TENDER No. UCSL/CC/SER/T/UM/39/1A/2025 Dt-24.12.2025

TENDER FOR EOT CRANE REVIVAL WORK AT HANGARKATTA



UDUPI COCHIN SHIPYARD LIMITED
MALPE, UDUPI 576108





TENDER NOTICE

Tender No. & date	UCSL/CC/SER/T/UM/39/1A/2025 Dt. 18th December 2025
Name of work	TENDER FOR EOT CRANE REVIVAL WORK AT UCSL HANGARKATTA YARD
Sit Visit	29th December 2025
Last date & time of receipt of tender	08th January 2026 (Thursday), 15:30hrs
Date & time of opening of Technical Bid (Part-I)	08th January 2026 (Thursday), 15:30hrs

- 1. Password protected quotations in the prescribed form is invited from bidders for the work specified above, subject to the terms and conditions as mentioned in the annexure to the tender enquiry so as to reach the undersigned by email or through postal mode, as mentioned on or before the date and time as stipulated.
- 2. Bidders are requested to visit the site on the specified date to familiarize themselves with the site conditions and operational requirements prior to submitting their bids, the bidder should send the details of the personnel visiting the yard to contractcell@udupicsl.com on or before 08th January 2025.
- 3. Site visit will be conducted at UCSL Hangarkatta Yard.
- 4. Clarifications if any, is to be forwarded on or before 08th January 2026 (Thursday), 15:00hrs.
- 5. The following shall be submitted along with the quote: -

PART- I: TECHNICAL BID

- a. Tender document duly signed on all pages Including Terms & conditions & Scope of work- at Annexure I & II.
- b. The techno commercial Check List at Annexure VII to be filled up completely and duly signed.
- c. Duly filled form at Annexure -IV, V & VI.

PART-II: PRICE BID

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

3. Mode of Submission of Quote:

- i. Bid shall be submitted as **Password Protected Zip File** in two parts. Part I: Technical Bid - with all enclosures and annexures as mentioned in Para 5 above Part II: Price Bid.
- ii. The files are to be forwarded as Two (2) separate password protected Zip files to contractcell@udupicsl.com
- iii. Part I and Part II are to be protected with separate and distinctly different passwords. CONTRACT



- iv. The Bids will be opened on online mode during which the bidder will be advised to share the password through SMS with which the technical bid will be opened.
- v. The price bids will be opened after technical evaluation and only the technically qualified bidders will be invited for opening of price bids which shall also be conducted on online mode.
- vi. However, subject to travel restrictions, the bidders can also attend the bid opening physically at Udupi Cochin Shipyard Limited, Baputhotta Ware house complex Office.
- vii. The contractors can also submit the quotations in sealed covers (Two-Bid) as separate sealed covers for Technical Bid and Price bid, both enclosed in a common sealed cover to reach the below mentioned address before the stipulated time.
- 6. The bidders shall ensure the receipt of bids at contractcell@udupicsl.com acknowledgement mail shall be sent to the bidders on receipt of bids. UCSL takes no responsibility for delay, loss or non-receipt of tenders by mail by the stipulated time.
- 7. The tender should be addressed to the Assistant General Manager (Contract Cell), Udupi Cochin Shipyard Limited, Malpe Harbor Complex, Malpe, Udupi 576 108, Karnataka, India.
- 8. No deviations on the tender conditions will be accepted, and bids with deviations will be considered technically disqualified. The acceptance of a tender or part thereof will rest with the Assistant General Manager (Contract Cell), Udupi Cochin Shipyard Limited and reserves the authority to reject the tender received without assigning any reason.

9. Contact person

In case of technical queries please contact						
Name	Designation	Phone Number	E-mail			
Ashik Basheer M	Assistant Manager (Utilities & Maintenance)	+91-9400136358	ashik.basheer@udupicsl.com			
In case of commercial queries please contact						
Name Designation		Phone Number	E-mail			
Akhil R P	Manager (Contract Cell)	+91 8129624149	contractcell@udupicsl.com akhil.rp@udupicsl.com			

Assistant General Manager (Contract Cell)

अखिल आर पी AKHIL R P प्रबंधक MANAGER

उडुपि कोचीन शिपयार्ड लिमिटेड UDUPI COCHIN SHIPYARD LIMITED माल्पे, कर्नाटक/MALPE, KARNATAKA-576 108

Encl:

Terms & Conditions - Annexure I 1. – Annexure II 2. Scope of work Price Bid - Annexure III 3. Power of Attorney - Annexure IV 4. Unconditional Acceptance Letter Annexure V 5. Annexure VI 6. Undertaking by Agency - Annexure VII Techno Commercial Check List 7.





TERMS AND CONDITIONS

TENDER FOR EOT CRANE REVIVAL WORK AT UCSL HANGARKATTA YARD.

1. DESCRIPTION OF WORK

- 1.1. This tender enquiry pertains to the awarding of contract for EOT Cranes revival work in UCSL facilities at Hangarkatta.
- 1.2. You are requested to inspect, obtain clarifications, if any, and carefully study the documents and the scope of services and UCSL, before submitting your offer.
- 1.3. The Agencies are advised to familiarize themselves with the site conditions before quoting.

2. GENERAL SCOPE OF WORK

- 1.4. The job is of turnkey in nature for complete electrical revival. Contractor shall have end-to end responsibility from preliminary inspection, lowering of spares, open up inspection, assessment of spares, procurement and replacement of spares, re-erection, structural modifications if required, trials run, commissioning, testing, training, final handover, etc. for ensuring tandem operation of hoist and CT systems for both individual and synchronized crane operations of the following cranes:
 - a) Bay-1 10T + 10T 1Nos
 - b) Bay-2 10T + 10T 2Nos
 - c) Bay-3 12.5T + 12.5T- 2Nos.
- 1.5. Refer **Annexure II** for detailed scope of work

3. ELIGIBILITY CRITERA

The document related to minimum eligibility criteria as given below should be submitted along with the technical bid (part-1). The minimum qualification criteria for participating in the tender will be as follows: -

- 3.1. The contractor / Agency should be registered with appropriate registration and documents related to be submitted and to be registered under companies act.
- 3.2. The bidder should have experience in installation and commissioning of VFD drives and Industrial automation/control system works involving motors, sensors, safety interlocks, and cabling.
- 3.3. Details of orders executed along with work completion certificate (Self attested copy) from the client indicating the performance, nature of work and value of work executed should be submitted along with the technical bid.
- 3.4. The bidder shall submit documentary evidence in support of this experience from public sector undertakings or reputed private sector companies.
- 3.5. Bidder shall not be under a declaration of ineligibility issued by Govt. of India / State Govt. /Public Sector Undertakings etc.





4. SCHEDULE OF COMPLETION

- 4.1. UCSL target to complete the total job scope not later than 02 months from the date of commencement.
- 4.2. Schedule of work should be planned without affecting yard production.
- 4.3. The work shall be scheduled sequentially for the cranes in Bay-3, Bay-2, and Bay-1, subject to prior approval from the Officer-in-Charge.
- 4.4. The contractor must submit a detailed schedule of work and get approval from the officer in
- 4.5. The project should be completed within the agreed timeline.

6. PERIOD OF CONTRACT & COMMENCEMENT OF SERVICES

6.1. The contract shall be valid for a period of 12 months from the date of issue of Work Order or till completion of work, whichever is earlier and no escalation in rate shall be allowed by UCSL on whatsoever reason.

7. METHOD OF AWARDING CONTRACT

- 7.1. Contract will be concluded with Bidder qualifying technically (including eligibility criteria), agreeing to Commercial conditions (Annexure VI) and emerging as L1.
- 7.2. UCSL also reserves the right to split the work orders to any number of bidders willing to match with L1 rate, if the performance of selected bidder is not satisfactory.

