04 No. Wash basin fresh water taps defective same to be renewed. DIA 25MM SS	DECK	NOS	4			
D25012. 4	Lower accommodation alleyway over head fresh water line corroded same to be renewed with flange to flange. Approx size: 2 inch GI pipe x 15 rmts. This job involves removal and refitment of over head panels approx 15 sq.mtrs.	DECK	MTR	15			
D25012. 5	Accommodation AC leuvers to be overhauled (open/shut) cleaned and painted(Approx 10 nos)	DECK	NOS	10			
D25012. 6	Accommodation W/H Mess rooms alleyway vinyl flooring to be covered with polythene cover and same to be removed after completion of all repair jobs. Complete this job in time otherwise any damage to flooring will be Yard's account.	DECK	SQM	100			



D25012. 7	Galley and wash basin drain choke to be cleared approx 25 mtr and 65NB dia	DECK	MTR	25			
D25012. 8	Two numbers fresh water discharge v/vs in port & Stbd accommodation area to be overhauled. Valve Size - 65 mm dia. Consider skimming of valve lid and valve seats.	DECK	NOS	2			
D25012. 9	Toilet/shower room scupper stainers missing in three locations. To be fitted. Approx. Size : 90mm dia SS type.	DECK	NOS	3			
D25012. 10	Health faucet sets with inlet pipe to be renewed in toilets-25 mm lines with faucet - 08 nos.	DECK	NOS	8			
D25012. 11	Bath room shower heads to be renewed. 25mm inlet dia SS shower heads.- 05 nos.	DECK	NOS	5			
D25012. 12	Fw line to be checked any defective line to be renewed. (approx: pipe thickness-1.25 inch. Length- 20 mtrs.	DECK	MTRS	20			
D25012. 13	Sw line to be checked any defective line to be renewed. (approx size: pipe thickness- 2.0 inch. Length- 20 meters.	DECK	MTRS	20			
D25012. 14	Scientists and Officers bathroom mixer valve to be renewed. 1/2 INCH	DECK	NOS	2			
D25012. 15	Toilet WC seat in scientists and officers cabin to be renewed. Total : 04 Nos	DECK	NOS	4			
D25012. 16	Windlass port & stbd brake existing 'L' shaped brake lever to be replaced with Wheel type brake lever. Wheel Size : 300 mm Dia Rod thickness: 20mm - 02 Nos	DECK	NOS	2			
	Tanks						



D25013. 1	Man hole covers of the following tanks to be opened and rubber packing of manhole to be renewed. Approx 11 No. Manholes. (A) Fresh water tank (P & S); (B)Bunker tank (port & Stbd); (C) Service tank (Port & stbd); (D) Sewage tanks; (E) L.O.Tank (Stbd).Material: contractor supply.	DECK	NOS	11			
D25013. 2	Fresh water tanks port and stbd to be cleaned completely inspected and applied with 02 coats of fresh water tank paint 16 cubic mtrs each. After painting tanks to be cleaned and fresh water to be filled two times and pumped out for avoiding paint smell and dust. approx tons of water required - 64 MT	DECK	NOS	2			
D25013. 3	Bunker tanks Port and Stbd (Capacity-12.14 T each) to be cleaned	DECK	NOS	2			
D25013. 4	DO Service tanks Port and Stbd (Capacity-7.6 T each) to be cleaned.	DECK	NOS	2			
D25013. 5	Sewage tank to be thoroughly cleaned wire brushed and applied primer & two coats of Bituminous paint. Area: 12sqm.	DECK	NO	1			
	Fumigation						
D25014. 1	After completion of dry dock repairs entire vessel to be fumigated by chemical free non organic compound .Approx. Area 1423 sqm. After completion of fumigation all dead rats and debris material etc. To be removed & v/l should thoroughly cleaned/gas freed Vessel particulars GRT-284T LOA-35.04MTRS BREADTH-8.25MTRS MOULDED DEPTH-2.8MTRS.	DECK	CBM	1423			



	Anchor and chain						
D25015. 1	Anchor gypsy engagement lever on both side not engaging properly need to rectified.	DECK	LS	1			
D25015. 2	Port & Stbd. Anchor ten lengths of chains to be lowered and layed in dry dock thoroughly C.G blasted cleaned and painted with two coats of bituminous paints and fitted back.	DECK	SET	2			
D25015. 3	Chain locker compartment to be thoroughly cleaned bailed out water & removed mud. Bottom perforated plate to be removed chipped and to be applied with one coat of bituminous paint. Area - 10 sq mtrs. This job involves opening and closing of two man hole covers (Gaskets - Yard supply). Consider 2 CBM mud & water in Chain locker.	DECK	LS	1			
	Navigational/ communicational equipment's						
D25016. 1	AIS annual test to be carried out and certificate to be issued. Make- JRC Model- JHS -182. Last tested on SEPT 2024.	DECK	NO	1			
D25016. 2	Radio technician to be provided to carry out SRT survey and EPIRB (1039/1040) SART to be tested and certificate to be issued . AIS annual servicing and test certificate to be issued.	DECK	NO	1			
D25016. 4	Wheel house radar magnetron to be renewed same is due from last 08 years.	DECK	NO	1			
D25016. 5	Aneroid barometer calibration to be done. Make: Observer; Last done on AUG 2024	DECK	NO	1			



