



This tender floated in NIC - CPP Portal is with Tender ID: **2024_HOCL_823734_1 dt. 30/08/2024** and GeM Portal with **GeM Bid No. GEM/2024/B/5346032 dt. 03/09/2024**. The due date for submission is **20/09/2024 at 02:00 PM**.

INDEX

LIMITED TENDER NOTICE FOR SUPPLY, FABRICATION, TESTING AND TRANSPORTATION OF STRIPPER COLUMN OVERHEAD CONDENSER

1	General Terms and conditions of the tender	ANNEXURE - I
2	Scope of work	ANNEXURE - II
4	Compliance/No Deviation Statement	ANNEXURE – III
5	Compliance of General Conditions of Contract (GCC)	ANNEXURE - IV
6	Check List	ANNEXURE - V
7	ESI, PF, Labour Law etc. – Requirements	ANNEXURE A, B, C & D
8	Labour Laws	
9	Safety, Health & Environment (SHE) Conditions	
10	Proforma of Declaration of Black Listing/ Holiday Listing	
11	Bidder Information	ANNEXURE - E
12	Self Declaration of Local Content	ANNEXURE - F
13	Bid Security Declaration	ANNEXURE - H
14	Bank Guarantee (for EMD/Security Deposit)	ANNEXURE - Q
15	Declaration of Compliance of Order (Public Procurement No.1, 2 & 3) dt. 23 Jul 2020 & 24 Jul 2020 on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 (Annexure R)	ANNEXURE - R
16	Instructions to the Contractors for use of Vehicles	ANNEXURE – S
17	Drawing	1 SHEET
18	QAP (Quality Assurance Plan)	4 SHEETS



ANNEXURE-I

GENERAL TERMS AND CONDITIONS OF THE TENDER

Pre-Qualification Criteria (to be included in the Technical Bid)

The Tenderers shall submit the following in the Technical bid (Un-priced Bid) without which the tender will be rejected.

- Complete set of Tender Document duly filled in and signed by the Tenderer as prescribed in different clauses of the Tender Document.
- GCC duly filled in the relevant portions, signed and stamped all the pages by the tenderer (The tenderers have to download the GCC (General Conditions of Contract) from our web site www.hoclkochi.com and the same has to be returned along with the technical bid duly signed and stamped in all pages.
- Earnest Money in the manner specified in the Tender document.
- Tender should accompany the details asked in A, B,C, D, E , F, H, R & S
- Copies of work orders already completed or in progress
- Completion certificates
- Organization chart with details of key persons
- Tools and tackles available
- Concurrent commitments
- GSTN registration
- Experience on similar works executed during the last five years and details like monetary value, proof of satisfactory completion of works etc.

Clause - 1 & 2 (not applicable to MSME)

1. Average annual financial turnover during the last 3 years, ending 31st March of the previous financial year, should be at least **₹4.50 Lakhs**. (Details of annual financial turnover to be submitted with Documentary proof).
2. Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:

Three similar completed works costing not less than the amount equal to **₹6.0 Lakhs**.
OR
Two similar completed works costing not less than the amount equal to **₹7.50 Lakhs**.
OR
One similar completed works costing not less than the amount equal to **₹12.0 Lakhs**.
3. The parties who have been blacklisted / put in holiday list or parties in respect of whom action has been initiated for Blacklisting / Holiday listing by HOCL/any government / Quasi government agencies or any PSUs shall not be considered for award of job. The tenderer should give a written declaration regarding the same.
4. In addition to Clause No.3.7 of our GCC, the tenderer who do not meet the basic requirements (technical / commercial) as per the tender enquiry document and any other important condition having significant bearing on the cost / utility / performance of the required goods, services etc. will be treated as unresponsive and the tender will be liable to rejection.



EARNEST MONEY DEPOSIT - NOT APPLICABLE TO MSME / SSI Units /PSUs

Quotation shall accompany an **EMD of ₹37,500/- shall be paid by crossed DD/Bankers Cheque/thro' NEFT.**

Bank Details - State Bank of India
- A/c No. 37881840330
- IFSC - SBIN0013551
Branch Name - Belapur, Mumbai

Details of bank transfer should be indicated in your technical offer. Quotations not accompanied with EMD, are liable to be rejected.

EMD of the tenderer will be forfeited under the following conditions:-

1. If after opening of the tender, the tenderer revokes his tender or increase his quoted rates.
2. If the tenderer does not commence the work after awarding the contract.
3. No interest on EMD will be paid.
4. EMD of the successful tenderer will be adjusted against the security deposit.
5. EMD of unsuccessful bidders shall be refunded after finalization of the contract and no interest shall be payable.
6. The tender is revoked or varied during its validity period.
7. The Prices are increased unilaterally after the tender opening and during its validity.
8. The tenderer after intimation of acceptance of the tender fails to execute the agreement/or furnish security deposit within the stipulated time.

