

TENDER DOCUMENT

Design, Supply, Installation, Testing, Validation and Commissioning of SCADA system to capture, store, monitor and Control of specified parameters, from 04 Mixer tanks in our Irapuram Factory, Cochin.



HLL Lifecare Limited

(A Government of India Enterprise)

Plot No.1&2,Rubber Park , Valayanchirangara

Ernakulam – 683556, Kerala, India

Phn: 0484-2597200

HLL LIFECARE LIMITED
 (A Government of India Enterprise)
 Plot No.1&2, Rubber Park , Valayanchirangara
 Ernakulam – 683556, Kerala, India
 Phn: 0484-2597200

INVITATION FOR BIDS (IFB)

IFB No : HLL/IFC/AUG/CONTRO PANEL/2026-27
Date : 06-05-2026
Tender Fee: Rs.590/- (Bids submitted without EMD and Tender Fee will be rejected)
EMD : Rs.10, 000/-

HLL Lifecare Limited (HLL), a Government of India Enterprise is inviting tender for civil works for the augmentation of HLL factory at Irapuram, Ernakulam. For the said project, sealed and super scribed bids are invited from competent and experienced Suppliers/Contractors who are capable to do the following work meeting their requirements as per our tender.

Sl.No	Brief Description of Item/Work	Qty
1	Design, Supply, Installation, Testing, Validation and Commissioning of SCADA system to capture, store, monitor and Control of specified parameters, from 04 Mixer tanks in our Irapuram Factory, Cochin. as per <u>Schedule of Work</u> enclosed.	As per Schedule of work

2. The bid documents will be available up to 06.05.2026, 06.00 PM. The scheduled date for issue, receipt and opening of bids is as follows.

- a) Date of issue of tender document - 06-05-2026 onwards
- b) Last date and time for receipt of bids - 13-05-2026, 03.00 PM.
- c) Date and time of opening of bids - 13-05-2026, 03.30 PM.
- d) Address for communication, receipt and place of opening of bids:

M (Purchase,Sales & stores)

HLL Lifecare Ltd
 Irapuram Plant
 Plot No. 1&2
 Rubber Park,Irapuram
 Valayanchirangara P.O
 Ernakulam District,Pin- 683556
 Phone-0484- 2597200
 E-mail: akhilmkumar@lifecarehll.com, ifchll@lifecarehll.com

3. The completed and sealed bid documents should be submitted to the Manager (Purchase, Sales & stores), in the above address along with the EMD OF Rs.10,000/-. The outer cover should bear the Enquiry No, closing date and General description of item tendered, and the words "DO NOT OPEN BEFORE" 03.00 PM on 23.01.2026. EMD shall be submitted in the form of demand draft drawn from a nationalized bank in favor of **HLL Lifecare Limited**

payable at Ernakulam or e-payment (through any of the UPI payment gateways) to the SBI Valayanchirangara bank account number of HLL Lifecare Irapuram, Account No. 67266462046, IFSC Code: SBIN0070558. Bids received after due date and time will be rejected. Any bid not accompanied by EMD will be rejected.

4. Bids will be opened in the presence of Bidders representative(s) who choose to attend on the specified date and time, at the office of HLL at the address given in Clause 2 (d) above.
5. In the event of the date specified for bid receipt and opening being declared as a closed holiday for the above purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.
6. HLL may, at its discretion, extend this deadline for submission of bids by amending the Bid Documents or any other reasons, in which case all rights and obligations of HLL and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
7. HLL will not be held responsible for the postal delay, if any, in the delivery of the bidding document or the non-receipt of the same. Bids sent by Telex/Fax/Telegraph/E-mail will not be accepted.
8. SSI/MSME units interested in availing exemption from payment of EMD should submit a valid copy of their registration certificate issued by the concerned DIC or NSIC / Udyam registration Certificate. But the Party has to provide Security deposit if Tender is awarded to them.
9. The EMD amount of the unsuccessful bidders will be duly returned after completion of all tender processing formalities & award of the bid to the successful bidder. The successful bidder shall need to remit a security deposit (SD) amount of 5% of the total contract value (incl tax) or will be limited to a value of 200000/- to a maximum . If the SD amount is higher than the EMD collected initially during the bid submission, this amount of EMD shall be converted to SD so that the successful bidder need to remit only the balance amount towards SD. However, the entire amount of SD of the successful bidder will be released only after the successful completion of the work, as well as all tender closing formalities of the tenderer.
10. The bidder will be disqualified if they have any record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.
11. The Bid must include the following information;
 - a. Enquiry No.
 - b. Promised Delivery/Completion Schedule
 - c. Price Schedule in Format for Quoting
 - d. All other documents/certificate/information as specified in the bid document.
12. In addition to the invitation for bids, the bidding documents include the following schedules.