D25016. 6	Multigas detector calibration to be done. Make: MCI Last done on AUG 2024	DECK	NO	1			
D25016. 7	Alchol detector calibration to be done. Model: AT6000 Last done on AUG 2024	DECK	NO	1			
D25016. 8	GMDSS battery and charger was defective same to be repaired.- 2 Nos	DECK	NOS	2			
D25016. 9	Magnetic compass to be swung and deviation card to be made during sea trial after completion of dry dock repairs. Make: Sperry marine	DECK	NO	1			
D25016. 10	Gyro compass annual servicing to be done. Make : ANSCHUTZ	DECK	NO	1			
	LSA and FFA equipment's						
D25017. 1	03 No. Fire line isolation v/v to be overhauled. Size- 65 mm dia. During overhauling if any damage to the valves same to be renewed. consider 01 no Valve size-40NB	DECK	NOS	3			
D25017. 2	EPIRB annual test (1040) and (1039) to be done and certificate to be issued. Make- MC Murdo Model- E5 SSMARTFIND Last done on AUG 2024. 1.EPIRB: Make- ACR	DECK	SET	2			
D25017. 3	SART annual test to be carried out. Last done on AUG 2024. Make: Mc Murdo/ Model - S4 RESUE SART/ Sr no. S4/1977446.-	DECK	SET	1			
D25017. 4	09 nos fire Hydrants to be overhauled. 65 mm dia	DECK	NOS	9			
D25017. 5	Fire line relief valve to be pressure tested. pressure set to be at 5 kg and certificate to be issued for the same.	DECK	NO	1			

D25017. 7	Rescue boat davit arm to be properly chipped and gauging to be done if required to be cropped and renewed. approx 1000 mmx 400 mm x 10 mm .Tubular STAGING to be provided 4mtr x 2 mtr	DECK	NO	1			
D25017. 8	Inflatable Rescue Boat Annual Servicing to be carried out by DG Approved workshop. Last done - AUG 2024 Make- DSB CONTINENTAL MODEL: 470-IRB Sr.no. 1-39079/08 capacity 07 Person.	DECK	NO	1			
D25017. 9	Rescue Boat Davit Annual Servicing to be carried out and certificate to be issued. Gear box overhauled and leakage to be rectified.	DECK	NO	1			
D25017. 10	04 nos Life raft Annual servicing to be done by OEM/DG Approved workshop last done on AUG 2024 (Make - SHAINGHAI YOULONG & SHM ship care TYPE INFLATABLE) 20 Persons capacity.	DECK	NOS	4			
D25017. 11	05 nos Water Type Fire Extinguishers (cap 09 ltr) to be recharged Annual Service and pressure testing to be done. CO2 cartridge to be weighed. Annual Service last done on AUG 2024 and PTD on 06/22.	DECK	NOS	5			
D25017. 12	06 nos Foam Type Fire Extinguishers (cap 09 ltr) to be recharged Annual Service and pressure testing to be done. CO2 cartridge to be weighed. Annual Service last done on AUG 2024 and PTD on 17.06.2022	DECK	NOS	6			
D25017. 13	01 no DCP Type Fire Extinguishers (cap 02 Kgs) to be recharged and Annual Service & Pressure test to be done. CO2 cartridge to be weighed.	DECK	NO	1			



	Annual Service last done on AUG 2024 and PTD on June.2024.						
D25017. 14	09 nos DCP Type Fire Extinguishers (cap 5 Kgs) to be recharged and Annual Service and pressure testing to be done. CO2 cartridge to be weighed. Annual Service last done on AUG 2024 and PTD on 17.06.2022 .	DECK	NOS	9			
D25017. 15	01 nos 50 Ltr AFFF Fire Extinguishers Annual Service and pr testing to be done. CO2 cartridge to be weighed. Annual Service last done on AUG 2024 and PTD on 17.06.2022	DECK	NO	1			
D25017. 16	Spare CO2 cartridge : 60 gms- 12 nos 120 gms- 09 nos 300 gms- 01 nos to be weighed and inspected..	DECK	NOS	22			
D25017. 17	Rescue Boat 01 No. DCP Portable Type Fire Extinguisher Annual Service and pr testing to be done. Next annual service due on July 2024	DECK	NO	1			
D25017. 18	SCBA Annual Servicing to be carried out. 06 nos SCBA Cylinders to be Refilled. Last annual done AUG 2024 and PTD July 2023	DECK	NOS	6			
D25017. 19	EEBD Annual Servicing to be carried out. If required 03 nos EEBD cylinders to be filled. Last annual done AUG 2024	DECK	NOS	3			
Containers							
D25018. 1	CORE SAMPLE CONTAINER SPLIT AC 2T capacity TO BE SERVICED	DECK	NO	1			
D25018. 2	Both lab containers doors to be removed hinges to be changed and fitted back to prove proper locking of doors.	DECK	NOS	2			



	GSI equipment's						
	The following survey equipment's shifted to workshop for maintenance and necessary repairs to be carried out as per GSI instructions. Entire equipment Painting to be done after completion of overhauling.						
D25019. 1	Grab 02 nos.to be overhauled .	DECK	NOS	2			
D25019. 2	Dredge buckets with slings 02 nos. To be overhauled	DECK	NOS	2			
D25019. 3	Gravity corers 02 nos. To be overhauled	DECK	NOS	2			
D25019. 4	Vibro corer MS barrels 31 nos. Size- 4.9 mtrs x 65mm dia to be supplied new .	DECK	NOS	31			
D25019. 5	Complete Vibro corer unit 01 no (Dismantled onboard and to be shifted to workshop.) Corroded and thin down bottom frame to be renewed. Motor securing flanges with step pieces to be renewed. If lifting bracket thin down during chipping same to be renewed with both securing flanges. All load taking parts to be dismantled and inspected for any corrosion and cracks. Entire equipment Painting to be done after completion of overhauling.	DECK	NO	1			
D25019. 6	Sparker reel 01 no. To be overhauled . Entire equipment Painting to be done after completion of overhauling.	DECK	NO	1			
D25019. 7	Magneto meter reel 01 no.to be overhauled. Entire equipment Painting to be done after completion of overhauling.	DECK	NO	1			
D25019. 8	Wooden stands for keeping MS barrels 05 nos (03small & 2 big) to renew	DECK	NOS	5			
	Wood work / carpentry jobs						