8. VALIDITY

8.1. The offer shall be valid for a period of 12(Twelve) months from the due date of the tender.

9. RATE

9.1. Rates are to be quoted in the Price Bid Format at Annexure III attached herewith.

10. PAYMENT

- 10.1. Payment Terms Payment will be made in 4 stages.
 - a) Stage-1: 30% of the contract value shall be paid upon completion and commissioning of Bay-3 cranes work (12.5T + 12.5T - 2 Nos).
 - b) Stage-2: 30% of the contract value shall be paid upon completion and commissioning of Bay-2 cranes work (10T + 10T - 2 Nos).
 - c) Stage-3: 30% of the contract value shall be paid upon completion and commissioning of Bay-1 cranes work (10T + 10T - 1 Nos).
 - d) Stage-4: 10% of the contract value shall be immediately paid upon satisfactory completion of the entire scope of work, including commissioning and testing of all
- 10.2. Payment shall be made within 30 days from receipt of invoice and necessary documentation as applicable.
- 10.3. Statutory levies such as I.T, Contribution towards PF, ESI, PT etc., shall be deducted from the bill as applicable.



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

11. TAXES & DUTIES

- 11.1. GST shall be applicable extra on the prescribed work. You are requested to furnish the following details in the invoice/Bill.
 - Applicable rate of GST/SAC Code
 - Firms GST Reg. NO.
 - Service accounting code (SAC) as prescribed by statutory authorities.
 - GST Reg. No. of Udupi Cochin Shipyards Limited (29AAACT1281B1ZO).

12. SECURITY DEPOSIT

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

WARRANTY

13.1. The Contractor shall provide a warranty of 24 months from the date of commissioning or 25 months from the date of invoicing, whichever occurs earlier. This warranty shall cover manufacturing defects for the items and ensure the defect-free and safe operation of the cranes. During the warranty period, if any repairs require the replacement of spare parts supplied and installed by the Contractor, such parts shall be replaced free of cost by the Contractor.

14. PERFORMANCE GUARANTEE

- 14.1. The complete work carried out by the contractor shall be guaranteed against defective on poor workmanship for a period of 12 months from the date of completion of work. Any work found defective during this period is to be repaired entirely at the contractor's cost.
- 14.2. Should any unsatisfactory performance and / or damage or failure occur due to poor workmanship and poor-quality material used by the contractor, the contractor shall be solely responsible for payment/reimbursement of expenditure incurred for rectifying the defect.
- 14.3. Towards this, a performance guarantee equivalent to 5% of the value of the contract to be furnished by the contractor on completion of the works by way of a bank guarantee (in approved proforma of UCSL) from a nationalized bank valid till the expiry of the guarantee period. In case the contract fails to submit the PG in time, SD mentioned at Clause 12 will be retained till the expiry of guarantee period.

15. LIQUIDATED DAMAGES

15.1. The progress of work will be monitored against the mutually agreed detailed schedule. Liquidated damages for delays in execution of the work beyond the scheduled date of completion, for any reason other than force majeure conditions, will be recovered at the rate



- of half percent of the value of the contract per week or part thereof, subject to a maximum of ten (10) percent of the value of the contract.
- 15.2. For better clarity, order values mentioned in LD clause are values excluding duties and taxes (Basic value). Liquidated damages, if any, shall be decided and settled only after the completion of the entire project but prior to the release of Final stage Payment.
- 15.3. If, for any reasons, supplier has a justification towards delay in supply / work execution and would intend to consider applicability/ non applicability of LD, the same shall be intimated to UCSL by way of a letter, failing which it will be deemed that delay is attributable to the supplier.
- 15.4. Delay in supply/Interruption of the work for reasons not attributable to supplier shall entitle extension of the order execution period for proportionate period without any additional cost to UCSL.

16. POWER OF ATTORNEY

- 16.1. The tenderer(s) shall have to sign in each page of the tender documents with official stamp as a token of his acceptance of the conditions stated therein.
- 16.2. The person signing the tender form on behalf of another or on behalf of a firm, shall enclose to the tender, a Power of Attorney or the said deed duly executed in his favour or the partnership deed giving him such power showing that, he has the authority to bind such other persons or the firm, as the case may be, in all matters pertaining to the contracts. If the Person so signing the tender, fails to enclose the said Power of Attorney, his tender shall be liable for being summarily rejected. The Power of Attorney shall be signed by all partners in the case of partnership concern, by the Proprietor in the case of a proprietary concern, and by the person who by his signature can bind the company in the case of a Limited Company.

17. TERMINATION & LIMITATION OF LIABILITY

- 17.1. This contract may be terminated upon the occurrence of any of the following events.
- 17.2. By agreement in writing of the parties hereto;
- 17.3. By the non-defaulting party, upon default by the other party, of any clause of this contract, if not remedied within fifteen (15) days, or such longer time as may be agreed upon by the parties, after receipt of notice thereof in writing from the non-defaulting party;
- 17.4. By the other party, upon either party;
 - Making the assignment for the benefit of creditors, being adjudged a bankrupt or becoming insolvent; or
 - Having a reasonable petition filed seeking its' dissolution or liquidation, not stayed or dismissed within sixty (60) days; or
 - Ceasing to do business for any reason.
- 17.5. For fraud and corruption or other unacceptable practices.
- 17.6. Upon expiry or termination of this Contract, neither party shall be discharged from any antecedent obligations or liabilities to the other party under this Contract unless otherwise agreed in writing.





- 17.7. UCSL may by notice in writing to Agency terminate the order after issuing due notice i.e., 30 days' notice period. UCSL shall be entitled to compensation for the loss limited to the order value.
- 17.8. Liability maximum that can be claimed by the Agency shall be limited to what is due to be and has been paid by UCSL for work done as per the payment milestones and limited to work order value.

18. ARBITRATION & JURISDICTION

- 18.1. Any disputes arising during the period of the contract shall, in the first instance be settled by mutual discussions and negotiations. The results of such resolution of dispute shall be incorporated as an amendment to the contract, failing which supplier shall approach the UCSL Grievance Redressal Committee as per relevant clause of the Contract.
- 18.2. If any dispute, disagreement or question arising out of or relating to or in consequence of the contract, or to its fulfillment, or the validity of enforcement thereof, cannot be settled mutually or the settlement of which is not herein specifically provided for, then the dispute shall within thirty days from the date either party informs the other in writing that such disputes, disagreement exists, be referred to arbitration. The arbitrators shall be appointed and the arbitration proceedings shall be conducted in accordance with and subject to the Arbitration and Conciliation Act, 1996 (No. 26 of 1996) as amended from time to time and the decision of the Arbitrators shall be final and binding on the parties hereto. The arbitration will be done by a Board comprising one arbitrator nominated by each party, and a mutually agreed Umpire. Each party shall bear its own cost of preparing and presenting its case. The cost of arbitration shall be shared equally by the parties unless the award provides otherwise. Performance under this Contract shall however, continue during arbitration proceedings and no payment due or payable by the parties hereto shall be withheld unless any such payment is or forms a part of the subject matter of arbitration proceedings.
- 18.3. Seat & Venue of Arbitration: The seat & venue of arbitration shall be at Bangalore.
- 18.4. Language of Arbitration: The Language of arbitration shall be English.
- 18.5. Governing Law: The contract shall be governed by Indian Law
- 18.6. In case of disputes, the same will be subjected to the jurisdiction of courts at Bangalore, Karnataka.

19. SUB CONTRACTING AND ASSIGNMENT

- 19.1. Contractor shall not assign or transfer the Purchase Order/ Work Order or any share or interest therein in any manner or degree to any third party without the prior written consent of UCSL.
- 19.2. Contractor shall not contract with any subcontractor and/or vendor without the prior written consent of UCSL. Such consent shall not relieve the Contractor from any of his responsibilities and liabilities under the Purchase Order/ Work Order. In addition, Contractor shall ensure that the terms and conditions of any such contract shall comply with and correspond to the terms and conditions of the Purchase Order/ Work Order.

20. SECRECY & RESTRICTION ON INFORMATION TO MEDIA

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



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

21. CANCELLATION OF ORDER AND RISK CONTRACTING

- 21.1. In the event the Agency fails to complete the work promptly and satisfactorily as per the terms of the order, and if any work is delayed beyond thirty (30) days from the agreed schedule, UCSL, without prejudice, reserves the right to cancel the order and get the work done at Agency's cost and the expenditure so incurred including any damage or loss will be recovered from him and the Security Deposit furnished by him is liable to be forfeited either in whole or in part.
- 21.2. UCSL also reserves to right to impose penalties ranging from Rs. 100 to Rs.500 to the employees of agencies and will be deducted from the bills, for any habitual offence on the cleanliness of uniforms, lack of obedience, not attending the tasks etc, and will be to the discretion of the Officer in charge for the work.