Schedule I	-	Conditions of Contract
Schedule II	-	Forms and Declarations
Schedule III	-	Schedule of Work
13. The company reserves the right to club or split the items of works, change the qualifying criteria at their discretion and to reject or cancel the Invitation for bids without assigning any reason thereof.

M (Purchase, Sales & Stores)

SCHEDULE I

CONDITIONS OF CONTRACT

1. PRICE

The basic rates quoted by the Bidder shall include cost of all materials and conveyance, labour charges; hire charges of plant and machinery, loading and unloading charges, insurance, Installation and commissioning charges, overheads, clearing of debris and all incidental charges etc for execution of the contract but excluding applicable GST for the work/service contract.

Price quoted should be firm without any escalation till the order is completely executed.

2. TAXES/DUTIES/LEVIES

The contractor shall be entirely responsible for all applicable taxes including GST, duties, license fees etc. incurred until successful completion of contract.

3. ESCALATION

The basic rates quoted by the Contractor in the contract documents shall be final and shall not be subjected to any change due to the increase in labour wages or inflation in the cost of materials or any other price variations due to any reason during the stipulated time period of the contract or during the extended time period of completion.

4. COMPLETION TIME

The items/Work as per the tender specifications shall be completed within a period of **2 Weeks** from the date of notification of award/date of site clearance whichever is later.

Time being the essence of the Contract, the work/delivery of items, stipulated should be strictly adhered to. Delay in delivery/non delivery/incompletion of the Specified Item/work will cause loss and/or damage to Purchaser.

5. PAYMENT TERMS

The contractor can submit two running account bills during the work period and payment made as below:

- a) 80% of the bill value will be paid on each running account bill submitted by the contractor.
- b) Balance 15% will be paid along with the final bill only after issue of Work Completion certificate by Engineer in Charge/Officer in Charge of HLL Lifecare Ltd.
- c) 5% amount of the Bill will be retained as retention money and will be released only after the Defect liability period of **12 months. This amount may also be furnished in the form of Bank guarantee (including e- Bank guarantee) from a commercial bank.**

The running account bills are to be submitted detailing the work description, quantity and rate as per the Work Order. Payment will be made against actual measurements recorded and certified jointly by HLL Engineer in charge and the Contractor's representative. For supply of capital items, duly certified delivery challan/supporting documents such as Warranty Certificates etc. shall be enclosed along with bill.

The payment has to be made to the Contractor for the total value of the works done; at contract rates plus the applicable GST.

Tax Deduction: All statutory deductions like Income Tax (TDS), GST (TDS), Workers Welfare Fund, E.S.I., P.F. or any other government-imposed liabilities shall be borne by the Contractor (as applicable at the time of execution of job) and shall be deducted from each bill submitted by the Contractor.

6. SECURITY DEPOSIT

6.1 On receipt of notification of award, simultaneously with the execution of the contract, successful bidder shall furnish a Security deposit in the form of a Demand Draft from a nationalized bank drawn in favour of **HLL Lifecare Limited payable at Ernakulam or e-payment (through any of the UPI payment gateways) to the SBI Valayanchirangara bank account number of HLL Lifecare Irapuram, Account No. 67266462046, IFSC Code: SBIN0070558** for an amount equal to 5% of the total contract value or will be limited to a maximum value of 200000/- as Security Deposit for his faithful execution of contract. The Security deposit should be valid until successful completion of the contract and acceptance of the Equipment/works by the purchaser/owner and will be released after acceptance of the Equipment/works by the purchaser/owner. In case of a delay in the works the validity of security deposit shall be extended.