D25020. 1	New heavy duty Pilot chair to be fabricated for bridge.	DECK	LS	1			
D25020. 2	Six numbers scientist cabins bunks/tables and cup boards to be wooden polished.	DECK	NOS	6			
D25020. 3	Lower accommodation - Officer's recreation room bilge viewing window is covered with vinyl sheet same to be opened.	DECK	LS	1			
D25020. 4	Oxy deck coating to be fixed on monkey island (water seeping in bridge and masters cabin) Approx area 01m x 01m	DECK	SQM	1			
D25020. 5	Wooden cupboard Mika to be repaired in galley . Size : 1500mm × 900 mm	DECK	LS	1			
D25020. 6	Scientists cabin wall paper damaged same to be renewed (Approx area: 50 sqm)	DECK	sqm	50			
D25020. 7	Crew cabin No- 07 mirror cabinet mirror broken to be renewed -1 No.	DECK	NO	1			
D25020. 8	Cabin door locks with handle need to be changed- Total=5 Nos.(Chief Scientist cabin No.10 Mess room Cabin No.5 Cabin No.3).	DECK	NOS	5			
D25020. 9	Cabins NO 17 and 4EO cabin cupboard door not closing properly to be repaired and wash basin soap tray to be renewed.	DECK	NOS	2			
D25020. 10	Crew toilet stbd side bidet shower pipe clamp 1 No damaged soap holder 1 No and cloth hanger- 2 Nos to be installed.	DECK	LS	1			
D25020. 11	02 NOS Toilet European system full set need to be renewed (01 in officers toilet & 01 in Ladies toilet)	DECK	NOS	2			



D25020.12	4 Nos Self door closing arrangements to be changed (Chart room Chief off cabin officers recreation room mess room).	DECK	NOS	4			
D25020.13	Galley cupboard hinges to be renewed- Total 8 Nos	DECK	NOS	8			
D25020.14	03 mtr wooden skirting's in galley to be renewed	DECK	mtr	3			
D25020.15	Mica of locker box near mess room damaged to be changed . Size : 1mtr x 1 mtr	DECK	SQM	1			
D25020.16	Bed curtain for Second office cabin to be installed. Bed. Size: 3mtr x 2.5mtr with all hook fitting	DECK	LS	1			
D25020.17	In accommodation two nos wooden ladders to be polished.	DECK	NOS	2			
D25020.18	All scientist cabins 12 nos bunks to be polished	DECK	NOS	12			
D25020.19	05 Door closers at various cabins is defective. To be renewed. Type : Heavy duty	DECK	NOS	5			
Engine room defects							
E 25001.1	Shore electrical power supply to be provided during dry dock-380V50 Hz100 AMPS 3 PH supply @ 250 UNITS / DAY connection.(detachable)	ENGINE	KWH	15000			
E 25001.2	Sludge oil rags & E/R bilges to be removed.	ENGINE	CBM	5			
E 25001.3	Air chutes to be provided in e/room whenever requested.	ENGINE	NOS	4			
E 25001.4	E/room & steering bilge area de-rust clean and epoxy paint and final painting to be done as per coding before completion of dry dock	ENGINE	SQM	90			



E 25001.6	Dirty oil & Bilge water to be taken out for safe disposal to shore reception facility.(Dirty oil- 1 cbm and Bilge water - 3 cbm Approx.)	ENGINE	CBM	4			
E25001. 7	Arrangement to be made for 10kl (approx) of lshfhsd grade f.o transfer to shore storage tank from ship bunker tank & kept till completion of dry dock job. same to transfer to ship bunker tank after completion of dry dock job.	ENGINE	KL	10			
Port main engine (Kirloskar Cummins)							
Running Hours since Last Decarburization- 10884.1Hrs.							
Running Hours since Last "D" check routine - 3306.8Hrs. (As on 31.12.2024)							
Model : type-kt 1150 m bhp-370rpm-1800							
D-checks routine to be carried out.							
(yard to arrange OEM service Engineer)							
E 25002.1	All CYL. Head to be overhauled & mountings to be checked and tightened.	ENGINE	NOS	6			
E 25002.2	Fuel Valve timing and tapped clearance to be check and adjusted.	ENGINE	NOS	6			
E 25002.3	J.C.W. water pump to be overhauled and fitted back.	ENGINE	NO	1			
E 25002.4	All fuel injectors to be overhauled & fitted back.	ENGINE	NOS	6			
E 25002.5	Turbo charger to be cleaned bearing clearance to check tighten manifold nuts and cap screws to be check.	ENGINE	NO	1			
E 25002.6	Air inlet and exhaust manifold to be cleaned and fitted back.	ENGINE	NOS	2			