RATES

Rates quoted shall be inclusive of all taxes, duties, octroi and other levies etc. GST, in case applicable shall be paid extra. The bidder should have GST registration with Central Excise Department.

PERFORMANCE SECURITY

Performance security shall be 10% of total work order value of the contract. It shall be furnished within 21 days after notification of award and it shall be released after the defect liability period.

Performance Security shall be furnished in the form of Account Payee Demand Draft/ Bank Guarantee issued from any Commercial Bank in India/ on online payment in an acceptable form.

SECURITY DEPOSIT

Total security deposit shall be 5% of total contract value. This shall be recovered through deductions at the rate of 5% (Five percent) of the value of each running account bill till the total security deposit amount is collected, after which no further deductions shall be made on this account.

Security Deposit shall be refunded not later than 60 days to the contractor without any interest after the completion of contract in all respects and completion of all such obligations under the contract.

LIQUIDATED DAMAGES

In case the contractor fails to complete the work within the stipulated period, contractor shall be liable to pay a LD of ½% (half percent) of the contract value per Week for the delay or part thereof subject to a maximum of 5% (Five percent) of the contract value.

PERIOD OF CONTRACT

The period of the contract shall be **1 year** from the date of issue of work order/issue of instruction to start the work.



SCOPE OF SUPPLY

a. **HOCL's Scope**
Nil.

b. **Contractor's Scope**

All skilled & Unskilled manpower require for the work is to be arranged by the contractor. All machines, tools, tackles, lifting equipments such as crane, chain pulleys, slings, D shackles, Hydraulic test pumps and other tools and equipments required for the completion of the work is to be arranged by the contractor.

All the materials including steel plates required for shell, top / bottom /side dish end of the exchanger, pipes and flanges required for nozzles, shell stiffening rings, structural supports / saddle support, cleats required for fixing ladder and platforms, gaskets, etc., and TPS shall be supplied by vendor.

Supply of painting material is in the scope of Vendor.

TOOLS AND TACKLES

a. **Contractor's Scope**

No work at HOCL, Kochi premises is envisaged.

b. **HOCL's Scope**

No work at HOCL, Kochi premises is envisaged.

GENERAL SITE CLEANING

Working site should always be kept cleaned up to the entire satisfaction of the Engineer/Officer-In-Charge. Upon completion of the work, all materials shall be transported to designated locations in HOCL premises as directed by the Engineer/Officer-In-Charge on daily basis. Material reconciliation has to be carried out before submitting the bill.

TIME OF COMPLETION

The supply of the equipment at HOC site should be completed within **4 months** from the date of work order / LOI

VALIDITY OF THE TENDER

The tender shall be kept valid for acceptance for a period of **Three Months** from the last date prescribed for receipt of the tender.

A Tenderer shall not be entitled during the said period of three months without the consent in writing of the company to revoke or cancel his tender or to vary the tendered rate or any terms thereof.

PRICE

The Contract will be awarded on fixed all-inclusive price unless otherwise specified. All rates in the tender shall cover applicable taxes, levies and duties. However applicable GST will be paid by HOCL subject to the successful tenderer having GST registration with Central Excise.

The price shall be quoted both in figures and words. In case a tenderer has quoted two different prices in words and figures the lower of the two will be considered valid and binding on the tenderer.



PAYMENT TERMS

Payment will be made within 30 days after supply of the Exchanger at HOCL, Ambalamugal along with all documents like final inspection cum release note, test certificate data folder, as built drawing and CD.

CONTRACT PREFERENCE

Contract / Price Preference or any other concessions applicable for **MSME / SSI Units /PSUs** will be as per latest Government of India Directives. For availing this benefit, the bidder shall make their claim in the Technical Bid itself and enclose necessary documentary evidence to prove their eligibility.

WE HAVE ALSO FLOATED TENDER IN NIC PORTAL. IF ANY PARTY QUOTED THROUGH NIC PORTAL AND BECAME L₁ COMPARED TO THE RATES IN GeM PORTAL, WORK WILL BE AWARDED TO THE NIC BIDDER AND VICE VERSA.

AGREEMENT

THE CONTRACTOR HAS TO EXECUTE AN AGREEMENT WITH HOCL IN THE PRESCRIBED FORMAT ON A KERALA STATE - NON JUDICIAL STAMP PAPER OF RS. 200/- IN CASE OF PLACEMENT OF WORK ORDER.