6.2 Within 7 days of the receipt of notification of award from the purchaser/owner; the successful Bidder shall furnish the security deposit in the form of a Demand Draft or Bank Guarantee in the security deposit form to be sent along with the Notification of Award or through electronic payment.

6.4 Failure of the successful Bidder to accept the notification of award or submission of security deposit within the timeframe shall constitute sufficient grounds for the annulment of the award and, in which even the purchaser/owner may make the award to the next lowest evaluated bidder or call for new bids.

6.5 Forfeiture of Security Deposit:

If the successful bidder / Contractor fails to supply the ordered material at the rate finalized or execute the work and / or supplies only part quantity / partially execute the work or fails to comply with the terms and conditions of the purchase order / work order the security deposit furnished will be forfeited / Bank Guarantee encashed.

7. INDEMNIFICATION CLAUSE

The Bidder shall indemnify and hold harmless the Owner/Purchaser from and against the below mentioned:

- i. All claims, demands, action, proceedings, losses, damages, liabilities, cost, charges, expenses or obligations that are occasioned or may occasion to HLL as a result of our non-payment of any statutory dues levied/leviable on the Contractor or the Contractor committing breach of any the rules, regulations, orders, directives, instructions that may be issued by any authority under various Labor Laws, PF, ESI Acts and all other applicable Laws/Acts/Rules or any other Statute or Laws for the time being in force
- ii. Any damages, loss or expenses due to or resulting from any negligence or breach of duty on our part or on the part of Sub-Contractor/s, if any, servants or agents of the Bidder.
- iii. Claims, if any, of the employee or the Contractor and its Sub Contractor/s, under the Workmen's Compensation Act, 1923 and Employer's Liability Act 1938 or Various Labor Laws or any other Laws rules and regulations in force for the time being in India and any acts replacing and/or amending the same or any of the same as may be in force at the time and under any law in respect of injuries to persons or property arising out of and in the course of the execution of the contract work and / or arising out of and in the course of employment of any workmen / employee.
- iv. Any non - compliance or improper compliance of statutes, rules and regulations which are applicable to HLL and also to the Contractor and to the employees , in respect of (a) Employees' Provident Fund and Miscellaneous Provision Act, 1952, (b) Employees State Insurance Act, 1948, (c) Contract Labor (R&A) Act, 1970 (d) Minimum Wages Act, 1948 (e) Payment of Wages Act,1936 (f) Bonus Act, 1965 (g) Workmen's Compensation Act, 1923 and / or any other laws which may become applicable in respect of the Contract/ Agreement between HLL and the Bidder.
- v. Any Act or omission by us or our Sub-contractor/s, if any, our /their servants or agents which may involve any loss, damages, liability, civil or criminal action.
- vi. To protect against all claims for damage caused due to non-obtaining of insurance policy during the project period.

8. FORCE MAJEURE

- a. Neither the Contractor nor the Purchaser/Owner shall be considered in default in the performance of their obligations as per the Contract so long as such performance is prevented or delayed because of strikes, war, hostilities, revolution, civil commotion, epidemics, pandemics, accidents, fire, cyclone, flood or because of any law and order proclamation, regulation or ordinance of Government or subdivision thereof or because of any act of God. The proof of existence of force majeure shall be provided by the party claiming it to the satisfaction of the other.

- b. The Contractor shall advise Purchaser/Owner initially by a Fax, followed by post, the beginning and end of any of the above causes of delay, failing which Purchaser/Owner shall not be liable to consider delays due to the above reasons. Notice as stated above should be given even in case where only the Contractor's bids are under the consideration of the Purchaser/Owner and no acceptance of the same has been given and detailed order issued.
- c. In the event of definite delay even if arising out of reasons due to force majeure, Purchaser/Owner shall have the right at their discretion to cancel the Order or part of the Order without any liability on their part to make any payment to the Contractor while reserving the right to claim refund of and any payment if advanced or paid to Contractor.