E 25002.7	PT fuel pump calibration to be done screen filter & magnet to replace and fitted back.	ENGINE	NO	1			
E 25002.8	Lub. Oil cooler to be chemically cleaned & pressure tested & fitted back.	ENGINE	NO	1			
E 25002.9	Entablature water space to be cleaned.	ENGINE	NO	1			
E 25002.10	Engine trial to be arranged after completion of work.	ENGINE	NO	1			
E 25002.11	To carry out renewal of Bottom Shell plates and frame below engine following necessary arrangement to be made (IF REQUIRED): To lift the engine from place. To Shift the engine to safe location. To refit engine at original place after plate renewal. This include dis-connecting & re-connecting pipeline electrical wiring mounting pads dismantling & re fitting of propeller shaft coupling and other misc. Arrangements to facilitate the bottom plates and frame renewal.	ENGINE	NO	1			
	Stbd main engine (kirloskar cummins)						
	Model : type-kt-1150-m bhp-370rpm-1800						
	Running Hours since Last Decarburization- 10881.9Hrs.						
	Running Hours since Last "D" check routine - 3304.6Hrs.(As on 31.12.2024)						
	D-checks routine to be carried out.						
	Job to be done by OEM service engineer with one year						
	Workman ship guarantee (yard to arrange OEM service Engineer						
E25003. 1	All CYL. Head to be overhauled & mountings to be checked and tightened.	ENGINE	NOS	6			



E25003. 2	Fuel Valve timing and tapped clearance to be check and adjusted.	ENGINE	NOS	6			
E25003. 3	J.C.W. water pump to be overhauled and fitted back.	ENGINE	NO	1			
E25003. 4	All fuel injectors to be overhauled & fitted back.	ENGINE	NOS	6			
E25003. 5	Turbo charger to be cleaned bearing clearance to check tighten manifold nuts and cap screws to be check.	ENGINE	NO	1			
E25003. 6	Air inlet and exhaust manifold to be cleaned and fitted back.	ENGINE	NOS	2			
E25003. 7	PT fuel pump calibration to be done screen filter & magnet to replace and fitted back.	ENGINE	NO	1			
E25003. 8	Lub. Oil cooler to be chemically cleaned & pressure tested & fitted back.	ENGINE	NO	1			
E25003. 9	Sme fuel pump front cover to be renewed. Pump to remove from place dismantle cracked front cover to renew pump to fit back with new gaskets. Spares ship supply.	ENGINE	NO	1			
E25003. 10	Both main engines' accessory drive pulley and locking nut to renew. Spares ship supply.	ENGINE	NOS	2			
E25003. 11	Sme exhaust leakage from uptake pipe inside funnel to be rectified. Job involves removal and refit of funnel flaps removal and refit of exhaust lagging approx 5m2. New lagging to be provided. Pipe dia:8".	ENGINE	NO	1			
E25003. 12	Entablature water space to be cleaned.	ENGINE	NO	1			
E25003. 13	Engine trial to be arranged after completion of work.	ENGINE	NO	1			



E25003.14	To carry out renewal of Bottom Shell plates and frame below engine following necessary arrangement to be made(IF REQUIRED): To lift the engine from place. To Shift the engine to safe location. To refit engine at original place after plate renewal. This include dis-connecting & re-connecting pipeline electrical wiring mounting pads dismantling & re fitting of propeller shaft coupling and other misc. Arrangements to facilitate the bottom plates and frame renewal.	ENGINE	NO	1			
Port main reduction gearing(make-twin disc modl-514c)							
E 25004.1	Lub. Oil cooler to be chemically cleaned pressure tested & fitted back.	ENGINE	NO	1			
E 25004.2	Necessary arrangement to be made to lift the engine during renewal of bottom shell plate bottom & near shaft gland bellow Port A.C. compartment. Which include hanging arrangement dis-connecting & connecting pipe line connection which required at the moment to complete the job also to be done.	ENGINE	NO	1			
Stbd. Main reduction gearing(make-twin disc modl-514c)							
E 25005.1	Lub. Oil cooler to be chemically cleaned & pressure tested & fitted back.	ENGINE	NO	1			
E 25005.2	Necessary arrangement to be made to lift the engine during renewal of bottom shell plate bottom & near shaft gland bellow Port A.C. compartment. Which include hanging arrangement dis-connecting & connecting pipe line Which required at the moment to complete the job also to be done.	ENGINE	NO	1			
#1 aux. Engine stbd (kirloskar cummins) aft							



	Model : type-nt-855-g2bhp-280@1500rpm						
	Running Hours since Last "D" check routine - 1908 Hrs.(As on 31.12.2024)						
	C-check routine to be carried out & shown to surveyor						
	(yard to arrange OEM service engineer.)						
E 25006.1	All 6 units mountings to be checked and tightened.	ENGINE	NOS	6			
E 25006.2	Fuel timing and tappet clearance to be checked	ENGINE	NOS	6			
E 25006.3	All fuel injectors to be overhauled and calibrated	ENGINE	NOS	6			
E 25006.4	Air inlet and exhaust manifold to be cleaned	ENGINE	NOS	2			
E 25006.5	Turbo charger to be cleaned bearing clearance to check tighten manifold nuts and cap screws to be check.	ENGINE	NO	1			
E 25006.6	A successful trial to be given after completion	ENGINE	NO	1			
E 25006.7	Necessary arrangement to be made to lift the engine during renewal of bottom shell plate which include hanging arrangement dis-connecting & connecting pipe line which required at the moment to complete the job.	ENGINE	NO	1			
	#2 aux. Engine port (kirloskar cummins) fwd						
	Model : type-nt 855 g2bhp-280@1500rpm						
	Running Hours since Last "D" check routine -1580 Hrs.(As on 31.12.2024)						
	C-check routine to be carried out & shown to surveyor						
	Job to be done by OEM service engineer						
E 25007.1	All 6 units mountings to be checked and tightened.	ENGINE	NOS	6			