22. FORCE MAJEURE

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

23. STORAGE OF MATERIAL AND EQUIPMENT

- 23.1. The Contractor shall arrange the storage of the materials/ equipment etc. if any, at a suitable location assigned by UCSL and shall ensure the safe and secure possession and handling of the items thus handed over to contractor. UCSL shall allot storage space within UCSL premises, if available.
- 23.2. As regards the equipment/materials stored by him as above as also in use by him, UCSL will not be responsible for any damage, pilferage, accident that may take place during the course of execution of the work. It will be entirely his responsibility to keep all the equipment, materials etc., in safe custody as also hold them duly insured at his expense.

24. IMS GUIDELINES

- 24.1. UCSL implemented an Integrated Management System (IMS) and the Quality Management System (QMS) within the yard. As part of IMS, subcontractors shall comply with the following measures related to the Quality, Health, and Safety & Environment (QHSE) policy of UCSL.
 - Meeting or exceeding customer requirements.
 - b) Assuring quality of the products and service.
 - c) Preventing occupational ill health & injuries.
 - d) Ensuring safe work sites.
 - e) Conserving natural resources.
 - Preventing / minimizing air, water & land pollution.
 - g) Handling and disposal of Hazardous wastes safely.





- h) Complying with statutory & regulatory and other requirements.
- Developing skills and motivating employees.
- 24.2. Occupational Health, safety & Environmental requirements of UCSL shall also include the following.
 - The contractor (or a sub-contractor performing work on behalf of the contractor) is deemed to comply with the Occupational health, safety and environmental policy of the company and also to all operational controls/standard operating procedures and shall undertake the work in total compliance with the requirements of the established Integrated Management System (IMS) of the company.
 - b) The Contractor shall undertake the work in total compliance with all applicable legal/statutory requirements related to occupational health, safety and environment effective in the state of Karnataka.
 - c) It is the sole responsibility of the contractor to assure that any sub-contractor/s who shall perform works in company lands/facilities/worksites on behalf of the contractor, is also following all requirements related to the Integrated Management System of the company and the health/safety/environmental Rules effective in the state.
 - The contractor shall provide/implement and operate/practice all occupational health, safety and environmental management measures/facilities, for their period of contract, in their activities/at their work sites, which shall be required according to the IMS of the company or that required by the health/safety/environmental Rules established and effective in the state, at their own cost.
 - If any contractor failed to comply with or violated any clauses/requirements of occupational health, safety and environmental Rules effective in the state, in their activities or at work sites and the same shall be exposed to the government or any competent authorities upon inspections, the contractor shall be solely responsible for all liabilities caused by his/her action and shall be responsible for paying the penalty and taking stipulated corrective actions insisted by the authorities within the specified time, at their own cost. Any liability to the company in this regard needs to be compensated by the contractor.
 - Upon completion of the work, contractor shall clear the area and shall not leave any Occupational health/safety/environmental liabilities to the company, from their activities at the worksites.
 - g) Any clarification related to IMS requirements of the yard, may be obtained by the contractor from the AGM (HSE) or the authorized representative of the contract, prior to the commencement of work.

SAFETY OF PERSONNEL AND FIRST AID

- 25.1. The Agency shall be entirely responsible for the safety of all the personnel employed by him on the work. In this regard, he may adopt all the required safety measures and strictly comply with the safety regulations in force. In this regard, the Agency will have to fully indemnify UCSL against any claims made by his workmen/other personnel.
- 25.2. The Agency may arrange to suitably insure all his workmen/ other personnel in this regard. UCSL will not be responsible for any injury or illness to the Agency's workmen/other personnel during execution of the works due to whatsoever reasons.



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

26. LABOUR LAWS AND REGULATIONS

- 26.1. The Agency shall undertake and execute the work with contract Labor only after taking license from the appropriate authority under the Contract Labor (Regulation & Abolition) Act 1970.
- 26.2. The Agency shall observe and comply with the provisions of all labour and industrial laws and enactments and shall comply with and implement the provisions of the Factories Act, 1948, Employees Provident Funds & Miscellaneous Provisions Act, 1952, Employees State Insurance Act, Payment of Gratuity Act, minimum Wages Act, Payment of Bonus Act, Contract Labour (Regulation and Abolition) Act and all other enactments as are applicable to him and his workmen employed by him. The Agency shall inform UCSL his license number from the Central Labour Commissioner.
- 26.3. All Persons, except those exempted under the respective Acts, shall necessarily be insured under the ESI scheme and be made members of the EPF Scheme from the day of their engagement as personnel in the Company. In Case 1, All such insured Persons should carry with them their ESI Identity Card for verification by the authorities. No Persons without a valid ESI Identity Card for verification by the authorities will be permitted to work
- 26.4. The Agency shall submit the Labour Reports/Returns as required by the Company from time to time in respect of their workmen in standard format to the concerned contracting officer so as to enable the same to reach Contract cell by the 5th of every month. Delayed submission of the same shall attract penal interest /damages at the rate as levied by the respective authorities under the relevant Acts.
- 26.5. The Agency shall maintain the records viz. Muster Roll, Acquittance Roll with full details, Account books etc., in original. These are required for inspection by the concerned authorities under each scheme.
- 26.6. If the Agency fails to pay any contributions, charges or other amounts payable under any of the aforementioned provisions of law, UCSL shall deduct or adjust amounts equivalent to such contribution, charges or amounts from amount payable to him by UCSL, including any deposit or amounts payable against bills and make payments on his account to the appropriate authority. He shall not be entitled to question or challenge such deductions, adjustments or payment made by UCSL.
- 26.7. Any other amount payable under any law or in respect of any person employed by the Agency, if not paid by him, shall be deducted or adjusted by UCSL out of any amount payable to the Agency including any Security Receipt and paid ever or withheld for payment by UCSL.
- 26.8. The Agency shall be fully responsible for the conduct and discipline of the workmen employed by him in the Company premises. If such workmen commit any misconduct or criminal act inside the Company, the Agency shall take appropriate action against such workmen. The Agency shall abide by the instructions/ guidelines issued by the Company for maintenance of discipline and good conduct among the workmen employed by him.
- 26.9. All persons who are engaged for various works in UCSL either directly or through Agency/contractors, should produce the following documents prior to issuing their entry passes:



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

Police clearance certificate with photo and address particulars. (Police clearance certificate to the effect that the concerned person is staying in the area of jurisdiction of the certificate issuing Police Station and that the person is not involved in any criminal offences as per the records available therein.)

- 26.11. Application and Declaration for enrolling under Employees Provident Fund and ESI Scheme- 3 individual passport size photographs and two copies of family photographs of the members.
- 26.12. Agency shall familiarize themselves with the labour rules & regulations.

27. ELECTRICITY RULES AND REGULATION

27.1. The contractor shall adhere to the various rules in respect of electrical installation as per the Indian Electricity Rules and Regulations and Electrical Inspectorate Standards in order to make sure that men and materials are safe from hazards.

28. OVERWRITING & CORRECTIONS

Tenders shall be free from overwriting or erasures. Corrections and additions, if any, shall be duly attested and a separate list of such corrections shall be attached with the offer

29. OTHER TERMS & CONDITIONS

- 29.1. Quality of services shall conform to the specification/ standards laid down by UCSL.
- 29.2. UCSL reserves the right to accept / reject any offer.
- 29.3. During the evaluation of tender, officer-in-charge may seek clarifications from the bidders. Clarification if any shall be given in writing/e-mail. Officer-in-charge's decision will be final and binding on the bidder.
- 29.4. Compliance of all statutory safety requirements and other safety rules stipulated by UCSL and other applicable statutory bodies shall be the responsibility of the Agency while working at UCSL premises. The Agency should ensure that their workmen and staff are adequately covered under Insurance.
- 29.5. Damages caused to the Shipyard properties/tools/accessories should be rectified by the Agency at his cost or proportional recoveries will be made from the Agency while passing their bills for payment.
- 29.6. The service provider shall have to engage men on round the clock basis and also on Sundays and holidays. Service has to be completed to the satisfaction of Udupi Cochin Shipyard Limited officer in-charge.
- 29.7. The service provider shall indemnify UCSL or its officers against any claims arising out of accidents or injuries to workmen or other persons or damage to other property which may arise during the execution of the contract or from breach of any Law or Regulation prior to delivery and acceptance of the items at UCSL.
- 29.8. The service provider shall also be governed by the General Conditions of Contract of UCSL, General Safety Rules and other relevant labour laws.
- 29.9. The upper age limit of all workers and supervisors employed by the Agency and those Agency who do or supervise the job themselves shall be as per the prevailing rules of UCSL and shall comply to the requirements of this tender.