9. DELAY IN WORK EXECUTION DUE TO REASONS BEYOND CONTRACTOR'S CONTROL

- a. Force majeure: If the execution of work is delayed due to force majeure, then Purchaser/Owner as per the affected period may extend the time period.
- b. In case work is delayed due to non-availability of stores supplied by Owner or any decision by Owner holding the progress of work, the contractor then upon any such happening causing delay shall immediately but not later than 10 days, give notice thereof in writing to the Owner, but nevertheless use constantly his best effort to prevent or make good delay. The Owner may in his discretion grant such extension of time as may appear reasonable to him and the same shall be communicated to the contractor in writing and shall be final and binding on him and the contractor shall be bound to complete the work within such extended time.

10. CHANGE ORDERS (APPROVAL FOR VARIATIONS)

- 10.1 Purchaser/Owner reserves the right to alter the Scope of Work (See Clause 10 and 30) and consequently the Contract Price shall be suitably adjusted for such changes by applying the approved rates. All change orders shall be issued by the Engineer-in-Charge and the onus shall be on the Contractor to obtain such prior written consent of the Engineer-in-Charge.
- 10.2 There shall be an order in writing to execute the extra item of work duly signed by the Agreement Authority before its commencement.
- 10.3 If the contractor finds, after examining the specifications and plans that extras are involved, he should give notice to the Engineer-in charge to this effect and shall proceed with the execution of the extra item only after receiving instructions in writing from Engineer-in charge and Agreement Authority.
- 10.4 Extra items may be classified as new, additional, substituted or altered items, depending, on their relation or otherwise to the original item or items of work.

The rates for extra items shall be worked out as below:-

- 10.5 In the case of all extra items whether altered or substituted, for which similar items exist in the contract, the rates shall be derived from the original item by appropriate adjustment of cost of affected components. The percentage excess or deduction of the contract rate for

the original item with reference to the estimated rate shall be applied in deriving the rates for such items. The Engineer in charge's interpretation as to what is a similar class of work shall be final and binding on the Contractor.

- 10.6 In the case of extra items, whether altered or substituted, for which similar items do not exist in the contract, the rates shall be arrived at on the basis of provision of standard data Book and schedule of rates of CPWD after applying the contractor's quoted percentage above or below.
- 10.7 In the case of extra items, whether additional altered or substituted, for which the rates cannot be derived from similar items in the contract, and only partly from similar items in the contract, and only partly from the CPWD rates, the rates for such part of items as are not covered in the schedule of rates shall be determined by the Project Management Consultant on the basis of the prevailing market rates giving due consideration to the analysis of the rate furnished by the Contractor with supporting documents, including contractor's profit. For the other part of the items the rates can be derived from the recent schedule of rates of C.P.W.D.
- 10.8 In the case of extra item whether additional, altered, substituted, for which the rates cannot be derived either from similar item of work in the contract or from the CPWD schedule of rates, the contractor shall within 14 days of the receipt of order to carry out the said extra item of work, communicate to the Project Management Consultant the rate which he proposes to claim for the item, supported by analysis of the rate claimed and the Project Management Consultant shall within one month thereafter, determine the rate on the basis or the market rate giving due consideration to the rate claimed by the contractor.
- 10.9 In all the above cases, the approved rates for extra, additional, altered or substituted items shall not exceed the rate which is arrived on the basis of the prevailing local market rates at the time of ordering or executing the extra item whichever is earlier.
- 10.10 Wherever, the term "tender excess or tender deduction" appears, it shall mean the overall percentage variation of estimated cost and agreed amount of contract.
- 10.11 The work mentioned above shall comprise the entire subsidiary and incidental items of works connected there within the same site as may be ordered to be done from time to time by the Consultant even though such works, may not be shown in the said drawings or described in the said specifications.
- 10.12 Extra items/substituted items if any shall be executed by the Contractor at the rates arrived from the Delhi schedule of rates, and in case of non-availability in the Schedule of Rates, by local market rates duly certified by Purchaser/Owner subject to Technical Sanction/Revised Technical Sanction. The contractor shall take earnest steps to complete the work within the limit of the awarded value. If the value of work exceeds the awarded amount, prior sanction of competent authority shall be obtained and in such cases the revised estimate will be submitted by the contractor as per PWD norms for getting revised Administrative Sanction from the Client/consultant.