E 25007.2	Fuel timing and tappet clearance to be checked	ENGINE	NOS	6			
E 25007.3	All fuel injectors to be overhauled and calibrated	ENGINE	NOS	6			
E 25007.4	Air inlet and exhaust manifold to be cleaned	ENGINE	NOS	2			
E 25007.5	Turbo charger to be cleaned bearing clearance tighten manifold nuts and cap screws to be check.	ENGINE	NO	1			
E 25007.6	A successful trial to be given after completion	ENGINE	NO	1			
E 25007.7	Necessary arrangement to be made to lift the engine during renewal of bottom shell plate which include hanging arrangement dis-connecting & connecting pipe line which required at the moment to complete the job.	ENGINE	NO	1			
	#3 aux. Engine harbour generator (kirloskar cummins)						
	Model : type-nt-495mg bhp-130rpm-1500						
	Total Running Hours since Installed - 66560 Hrs.						
	(yard to arrange OEM service engineer.)						
E25008. 1	Hardour Generator Engine all connection of L.O. F.O. F.W. to be removed. All alarm & Trip of L.O. & F.W. connection to be removed. Engine to be de-coupled from Alternator .All foundation bolts to be removed. Engine to be removed from place and shifted to poop deck and to yard by crane. Generator to be completely ovnew Harbour Generator Engine to be installed in place with similar capacity and couplied with alternator (If old Alternator to be used) and proper alignment to be done foundation bolts to be secure. All L.O. F.O. F.W. safety trips & Alarms	ENGINE	NO	1			



	connection to be made as per new engine requirement and satisfactory trial to be shown to ship staff.						
E25008.2	Harbour Generator ventilation metal door panel to be cut and removed & after completion of job same to be fitted back in place.	ENGINE	NO	1			
E25008.4	A successful trial to be given after completion	ENGINE	NO	1			
Air conditioning system model - 5f60 make - carrier							
E 25009.1	Evaporator unit air side to be cleaned with soap and chemical.	ENGINE	NO	1			
E 25009.2	AHU blower to be overhauled Plummer blocks to be renewed. (Spares to be arranged by yard).	ENGINE	NOS	2			
E 25009.3	Port & Stbd. A.C. Compressor all safety cut out & alarms pressure switch to be checked & defective switch to be renewed (contractor supply).	ENGINE	NOS	6			
E 25009.4	PORT & STBD oil separator to be cleaned.	ENGINE	NOS	2			
E 25009.5	PORT & STBD drier filter to be renewed.(Contractor supply)	ENGINE	NOS	2			
E 25009.6	10nos valve seats & gland to be renewed.	ENGINE	NOS	10			
E 25009.7	12 no. Ac louvers on/off knob to be check & made operational.	ENGINE	NOS	12			
Split air-conditioning system capacity-1.5tons							
E 25010	Wheel House GEO container and sediment container split AC units 04 no's to be serviced includes the jobs of: a) cleaning of condenser fins & evaporator filters. B) Inspection of fan motor compressor expansion v/vs capacitors of starting and running &	ENGINE	NOS	4			



	relays. System gas quantity to be checked and charged if required. Satisfactory running trial to be shown to ships staff. OEM to supply spares.						
E 25011.2	04 Nos D.O. tank to be cleaned and manhole door oil joint to be renewed. (Capacity approx. 44 cubic metre including all 4 tanks)	ENGINE	NOS	4			
	Windlass						
	Make- elefant metz 5.5kw bhp-750 rpm-1500						
E 25012.1	Port & Stbd break bands to be renewed with new counter sunk bolt/ screw. (contractor supply)	ENGINE	NOS	2			
E 25012.2	Windlass gear box to be checked & worn out parts to be renewed. Suspecting shaft key for engaging & dis-engaging the Anchor chain drum of STBD. Side is worn out (sidewise) same to be checked & repaired. Oil to be drained & after cleaning Fresh oil to be taken in sump. (Oil ship supply)	ENGINE	NO	1			
E25012. 3	Both port and stbd side anchor chains slipping from gypsy while doing let go of anchor. Gypsies to be refurbished or renewed for smooth movement chain on gypsy.	ENGINE	NO	2			
E 25012.4	Satisfactory trial to be shown to surveyor after completion of works.	ENGINE	NO	1			
	Steering hydraulic system						
E 25013.1	Rudder angle to be calibrated in rudder compartment and compare it with W/H indicator and error to be rectified.	ENGINE	NO	1			
	Hydraulic system						



E 25014.1	Both side hydraulic rams' lip seals leaking seals to renew seal od:45mm id:36mm thickness:7mm. Seal contractor supply.	ENGINE	NOS	2			
E 25014.2	Steering gear unit hydraulic oil tank low level alarm float switch not working same to be replaced with suitable float switch and alarm to be made operational.	ENGINE	NO	1			
E25014. 3	Direction control valves to be overhauled o-rings to renew solenoid coil to check leakages to be rectified.	ENGINE	NOS	2			
E25014. 4	Oil leaking from pressure switch body. Pressure switch to be replaced with same type or similar type. Pressure switch contractor supply.	ENGINE	NO	1			
E25014. 5	No:1 hydraulic pump not developing sufficient pressure pump to be overhauled and calibrated at test bench. satisfactory performance to be proved.	ENGINE	NO	1			
E25014. 6	Hydraulic pumps tripping while using hydraulic crane for more than 15 minutes suspecting overloading of electric motors due to hard movement of crane cylinders operating pressure of various cylinders and wire drum to check and defect to be rectified.	ENGINE	NO	1			
E25014. 7	Corer winch not holding load of vibrocorer unit while lifting from water counter balancing valve to overhaul and defect to be rectified.	ENGINE	NO	1			
E25014. 8	Manually operating direction control valves of a-frame and corer winch to be overhauled. Make:yuken model: dmg-06-3c2-50.	ENGINE	NOS	2			