DEFECT LIABILITY PERIOD

The contractor shall guarantee the entire work for a period of **18 months** from the date of supply or **12 months** from the date of installation of the equipment at the site whichever is earlier.

GUARANTEE

The equipment (section supplied) and parts shall be guaranteed against defects in design, material, workmanship, and performance for a period of 18 months from the date of supply or 12 months from the date of installation of the equipment at the site whichever is earlier.

Arbitration of disputes

"All disputes, differences, questions and claims arising out of, under or touching upon this Tender /Agreement/ Purchase Order/ Work Order shall be settled amicably between the parties through mutual discussion and failing that, such disputes, difference, questions or claims shall be referred for resolution through arbitration to the India International Arbitration Centre or a Sole Arbitrator to be appointed by the Chairman-cum-Managing Director of HOCL and the award of Arbitration shall be final and binding on the parties. The seat of the Arbitration shall be at Kochi, Kerala, India and the proceedings of the arbitration shall be held at Kochi, Kerala, India in accordance with the India International Arbitration Centre Act 2019 / Indian Arbitration & Conciliation Act 1996 or any statutory modification or re-enactment thereof for the time being in force.

OTHER TERMS AND CONDITIONS

GENERAL CONDITIONS OF CONTRACT (GCC) OF HOCL

The General Conditions of Contract of the company is applicable to, and forms part of the contract. The General Conditions of Contract of HOCL is available in the office of The Chief General Manager (P&A) of HOCL, Ambalamugal or can be downloaded from our Web site www.hoclkochi.com.

RIGHT TO ISSUE ADDENDUM

The company reserves the right to issue any addendum to the tender document to clarify/amend/supplement and/ or delete any of the conditions, clauses or terms stated in the tender documents. Each addendum issued shall be distributed to the tenderer or his authorized representative and each such addendum shall become part of the tender documents.



DUE DATE & TIME: Due date for submission of tender is (Closing date) **20/09/2024 at 02.00 PM.**

OPENING OF BIDS: The Bids will be opened on **21/09/2024 at 02.00 PM** electronically. Technically acceptable bidders will be informed about the date and time of opening of the price bids by emails.

VALIDITY OF OFFER: Offer shall be valid for a minimum period of 90 days from the last date of submission stipulated for the tender.

PRICE BID SUBMISSION-BOQ: Bidders are requested to note that they should necessarily **submit their financial bids in the format provided and no other format is acceptable.** If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. **Bidders are required to download the BOQ file, open it and complete the blue coloured (unprotected) cells with their respective financial quotes and other details** Refer Instructions to Bidder for Online Bid Submission. **(such as name of the bidder).** No other cells should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

RIGHT TO REJECT A BID: HOCL reserves the right to reject any bid due to reasons such as (a) Vendor not following above bidding procedures (b) Vendor not being technically acceptable to HOCL (c) Not enclosing EMD with the techno commercial bid or EMD paid being lesser than the stipulated amount (d) Vendor not agreeing with the general conditions of the tender. (e) Not enclosing any particular documents asked for (f) Any other valid reasons.

SIGNING & STAMPING ON ALL PAGES OF BIDS: The vendor shall sign and stamp on all the pages of the bids uploaded, failing which bids are liable to be rejected.



SCOPE OF WORK

“TIME IS THE ESSENCE OF THIS CONTRACT”

The scope of work includes but not limited to the following:

1. Supply

Preparation of fabrication drawing, supply, fabrication, testing and transportation of shell, Straight Tube Bundle, dish end, floating head, floating head cover, Channel Head, Channel Cover and test rings of Stripper Column Overhead Condenser as per the attached drawings, Technical specifications, etc.

Design Data

	Shell	Tube Side
Design Pressure, Kg/cm ² g	3.5	6.5
Design Temperature °C	228	121
Working Pressure	-	-
Working Temperature	-	-
Hyd.Test Pressure, Kg/cm ² g	5.47	9.75
Corrosion Allowance, mm	Nil	3mm
Joint Efficiency	100%	100%
Radiography	FULL	FULL
Heat Treatment	Dished Head Normalized	Floating Head
Fluid	Hydro Carbon	Cooling Water
Number of Passes	ONE	TWO
Lining	-	-
Insulation Thickness	50MM	-
Finish Required		
MOC	SA 240 TP 316	For Tube SA 213 TP 316
Design Code: ASME Sec VIII Div 1, TEMA CLASS 'R'		