10.13 Any additional work necessitated for proper completion as per the requirements of client shall be executed at additional amount in accordance with the DSR rates at the time of tender. The time of completion of work shall also be further extended according to the quantum of additional works to be executed.

11. LIQUIDATED DAMAGES FOR DELAYS

If the work is not completed and handed over to the Purchaser/Owner within the time stipulated in the Order, Purchaser/Owner may at their option, either (1) recover from the Contractor liquidated damages at the rate of 0.5 % of the total contract value for every week of delay, subject to a maximum of 7.5 % of the total contract value, or (2) at the risk and cost of the Contractor and without prejudice to the other remedies/rights as per the Contract, terminate the order wholly or partially and complete it themselves or reassign it to other contractors.

12. SCOPE OF SERVICES, SUPPLIES AND MATERIALS:

The scope will include all services, supplies etc. for the satisfactory execution of the Contract except in so far as any of those are expressly excluded.

13. SPECIAL INSTRUCTIONS

- 13.1 The bidder shall visit the site before quoting for the work and take their own assessments before quoting of bids.
- 13.2 All pages of the bid, except for un-amended printed literature shall be signed by the person or persons signing the bid. The seal of the company shall be stamped in all pages.
- 13.3 Bids shall be made in English. The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be signed by the person or persons signing the bid.
- 13.4 To assist in the examination, evaluation and comparison of bids, the Owner may, at its discretion, ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in the rate or substance of the bid shall be sought, offered or permitted.
- 13.5 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be calculated. If there is a discrepancy between the words and figures of unit price, the amount in words of unit price shall prevail.
- 13.6 Prior to the detailed evaluation, the Owner will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these clauses, a substantially responsive bid is one, which conforms to specifications and all the terms and conditions of the bidding documents without material deviation. The Owner's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

- 13.7 The Owner's determination as to the substantial responsiveness or otherwise of each bid or consideration of a minor informality or non-conformity or irregularity is final and conclusive.
- 13.8 The Owner reserves the right to negotiate with the lowest evaluated responsive bidder.
- 13.9 The Owner will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily for the items offered.
- 13.10 Prior to the expiration of the period of bid validity, the Owner will notify the successful Bidder in writing by or cable or telex or fax, to be confirmed in writing by post, that its bid has been accepted. The notification of award may be sent in the form of Letter of Intent and/or Work order.
- 13.11 The signed acceptance of the notification of award by the Contractor will constitute a concluded contract.
- 13.12 The work should be carried out without causing any inconvenience to the public and shall ensure that no damages are caused to the existing machinery or any items in the site premises.
- 13.13 During the execution of work, the contractor or authorized representative should be present at site.
- 13.14 Successful bidder shall provide the specification and details of the components, instruments proposed along with their makes and data sheets.
- 13.15 Successful bidder shall provide the details of the range of the instrument, nominal values, minimum, maximum values, alarm values and trip values (Software and Hardware).
- 13.16 The Wiring diagram of the hardware components shall be provided.
- 13.17 As built drawings of the ICS configuration, instrument ranges, alarm values, trip values, parameters of the programmable controllers shall be provided after successful commissioning of the system.
- 13.18 The supplied system shall have end to end spare capacity of at least 20 % for future use
- 13.19 All Materials, Equipment's/ Tools required for the work should be arranged by the contractor and brought to site for the timely completion of the work.
- 13.20 The materials used shall be as per specification and of good quality.
- 13.21 The Contractor has to arrange necessary insurance coverage for the machine, workmen etc. deployed by him. He shall arrange all safety measures to protect his workmen and also the properties of HLL/Hospital Building. The work site safety of all employees, their ESI, PF etc will have to be borne by the contractor.