29.10. Assistant General Manager, or his authorized representative will be the Officer-in-charge of these contracts.



SCOPE OF WORK

In this scope of work covers complete electrical revamping of the following cranes.

A. Bay-1 10T + 10T - 1Nos

B. Bay-2 10T + 10T - 2Nos

C. Bay-3 12.5T + 12.5T- 2Nos.

A. Scope of Work - Electrical Revival of Bay-1 (10+10 Ton) EOT Crane

1. Project Overview

The project involves the complete electrical revamping of the Bay-1 (10+10 Ton) EOT Crane at the Hangarakatte Unit. Bay-1 has one Demag make double-girder EOT crane with double crabs, each equipped with a 10-T single hoist. The crane operates with hoist and cross travel (CT) in tandem, and the existing system is based on Demag crane logic with stepless speed control and an HBC make radio remote controller. The scope covers supply, installation, testing, and commissioning of new electrical systems, ensuring safe, reliable, and efficient operation.

2. Detailed Scope of Work

2.1. Control panels

The work includes complete renewal of the crane's electrical system, covering control panels, wiring, and switchgear. All VFDs (ABB make) with DBRs will be provided by UCSL. The vendor shall supply all control panels, of IP55 protection rating and supported by valid test certificates. Each control panel shall be provided with one 16A, 230V industrial plug socket and one 6A, 230V domestic plug socket (mounted outside the panel), complete with the required MCB and switch. The control panel enclosure shall be fabricated from Cold CRCA sheet steel of minimum 2.0 mm thickness. The enclosure shall be finished with epoxy powder coating in RAL 7035 standard shade. The panels shall be designed with adequate space and mounting arrangements for UCSL-supplied VFDs. DBRs shall be installed outside the panels with proper arrangements. The VFDs and DBRs will be handed over by UCSL at the time of installation. The Main control panel dimension shall be 7000 mm (L) × 450 mm (W) × 1500 mm (H). For isolating the power supply to crane MCCB suitable rotary handle to be given at outside of main door. The details of motors, VFD, DBR supplied by UCSL are as follows.

LT: Two motors with one VFD

VFD: ABB ACS 380/18.5 KW/25HP/38 Amps

DBR:1850Watts 15E

Motor: 5.50 KW/1455RPM/10.40Amps/415V, make: Demag cranes and components

Motor type: ZBA 132 AL 4 B050

LT Speed: 5 - 50 Mtr/Min

Brake: Electromagnetic DC disc brake (Demag make)

CT: Two motors with one VFD in each crab VFD: ABB ACS 380/3KW/4HP/7 Amps

DBR:128 Ohms/1000Watts

Motor: 0.55 KW/1420RPM/1.6Amps/415V, make: Demag cranes and components

Motor type: ZBA 80 A4 B007





CT Speed: 5 - 20 Mtr/Min

Brake: Electromagnetic DC disc brake (Demag make)

Hoist: One motor with one VFD in each hoist VFD: ABB ACS 880/37KW/50HP/72 Amps

DBR:6 Ohms/30KW

Motor: 36.7 KW/1435RPM/90Amps/415V make: Demag cranes and components

Motor Type: ZBR 180 A4 B280 Hoist Speed: 1 - 10 Mtr/Min

Brake: Electromagnetic DC disc brake (Demag make)

2.2. Radio remote Control

A new radio remote control system shall be supplied, installed, and commissioned, incorporating tandem operation for Hoist-1, Hoist-2, and CT. The remote shall be of stepless joystick type with a dead-man switch and shall include fault reset provision directly from the transmitter. The system shall be Tele Radio make with a minimum 2-year warranty. One spare master radio controller set (one transmitter and one receiver, make: Tele Radio) shall also be provided. The supplied radio remote control shall be compatible with other cranes in the yard equipped with Tele Radio remote controls, allowing interchangeability of remotes when required. Details of existing remote used in other cranes in yard is given below-

Master remote and follower remote:

Make: Tele radio. Model T12-60

Frequency - 433.075 - 434.775 MHZ

ANATEL 09381-21-12410

2.3. Limit Switches & Encoders

The scope also includes replacement of LT and CT limit switches, anti-collision sensors, junction boxes, lights, and sirens. The hoist limit switch will be retained. Encoders shall be installed on all hoist motors, including supports, and shall be compatible with the VFDs. Limit switches shall comply to EN/IEC 60947-5-1, with ratings UI:500V Uimp; 6KV AC -15 240V 3A

2.4. Load Cell & Display

Pin-type load cells with load displays shall be installed individually for each hoist, with display dimensions of 415 mm × 200 mm approx. (tolerance ±1-4%). The load cell system shall include all accessories and calibration certificates.

2.5. Drag chains

Complete drag chains with accessories shall be replaced with new reputed make. This also includes fixing of required clamps and brackets for fixing of drag chain to the crabs. The number and size of the drag chain cables shall be determined by the vendor based on the operational requirements. The cables used in drag chain should be drag chain duty cable.





2.6. Cables & Crane lights

The vendor shall determine cable sizes and quantities as per requirement and relevant IS standard. Vendor to submit cable test certificate as applicable. Supply and installation of 4 Nos 200W LED fittings is also in the scope of vendor.

2.7. Indication Lights and siren

Busbar phase indication lights, fault indication lights, and crane ready lights to be installed as per the requirement. For LT and CT movements, a siren and revolving light shall also be installed.

2.8. Busbar and current collector

Busbar alignment to be checked and corrected. Additional 5 Mtrs Busbar, replacement for damaged Joint cover and Holding clamp to be removed from Bay 3 and to install in Bay 1. The existing bus bar is of Vahle make. Suitable 8 Nos Vahle Make current collector to be supplied and installed. The incoming busbar cable shall be properly laid up to 3 meters with the necessary supports.

2.9. Control Pendant

Existing control pendant (Make: Demag) to be used after necessary repair. Pendant hanging support rope to be renewed and C Track free movement to be confirmed.

2.10. Dismantling of existing equipment

Dismantling of old panels, wiring, DBRs, load cells, and load displays will also be in vendor's scope.

2.11. Deliverables

Vendor to supply all materials required to carry out the given scope except VFDs and DBR.

3. Operational Requirements

- a. LT, CT, and hoist must allow stepless speed variation from minimum to maximum motor speed when operated with both radio remote and pendant controllers.
- b. CT and hoist must have tandem operation with necessary safety cut-off features as specified in the table 1.
- c. LT, CT, and hoist should have slow-speed cut-off and stop features.

	Bay 1 - 10T+10T EOT crane
Selected Operation Sequence	Required Operation
1/2	Crane main crab and Hoist operate with the main joystick, Auxiliary crab and Hoist operate with the Auxiliary joystick,
1+2	Main and Auxiliary hoist and crab has to operate with using main joystick with tandem mode

Table 1 - Bay 1 Operation



अनवंश कथ

Udupi Cochin Shipyard Limited Tender for EOT Crane Revival Work at UCSL Hangarakatte Yard UCSL/CC/SER/T/UM/39/1A/2025 Dt 24th December 2025

4. Testing & Commissioning

The vendor shall carry out complete testing of all newly installed systems and accessories to ensure correct functioning. Verification of crane operation with new panels, DBRs, remote controls and pendant controller shall be done in accordance with the specified operational requirements as per the table 1. Load tests shall be performed by UCSL, vendor to provide necessary support. The vendor shall commission the crane in compliance with UCSL requirements.

5. Structural Work

Current Collector Maintenance: New cage to be consider. Existing cage to be removed and install the new one to easy access to the Current collector. Retention of all existing mechanical components such as the main girder, rope drum, hook, wheels, bearings, and gearboxes, and brakes unless specified for replacement.