Detailed Engineering

1. The scope of work includes procurement of materials, fabrication, testing and supply of the Stripper Column Overhead Condenser. Vendor shall supply the exchanger with all appurtenances, internals and accessories required for testing, operation and maintenance as per the drawing. Vendor shall ensure that the material specification/dimensions/weld seam locations and nozzle orientations are identical to the attached drawing. However the vendor shall submit the Exchanger development and detailed drawing including the material list for review and approval by HOCL IIIrd party inspection agency. All parts like tube bundle assembly, floating head, floating head cover, channel head, channel cover, dish end, Internals, Distribution Pipes, Nozzles, Gaskets, Fasteners, Test Rings, etc. are covered in this scope of work.
2. Site visit for assessment of critical details / dimensions such as nozzle orientation, nozzle stand out (projection), nozzle flange rating and drilling dimensions, etc. if the party desires so. All nozzle connections on the equipment shall match the pairing nozzle flanges of the connected piping in existing system.
3. All Gasket faces should be serrated to 125Ra (As per B16.5 clause 6.3.4).



4. Procurement of all materials as per drawing including steel plates, Tube Sheet, straight Tubes, Baffle plates, Tie rod, floating head, floating head cover, channel head, channel cover, dish end, structural, nozzle pipes & flanges, nozzle reinforcement and structural pad plates, structural supports, cleats for shell, Pipes and flanges required for nozzles, shell stiffening rings, external shell stiffeners, lifting lugs, saddle support, structural support cleats required, Fasteners, Gaskets, etc.
5. Tube bundle assembly consisting of tube sheet, straight tubes, baffles, dowel pins, jack screws, eye bolts, plugs, jack screw bolts, hexagonal bolt and guide pin, spacers, tie rods etc., as per TEMA Class R. In case of any deviation from the above, the same should be brought out in the deviation list along with the unpriced bid.
6. Preparation and obtaining approval from IIIrd Party inspection agency of welding procedure specification (WPS), Procedure Qualification Records (PQR) and welder performance qualification (WPQ).
7. Documents including a detailed quality assurance plan (QAP) to be submitted immediately on receipt of firm work order for the approval of HOCL/III Party Inspection Agency.
8. Fabrication drawings shall be submitted for approval within 10 days from the receipt of work order. (Delay in submission of drawings / getting approval shall in no way relieve the vendor of his responsibility in meeting all the provisions of the enquiry conditions). However, the dimensions and thickness of the Exchanger need to be maintained.
9. All test certificates like material test certificates (Mill test certificate), chemical analysis report etc. should be from a reputed govt. approved lab duly reviewed by third party. The party should submit 3 copies of the data folder to HOC duly approved by third party inspection agency at the time of delivery. The data folder should contain at least the following certificates:
 - a. Material test certificates (Mill test certificates)
 - b. Chemical Analysis Report
 - c. Dimensional Inspection Report
 - d. Visual inspection certificates for deformation of vessel after welding, finish of material / machined surface
 - e. Hydro test certificate
 - f. NDT Test certificate
 - g. Final Inspection cum release note
 - h. WPS/WPQ for all welding, radiography report
 - i. Stress relieving report with temperature time graph
 - j. As-built drawing (6sets + 1 soft copy in Auto CAD –Editable format)
10. IIIrd Party Inspection is required for
 - Material identification
 - QAP & Delivery schedule, WPS, WPQ, PWHT, NDT Procedures, Radiography, Stress Relieving etc.
 - Stage wise inspection during fabrication as per QAP
 - Final Inspection during fabrication as per QAP.

Inspection and testing shall be carried out strictly to the requirements of codes stated in the specification by the IIIrd Party inspection agency. Third party inspector will be appointed by HOCL at their cost.
11. Fabrication of the exchanger shell, Tube bundle, floating head, floating head cover, Channel Head, Channel cover and dish end, pipes & flanges required for nozzles, shell stiffening rings external shell stiffeners, lifting lugs, structural support / saddle support, cleats required etc. Post weld heat treatment of the fabricated equipment.
12. Mechanical fabrication and testing shall be as per ASME Sec VIII Div 1 / TEMA Class R (Latest edition).



13. Welding of cleats / brackets for the fixing of ladders and platforms (if any).
14. Post weld heat treatment of the fabricated equipment.
15. Radiography has to be done as per ASME Code.
16. Inspection and testing including hydro test.
- 17. WORK PLANNING CHART AND WEEKLY PROGRESS REPORT SHOULD BE SUBMITTED TO HOC WITHIN 5 DAYS IN THE EVENT OF GETTING ORDER.**
18. Transportation of the equipments to site. Transit insurance will be arranged by HOCL. Vendor shall inform the details prior to the dispatch for insurance purpose.
19. Supply and application of primer and finish paint on channel Head and Channel Cover as per section 6.
20. Any other items covered in other documents / drawings attached with the enquiry but not specifically mentioned above.