- 13.22 The work should be carried out in truly professional manner, neatly finished with proper line, level and plumb. Cleanliness and finishing of the job is of utmost importance. Hence the job should be done most carefully with best workmanship. For all finishing jobs samples should be approved from the Purchaser/Owner before completely executing the work.
- 13.23 The Purchaser/Owner should be immediately informed for any discrepancy in drawings, specifications and instructions in the execution of job before actual execution of particular item having discrepancy.
- 13.24 Any item found to be having been executed with poor workmanship then the Contractor shall have to rectify /reconstruct the work as specified by Purchaser / Owner. No extra charge will be admissible in such case. If contractors fail to do so, the Purchaser / Owner reserved the right to rectify/reconstruct the work through some other agency at the expenses of Contractor.
- 13.25 The schedule of activities as submitted by the Contractor shall have to be strictly adhered to. Regular progress reports shall have to be submitted by the Contractor giving all details for monitoring of the schedule.
- 13.26 The Contractor shall make initial drawings/layouts (as per site conditions) and get it approved by HLL before execution.
- 13.27 Special care is to be taken for cleanliness of the site. After the end of day's work, the site should be cleaned immediately.
- 13.28 The Contractor shall have to co-operate with the agencies executing other works in the same area.
- 13.29 While executing the work, the Contractor shall ensure safety and security of the property of the Purchaser/Owner so as to avoid theft etc.
- 13.30 Measurement & Payment terms:

The method of measurement of completed work shall be in accordance with the standard measurement. Final Payment will be made on satisfactorily completion of work as per the order. Interim or running account bills shall be submitted by the contractor for the work executed on the basis of such recorded measurements in the format of HLL. All such interim payments shall be regarded as payment by way of advances against final payment only, and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the officer relating to the work done or materials delivered forming part of such payment, may be modified, or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evident that any work or material so which it relates is /are in accordance with the contract and certificate. Any such interim payment, /any part there of shall not in any respect conclude, determine or affect in any way powers of the engineer in charge under the contract or any of such payment s be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

13.31 The Quantity shown in the schedule is an approximate estimated quantity. No rate revision will be entertained if the quantity increases/decreases due to the site condition while executing the work.

13.32 During the execution of work, the contractor or authorized representative/s at least one person having technical qualification should be present at site.

13.33 The contractor shall comply with by-laws and regulation of local and statutory authorities having jurisdiction over the work and shall be responsible for payment of all statutory fees and other charges and the giving and receiving of all necessary notices and the Owner shall be kept informed of the said compliances with by-laws, payment made, notices issued and received. All statutory payments shall be made by the Contractor and the same will be reimbursed by HLL on producing original challans/receipts.

13.34 Electrical

The work shall be carried out by a contractor holding valid licence issued by the State Government/Competent Authority for carrying out installation work of all voltage classes involved, under direct supervision of the persons holding valid certificates issued or recognized by the state government/competent authority.

13.35 General Conditions for capital items

- a. The equipment/items should be complete with all accessories and interconnections.
- b. The purchaser will be providing the required electrical supply to the equipment. All wiring requirements within the equipment are to be provided by the supplier as per standard.
- c. The equipment/items offered should be suitable for Indian electrical ratings as follows.
Power supply: 200-230V, 50 Hz (Single Phase) or 400-440 V, 50 Hz (3 Phase)
- d. The suppliers should submit 3 copies of the following documents, relevant to their scope of supply, along with delivery & commissioning of the Unit :
Relevant Test Certificates, Operation & Maintenance Manual, Installation Manual, Troubleshooting Manuals, Guarantee Certificate
- e. Any other related documents
- f. Any deviations from the bid documents shall be clearly indicated.
- g. The bid should be complete with all the relevant details.

12.1 Final payment shall be paid only after clearing the site as per direction of Engineer-in-charge / Officer in charge.

14. ENTIRETY OF THE AGREEMENT

All of the terms agreed to between the Supplier / Contractor and Purchaser / Owner will be included in the Purchase / Work Order / Contract and no their communication, proposal or understanding, written, oral or implied, will be considered to be included in the Purchase / work Order / Contract or form part of the Contract between the Supplier/Contractor and Purchaser / owner unless specifically agreed to in that behalf in writing between Supplier/Contractor and Purchaser / owner.