6. Preferred Makes of Materials

- a) Drag chain with cables: IGUS, LAAP/MURRPLASTIK
- b) Limitswitches:
 - Telemecanique/STROMAG/SIEMENS/KOINO/SAKAMOTO/YASUKAWA/SCHMERSAL/TURCK /OMRON/PEPPERL-FUCHS
- c) Switchgear: Schneider / ABB / siemens
- d) Loadcell: SPA/NRE/Honeywell/FLINTEC/NOBEL/SHINHAN/MAGTROL/STRAIGHTPOINT USA
- e) Encoder: Kubler /Baumer /Siemens/Hubner/Leine&Linde
- f) 200W LED lights: Havells/Bajaj/Wipro /Philips/Crompton

7. Warranty

All items shall be warranted for 24 months from commissioning. Drag chain and cables shall carry a 5-year warranty. Any breakdown during warranty period vendor should attend the same within 24 hrs., Else the cost at actuals will be deducted from vendor.

8. Exclusions

The following are excluded from vendor's scope and will remain under UCSL scope:

- a. Girder box, end carriage, LT wheels, LT motors, hoist, and CT motors.
- b. Third-party load testing and certification.
- c. Major structural modifications.

9. Training and Handover

- a. Provide comprehensive training to UCSL's operation and maintenance team, troubleshooting, and maintenance of the newly installed systems in the Bay-1.
- b. Handover all relevant documentation, including user manuals, warranty certificates, and any other technical documents related to the supplied and installed components.

10. Acceptance Criteria

- a. The Bay-1 crane shall seamlessly integrate with the newly installed system and perform in accordance with the specified requirements as per the table 1.
- b. Successful demonstration of the trial run and approval the UCSL representative.



c. Completion of operator training and handover of all necessary documents.

11. Points applicable to all cranes:

- a) All the Radio Remote Controller (RRC) Connector model should be same. At a time to the control panel either RRC/pendant will be connected, a single common connector shall be considered for RRC and Pendant.
- b) LT & CT Striker to be consider for all the Bays for limit switch activation.
- c) For tandem operation Master Crane is CS Bay side and Slave Crane is River Side.
- d) Crane has to operate based on the command without any deviation in operation.
- e) Necessary rain protection covers to be provided for all DBR, Receiver and crane to crane communication
- f) The power cables, control cables and all panel components should be properly and completely labelled and should be fully matching with the wiring diagram labelling.
- g) Earthing Double earthing should be provided for all electrical equipment using suitable size copper conductor/strips as per standards.
- h) The electrical installation of the crane shall generally conform to Section 3 of IS 3177-1999 with Amendments.
- AC 415 (+/- 5%) V, 3 Phase, i) Power supply 50 (+/- 3%) Hz, 4 Wire (3 Phase + Earth)
- j) All electricals shall be suitably designed for 40°C ambient temperature with relative humidity up to 100% as per IS 875.

12. Eligibility Criteria

The bidder should have experience in installation and commissioning of VFD drives and Industrial automation/control system works involving motors, safety sensors, interlocks, and cabling.

The bidder shall submit documentary evidence in support of this experience from public sector undertakings or reputed private sector companies. The documents shall include:

- · Copies of relevant purchase orders, and
- Corresponding work completion certificates issued by the respective organizations





B. Scope of Work - Electrical Revival of Bay- 2 (10 T + 10 T) EOT Crane

1. Project Overview

The project involves the complete electrical revamping of the Bay-2 (10+10 Ton) EOT Crane at the Hangarakatte Unit. Bay-2 has two Demag double-girder EOT cranes with double crabs, each equipped with a 10-ton single hoist. The cranes operate with the hoist and cross travel (CT) in tandem on individual cranes and crane-to-crane tandem with hoist, CT, and long travel (LT). The existing system uses Demag crane logic with stepless speed control and a Master and Slave Tele Radio remote controller. The scope covers supply, installation, testing, and commissioning of new electrical systems, ensuring safe, reliable, and efficient operation.

2. Detailed Scope of Work

a. Control panels

The work includes complete renewal of the crane's electrical system, covering control panels, wiring, and switchgear. Supply of Hoist VFDs (4 Nos, make: ABB ACS 880/37KW/50HP/72 Amps) with DBR will be UCSL scope. The supply of VFDs with DBR (VFD Make: ABB) for the CT & LT movement shall in the scope of vendor. The vendor shall supply all control panels, of IP55 protection rating and supported by valid test certificates. Each control panel shall be provided with one 16A, 230V industrial plug socket and one 6A, 230V domestic plug socket (mounted outside the panel), complete with the required MCB and switch. The control panel enclosure shall be fabricated from Cold CRCA sheet steel of minimum 2.0 mm thickness. The enclosure shall be finished with epoxy powder coating in RAL 7035 standard shade. The panels shall be designed with adequate space and mounting arrangements for UCSL-supplied VFDs. DBRs shall be installed outside the panels with proper arrangements. The VFDs and DBRs will be handed over by UCSL at the time of installation. The Main control panel dimension shall be 7000 mm (L) \times 450 mm (W) × 1500 mm (H). For isolating the power supply to crane MCCB suitable rotary handle to be given at outside of main door. The details of motors, VFD, DBR supplied by UCSL are as follows.

LT: Two motors with one VFD in each crane (Vendor to supply VFD for LT)

Motor: 5.50 KW/1455RPM/10.40Amps/415Vmake: Demag cranes and components Motor Type:

ZBA 132 Al 4 B050 Motor no:43871011

LT Speed: 5 - 50 Mtr/Min

Brake: Electromagnetic DC disc brake (Demag make)

CT: Two motors with one VFD in each crab (Vendor to supply VFD for CT)

Motor: 0.55 KW/1420RPM/1.6Amps/415V make: Demag cranes and components Motor type: ZBA

80 A4 B007 Motor No: 43871044

CT Speed: 5 - 20 Mtr/Min

Brake: Electromagnetic DC disc brake (Demag make)

Hoist: One motor with one VFD in each hoist (Hoist VFD UCSL supply)

VFD: ABB ACS 880/37KW/50HP/72 Amps

DBR:14 Ohms/16KW





Motor: 36.7 KW/1435RPM/90Amps/415V make: Demag cranes and components Motor Type:

ZBR 180 A4 B280 Motor no:34864239

Hoist Speed: 1 - 10 Mtr/Min

Brake: Electromagnetic DC disc brake (Demag make)

The outgoing connection from the control panels shall be of Removable socket connections. Heavy

duty industrial connector (Hood and base type) with locking lever shall be used.

b. Radio Remote Control

Vendor shall configure the existing Tele Radio master and slave remote controllers with the new

Details of existing remote used in other cranes in yard is given below-

Master remote and follower remote:

Make: Tele radio, Model T12-60 Frequency - 433.075 - 434.775 MHZ ANATEL 09381-21-12410

c. Limit Switches & Encoders

The scope also includes replacement of LT and CT limit switches, anti-collision sensors, junction boxes, lights, and sirens. The hoist limit switch will be retained. Encoders shall be installed on all hoist motors, including supports, and shall be compatible with the VFDs.

Limit switches shall comply to EN/IEC 60947-5-1, with rating UI:500V Uimp; 6KV AC - 15 240V 3A

d. Load Cell & Display

Pin-type load cells with load displays shall be installed individually for each hoist, with display dimensions of 415 mm × 200 mm approx. (tolerance ±1-4%). The load cell system shall include all accessories and calibration certificates.

e. Drag chains

Complete drag chains with accessories shall be replaced with new reputed make. This also includes fixing of required clamps and brackets for fixing of drag chain to the crabs. The number and size of the drag chain cables shall be determined by the vendor based on the operational requirements. The cables used in drag chain should be drag chain duty cable.

f. Cables & Crane lights

The vendor shall determine cable sizes and quantities as per requirement and relevant IS standard. Vendor to submit cable test certificate as applicable. Supply and installation of 4 Nos 200W LED fittings is also in the scope of vendor.



g. Indication Lights and siren

Busbar phase indication lights, fault indication lights, and crane ready lights to be installed as per the requirement. For LT and CT movements, a siren and revolving light shall also be installed.

h. Busbar and current collector

Busbar alignment to be checked and corrected. Replacement for damaged Joint cover and Holding clamp to be removed from Bay 3 and to install in Bay 1. The existing bus bar is of Vahle make. Suitable 16 Nos Vahle Make current collector to be supplied and installed. The incoming busbar cable shall be properly laid up to 3 meters with the necessary supports.

i. Control Pendant

Existing control pendant (Make: Demag) to be used after necessary repair. Pendant hanging support rope to be renewed and C Track free movement to be confirmed.

j. Dismantling of existing equipment

Dismantling of old panels, wiring, DBRs, load cells, and load displays will also be in vendor's scope.

k. Deliverables

Vendor to supply all materials required to carry out the given scope except VFDs and DBR for hoist.