2. Submission of drawings & Documents

Vendor shall submit the following documents to HOCL.

1. Dimensioned general arrangement drawing of the Exchanger and Tube Bundle shall be submitted. The party should submit the as-built drawing along with supply of exchanger shell. (6 sets + 1 set soft copy in Auto CAD editable format)
2. Dimensioned Exchanger development drawing showing details of the circumferential & longitudinal weld seams, nozzle openings & RF pads and external shell stiffeners, ladder / platform support and insulation cleats etc.
3. Detailed QAP for procurement, Fabrication, inspection and supply shall be submitted for approval and weekly progress report should be submitted to HOCL without fail.
4. Welding procedure specification (WPS), Procedure Qualification Record (PQR) and Welder performance qualification (WPQ)
5. Material Test Certificates for brought-out items such as plates, nozzle pipe & flanges, fasteners, gaskets, etc.
6. NDT, Dimensional report and hydro test report.
7. Radiography report
8. Heat treatment procedure and stress relieving record.
9. Final "AS BUILT" drawings as mentioned above.

3. Materials

1. All the materials including steel plates required for shell, Channel Head, Straight - Tube Bundle, dish end, Channel Cover, Test Rings, pipes and flanges required for nozzles, shell stiffening rings, structural supports / saddle support, cleats required for fixing ladder and platforms, etc., shall be supplied by vendor.



2. Refer the attached drawing for the item-wise material of construction / bill of materials.
3. All nozzle fasteners shall confirm to ASTM A193 Gr.B7 and ASTM A194 Gr. 2H.
4. All materials supplied by the vendor shall meet the requirements of attached drawings/ Specifications and applicable codes & standards. Test certificates for the materials shall be submitted to HOCL.
5. All gaskets shall be supplied for Shell & Dish end flanges, floating head, channel head cover, tube bundle as per the drawing attached.

4. Fabrication

1. Fabrication of the section shall be confirms to ASME Sec VIII Div.1 code
2. The drawing of the exchanger is attached. If anything is not clear from the drawing the bidder is free to visit our site to clarify their doubts and collect the details they required. It is the responsibility of the vendor to submit the fabrication drawing of the equipment. The scope of the vendor shall include site visit for assessment of critical details / dimensions such as nozzle orientation, nozzle stand-out (projection), nozzle flange rating and drilling dimensions, etc. if the party desires so. Vendor shall submit to HOCL the detailed general arrangement and shell development drawings.
3. Formed parts shall have minimum required thickness after forming as per the drawing. Plate thickness selection shall be done after consideration of thinning while forming.
4. Tube bundle assembly consisting of tube sheet, straight tubes, baffles, dowel pins, jack screws, eye bolts, plugs, jack screw bolts, hexagonal bolt and guide pin, spacers, tie rods etc., as per TEMA CLASS R Standard and no deviation is permitted. In case of any deviation from the above, the same should be brought out in the deviation list along with the unpriced bid.
5. Straight tubes of Dia 19.05 mm OD and 14 BWG minimum wall mm thick in SA 213 TP 316 required as per the attached drawing.
6. Tube sheet plate shall be SA 240 TP 316 plate with 25 mm thick on fixed side and 32 mm thick on Floating head side, Baffle plate shall be SA 240 TP 316 with 10 MM thick (4Nos), Tube & Spacer tubes shall be SA 213 TP 316 with 19.05 mm OD X 10 BWG shall be under your scope as per the drawing.
7. The seal welding of the tubes to tube sheet shall be done by TIG welding, and the welding is to be carried out by a qualified welder and the welding is to be done before the expansion of the tubes. The welding shall be done in such a manner that, there shall be no distortion in the tube sheet. The expansions of the tubes are to be done after welding with required torque. The filler wire used for TIG welding should be of L&T/ESSAB/Advani Make only
8. Drilling and tapping for Eye bolt/Lifting hook is to be providing on tube sheet.
9. Design and fabrication of the dummy covers (end closure) and test rings for shop hydro test is in the vendors scope and same has to be handed over to HOCL. The cost towards the same shall be inclusive of total cost offered.
10. This item is required one to one replacement of the shell and dish end of the existing exchanger and supplier has to take care of all nozzle orientation, stand out, padding etc. to avoid any mismatch at site during erection.



