

(This tender aims for already enlisted contractors for this work with HOCL Kochi Unit. Any new contractor who wish to empanel for this type of work may submit their credentials so that they will be evaluated and pre-qualified and shall be considered for similar future work).



**HINDUSTAN ORGANIC CHEMICALS LTD**  
**(A Govt. of India Enterprise)**  
**AMBALAMUGAL PO**  
**ERNAKULAM DIST, KERALA, INDIA**

Phone :04842720911 ; Email :kochi@hoclindia.com  
Fax :0484-2720893 ; Web :www.hoclindia.com

**REQUEST FOR QUOTATION**

Service RFQ NO.	: 70000080 / MEC30254
Tender Type	: Limited Tender Service
Due Date/Time	: 26-Apr-2021/14.00 hrs
Opening date/Time	: 26-Apr-2021/15.00 hrs
Contact Person	: Mr.MK Girijan, CE (MECH)
Date	: 5-4-2021

**SERVICES REQUIRED AT:**

M/s.HINDUSTAN ORGANIC CHEMICALS LTD  
AMBALAMUGAL PO, ERNAKULAM DIST, KERALA, INDIA

**Dear Sirs,**

**Subject:** IN-SITU METALLOGRAPHY

**Sealed quotations in duplicate are invited by Hindustan Organic Chemicals Ltd.,Ambalamugal for the works as detailed below.A set of tender documents is enclosed for submitting your quotation.**

**Name of Work:IN-SITU METALLOGRAPHY. A brief description of the scope of work is given separately which is attached herewith.**

**Last date of receipt of quotations:Tenders will be received at the office of General Manager(P&A), Hindustan Organic Chemicals Ltd.,Ambalamugal on or before 26-Apr-2021/14.00 hrs. Bids received after the due date will not be considered.**

**Schedule of Rates,Scope of Work,Terms & Conditions and Other Documents are enclosed**

*Continued...*

Bidders shall go through all documents attached to the quotation and fill in the blank spaces provided for and submit the same duly signed and dated. Quotation should be completed in all respects and in accordance with the various terms and conditions specified in the enquiry documents. Incomplete quotations are liable to be rejected.

**Goods and Service Tax (GST) :**

Goods and Service Tax (GST) applicable shall be paid extra, to those who have GSTIN registration, unless otherwise specified elsewhere.

**Rates :**

The Tenderer should quote the rates in English both in figures as well as in words. Offers received without the rates in figures and in words are liable for rejection. In case of discrepancy exists between the rates quoted in figures and words, the rates quoted in words will prevail.

**ESI, PF, Labour Law, SHE (Safety, Health & Environment) etc. # Requirements :**

Refer Annexure A, B and C attached.

**Validity of Offer :**

The offer shall be valid for a period of 90 days from the last date of submission of tenders. The successful tenders shall sign the 'Form of Rate List' or execute an agreement in non-judicial stamp paper of appropriate value (to be borne by the contractor) within 21 days from the date of issue of letter of acceptance

**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.

**Other Terms & Conditions :**

The tenderers have to download the GCC (General Conditions of Contract) from our website [www.hoclkochi.com](http://www.hoclkochi.com) and the same has to be returned along with the technical bid duly signed and stamped in all pages. However those who wish to have a hard copy of the same, can collect from us on request. The request for extension of due date will not be entertained in any case.

In addition to Clause No. 3.7 of our GCC, the tenderers 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.

In case you are unable to quote, kindly send the quotation with a regret for our records. Non-receipt of a regret will adversely affect your vendor rating.

Your quotation must be strictly in enclosed envelope indicating Collective RFQ Number, RFQ Number, Due Date and Name of Work.

For all future correspondences, please mention the Service RFQ Number , Contractor Name and Vendor Code.

The tender notice may be read in conjunction with the standard General Conditions of Contract (available in [www.hoclkochi.com](http://www.hoclkochi.com)), Special Conditions of Contract, Technical Specification, Drawings and other documents forming part of this enquiry.

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## Schedule of Rates

Name of vendor:

GSTIN Regn. of vendor: .....