3. Operational Requirements

- a. LT, CT, and hoist must allow stepless speed variation from minimum to maximum motor speed when operated with master and slave both radio remote and pendant controllers
- b. Synchronization of both the cranes with tandem operation in LT, CT, and hoist operation with necessary safety cut-off features as specified in the table 2.
- c. LT, CT, and hoist should have slow-speed cut-off and stop features.

Crane Selection	Selected Operation Sequence	Required Operation			
1	C/H 1/2 Crab and Hoist have to operate independently with Ma and auxiliary Joy stick				
.1	C/H 1+2	Hoist and Crab need to operate in Tandem with Main Joystick			
C/H 1/2 Crab and Hoist have to operate independently with the and auxiliary Joy stick.					
2	C/H 1+2	Crab and Hoist have to operate need to operate in Tandem with Main Joystick			
1+2	C/H 1/2	Master Main crab and Main Hoist have to operate independently with the Main and auxiliary Joystick.			



1+2	C/H 1+2	Master Main Hoist and Main Crab need to operate in Tandem with Main Joystick
1+2	C/H 1+3	Main + Follower Crane Main Hoist and Main Crab has to operate in Tandem with Master remote Main joystick
1+2 C/H 2+4		Main + Follower Crane Auxiliary Hoist and Auxiliary Crab have to operate in Tandem with Master remote Auxiliary joystick
1+2	C/H 1-4	Master and Follower crane All hoist and all Crab operate on Tandem with Master remote with Main Joystick
1+2	C 1+2 /3+4, H 1- 4	Master crane Both crabs in Tandem with Main Joystick operation, Follower crane Both crabs in Tandem with Auxiliary Joystick operation, and all four Hoist in tandem with master remote with main joystick
1+2 C 1-4, H1+2/3+4		Master crane Both Hoists in Tandem with Main Joystick operation, Follower crane Both Hoists in Tandem with Auxiliary Joystick operation, and all four Crabs in tandem with the master remote main joystick
1.0	C/H 1+3,	Master crane main Hoist and crab and Follower crane Main Hoist and crab have to operate master remote main joystick in tandem mode.
1+2	C/H 2+4	Master crane Auxiliary Hoist and crab and Follower crane Auxiliary Hoist and crab have to operate the master remote main joystick in tandem mode.
	10T+10T	on Crane Slave Remote Operating Procedure
Selected Crane	Selected Operation Sequence	Required Operation
2	3/4	Follower crane Main crab and Hoist operate with the main joystick, Follower crane Auxiliary crab and Hoist operate with the Auxiliary joystick,
	3+4	Main and Auxiliary hoist and crab has to operate with using main joystick with tandem mode
Ad	ditional fun	ctions, safety and speed references for both cranes
Additional functions		If any one of the hoist/crabs/girder 1st limit switches acted then all the remaining three hoists/crabs/girder has to run on low speed. If any one of the hoist/crabs/girder 2nd step limit switches acted then remain all hoist/crab/girder should be stop.
		There should not be any difference in speed of hoists/crab/girders (after the tandem operation difference in distance between hoists/crab/2 cranes will be same).



Hoist safety operation Hoist Lower and Upper Cutoff Limit
switches are to be provided (With two step)
CT /LT safety operation Two cut off Limit switches are to be
provided (With two step)

Table 2 - Bay 2 Operation

4. Testing & Commissioning

The vendor shall carry out complete testing of all newly installed systems and accessories to ensure correct functioning. Verification of crane operation with new panels, DBRs, remote controls and pendant controller shall be done in accordance with the specified operational requirements as per the table 2. Load tests shall be performed by UCSL, vendor to provide necessary support. The vendor shall commission the crane in compliance with UCSL requirements.

5. Structural Work

Current Collector Maintenance: new cage to be consider. Existing cage to be removed and install the new one to easy access to the Current collector. Retention of all existing mechanical components such as the main girder, rope drum, hook, wheels, bearings, and gearboxes, and brakes unless specified for replacement.

6. Preferred Makes of Materials

- a) Drag chain with cables: IGUS, LAAP/MURRPLASTIK
- b) Limitswitches:
 - Telemecanique/STROMAG/SIEMENS/KOINO/SAKAMOTO/YASUKAWA/SCHMERSAL/TUR CK/OMRON/PEPPERL-FUCHS
- c) Switchgear: Schneider/ABB/Siemens
- d) Loadcell: SPA/NRE/Honeywell/FLINTEC/NOBEL/SHINHAN/MAGTROL/STRAIGHTPOINT USA
- e) Encoder: Kubler /Baumer /Siemens/Hubner/Leine&Linde
- f) 200W LED lights: Havells/Bajaj/Wipro /Philips/Crompton

7. Warranty

All items shall be warranted for 24 months from commissioning. Drag chain and cables shall carry a 5-year warranty. Any breakdown during warranty period vendor should attend the same within 24 hrs, Else the cost at actuals will be deducted from vendor.

8. Exclusions

The following are excluded from vendor's scope and will remain under UCSL scope:

- a) Girder box, end carriage, LT wheels, LT motors, hoist, and CT motors.
- b) Third-party load testing and certification.
- c) ajor structural modifications.

9. Training and Handover

a) Provide comprehensive training to UCSL's operation and maintenance team, troubleshooting, and maintenance of the newly installed systems in the Bay-1.



b) Handover all relevant documentation, including user manuals, warranty certificates, and any other technical documents related to the supplied and installed components.

10. Acceptance Criteria

- a) The Bay-1 crane shall seamlessly integrate with the newly installed system and perform in accordance with the specified requirements as per the table 1.
- b) Successful demonstration of the trial run and approval the UCSL representative.
- c) Completion of operator training and handover of all necessary documents.

11. Points applicable to all cranes:

- a) All the Radio Remote Controller (RRC) Connector model should be same. At a time to the control panel either RRC/pendant will be connected, a single common connector shall be considered for RRC and Pendant.
- b) LT & CT Striker to be consider for all the Bays for limit switch activation.
- c) For tandem operation Master Crane is CS Bay side and Slave Crane is River Side.
- d) Crane has to operate based on the command without any deviation in operation.
- e) Necessary rain protection covers to be provided for all DBR, Receiver and crane to crane communication
- f) The power cables, control cables and all panel components should be properly and completely labelled and should be fully matching with the wiring diagram
- g) Earthing Double earthing should be provided for all electrical equipment using suitable size copper conductor/strips as per standards.
- h) The electrical installation of the crane shall generally conform to Section 3 of IS 3177-1999 with Amendments.
- i) Power supply AC 415 (+/- 5%) V, 3 Phase, 50 (+/-3%) Hz, 4 Wire (3 Phase + Earth)
- j) All electricals shall be suitably designed for 40°C ambient temperature with relative humidity up to 100% as per IS 875.

13. Eligibility Criteria

The bidder should have experience in installation and commissioning of VFD drives and Industrial automation/control system works involving motors, safety sensors, interlocks, and cabling.

The bidder shall submit documentary evidence in support of this experience from public sector undertakings or reputed private sector companies. The documents shall include:

- · Copies of relevant purchase orders, and
- Corresponding work completion certificates issued by the respective organizations





Scope of Work - Electrical Revival of Bay- 3 (12.5 T + 12.5 T) EOT Crane

1. Project Overview

The project involves the complete electrical revamping of the Bay- 3 (12.5 T + 12.5 T) EOT Crane at the Hangarakatte Unit. Bay-3 has two Demag double-girder EOT cranes with double crabs, each equipped with a 12.5 T single hoist. The cranes operate with the hoist and cross travel (CT) in tandem on individual cranes and crane-to-crane tandem with hoist, CT, and long travel (LT). The existing system uses Demag crane logic with stepless speed control and a Master and Slave Tele Radio remote controller. The scope covers supply, installation, testing, and commissioning of new electrical systems, ensuring safe, reliable, and efficient operation.