E25014.9	To fabricate and supply spare hydraulic hoses connecting operating valve to corer winch hydromotor and a-frame. Size: 1" dia x 1.7mtr long en 856/isd 3862 4sh dn 25 w.p-380 bar(5510psi).	ENGINE	NOS	4			
Keel coolers - 2 nos make-BRFU 825 FAS 20+15							
E25015.1	Keel cooler of both Main Engines & Aux Engines (forward & aft) to be taken out chemically cleaned pressure tested at 3 BAR. Anodes to be renewed & fit back. Size:- 960x750x340mm. Includes the following work pipes and valves to be removed and fitted back. NEW NEOPRENE RUBBER JOINTS TO BE USED. (All necessary Spares to be arranged by yard).	ENGINE	NOS	2			
E25015.2	Cooler housing to be cleaned and painted. Area:5m2.	ENGINE	SQM	5			
E25015.3	For carrying out above job following items to remove and refit.	ENGINE	LS	1			
A) 8 NOS OF C.W PIPES OF 2.5 mtrs LONG 90 mm DIA.							
B) GS PUMP OVERBOARD VALVE WITH PIPE.1.2 mtr LONG 70 mm dia.							
C) BILGE PUMP OVERBOARD VALVE WITH PIPE.1.2 mtr LONG 70 mm dia.							
D) AC C.W PUMP OVERBOARD VALVE WITH PIPE.1.2 mtr LONG 70 mm dia.							
E) LADDER 3.5 mtrs LONG X 70 cm WIDTH.							
Propellers							
E25016.1	Port and Stbd propellers to be removed cleaned & buffed . After fitment of propeller shaft same to be fitted back.(Each propeller 1015mm Dia.)	ENGINE	NOS	2			

E 25016.2	DP test to be carried out on PORT & STBD propellers and bow thruster propeller.	ENGINE	NOS	3			
E 25016.3	Propeller rope guard to be removed cleaned and fitted back.	ENGINE	NOS	2			
E 25016.4	Propeller shaft gland packing to be renewed. Worn out stud to be renewed.	ENGINE	NOS	2			
E25016.5	Bow thruster propeller to be cleaned and buffed. (propeller dia:600mm)	ENGINE	NO	1			
E25016.6	Both side gratings of tunnel to remove for man entry gratings to fit back and secured after completion of job. scaffolding to be provided upto height of 2 meters.	ENGINE	NO	1			
E25016.7	Bow thruster unit gear case oil to be drained off and fresh oil to be replenished.	ENGINE	NO	1			
	Rudder						
E 25017.1	Rudder shaft gland packing to be renewed. Worn out studs to be renewed.	ENGINE	NOS	2			
E 25017.2	Both rudder stocks to be lowered includes the job of removing of rudder tie rod linkages in both sides both glands to be removed and lowering the rudder using chain blocks.(Consider plate renewal also)	ENGINE	NOS	2			
E 25017.3	Jumping clearance of rudder to measure and record Bottom pintle clearance & to bush clearance to measure and record. Pressure testing of rudder to be done.	ENGINE	NOS	2			
E 25017.4	Rudder bushes condition to be checked if required same to be renewed (Bush to be arranged by contractor)	ENGINE	NOS	2			



E 25017.5	Cementing & re-cementing to be done in rudder stock palm coupling after repairs & refitting.	ENGINE	NOS	2			
E 25017.6	Arrange staging of 2.5 x 7 x 1 mts height & other lifting gears to carry out for above work	ENGINE	NOS	2			
	Shaft seal						
E 25018.1	To check the leakage & water flow through the Thordon bush before the vessel reflaters after dry dock.	ENGINE	NOS	4			
E 25018.2	Thorden Bushes to be checked after removal of propeller shaft and clearance to be measured and recorded .	ENGINE	NOS	4			
E25018. 3	Both port and stbd stern tube fwd and aft thordon sxl bearings to renew .size : id-120mm od-155mm fwd bearing 240mm long and aft bearing 480mm long. Job involves removal of old bearings cleaning of stern tube fitment and alignment of bearings insitu machining of bearings for even clearance and id calibration. Scaffolding to be provided for removal and refit of tail shaft and bearings. job to be carried out by oem m/s. Vanson engg pvt ltd.	ENGINE	NOS	4			
	Tail shaft						
E 25019.1	Both tail shafts to be replaced with new ship supplied tail shafts. Job involves removal and refit of forward end couplings removal and refit of gland stuffing box. Tail shaft dia:120mm x length: 3745mm.	ENGINE	NOS	2			
E25019. 2	Both tail shafts' gland packing's to be renewed. Size 20mm no. Of packing's: 12 nos. packing ship supply.	ENGINE	NOS	2			