Item No.	Service No. Description	Unit	RFQ Qty	Unit Rate (INR) Figure / Words	Amount (INR)
1	<b>S1001729</b> In-situ Metallography ( by Replication Technique)of Hot Oil Heater tubes, Cumene Reactor and other equipments as per the scope of work.	Numbers	25.00		
<b>Service Account Code(SAC) for S1001729 :.....</b>					
<b>Rate of Tax %:</b>					

All fields including Service Account Code and tax rate for all the items to be filled by the vendor /contractor failing which your offer is liable to be rejected.

Total Amount Rs:

In Words Rupees:.....

Date :

Signature and Seal of the Contractor

## NOTES

### 1.SCOPE OF WORK:-

The scope of work involves but not confined to In-situ Metallography of Hot oil heater tubes and Cumene Reactor.

1. Replication technique shall be applied after preparing the surface at selected location of the component to reproduce accurately the metallographic features such as distribution, size and morphology of the carbide precipitation and micro voids associated with early stage of creep damage, inter-granular/ trans-granular cracks typical in stress corrosion and temper embrittlement cases.
2. The procedure of the job shall generally conform to ASTM E-1351.
3. Unless stated otherwise, replicas shall contain weld metal, heat affected zone and base metal.
4. Superior quality of replication consumable shall be used.
5. Fine cleaning of spots by chipping / grinding. The areas for replica shall be prepared by either mechanical or electrolytic polishing means followed by chemical/electrochemical etching of the spots before study/examination.
6. A microscopic examination of each replica shall be made on site to verify that it is of adequate quality and to note signs of material damage (e.g. creep micro or macro cracking) which may require immediate attention. The quality and reproducibility of the replicas should be checked at site by a portable optical microscope before sending them to laboratory. If significant damage is found at a replica site during the onsite examination, the location shall be re-replicated after re-grinding/polishing.
7. Prior to final evaluation of replicas, these shall be coated with a film of vapour-deposited gold or gold-palladium. The coated replicas shall be examined, with a light (optical) microscope at magnification ranging from 100 X to 500 X. Arrangement then shall be made by the NDT agency to view the replicas under Scanning Electron Microscopy (SEM) at magnification ranging from 2000X to 5000X. As per the requirement, HOCL may insist for Third Party Inspection (TPI). In that case, the examination shall be carried out in presence of TPI/HOCL.
8. Analysis of microstructure.
9. Each replica shall be given a unique identification designation. The report shall include a sketch of the component showing the location of each replica site as well as on overall photograph and close up photograph showing the replica location.
10. Generation and submission of the report, stipulating, the remaining life of the tubes.
11. The report shall include the photomicrograph of the replica at each zone where creep damage has occurred, taken at a suitable magnification to show the microstructure and significant findings. A photomicrograph shall be taken of a typical replica of each component.
12. The report shall include the damage classification associated with each zone of interest of each replica and the corresponding recommended re-examination interval.
13. Detailed report with colored photographs (6 sets) shall be submitted giving all observations and details of equipment, consumable etc.
14. If any immediate activity to be done after In-situ Metallography, the procedure for the same shall be submitted.
15. The detailed procedure for in-situ metallography shall be submitted for review and approval.
16. All the above work should be carried out as per HOCL specification and under HOCL inspection.

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## 2.SCOPE OF SUPPLY:- MATERIALS

### a. Contractor's Scope

All accessories required for the job and competent technician shall be brought to the site by the contractor for satisfactory completion of the work.

### b. HOCL's Scope

Scaffolding and platform will be erected at the area where the in-situ metallography is to be done.

220 # 230, 50Hz, A/C supply minimum two points with extension shall be provided. Adequate lighting at the work spot.

## TOOLS AND TACKLES

### a. Contractor's Scope

Contractor has to bring all equipments required for grinding, polishing, etching and replication of spots including all consumables, chemicals and tools and tackles required for the satisfactory completion of the job.

### b. HOCL's Scope

Nil

## 3.DEFECT LIABILITY PERIOD:-

Contractor shall guarantee the work for a period of 12 months from the date of issue of completion certificate. Any damage or defect that may arise or lie undiscovered at the time of issue of completion certificate, connected in any way with the workmanship should be rectified by the contractor at his own expense as deemed necessary by the Engineer-in-Charge

## 4.PAYMENT TERMS:-

50% payment shall be made on completion of site works.

20% on submission of interim report.

Balance 30% on submission of final report.

## 5.SECURITY DEPOSIT:-

Total security deposit shall be 3% of total contract value.

1% of order value of contract referred as Initial Security Deposit shall be furnished within 21 days after notification of the award of work.

Balance 2% shall be recovered through deductions at the rate of 3% of the value of each running account bill till the total 3% security deposit amount is collected.

## 6.LIQUIDATED DAMAGES:-

If the work is not completed within the stipulated time, the contractor is liable to pay a LD of ½% of the total contract value PER DAY of the delay or part there of subject to a maximum of 5% of the contract value.

## 7.PERIOD OF CONTRACT:-

- The period of the contract shall be one year from the date of issue of work order.

## 8.TIME OF COMPLETION:-

- Time of completion shall be 5 days from the date of issue of work order/intimation to start the work as per issued work permit

## 9.ATTACHMENTS:-

### SPECIAL CONDITIONS OF CONTRACT

*Continued...*

1. All manpower, tools, equipment, etc. whatever required for the work are to be arranged by the contractor.
2. Safety Helmets, safety shoes, goggles, safety belts and other PPEs etc. for the workmen and supervisor employed for the work are to be arranged by the contractor.
3. No work to be carried out without wearing safety gadgets (PPE's), work order, confined space entry record and safety work permit by the employees of the contractor.
4. This work is a shutdown activity and you have to put all efforts to complete the work in time. Also you have to deploy people on round the clock basis if situation warrants as per the instruction of Engineer-in-Charge.
5. The entire work is to be carried out as per the standard engineering practice and subjected to stage inspection by HOC/3rd party inspection agency.
6. All debris, waste etc. arising out of the job should be segregated weighed, transported and dumped into the scrap yard as per the instruction of Engineer-in-Charge at your cost. The contractor also has to abide by the guidelines for Environmental Protection.
7. HOC has every right to stop the work if the progress and quality of work is found unsatisfactory. The balance work will be carried out by HOC through another agency at the cost and risk of the first contractor.
8. Contractor has to mobilise the complete team with necessary tools and tackles within 24 hours from the time of intimation to start the work.
9. Either the contractor or his authorised supervisor shall be available at work site throughout the work.
10. The quantity shown can vary ie. Increase or decrease depending upon the situation. However, the rate and other terms and conditions shall be same throughout the pendency of the contract for which the contractor shall be ready.
11. Appropriate insurance shall be arranged by the contractor for the coverage of the liability to the people employed by them, arising out of any accident occurring during the execution of the work.
12. HOCL will not entertain any claims or responsible whatsoever in the event of any accident/incident.
13. The Contractor shall follow all clause in Annexure –A, B & C like ESI, Safety Regulations and General Conditions of Contract, Workmen Compensation, Personal Protective Equipments (PPE), Labour Laws, PF, Guidelines to contractors / suppliers for environmental protection & Confined Space Entry
14. Contractor shall get prior permission from the Engineer-in-Charge for bringing the material to HOC.
15. Contractor shall ensure that a standby person is kept outside the man-way nozzle when the work is inside a confined space.

**Thanking You,**

**Yours Faithfully,**

**FOR HINDUSTAN ORGANIC CHEMICALS LTD**

**BENO P KURIANS  
DEPUTY GENERAL MANAGER(MECHANICAL)**

**Attachments: -**

- 1. Annexure 'A & B' - ESI, PF, Labour Law Requirements.**
- 2. Annexure 'C' - Safety, Health and Environment (SHE) Conditions.**

*Continued...*

3. Annexure 'D' - Proforma of declaration of black listing / Holiday listing

4. General Conditions of Contract. ( can be downloaded from HOCL website )

5. Special Conditions of Contract

-----Tear off portion to be pasted on the Envelope containing Offer-----

**Offer for IN-SITU METALLOGRAPHY**

**From : HOCL  
1003142**

RFQ No. : 70000080

**Due Date :26-Apr-2021  
Due Time : 14.00 hrs**

**To,  
General Manager(P & A)  
Hindustan Organic Chemicals Limited  
P.O Ambalamugal, Ernakulam - 682302  
Kerala , India**