2. Detailed Scope of Work

a. Control panels

The work includes complete renewal of the crane's electrical system, covering control panels, wiring, and switchgear. The supply of VFDs with DBR (VFD Make: ABB) for the CT, LT and Hoist shall in the scope of vendor. The vendor shall supply all control panels, of IP55 protection rating and supported by valid test certificates. Each control panel shall be provided with one 16A, 230V industrial plug socket and one 6A, 230V domestic plug socket (mounted outside the panel), complete with the required MCB and switch. The control panel enclosure shall be fabricated from Cold CRCA sheet steel of minimum 2.0 mm thickness. The control panel enclosure shall be fabricated from Cold CRCA sheet steel of minimum 2.0 mm thickness. The main control panel dimensions are 7000 mm (L) × 450 mm (W) × 1500 mm (H). For isolating the power supply to crane MCCB suitable rotary handle to be given at outside of main door. The details of motors supplied by UCSL are as follows.

LT: Two motors with one VFD per crane

Motor: 7.5 KW/1435RPM/14Amps/415V make: Demag cranes and components Type: ZBA132B4

b050 Motor Nr:43873584 LT Speed: 5 - 50 Mtr/Min

Brake: Electromagnetic DC disc brake (Demag make)

CT: Two motors with one VFD for each crab

Motor: 0.75 KW/1410RPM/2.3Amps/415V make: Demag cranes and components Motor type: ZBA

80B4 B007 Mot Nr: 43870944 CT Speed: 5 - 20 Mtr/Min

Brake: Electromagnetic DC disc brake (Demag make)

Hoist: One motor with one VFD for each hoist

Motor: 36.7 KW/1435RPM/90 Amps/415V make: Demag cranes and components Motor Type:

ZBR 180 A4 B280 Motor no: 34864237

Hoist Speed: 1 - 10 Mtr/Min

Brake: Electromagnetic DC disc brake (Demag make)

The outgoing connection from the control panels shall be of Removable socket connections. Heavy

duty industrial connector (Hood and base type) with locking lever shall be used.



b. Radio remote Control

Vendor shall configure the existing Tele Radio master and slave remote controllers with the new electrical system.

Details of existing remote used in other cranes in yard is given below-

Master remote and follower remote:

Make: Tele radio, Model T12-60

Frequency - 433.075 - 434.775 MHZ

ANATEL 09381-21-12410

c. Limit Switches & Encoders

The scope also includes replacement of LT and CT limit switches, anti-collision sensors, junction boxes, lights, and sirens. The hoist limit switch will be retained. Encoders shall be installed on all hoist motors, including supports, and shall be compatible with the VFDs.

Limit switches shall comply to EN/IEC 60947-5-1, with ratings UI:500V Uimp; 6KV AC - 15 240V 3A.

d. Load Cell & Display

Pin-type load cells with load displays shall be installed individually for each hoist, with display dimensions of 415 mm × 200 mm approx. (tolerance ±1-4%). The load cell system shall include all accessories and calibration certificates.

e. Drag chains

Complete drag chains with accessories shall be replaced with new reputed make. This also includes fixing of required clamps and brackets for fixing of drag chain to the crabs. The number and size of the drag chain cables shall be determined by the vendor based on the operational requirements. The cables used in drag chain should be drag chain duty cable.

f. Cables & Crane lights

The vendor shall determine cable sizes and quantities as per requirement and relevant IS standard. Vendor to submit cable test certificate as applicable. Supply and installation of 4 Nos 200W LED fittings is also in the scope of vendor.

g. Indication Lights and siren

Busbar phase indication lights, fault indication lights, and crane ready lights to be installed as per the requirement. For LT and CT movements, a siren and revolving light shall also be installed.

h. Busbar and current collector

Supply and install 110 mtrs of new 250A copper busbar with accessories and 16 current collectors. Vendor shall dismantle the existing busbar and properly lay the incoming busbar cable up to 3 mtrs with necessary supports





i. Control Pendant

Existing control pendant (Make: Demag) to be used after necessary repair. Pendant hanging support rope to be renewed.

j. Dismantling of existing equipment

Dismantling of old panels, wiring, DBRs, Bus Bar, load cells, and load displays will also be in vendor's scope.

k. Deliverables

Vendor to supply all materials required to carry out the given scope.

3. Operational Requirements

- a) LT, CT, and hoist must allow stepless speed variation from minimum to maximum motor speed when operated with master and slave both radio remote and pendant controllers
- b) Synchronization of both the cranes with tandem operation in LT, CT, and hoist operation with necessary safety cut-off features as specified in the table 3.
- c) LT, CT, and hoist should have slow-speed cut-off and stop features.

12.5T + 12.5 T Crane Master Remote Operating Procedure				
Crane Selection Sequence		Required Operation		
1	C/H 1/2	Crab and Hoist have to operate independently with Main and auxiliary Joy stick		
1	C/H 1+2	Hoist and Crab need to operate in Tandem with Main Joystick		
2	C/H 1/2	Crab and Hoist have to operate independently with the Main and auxiliary Joy stick.		
2	C/H 1+2	Crab and Hoist have to operate need to operate in Tandem with Main Joystick		
1+2	C/H 1/2	Master Main crab and Main Hoist have to operate independently with the Main and auxiliary Joystick.		
1+2	C/H 1+2	Master Main Hoist and Main Crab need to operate in Tandem with Main Joystick		
1+2	C/H 1+3	Main + Follower Crane Main Hoist and Main Crab has to operate in Tandem with Master remote Main joystick		
1+2	C/H 2+4	Main + Follower Crane Auxiliary Hoist and Auxiliary Crab have to operate in Tandem with Master remote Auxiliary joystick		
1+2	C/H 1-4	Master and Follower crane All hoist and all Crab operate of Tandem with Master remote with Main Joystick		
1+2	C 1+2 /3+4, H 1- 4	Master crane Both crabs in Tandem with Main Joystick operation, Follower crane Both crabs in Tandem with Auxiliary Joystick operation, and all four Hoist in tandem with master remote with main joystick		

CONTRACT



Udupi Cochin Shipyard Limited Tender for EOT Crane Revival Work at UCSL Hangarakatte Yard UCSL/CC/SER/T/UM/39/1A/2025 Dt 24th December 2025

		0C5L/CC/SER/1/0M/39/1A/2025 Dt 24 Decemb
1+2 C 1-4, H1+2/3+4		Master crane Both Hoists in Tandem with Main Joystick operation, Follower crane Both Hoists in Tandem with Auxiliary Joystick operation, and all four Crabs in tandem with the master remote main joystick
1.0	C/H 1+3,	Master crane main Hoist and crab and Follower crane Main Hoist and crab have to operate master remote main joystick in tandem mode.
1+2	C/H 2+4	Master crane Auxiliary Hoist and crab and Follower crane Auxiliary Hoist and crab have to operate the master remote main joystick in tandem mode.
	10T+10T	on Crane Slave Remote Operating Procedure
Selected Crane	Selected Operation Sequence	Required Operation
2	3/4	Follower crane Main crab and Hoist operate with the main joystick, Follower crane Auxiliary crab and Hoist operate with the Auxiliary joystick,
	3+4	Main and Auxiliary hoist and crab has to operate with using main joystick with tandem mode
Ad	ditional fun	ctions, safety and speed references for both cranes
Additional fundamental Additional fundamental functions		If any one of the hoist/crabs/girder 1st limit switches acted then all the remaining three hoists/crabs/girder has to run on low speed. If any one of the hoist/crabs/girder 2nd step limit switches acted then remain all hoist/crab/girder should be stop. There should not be any difference in speed of hoists/crab/girders (after the tandem operation difference in distance between hoists/crab/2 cranes will be same). Hoist safety operation Hoist Lower and Upper Cutoff Limit
		switches are to be provided (With two step) CT /LT safety operation Two cut off Limit switches are to be provided (With two step)

Table 2 - Bay 2 Operation

4. Testing & Commissioning

The vendor shall carry out complete testing of all newly installed systems and accessories to ensure correct functioning. Verification of crane operation with new panels, DBRs, remote controls and pendant controller shall be done in accordance with the specified operational requirements as per the table 2. Load tests shall be performed by UCSL, vendor to provide necessary support. The vendor shall commission the crane in compliance with UCSL requirements.