E25019.3	Both tail shafts' couplings to overhaul worn out parts to renew.	ENGINE	NOS	2			
E 25019.2	Final alignment of the shaft to be done with engine & gear box shown to ship staff & certificate for the same to be provided.	ENGINE	NOS	2			
	Halon system (2 yearly) mfg- ginge cylinder - 01capacity - 36kg.						
E 25020	FIXED FIRE FIGHTING HALON SYSTEM 2 YEARLY ROUTINE TO BE CARRIED OUT (bottle Weightment pipeline blown through Contents verification and other items) as per DGS Circular 06 of 2013 to be done and certificate for same to be provided.	ENGINE	LS	1			
	FOLLOWING PUMPS TO BE OVERHAULED (Spares contractor supply)						
E 25021.1	FIRE AND GS PUMP -30m3/hr.BE PUMP A5120	ENGINE	NO	1			
E 25021.2	Ac cooling water pump (stbd) be pump a 5110k	ENGINE	NO	1			
E 25021.3	Sewage pump (aft) 0.5m3/hr kirloskar	ENGINE	NO	1			
	Following sea chest suction valves to be overhauled and necessary repairs to be carried outland packing and joint to be renewed. If required renewal same to be arrange by ship yard.						
E 25022.1	Stbd a/c s/w cooling suction valve size -65mm	ENGINE	NO	1			
E 25022.2	Stbd s/w hyd . Pump suction valve size -65mm	ENGINE	NO	1			
E 25022.3	Port a/c s/w cooling suction valve size -65mm	ENGINE	NO	1			
E 25022.4	Bilge & g.s pump sea suction valve size -65mm	ENGINE	NO	1			
	Following ship side (over board) valve to be overhauled and necessary repairs to be carried outland packing and joints to be renew.						



E 25023.1	Stbd a/c s/w cooling over board valve size -65mm	ENGINE	NO	1			
E 25023.2	Sewage pump over board valve size-65mm	ENGINE	NO	1			
E 25023.3	Port a/c s/w cooling obd valve size -65mm	ENGINE	NO	1			
E 25023.4	G.s pump over board valve size -65mm	ENGINE	NO	1			
E 25023.5	Bilge pump over board valve size -65mm	ENGINE	NO	1			
E 25023.6	Port and STBD main sea chest column to be cleaned gauging to be done. Column to be painted internally with approx. H- 3mtr Dia- 300mm.Both side top cover studs to be renewed (stainless steel)	ENGINE	NOS	2			
Following valves to be renewed							
E 25024.1	Out board sewage pump discharge valve (gate v/v-40-mm) (contractor supply) Certified by class.	ENGINE	NO	1			
E 25024.2	Both a/c sea water cooling line butterfly valve after sea suction filter valve. (Contractor supply)	ENGINE	NOS	2			
E 25024.3	S.W. hydrophore outlet to accommodation 48 mm ball valves. (contractor supply)	ENGINE	NOS	2			
Pipelines							
Following Pipe lines to be removed pressure tested at 05kg/cm2 or renewed as required and fitted back with new gaskets & painted. All dimensions are approximate and material MSSCH 40Seamless pipe.							
Following pipelines to be renewed material: ms sch 40. Old flanges can be used.							
E 25025.1	Sw hydrophore suction pipe line. Length- 2mtr flanges-04 nos od-30mm bends-04 nos.	ENGINE	MTR	2			

E 25025.2	PORT AC C.W PUMP SUCTION PIPE.LENGTH:01 MTR FLANGE-01 no OD-60mm Elbow Bends-01 nos.	ENGINE	MTR	1			
E 25025.3	STBD AC C.W PUMP DISCHARGE PIPE.LENGTH:02 MTR FLANGE-04 no OD-60mm Elbow Bends-03 nos.	ENGINE	MTR	2			
E 25025.4	Aft sewage pump suction line length - 3 mtr od:90mm flanges:04 nos bends:04 nos.	ENGINE	MTR	3			
E 25025.5	Ac cooling pump common suction line length- 4mtr od:60mm no of flanges: 06 nos no of bends:04 nos.	ENGINE	MTR	4			
E 25025.6	Fire and gs pump suction and discharge pipe length- 04 mtr od: 75mm no.of flanges:04nos no of bends:04 nos.	ENGINE	MTR	4			
E 25025.7	Main sea chest pipeline to be pressure tested and defective same to be renewed. OD - 60 mm Length - 06 mtrs.	ENGINE	MTRS	6			
E 25025.8	Miscellaneous						
E 25026.1	Both auxiliary engines dash board to renew all gauges and pressure switches to be mounted on single panel and panel to be secured properly. Panel board size 0.5 x 0.5 m	ENGINE	NOS	2			
E 25026.2	Engine room blowers flap hinges to be removed eased and fitted back.	ENGINE	NOS	2			
E25026.3	Following pr.gauges and releif valve to calibrate and certificate to be issued.	ENGINE	NOS	4			
	Emergency fire p/p-disch pr.gauge.						
	Fire & gs p/p suction and disch. pressure gauge--2 nos.						



	Fire line relief valve.						
E 25026.4	Engine room bilges to clean and paint area:160m2 paint ship supply.	ENGINE	SQM	160			
E 25026.5	Steering compartment bilges to clean and paint area:30m2 paint ship supply.	ENGINE	SQM	30			
E 25026.6	Damaged Exhaust laggings of the PME SME AE1 AE2H/G & Emerg. Fire pump engine to renew	ENGINE	M2	10			
E 25026.7	PORT AND STBD Propeller shaft rpm indicators in engine room and wheel house erratic in operation same to check and calibrate repair/renew if found defective.(Contractor supply)	ENGINE	NOS	4			
E 25026.8	Port & stbd. Bunker & service tank quick closing valve to be overhauled. All defective parts to be renewed . (contractor supply)	ENGINE	NOS	2			
E 25026.9	Air compressor & air bottle relief valve to be pressure set and certificate to be issue	ENGINE	NOS	2			
E 25026.10	Sea water and fresh water hydrophore tank cleaning and chipping need to carried out and defective parts need to be renewed. 300 lts each. Approx.	ENGINE	NOS	2			
E 25026.11	AHU FILTER 02 nos. To be fabricated new as per sample with new felt filter element.(Size of the filter is 1150 mm X 460 mm of L-channel of width - 25 mm total length - 3600 mm. Fillet filter of 1150 mm X 460 mm fillet covering steel mesh of 1150 mm X 460 mm X 02 nos.(both side) securing plate of length - 3600 mm width - 25 mm thickness - 4mm.)	ENGINE	NOS	2			
E 25026.12	Port & Stbd. Bunker flange manifold blank to be renewed. Flange OD - 146 mm Thickness - 10 mm PCD - 126	ENGINE	NOS	2			