15. CORRESPONDENCE

All correspondence relating to this Order including Invoice shall be in English, to:

M (Purchase,Sales & stores)

HLL Lifecare Ltd

Irapuram Plant

Plot No. 1&2

Rubber Park,Irapuram

Valayanchirangara P.O

Ernakulam District,Pin- 683556

Phone-0484- 2597200

E-mail: akhilmkumar@lifecarehll.com, ifchll@lifecarehll.com

16. SETTLEMENT OF DISPUTES

Arbitration shall not be a means of settlement of any dispute or claim arising out of the contract relating to the work. Any disputes or difference arising between the parties with respect to the performance of any part of this agreement or anything connected therewith, etc shall as far as possible be mutually settled by the process of dialog and negotiation.

The Courts at Ernakulam alone shall have jurisdiction in respect of settlement of any matter arising out or in connection with the contract.

SCHEDULE II**FORMS AND DECLARATIONS****1. ACCEPTANCE FORM**

(To be submitted in the letter pad of the firm indicating full name and address, telephone & fax numbers etc.)

From

To

M (Purchase,Sales & stores)

HLL Lifecare Ltd

Irapuram Plant

Plot No. 1&2

Rubber Park,Irapuram

Valayanchirangara P.O

Ernakulam District,Pin- 683556

Phone-0484- 2597200

E-mail: akhilmkumar@lifecarehll.com, ifchll@lifecarehll.com

Name of Work: **Design, Supply, Installation, Testing, Validation and Commissioning of SCADA system to capture, store, monitor and Control of specified parameters, from 04 Mixer tanks in our Irapuram Factory, Cochin**

Dear Sir,

I / We, hereby offer to design / fabricate / supply / install / testing / validate / commission as detailed in schedule hereto or such portion thereof as you may specify in the acceptance of Bid at the price given in the price bid and agree to hold this offer open for **one year** from the date of bid opening prescribed by the Purchaser. I / We have understood the terms and conditions mentioned in the invitation for bid and Conditions of Contract furnished by you and have thoroughly examined the specifications quoted in the bid document hereto and are fully aware of the nature of the scope of work required and my / our offer is to comply strictly in accordance with the requirement and the terms and conditions mentioned above.

We are hereby attesting all the pages of the tender document & submitting the same in proof of our acceptance of the terms of the tender.

Yours faithfully,

NAME & SIGNATURE OF THE BIDDER WITH SEAL

SCHEDULE III

SCHEDULE OF WORK

(TECHNICAL SPECIFICATION/Scope of work)

A. Introduction:

In the compounding section, there are four mixer tanks which are used for pre-vulcanization of natural latex. The latex along with chemicals are heated upto 55 degree for 12-16 hours till the pre-vulcanization reaches the desired level. After this, it is cooled to 20 degree using chilled water and transferred to supply tanks for use in the moulding machines. The heating process is done by a hot water generator which is a closed loop which pumps hot water at 65-75 degree into the jackets of the mixer tank for heating the latex.

B. Proposed system:

The proposed system consist of a SCADA system with a PLC control panel, operator HMI and SCADA server to control all four mixer tanks. The jacked mixer tanks are heated by pumping hot water (55-60 degree) from the hot water generator. The inlet and outlet valves (actuuated piston valves) for the hot water has to be controlled for achieving the desired jacket temperature. There are three RTD in the mixer tank in which the jacket water temperature is the reference temperature and top and bottom latex temperature shows the temperature of latex in the tank. All three temperatures should be monitored and recorded. There is an agitator in the mixer tank for facilitating uniform heating of latex. This agitator speed has to be controlled by a VFD.

I/O per mixer tank

1. Analog input (RTD): 3 nos
2. Analog output (0-10V DC): 1 nos
3. Digital input: 10 nos
4. Digital output: 10 nos

The mixer tank operation is controlled by a flow chart which heats, cools and keeps the tank idle as per the desired temperature and time which can be set.