Testing & Inspections

1. IIIrd Party inspection is required for material identification. Approval of WPS / WPQ and PQR Radiography and NDTs as per QAP.
2. IIIrd Party shall carry out the inspection at various stages of fabrication / procurement, including raw material identification as per QAP.
3. Approval of review of drawings / specifications / QAP etc. by HOCL shall in no way relieve the vendor of his responsibility in meeting all the provisions of the enquiry conditions.
4. All root runs of butt-welds shall be back chipped and dye penetrant tested.
5. All weld joints shall be tested by MPI & UT Flaw check also.
6. All 'T' joints shall be radio graphed (covering a minimum of 100mm on each leg of the tee)
7. Final inspection and hydro testing shall be carried out at shop before dispatch and the same shall be got witnessed by IIIrd Party/HOCL.

5. Painting of Channel Head and Channel Cover.

1. Grit Blasting - Complete grit blasting of the equipment has to be done to the required finish as per SSPC-SP-5-63 and the same shall be certified by III party inspection.
2. Supply of painting materials & painting of the equipment and attached structural as per the detailed given in Technical Specification.
3. All un-machined CS (external) surfaces shall be shot / slag blasted to SA 2 ½ Standard and painted.
4. All machined surfaces to be coated with rust protecting coats.

6. General

1. Entire work shall be carried out in accordance with relevant standards and accepted codes of practices.
2. All butt welds shall have full penetration. When welding is carried out from both sides of a joint, the root of first side shall be dressed back to sound metal and Dye penetrant tested before commencement of weld on second side.
3. All butt welds on the inner surface of the replaced section of the vessel shall be ground flush. Fillet welds shall be ground to smooth contour.
4. Cleats for structural shall not be welded directly to the vessel. Pad plates of the same material as the shell be provided for this purpose.
5. All necessary cleats and pad plates required for platforms and ladders and pipe support cleats are to be provided.
6. The bolt holes of saddle support to be fabricated and shall match with the present foundation bolts. Cleats for platforms and ladders to be provided at the present location for use of existing platforms and ladders.
7. All civil works and erection works are exempted from scope of work.
8. Mating flanges exempted from the scope of supply.



7. Transportation

1. The entire section of the vessel, davit arms etc. shall be transported to site in one piece.
2. All flanges and gasket faces should be covered with wooden plank before transportation.
3. Unloading of the equipments at HOCL site shall be carried out by HOCL at their cost.
4. Fasteners shall be properly marked, packed and supplied loose.
5. Transit Insurance will be arranged by HOCL at their cost. However party need to provide the dispatch details in advance to arrange the same.

8. Exclusions

Field Hydro test, supply and fixing of platforms & ladders is excluded from the vendor's scope.

9. Guarantee

The equipment (section supplied) and parts shall be guaranteed against defects in design, material, workmanship, and performance for a period of 18 months from the date of supply or 12 months from the date of installation of the equipment at the site whichever is earlier.



TECHNICAL SPECIFICATION FOR PAINTING

General

These technical specifications shall be applicable for the work covered by this contract, over and above and without prejudice to the various codes of practices, standard specifications, etc., it being specifically understood that contractor shall carry out the work in all respects with the best quality of materials and workmanship, and in accordance with the best engineering practice and instructions of Engineer-in-Charge.

Wherever it is stated in the specification that a specific material is to be supplied or a specific work is to be done, it shall be deemed that the same shall be supplied or carried out by the contractor of his own cost.

Scope

Scope of work covered in the specification shall include without being limited to the following:

This specification defines the requirements for surface preparation, selection and application of paints, on equipment vessels, machinery, piping, ducts, tanks, steel structures, cable trays etc.

Codes and Standard

IS : 101 - Methods of test for ready mixed paints and enamels

IS : 2074 - Specifications for ready mixed paints, red oxide zinc chrome priming

IS : 2932 - Specification for enamel, synthetic exterior (a) undercoating (b) finishing

The paint manufacturer's instructions shall be followed as far as possible at all times. Particular attention shall be given to the following:

- a. Proper storage to avoid exposure, as well as extremes of temperature.
- b. Surface preparation prior to painting
- c. Mixing and thinning
- d. Application of paints and the recommended limit on time intervals between coats.

Any painting work including surface preparation on piping or equipment shall be commenced only after the system tests have been completed and clearance for taking up painting work is given by the IIIrd Party, who may, however, at his discretion authorize in writing for, the taking up of surface preparation or painting work in any specific location, even prior to completion of system test.