	mm. Holes - 04 nos. Hole Dia. - 16mm.						
E 25026.13	Forward Deck light rotary switch cable hanging same to be provided with cable securing base of Width - 1 inches length - 1mtrs thickness - 3 mm.	ENGINE	MTRS	1			
E25026. 14	Both main engines' rpm control from wheel house sluggish in operation speed range very less the push - pull remote control operation mechanism to check and worn out parts in control box to be renewed. Job to be carried out by OEM m/s. technocraft engineers Mumbai.	ENGINE	SET	2			
	Electrical jobs						
	The following motors to be overhauled (includes the job of dismantling and assembling checking the insulation values of stators & rotors checking the bearings checking the end covers checking the rotor keyway checking the terminal box and the body threads.) Worn out parts to be renewed.						
E 25027.1	Self-Starter Motors (ME)-2NOS & A/E- 3 NOS 24V DC to be overhauled includes the job of checking the pinion pinion lever solenoid coil and the brush hold unit with brushes. If required spares may be changed. Main Engine-24v DC -1 no's & Aux Engine- 24v DC- 1 no's (spares contractor supply)	ENGINE	NOS	4			
E 25027.2	Hydraulic pump motors- 22kw	ENGINE	NOS	2			
E 25027.3	Ac blower motor 5.5 kw	ENGINE	NOS	2			
E 25027.4	Galley exhaust blower motor 1.1 kw	ENGINE	NO	1			
E 25027.5	Engine room blower motor 1.1 kw	ENGINE	NOS	2			



E 25027.6	Toilet exhaust blower motor 0.5 kw	ENGINE	NO	1			
	Battery chargers make- trafo and main circuit breaker						
E25028	24 volt 200 AH battery charger in wheelhouse and E/R to be serviced job involves adjustments of control card potentiometers or replacement of the control card if required for satisfactory operation in auto mode.-----	ENGINE	SET	3			
	Main circuit breakers						
E25028. 1	Main Circuit Breaker of A/E 1 & 2 (1000Amps Terasaki type- AH-10 B) and A/E 3 (660Amps Terasaki Type AH-6B) to be cleaned overhauled. All trips i.e Overload reverse power low voltage high current trips to be checked & shown to surveyor for satisfactory operation.	ENGINE	NOS	3			
	Main switch board jobs.						
E25029	A) Main switch board to be cleaned and all connections tightness to be checked. B) Switch gear involved in switchboard control to be checked if found damaged to be renewed. C) Insulation test to be carried out for switch board. D) All switch board safeties to be shown to surveyor/ship staff.	ENGINE	SET	1			
	Meters calibration.						
	Following meters to calibrate and certificate to provide defective meters to renew spares contractor supply						
	In wheel house						
E25030. 1	Volt meter 0-500 v indication panel for AE's running	ENGINE	NOS	3			



E25030. 2	Volt meter 0-40 v DC 24 V DC panel	ENGINE	NO	1			
E25030. 3	Ammeter 0-100 A DC 24 V DC panel	ENGINE	NO	1			
E25030. 4	1000 to 1000 rpm on both direction of BT motor speed on BT control panel	ENGINE	NO	1			
E25030. 5	500 to 500 rpm on both direction of BT propeller speed on BT control panel	ENGINE	NO	1			
E25030. 6	0 to 250 A ammeter for of BT motor on BT control panel	ENGINE	NO	1			
	In Engine room						
E25030. 7	AE 1 volt meter 0-500 v Ammeter 0-600A kwmeter30-300 KW frequency meter45-55 Hz Cos Ø +.5 to -.5	ENGINE	NOS	5			
E25030. 8	AE 2 volt meter 0-500 v Ammeter 0-1200A kwmeter30-300 KW frequency meter45-55 Hz Cos Ø +.5 to -.5	ENGINE	NOS	5			
E25030. 9	AE 3 volt meter 0-500 v Ammeter 0-400A kwmeter30-100 KW frequency meter45-55 Hz Cos Ø +.5 to -.5	ENGINE	NOS	5			
E25030. 10	Shore supply panel volt meter 0-500 V Ammeter 0-150 A	ENGINE	NOS	2			
E25030. 11	Hydraulic Winch 1 &2 supply panel Ammeter 0-80A	ENGINE	NOS	2			
E25030. 12	AC compressor P & S supply panel Ammeter 0-200A	ENGINE	NOS	2			
E25030. 13	Bilge p/p & G.S p/p supply panel Ammeter 0-50A	ENGINE	NOS	2			
E25030. 14	220V supply panel Volt meter 0-300 V & Ammeter 0-200 A	ENGINE	NOS	4			
E25030. 15	Battery charger panel Volt meter 0-40 V & Ammeter 0-60 A	ENGINE	NOS	4			
Total cost (A)					NA		
Total cost in words (before GST)							