C. Bill of material:

The tentative bill of material is given below. **The party has to visit the site and evaluate the work before quoting.**

SI No:	Item	Description	Make	Quantity
1	PLC	24V, 14DI / 10DO	Siemens/Eq	01
2	Expansion Module	16 DI	Siemens/Eq	02
3	Expansion Module	16 DO	Siemens/Eq	02
4	Analog Input module	4- RTD	Siemens/Eq	03

5	Analog output module	24DC/ 10A	Siemens/Eq	01
6	Power supply	24VDC/10A	Meanwell	01
7	Ethernet Switch	4-Port	Teltonika	01
8	HMI	7" TFT/Touch Screen	Siemens/ Pro-face	01
9	VFD	3HP/3-Phase/440VAC	Siemens/ Fuji	04
10	Relay Board	8-Channel	Omron/ Eq	03
11	Enclosure	800x2000x400	Rittal	01
12	MCB	4P-32A, 3P-10A, 2P-6A, 2P-DC-4A	Schneider /L&T	8
13	Terminal blocks	2.5 Sqmm	Reputed	200
14	Fan Filter Unit	6"/Square	Reputed	01
15	Other Accessories	Duct/Rail/Cable lug	Reputed	As required
16	RTD	30MM/ 60MM length	Reputed	12
17	SCADA server	With 28" monitor	HP/ Dell	01
18	SCADA liscence	1.5K Tag Runtime	AVEVA	01
19	Field cabling	Control/RTD/Networking	Ploycab/Finolex/Lapp	As required

D. Scope of work:

- 1) Design, Supply, Installation, Testing, Validation and Commissioning of SCADA system to capture, store, monitor and Control of specified parameters, from 04 Mixer tanks.
- 2) The system would have a flow chart to control the process flow and monitor and record the different temperatures in the mixer tank. HLL should have the provision to set the process temperatures and time for each processes.
- 3) Provision for setting different VFD speed for different processes.
- 4) The tank inside temperature should be individually controlled by the jacket temperature in each mixer tanks. The temperature in the jacket will be maintained by turning on and off the hot water valves (Actuated piston valves).
- 5) The 24V DC output for turning on and off the hot water valve will be PID tuned to optimize the jacket temperature.
- 6) Alarms for high temperature/VFD trip etc should be displayed and logged.
- 7) All cabling works and installation of communication devices shall be under the scope of successful bidder.

E. General conditions:

- 1) Successful bidder shall provide the specification and details of the components, instruments proposed along with their makes and data sheets.
- 2) The party shall supply the IT Hardware required to install the licensed SCADA software application. The supplied desktop computer/server shall be of make HP/DELL (01 numbers including UPS). The minimum specification of desktop computer /server supplied shall be Processor: Pentium i5, RAM: 8 GB min or higher as required for entire SCADA system, display resolution: 1920X1080, Operating System: Windows 11 or latest versions, MS Office 2024 or latest versions, Monitor size: 28". The successful

bidder shall supply any higher configuration of desktop computer/server required to ensure the smooth running of SCADA application.

- 3) The SCADA system shall have facility to input values manually for parameters as decided by HLL.
- 4) The software shall provide historical data views for analysis purpose.
- 5) Successful bidder shall provide the details of the range of the instrument, nominal values, minimum, maximum values, alarm values and trip values (Software and Hardware).
- 6) The Wiring diagram of the hardware components shall be provided.
- 7) As built drawings of the ICS configuration, instrument ranges, alarm values, trip values, parameters of the programmable controllers shall be
- 8) provided after successful commissioning of the system.
- 9) The supplied system shall have end to end spare capacity of at least 20 % for future use.

PRICE BID

Design, Supply, Installation, Testing, Validation, Commissioning of the PLC System for mixer tanks at HLL - Irapuram Factory, Cochin			
Sub:	INSTALLATION OF CONTROL PANELS		
Sl No	Specification	Unit Rate (Rs.)	Total Amount in (Rs.)
1	Design, Supply, Installation, Testing, Validation and Commissioning of SCADA system to capture, store, monitor and Control of specified parameters, from 04 Mixer tanks in our Irapuram Factory, Cochin.		
	GST @18 %		
	GRAND TOTAL		

NAME & SIGNATURE OF THE BIDDER WITH SEAL