Paint Materials

Manufacturers shall furnish the characteristics of a paints indicating the suitability for the required service conditions. Primer and finish coats shall be of class quality and shall conform to the following:

Primer

Primer (P - 6) - Epoxy Zinc Phosphate Primer

Type	- Two pack.
Composition	- Polyamide cured epoxy resin medium pigmented with Zinc Phosphate
Volume solids	- 40% (min.)
DFT	- 35 microns/coat (min)
Covering capacity-	11 - 12 M ² /Lit/coat

Finish Coats

Finish Coat (F - 6) - Epoxy Coating

Type	- Two pack.
Composition	- Polyamide cured epoxy resin medium suitably pigmented
Volume solids	- 60 - 65%
DFT	- 35 microns/coat (min)
Covering capacity	- 6 - 6.5 M ² /Lit/coat



Surface preparation and painting of equipment using epoxy paint systems. Surface preparation should be as per SSPC-SP-2-63

Painting System Requirement:

One coat of Zinc Phosphate Epoxy Primer (P - 6)

Two coats of Epoxy finish paint (F - 6)

DFT

a. Primer - (35 + 3) (1 Coat)

b. Finish - (35 + 3) (2 Coats)

Total DFT of all three coats - 105 μ (min)

Colour

Epoxy Grey

Note :

1. Covering capacity and DFT depends on method of application. Covering capacity specified above are theoretical. Allowing the losses during application, minimum specified DFT should be maintained.
2. All primers and finish coats should be cold cured and air drying unless otherwise specified.
3. All painting should be applied in accordance with manufacturer's instructions for surface preparation, intervals, curing and application. The surface preparation, quality and workmanship should be ensured.
4. Technical data sheets for all paints shall be supplied at the time of submission of quotations.

Manufacturers

The paints shall conform to the specifications given above and Class - I quality in their products, range of any of the following manufacturers:

- a. M/s. Asian Paints (India) Ltd:
- b. M/s. Bombay Paints
- c. M/s. Berger Paints India Ltd:
- d. M/s. Goodlass Nerolac Paints Ltd:
- e. M/s. Garware Paints
- f. M/s. Jenson & Nicholson
- g. M/s. Shalimar Paints

Inspection and Testing

All painting materials including primers and thinners shall be procured from reputed manufacturers as per specifications and shall be accompanied by manufacturer's test certificates.

The painting work shall be subject to inspection by Illrd Party at all times. In particular, following stage inspection will be performed and contractor shall offer the work for inspection and approval at every stage before proceeding with next stage. The record of inspection shall be maintained. Stages of inspection are as follows:

- Surface preparation
- Primer application
- Each coat of paint



Any defect noticed during the various stages of inspection shall be rectified by the contractor to the entire satisfaction of IIIrd Party Inspection before proceeding further. Irrespective of the inspection, repair and approval at intermediate stages of work, contractor shall be responsible for making good any defects found during final inspection/guarantee period/defect liability period as defined in general condition of contract. Dry film thickness (DFT) shall be checked and recorded after application each coat.

Primer Application

After surface preparation, the primer should be worked by brush application to cover the corners, sharp edges etc. in the presence of IIIrd Party inspector nominated by HOCL.

The shades of successive coats should be slightly different in colour in order to ensure application of individual coats. The thickness of each coat and complete coverage should be checked as per provision of this specification. This should be approved by IIIrd Party inspector before application of successive coats.

Prior to application of paints on surfaces, the thickness of the individual coat shall be checked by application of each coat of same paint on test M.S.Panel. The thickness of paint on test panel shall be determined by using thickness gauge such as "Elkometer". The thickness of each coat shall be checked as per provision of this specification. This shall be approved by IIIrd Party before application of paints on the vessel surface.

Final inspection shall include measurement of paint dry film thickness, check of finish and workmanship. The thickness should be measured at as many points/locations as decided by IIIrd Party inspector and shall be within $\pm 10\%$ of the dry film thickness

Standard Specification for surface preparation

Surface preparation shall be done by one of the following methods in accordance with the SSPC specification:

No.	Specification	Subject	Purpose
1.	SSPC-SP-1-63	Solvent Cleaning	Removal of oil, grease, dirt, soil, salts and contaminants by cleaning with solvents, vapour, alkali, emulsion or steam
2.	SSPC-SP-2-63	Hand Tool Cleaning	Removal of loose rust, loose mill scale, and loose paint to degree specified, by hand chipping, scraping, sanding and wire brushing
3.	SSPC-SP-3-63	Power Tool Cleaning	Removal of loose rust, loose mill scale, and loose paint to degree specified, by power tool chipping, descaling, sanding, wire brushing and grinding.
4.	SSPC-SP-4-63	Flame Cleaning on New Steel	Dehydrating and removal of rust, loose mill scale, and some tight mill scale by use of flame, followed by wire brushing
5.	SSPC-SP-5-63	White Metal Blast Cleaning	Removal of all visible rust, mill scale, paint and foreign matter, by blast cleaning by wheel or nozzle (dry or wet) using sand, grit or shot. (for very corrosive atmosphere where high cost of cleaning is warranted)
6.	SSPC-SP-6-63	Commercial Blast Cleaning	Blast cleaning until at least two-thirds of each element of surface area is free of all visible residues (For rather severe conditions of exposure)
7.	SSPC-SP-7-63	Brush-off Blast Cleaning	Blast cleaning of all except tightly adhering residues of mill scale, rust and coatings, exposing numerous evenly distributed flecks of underlying metal.
8.	SSPC-SP-9-63T	Weathering Followed by Blast Cleaning	Weathering to remove all or part of mill scale followed by blast cleaning to one of the above standards.
9.	SSPC-SP-10-63T	Near White Blast Cleaning	Blast cleaning nearly to white metal cleanliness, until at least 95% of each element of surface area is free of all visible residues. (For high humidity, chemical atmosphere, marine or other corrosive environment.)



COMPLIANCE / NO-DEVIATION STATEMENT

It is hereby stated that the quotation/offer submitted by us is in full compliance with all the documents issued against the enquiry and also further confirmed that there is no deviation from all the terms and conditions as per the enquiry.

Signature of the Tenderer :

Name of the Tenderer :

Address :

Place :

SEAL

Date :



ANNEXURE - IV

COMPLIANCE OF GENERAL CONDITIONS OF CONTRACT (GCC)

It is hereby stated that we have read and understood General Conditions of Contract (GCC) and confirm that we abide by all the terms and conditions of GCC.

Signature of the Tenderer :

Name of the Tenderer :

Address :

Place :

SEAL

Date :



ANNEXURE- V

CHECK LIST

EARNEST MONEY DEPOSIT NOT APPLICABLE TO MSME / SSI Units /PSUs

Quotation shall accompany an EMD of ₹37,500/- shall be paid by crossed DD/Bankers Cheque/thro' NEFT.

Bank Details - State Bank of India
- A/c No. 37881840330
- IFSC - SBIN0013551

Branch Name - Belapur, Mumbai

Details of EMD enclosed: (YES/NO).

DD No. _____ Dated _____ Amounting to _____

Name of the Bank : _____

PRE-QUALIFICATION CRITERIA (TO BE INCLUDED IN THE TECHNICAL BID) (Not applicable to already registered vendors of HOCL)

The Tenderers shall submit the following in the Technical bid (Un priced Bid) without which the tender will be rejected.

- Complete set of Tender Document duly filled in and signed by the Tenderer as prescribed in different clauses of the Tender Document.
- GCC duly filled in the relevant portions, signed and stamped all the pages by the tenderer (The tenderers have to download the GCC (General Conditions of Contract) from our web site www.hoclkochi.com and the same has to be returned along with the technical bid duly signed and stamped in all pages.
- Earnest Money in the manner specified in the Tender document.
- Tender should accompany the details asked in A, B,C, D, E , F, H, R & S
- Copies of work orders already completed or in progress
- Completion certificates
- Organization chart with details of key persons
- Tools and tackles available
- Concurrent commitments
- GSTN registration
- Experience on similar works executed during the last five years and details like monetary value, proof of satisfactory completion of works etc.

Clause - 1 & 2 (not applicable to MSME)

1. Average annual financial turnover during the last 3 years, ending 31st March of the previous financial year, should be at least ₹4.5 Lakhs. (Details of annual financial turnover to be submitted with Documentary proof).



2. Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:

Three similar completed works costing not less than the amount equal to **₹6.0 Lakhs.**

OR

Two similar completed works costing not less than the amount equal to **₹7.50 Lakhs.**

OR

One similar completed works costing not less than the amount equal to **₹12.0 Lakhs.**

3. The parties who have been blacklisted / put in holiday list or parties in respect of whom action has been initiated for Blacklisting / Holiday listing by HOCL/any government / Quasi government agencies or any PSUs shall not be considered for award of job. The tenderer should give a written declaration regarding the same.
4. In addition to Clause No.3.7 of our GCC, the tenderer who do not meet the basic requirements (technical / commercial) as per the tender enquiry document and any other important condition having significant bearing on the cost / utility / performance of the required goods, services etc. will be treated as unresponsive and the tender will be liable to rejection.

Signature of the Tenderer :

Name of the Tenderer :

Address :

Place :

Date :