5. Structural Work

Current Collector Maintenance: new cage to be consider. Existing cage to be removed and install the new one to easy access to the Current collector. Retention of all existing mechanical components such as the main girder, rope drum, hook, wheels, bearings, and gearboxes, and brakes unless specified for replacement.

6. Preferred Makes of Materials

- a) Drag chain with cables: IGUS, LAAP/MURRPLASTIK
- b) Limitswitches: Telemecanique/STROMAG/SIEMENS/KOINO/SAKAMOTO/YASUKAWA/SCHMERSAL/TURC K/OMRON/PEPPERL-FUCHS
- c) Switchgear: Schneider/ABB/Siemens
- SPA/NRE/Honeywell/FLINTEC/NOBEL/SHINHAN/MAGTROL/STRAIGHTPOINT d) Loadcell: USA
- e) Encoder: Kubler /Baumer /Siemens/Hubner/Leine&Linde
- f) 200W LED lights: Havells/Bajaj/Wipro /Philips/Crompton
- g) DSL System: safe track, Vahle, Grip, Powermech, Pagoda, silverline

7. Warranty

All items shall be warranted for 24 months from commissioning. Drag chain and cables shall carry a 5-year warranty. Any breakdown during warranty period vendor should attend the same within 24 hrs, Else the cost at actuals will be deducted from vendor.

8. Exclusions

The following are excluded from vendor's scope and will remain under UCSL scope:

- a) Girder box, end carriage, LT wheels, LT motors, hoist, and CT motors.
- b) Third-party load testing and certification.
- c) Major structural modifications.

9. Training and Handover

- a) Provide comprehensive training to UCSL's operation and maintenance troubleshooting, and maintenance of the newly installed systems in the Bay-1.
- b) Handover all relevant documentation, including user manuals, warranty certificates, and any other technical documents related to the supplied and installed components.

10. Acceptance Criteria

- a) The Bay-1 crane shall seamlessly integrate with the newly installed system and perform in accordance with the specified requirements as per the table 1
- b) Successful demonstration of the trial run and approval the UCSL representative.
- c) Completion of operator training and handover of all necessary documents.



11. Points applicable to all cranes:

- a) All the Radio Remote Controller (RRC) Connector model should be same. At a time to the control panel either RRC/pendant will be connected, a single common connector shall be considered for RRC and Pendant.
- b) LT & CT Striker to be consider for all the Bays for limit switch activation.
- c) For tandem operation Master Crane is CS Bay side and Slave Crane is River Side.
- d) Crane has to operate based on the command without any deviation in operation.
- e) Necessary rain protection covers to be provided for all DBR, Receiver and crane to crane communication
- f) The power cables, control cables and all panel components should be properly and completely la belled and should be fully matching with the wiring diagram labelling.
- g) Earthing Double earthing should be provided for all electrical equipment using suitable size copper conductor/strips as per standards.
- h) The electrical installation of the crane shall generally conform to Section 3 of IS 3177-1999 with Amendments.
- i) Power supply : AC 415 (+/- 5%) V, 3 Phase, 50 (+/- 3%) Hz, 4 Wire (3 Phase + Earth)
- j) All electricals shall be suitably designed for 40°C ambient temperature with relative humidity upto 100% as per IS 875.
- k) The vendor shall conduct a site visit prior to submitting their offer. Any clarifications required must be sought and resolved during this visit. No claims regarding site conditions or scope ambiguities shall be entertained after submission of the offer.

12. Eligibility Criteria

The bidder should have experience in installation and commissioning of VFD drives and Industrial automation/control system works involving motors, sensors, safety interlocks, and cabling.

The bidder shall submit documentary evidence in support of this experience from public sector undertakings or reputed private sector companies. The documents shall include:

- · Copies of relevant purchase orders, and
- Corresponding work completion certificates issued by the respective organizations.





UCSL/CC/SER/T/UM/39/1A/2025 Dt 24th December 2025 PRICE BID FORMAT

	Bay-1 crane(10T+1	OT) - 1	No			
S1 No	Description	UOM	Qty	Price/Unit	Total Price (INR)	
1	Supply & Installation of Panel with other accessories	No	1			
2	Supply & Installation of Load cell with display	No	2			
3	Supply & Installation of Drag chain with cable	Set	2			
4	Supply & Installation of Radio remote transmitter and receiver (1 Master & 1 Slave)	Set	2			
5	Supply & Installation of Current collector	No	8			
6	Supply & installation of any accessories required for the completion of scope of work	Ls	1			
	Bay-2 crane(10T+1	OT) - 2	2No			
7	Supply & Installation of VFD Drives(4CT and 2LT)	No	6			
8	Supply & Installation of Panel with other accessories	No	2			
9	Supply & Installation of Load cell with display	No	4			
10	Supply & Installation of Drag chain with cable	Set	4			
11	Supply & Installation of Current collector	No	16			
12	Supply & installation of any accessories required for the completion of scope of work	Ls	1			
	Bay-3 crane(12.5T+1	2.5T)	- 2No			
13	Supply & Installation of Panel with other accessories	No	2			
14	Supply & Installation of VFD Drives(4 Nos hoist, 4CT and 2LT)	No	10			
15	Supply & Installation of Load cell with display	No	4		25	
16	Supply & Installation of Drag chain with cable	set	4			
17	Supply & Installation of Busbar with accessories 250A	М	110		4	
18	Supply & Installation of Current collector	No	16			
19	Supply & installation of any accessories required for the completion of scope of work	Ls	1			
	Total Amount					
	IGST/GST					
	Grand Total Amount(INR)					

**Note:

- i. L1 will be arrived based on the lowest total amount quoted at Sl.No.24
- ii. In the case of error in multiplication/ addition in the amount calculated, the unit rate quoted will be calculated accordingly.
- iii. The above indicative list of items along with respective quantities (not limited) shall be considered as minimum requirement for preparing the quotation, if any additional item other than those specified above is required for the satisfactory completion of project as per the scope of work shall be under scope of contractor under no extra cost.
- iv. Payment shall be done based on the actual quantity of work executed.



v. Quotes with Conditional rates / additional charges / Conditional discounts will be disqualified.

Signature:

Address of the contractor:

Seal:



POWER OF ATTORNEY

(On Applicant's letter head)

(Date and Reference)

(Company Seal)

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



UNCONDITIONAL ACCEPTANCE LETTER

(Unconditional acceptance to be given by in letter head)

ACCEPTANCE OF TENDER CONDITIONS

- 1. Tender Document no. UCSL/CC/SER/T/UM/39/1A/2025 Dt 24th December 2025 for EOT Crane Revival work at UCSL Hangarkatta Yard, has been received by me/us and I/We hereby unconditionally accept the tender conditions of tender documents in its entirety for the above work.
- 2. It is further noted that it is not permissible to put any remarks/conditions in the tender enclosed in "Part-2 (price bid)". I/We agree that the tender shall be rejected and ACCEPTING AUTHORITY.

,	
(Signature of the tenderer) with rubber sta	mp
Date:	

Yours faithfully.



Tender No.: UCSL/CC/SER/T/UM/39/1A/2025 Dt: 24th December 2025

UNDERTAKING BY CONTRACTOR

Name of Service: - EOT Crane Revival Work at Hangarkatta.

- 1. "I / WE COMPLY WITH ALL CONDITIONS OF TENDER BY UCSL AND CONFIRM THAT RATES QUOTED IN THE PRICE BID ARE INCLUSIVE OF ALL TAXES AND DUTIES INCLUDING SERVICE TAX IF APPLICABLE. I / WE ALSO CONFIRM THAT PART 2 (PRICE BID) DO NOT CONTAIN ANY CONDITIONS".
- 2. "I / WE HAVE NOT MADE ANY PAYMENT OR ILLEGAL GRATIFICATION TO ANY PERSON/AUTHORITY CONNECTED WITH THE BID PROCESS SO AS TO INFLUENCE THE BID PROCESS AND HAVE NOT COMMITTED ANY OFFENCE UNDER THE PC ACT IN CONNECTION WITH THE BID."

Signature:

Seal:

Name & address of the contractor:





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

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

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

Signature:

Address of the Contractor:

Seal:

