

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

Phone:0484-2720911; Email:kochi@hoclindia.com Fax:0484-2720893; Web:www.hoclindia.com

REQUEST FOR QUOTATION

Yokogawa India Ltd, BGLR-560100

Plot No: 96, Electronics City

Electronics City, BANGALORE-560100 Hosur Road, BANGALORE Hosur Road, BANGALORE

, Karnataka India-560100

Vendor Code: 1004468

Service RFQ NO. : 70000032 / INST/SPR/2020/07

Tender Type : Single Tender Service

Due Date/Time : 22-Jul-2020/14:00:00 hrs

Opening date/Time : 22-Jul-2020/15:00:00 hrs

Contact Person : T K Raju, DGM(I)

Date : 26-6-2020

SERVICES REQUIRED AT:

M/s.HINDUSTAN ORGANIC CHEMICALS LTD

AMBALAMUGAL PO, ERNAKULAM DIST, KERALA, INDIA

Dear Sirs,

Subject: UPGRADATION OF CENTUM CS 3000 IN BOILER PLANT

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:UPGRADATION OF CENTUM CS 3000 IN BOILER PLANT. 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 22-Jul-2020/14:00:00 hrs. Bids received after the due date will not be considered.

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

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. hockochi.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), Special Conditions of Contract, Technical Specification, Drawings and other documents forming part of this enquiry.

Schedule of Rates

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Rate of Tax %:

GSTIN Regn. of vendor:

Item No.	Service No. Description	Unit	RFQ Qty	Unit Rate (INR) Figure / Words	Amount (INR)
1	1 S2000282 Up gradation Of DCS CS3000 to CENTUM VP		1.00		
Service Account Code(SAC) for S2000282 :					

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 An	nount Rs:	
In Words	s Rupees:	
Date	:	Signature and Seal of the Contractor

NOTES

1.SCOPE OF WORK:-

REF: 1) W.O.No.5500004180 dated 30/07/2018; 2) YIL/CSD/OBSOLOSCENCE/CHN19 dated 10/10/2019.

3) YIL/CSD/Q/KCH-S-HOCL-BOILER- Rev 0 dated 05/01/2020

I. UPGRADATION

Up gradation of the existing obsolete hardware and software to the latest system by discardingthe obsolete hardware in the existing DCS System and loading the latest DCS System software.

All the existing engineering

engineering and operating facilities should be available in the new system.

THE AMOUNT REQUIRED FOR THE UPGRADATION OF THE SYSTEM TO BE SPREAD OVER TO THE ENTIRE AMC PERIOD OF FIVE YEARS.

- II. AMC :-1.The AMC shall be comprehensive covering the following services for 5 Years from the date of contract as per work order.
- a. Preventive (Shutdown) Maintenance Service 1 Visit per year.
- b. Routine Maintenance 3 Visits per year.
- c. Breakdown Maintenance As and when required.
- d. Incase system or sub system breakdown, the system shall be brought

back to operation within 24 hours - As and when required

2. SCOPE OF WORK FOR PREVENTIVE (SHUTDOWN) MAINTENANCE SERVICE

This service is a total System Power Turn-off service and as such will be carried out during Scheduled Plant Shutdown or

during such periods when clearance is provided to carry out the services. Clear and advance information of at least 2 weeks will

be given by HOCL. In case in any year if we are not able to hand over the system for shutdown maintenance, this service will be

converted into a routine preventive maintenance. SHUTDOWN MAINTENANCE will be carried out once in a year. service is carried out on the systems/instruments under Contract, to ensure safe and trouble free operation and to minimize unexpected failures of the system/Instruments.

. Checking and Recording of operating conditions:

Operating conditions of the system, Physical conditions and

environmental conditions like Humidity, temperature etc. will be checked and suggestions will be recorded wherever necessary.

. Confirmation of installed hardware / software

Check of I/O-loading, Revision levels and type's of installed hardware. Check of installed system Software of each Agreement Product and verification of the System Software available on site. Dismantling of system:

The DCS system will be completely dismantled to insure proper physical connection and placing.

Confirmation of power source performance:

Voltage measurement shall be made for the system input power

source and DC power source of the Agreement Products. Wave form measurement shall be made for the system input power source

and DC power source of the Agreement Products in case when problems

Cleaning & Inspection of hardware:

Each PCB of the Control Station and Operator Station will be cleaned and overhauled for Dust and Contamination using certified cleaning agents and categorical physical inspection will be carried out out to ascertain any possible damages to the tracks, contacts components etc.

Functional Test & Calibration Check:

Every function of each of the DCS system components will be checked on a sampling basis using YOKOGAWA Proprietary Diagnostic software wherever applicable and recommended. Inspection & lubrication of movable parts:

Inspection and lubrication of movable parts like printer head movement assembly,

Ribbon movement, gear assembly, FDDs, Streamer etc will be carried out for smooth and reliable operation. Cleaning & Inspection of Contact Points:

Inside of the cubicles and fan filters will be cleaned/replaced and all the

contact points will be cleaned and inspected for proper contact and any loose connections/ screws will be tightened accordingly.

Resolving of problems:

The problems which require / required stopping or powering-off of the SYSTEM and problems highlighted by our operating or maintenance staff shall be discussed and attempts to be made to resolve the same. Re - commissioning:

After the overhaul, the system components will be assembled back and shall be re-commissioned.

Observation of system operation:

Upon completion of the work, test operations shall be carried out to confirm that the System/Product operate normally and satisfactorily. Upon completion of shutdown maintenance, ONE YIL engineer will observe the DCS

system for ONE day from the time of completion of the maintenance activities to ensure proper system operation. Reports & Advice on Daily Maintenance:

After the completion of Shutdown Maintenance work, a comprehensive Report shall be submitted. The Report in addition to the record of the measured conditions will also include advice on control room conditions and daily maintenance work to be carried out by our maintenance staff.

SCOPE OF WORK FOR ROUTINE MAINTENANCE (PERIODIC) SERVICE

The Periodic maintenance service is initiated by YIL will be carried out three times in a year. Each routine maintenance visit will be for 01 day. The schedule of these services can be drawn on mutual agreement. The details of services under Periodic Maintenance are as follows: -

CHECKING OF OPERATING CONDITIONS

YIL engineer shall discuss with our staff and ascertain the operating conditions of the system.

CONFIRMATION OF INSTALLED HARDWARE/SOFTWARE

Check of I/O loading, revision levels and type's of installed hardware.

Check of I/O loading, revision levels and type's of installed hardware. Check of installed system software of agreement product and verification of the system software available on site.

BACK UPS

If required, the images of operator stations and control stations will be saved on CDs or memory devices as applicable

Replacement of Parts/Spares

If some parts like Batteries are required to be replaced, the required actions to purchase & handover the same will be initiated by M/s HOCL & YIL engineer will replace the same.

CHECKING OF GENERAL HEALTHINESS OF THE SYSTEM

Battery voltages will be checked and recorded and replacements are made from YIL stock, if required.

INVESTIGATIONS OF PROBLEMS

If YIL engineer identifies any problems during testing or problems highlighted by our staff,

YIL engineer will investigate such problems and take necessary steps to resolve such problems. REPLACEMENTS OF PARTS / SPARES

If some parts like Batteries are required to be replaced and if the concerned system is released, YIL engineer will replace the same.

REPORT

A detailed report on the jobs carried out and the observations and recommendations will be submitted after each visit.

4. SCOPE OF WORK FOR BREAKDOWN MAINTENANCE SERVICE

In the event of on-line natural breakdown of the system, upon call from our side, YIL will give remedial advice to our maintenance staff over telephone / fax / telex / e-mail. If problem is not resolved YIL shall make use of the RMS facility to log on to the DCS and rectify the problems. If still engineer's visit is required, YIL engineer will reach our site at the earliest convenience but not later than 24 hours to attend the problem and restore the system back to normalcy.

Need based emergency visits will be provided on demand during the contract period.

Emergency situation is defined as:

- Failure of the system or part of system which results in plant shutdown or tripping.

Failure in which the operator is not able to control the plant through DCS, such as CRT blanking, freezing, keyboard freezing etc

- Failure of systems internal power source.
- Failures such as Hard disk crash etc.

If any PCB or parts are found damaged / not working and needs replacement, such parts / cards / spares to be provided by YIL for replacing

The list of existing hardware items and software covered under the present AMC is given in Annexure – I All other terms and conditions shall be as per our enquiry and our General Conditions Contract.

PAYMENT TERMS :- After the completion of AMC visit at each quarter and submission of invoice. The amount required for the

up gradation of the system to be spread over for the entire AMC period of 5 Years SPECIAL NOTE:-

- 1. You are requested to submit your willingness to enter into an Integrity Pact with HOCL .Details of agreement is attached.
- 2. You are requested to submit a declaration that you are not black listed by any of the PSUs.

Your quote should also consider the following requirements:

- 1. The Documentation of the entire things to be submitted (item list attached).
- 2. Training for the Process people and the Maintenance engineers are also to be given.
- 3. Support for the entire DCS including Hardware and software to be given at least for TEN years.

ANNEXURE - I

List of Hardware items and softwares.

SL.NO DESCRIPTION MODEL/MAKE QTY

A. OPERATOR SUB-SYSTEM: ENGG. CUM OPERATOR STATION:

A1. HUMAN INTERFACE STATION 20.1" LCD MONITOR DESKTOP TYPE, ENGINEERING & OPERATION MONITORING WITH CORE 2 DUO 1 GB RAM,

HARD DISK: 160 GB HDD, FDD 1.44 MB WITH WINDOWS XP OS , DVD WRITER, OPTICAL MOUSE HP/DELL - 1No.

A2. HUMAN INTERFACE STATION 20.1" LCD MONITOR DESKTOP TYPE, OPERATION MONITORING WITH CORE 2 DUO 1 GB RAM,

HARD DISK: 160 GB HDD, FDD 1.44 MB, WITH WINDOWS DP OS CD WRITER & OPTICAL MOUSE. HP /DELL – 2Nos.

B. CONTROLLER AND DATA ACQUISITION SUB-SYSTEM

- B1. DUPLEXED FIELD CONTROL STATION AFV10D 1No B2. LOCAL NODE INTERFACE UNIT WITH REDUNDANT POWER SUPPLY & COMMUNICATIONS BUS ANB10D 3Nos.
- B3. MULTI LOOP CONTROLLER CARD (8A 1+8AO) AAB841 12Nos.
- B4. 16 CHANNEL ANALOG INPUT MODULE AAV141 5Nos.
- B5. 32 CHANNEL CONTACT INPUT MODULE ADV151 3Nos.
- B6. 32 CHANNEL CONTACT OUTPUT MODULE ADV551 2Nos.
- B7. 15 CHANNEL T/C INPUT MODULE AAT141 1No
- B8. TERMINATION MODULE FOR AAB841 YBNM 6Nos.
- B9. TERMINATION MODULE FOR AAV141 YBNC 5Nos.
- B10. TERMINATION MODULE FOR D1 OPTCOUPLER -3Nos.
- B11. RELAY BOARD FOR DO WITH 2 CONTRACTS YRO SRS 2Nos.
- B12. MEMBRANE KEYBOARD AIP827 2Nos.
- C. SOFTWARE
- SOFTWARE PACKAGES FOR OPERATION & MONITORING (ON HIS)
- C1. STANDARD OPERATION & MONITORING SOFTWARE LHM1101 2Nos.
- C2. REPORT PACKAGE LHS6530 -1No.
- C3. OPC INTERFACE PACKAGE LHS2411 1No. SOFTWARE PACKAGES FOR ENGINEERING FUNCTIONS (ON HIS)
- C4. STANDARD BUILDER FUNCTIONS LHM5100 -1No.
- C5. STANDARD OPERATION & MONITORING SOFTWARE LHM1101-1No.
- C6. GRAPHIC BUILDER LHS5150-1No.
- C7. TEST FUNCTION PACKAGE LHM5150-1No.
- C8. SELF DOCUMENTATION LHM5490 -1No.
- C9. ELECTRONIC IM PACKAGE LHS5495-1No.
- C10.LOGIC CHART STATUS DISPLAY PACKAGE LHM4420-1No.
- D. COMMUNICATION SUB:SYSTEM:
- D1. DATA HIGHWAY CABLE (REDUNDANT) YIL STANDARD-20METERS
- D2. ETHERNET SWITCH NETGEAR/DLINK-2Nos.
- D3. PREFAB CABLE-1 LOT
- D4. INTERCONNECTION CABLE WITH IN CONTROL ROOM -1 LOT
- E. OTHER ITEMS
- E1. 24 V DC REDUNDANT POWER SUPPLY 14AMPS COZAL/EQV -1SET
- F. SPARE I/O MODULES INSTALLED AND WIRED
- F1. CLOSED LOOP CARD + TERMINATION MODULE + PREFAB CABLE- 2 SET
- F2. OPEN LOOP CARD+ TERMINATION MODULE + PREFAB CABLE- 1 SET
- F3. DIGITAL INPUT CARD+ OPTOCOUPLER BOARD+ PREFAB CABLE- 1 SET
- F4. DIGITAL OUTPUT CARD+ RELAY BOARD+ PREFAB CABLE -1 SET

Documentation/drawings shall be supplied as per requirements given below.

- 1 Architecture of the system
- 2 Detailed bill of material up to module level
- 3 Bill of material, make model number with catalogues

of all bought out items

- 4 Organisation chart for job execution
- 5 Detailed schedule of job execution
- 6 A copy of standard engineering formats which shall be filled by

HOCL for engineering activities

- 8 Standard dimensional drawings
- a. operator/dummy console
- b. system cabinets/marshalling cabinets/power distribution cabinets
- c. Peripherals like printers etc 9 Final layout drawings including internal hardware mounting details
- 10 Calculation of total power requirements
- 11 Expected heat dissipation
- 12 Schematic drawings for
- a. Safety grounds
- b. Intrinsic safe/shield/reference ground 13 Typical Loop schematic for
- a. analog closed loops
- b. Analog open loops
- c. Bulk I/O loops d.Digital I/Os. 14 Final loop wiring diagrams
- 15 Nest loading and I/O assignments
- 16 Copy of different logs configured
- 17 Logic & Ladder diagrams
- 18 Printouts of all higher language programs if any
- 19 Printouts of all generated graphics
- 20 Software loading calculations for various system nodes with spare margins available
- 21 Factory acceptance test plan
- 22 Standard system documentation
- a. Instruction manuals
- b. Maintenance manuals
- c. System engineering manuals
- d. Installation manuals
- e. Algorithm library
- f. Manuals of all bought out items
- 23 All System manuals as electronic documents in CD-ROM

Vendor shall maintain one set of documents at site during Installation and commissioning and mark all the modifications carried at site and incorporate the same in the final documents to be submitted as per above.

Number of copies required can be decided later on

Thanking You,

Yours Faithfully,

FOR HINDUSTAN ORGANIC CHEMICALS LTD

JAGADEESH GM(INSTRUMENTATION)

Attachments: -

- 1. Annexure 'A & B' ESI, PF, Labour Law Requirements.
- 2. Annexure 'C' Safety, Health and Environment (SHE) Conditions.
- 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 UPGRADATION OF CENTUM CS 3000 IN BOILER PLANT

From : Yokogawa India Ltd, BGLR-560100 1004468

RFQ No. : 70000032

Due Date :22-Jul-2020 Due Time : 14:00:00 hrs

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