



# भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान तिरुपति

**INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH TIRUPATI**

Transit campus: C/o Sree Rama Engineering College Campus, Rami Reddy Nagar,  
Karakambadi Road, Mangalam (B.O), Tirupati - 517 507

**Website: [www.iisertirupati.ac.in](http://www.iisertirupati.ac.in)**

**Limited Tender No: IISERT/PUR/0195/20**

**Date: 14-Oct-2020**

Indian Institute of Science Education and Research, Tirupati invites online bid (e-tender) in **Single bid** (Technical + Financial) system for the following.

Item Description	Quantity
Supply, installation, testing and commissioning of R.O. Plant	02 Nos

The Tender Document can be downloaded from Central Public Procurement (CPP) Portal <https://eprocure.gov.in/eprocure/app> and bid is to be submitted online only through the E-procurement portal up to the last date and time of submission of tender.

### Critical Dates of Tender

Sr.No	Particulars	Date	Time
1	Date of Online Publication/Download of Tender	14/10/2020	14:00 Hrs.
2	Bid Submission Start Date	14/10/2020	18:30 Hrs.
3	Bid Submission Close Date	21/10/2020	15:00 Hrs.
4	Opening of Bids	22/10/2020	15:30 Hrs.

**No manual bids will be accepted. All quotation should be submitted in the E-procurement portal only**

**Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 0120-4200462, 0120-4001002, 91-8826246593.**

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## **CHAPTER-1. INVITATION FOR BIDS**

1. Indian Institute of Science Education and Research, Tirupati invites online bids (e-tender) in single bids systems for Supply, installation, testing and commissioning of R.O. Plant as per specifications. The Technical specifications are given in Chapter 4: Schedule of Specifications.

**Contact for information:**

Technical & Commercial contact:

Assistant Registrar (Admin & Purchase)

Indian Institute of Science Education and Research (IISER), Tirupati

Transit campus: C/o Sree Rama Engineering College Campus, Rami Reddy Nagar,  
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Website: [www.iisertirupati.ac.in](http://www.iisertirupati.ac.in)

2. Supply means: "Supply, Installation & Commissioning".

3. **Submission of Bid:**

Bid Submission Start Date: 14/10/2020 from 18:30Hrs.

Bid Submission Close Date: 21/10/2020 up to 15:00Hrs.

Opening of Bids: 22/10/2020 at 15:30 pm

4. No manual bids will be accepted. All quotation should be submitted in the E-procurement portal only

5. The Offer should comprise of the following:

- (i) The offer should be complete to indicate that all products and services asked for are quoted.

- (ii) The purpose of certain specific conditions is to get or procure best Equipment/service etc. for IISER, Tirupati. The decision of Purchase Committee shall be the guiding factor for selection of the responsive firms.

- (iii) Duly filled in Bid with proper seal and signature on each page of the bid should be submitted online and the same should accompany with complete specifications, Manufacturer's name, address and relevant Technical Literature / Brochures with warranty Terms.

- (iv) Agreements / Purchase Orders / Completion certificates if any, for similar works in other Institutes, the details of such supplies for the preceding three years should be given together with the prices eventually or finally paid.

- (v) Copy of GST No. and PAN No. allotted by the concerned authorities. If registered with the National Small Industries Corporation, the registration



number, purpose of registration and the validity period of registration and a copy of DGS&D registration wherever it is applicable should also be provided in bid.

- (vi) The prices should be shown against each item for the purpose of Insurance claims / replacements if any.
- (vii) Compliance sheet with any deviation with reference to the terms and specifications.
- (viii) The item should be supplied with manuals and the manuals including technical drawings should be complete in all respects to operate without any problem.
- (ix) Duly filled in checklist as per Chapter 6 should be submitted along with tender.
- (x) The Bidders are requested to quote for Educational Institutional Price for Equipment's, since we are eligible for the same

**Note : IISER , Tirupati is requesting only Single Bid (Technical Specification and Price together) the Bidders must be extremely careful about the requirement mentioned in the tender and submit their quotes accordingly. Any shortfalls found during the tender evaluation such bids will be rejected without seeking any further clarifications from the bidders. Since it is a single bid any further clarification will cause/draw objections from other bidders.**

**All the bidders should quote their offer as per "Chapter - 5 Price Schedule" for uniformity.**

## 6. Purchase Committee

The Purchase Committee will evaluate the tenders and may also nominate some external/expert members, in the interest of IISER, Tirupati.

## 7. Terms of the Purchase Committee

- (i) A committee duly constituted by the Director, IISER, Tirupati will go through the bids and recommend firms that are meeting all the specifications of the Tender. The recommendation/decision of the purchase committee is the final and binding on all the parties.
- (ii) Purchase Committee will proceed through Bids as defined in **Chapter IV (Schedule of requirements, specifications and allied technical details)**, in order to determine whether they are substantially responsive to the requirements set forth in the tender. In order to reach such a determination, IISER, Tirupati will examine the information supplied by the Bidders, and shall evaluate the same as per the specifications mentioned in this tender.

- (ii) The purchase committee may formulate evaluation criteria in addition to the specifications and requirements indicated in the tender, in the interest of IISER, Tirupati.

**9. Commercial Bid Evaluation:**

Based on results of the Technical evaluation IISER, Tirupati evaluates the Commercial Bid of those Bidders who qualify in the Technical evaluation.

- a. IISER Tirupati shall correct arithmetical errors on the following basis:
- i. If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected.
  - ii. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
  - iii. If there is a discrepancy between words & figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above.
- b. Selling exchange rate/equivalent to Indian currency will be as on the date of bid opening in the case of single bidding and the rate on the date of opening of the priced bids in the case of two-part bidding.
- c. The bids shall be evaluated on the basis of final landing cost as per format given in Price Schedule in case of import / indigenous items.**
- d. The comparison between the indigenous and the foreign offers shall be made on FOR destination basis and CIF/CIP basis respectively. However the CIF/CIP prices quoted by any foreign bidders shall be loaded further as under :
- Towards customs duty and other statutory levies-as per applicable rates.
  - Towards custom clearance, inland transportation etc. – 2% of the CIF/CIP value.
- e. Where the price quoted on FOB/FCA and CIF/CIP basis are the same, the Contract would be made on CIF/CIP basis only.
- f. The Vague terms like “packing, forwarding, transportation..... Etc. extra” without mentioning the specific amount/percentage of these charges will not be accepted. **Such offers shall be treated as incomplete and rejected.**
- g. After arriving at final pricing of individual offers of all the short listed firms, the lowest firm will be awarded with Contract/Purchase Order.
- h. If there are any discrepancies in price schedule and tender document please refer to the BOQ in the Central Public Procurement Portal, the BOQ item/words/conditions mentioned in BOQ prevails

10. No request for extension of due date will be considered under any circumstances.
11. No sub-contracting is allowed with regard to installation, warranty maintenance and after sales service.
12. The Director, IISER, TIRUPATI reserves the right to accept the offer in full or in parts or reject summarily or partly.
13. The relatives / near relatives of employees of the client are prohibited from participation in this bid.

The near relatives for this purpose are defined as:

(a) Members of a Hindu Undivided Family.

(b) Their husband or wife.

(c) The one is related to the other in the manner as father, mother, son(s), son's wife (daughter-in-law), daughter(s) & daughter's husband (son-in-law), brother(s) & brother's wife, sister(s) and sister's husband (brother-in-law).

14. Unloading: In Case of Equipment unloading at IISER Tirupati will be under Supplier scope

## **CHAPTER-2 : INSTRUCTIONS TO BIDDERS**

### **Delivery Period / Timeliness**

The deliveries & installation must be completed **within 15 days**, after placement of purchase order. The time is the essence of the contract. It is mandatory for the bidders who respond to this bid to meet these expectations, as are tightly linked to IISER, TIRUPATI's plans of completing the project within the time frame.

### **Locations for the Supply / Services:**

Supply, installation, testing and commissioning of R.O. Plant Covered by this document is required to be done at IISER, Tirupati.

#### **1. Eligible Bidders:**

- 1.1 IISER, TIRUPATI reserves the right to award / reject the order to any particular bidder without assigning any reason thereof.
- 1.2 Bidders should not be under a declaration of ineligibility for corrupt and fraudulent practices.
- 1.3 Bidders should QUOTE strictly in accordance with the requirements.
- 1.4 Bidders shall adhere to the procedure and processes laid down in this document and shall follow fair and ethical practices of trade.
- 1.5 Based on the list of installations provided by the bidder, IISER, TIRUPATI will have its option to obtain details of the installations, their performance, after sales services etc. for evaluation of the tender, directly from the concerned organizations
- 1.6 Firms which have already supplied to IISER, TIRUPATI and have not completed required installation/after sales service/warranty replacements etc. such firms offers will not be considered for further evaluation and no enquiries thereafter will be entertained.
- 1.7 Conditional Offers will not be considered.
- 1.8 IISER, TIRUPATI will not provide any accommodation/transportation for the engineers/ representatives for attending installation. It is the absolute responsibility of the supplier to make their own arrangements.
- 1.9 The authorized person who signs the tender is required to indicate his e-mail ID, mobile No. and also general e-mail ID for easy and faster communication.



## **2. Amendment of Bidding Documents**

At any time prior to the deadline for submission of bids, IISER, TIRUPATI may, for any reason, whether on its own initiative or in response to the clarification request by a prospective bidder may modify the bid document.

### **PREPARATION OF BIDS**

#### **3. Period of validity of bids**

- 3.1. Bids shall be valid for a period of **90 days** from the date of opening the bid.
- 3.2. IISER, TIRUPATI may ask for the bidder's consent to extend the period of validity. Such request and the response shall be made in writing only. A bidder agreeing to the request for extension will not be permitted to modify his bid.

### **AWARD OF CONTRACT**

#### **4. Award Criteria**

- 4.1 IISER, TIRUPATI shall award the contract to the technically eligible lowest bidder.
- 4.2 If more than one bidder happens to quote the same lowest price, IISER, TIRUPATI reserves the right to award the contract to more than one bidder or any bidder.

#### **5. Purchaser's Right to vary Quantities at the time of Award**

IISER, TIRUPATI reserves the right at the time of award of Contract to increase or decrease the quantity of items specified in the Schedule of Requirements without any change in price or other terms and conditions.

#### **6. Corrupt or Fraudulent Practices**

IISER, TIRUPATI requires that the bidders who wish to bid for this project have highest standards of ethics.

- 6.1. IISER, TIRUPATI will reject a bid if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices while competing for this contract.
- 6.2. IISER, TIRUPATI may declare a vendor ineligible, either indefinitely or for a stated duration, to be awarded a contract if it at any time determines that the vendor has engaged in corrupt and fraudulent practices during the execution of contract.



**7. Interpretation of the clauses in the Tender Document / Contract Document**

In case of any ambiguity / dispute in the interpretation of any of the clauses in this Tender Document, **Director, IISER, TIRUPATI's interpretation of the clauses shall be final and binding on all parties**

### CHAPTER - 3 : CONDITIONS OF CONTRACT

#### 1. Price

- 1.1. The price quoted shall be considered firm and no price escalation will be permitted.
- 1.2. The price criteria should be on F.O.R., IISER TIRUPATI. Govt. Levies like GST. if any, shall be paid at actual rates applicable on the date of delivery. Rates should be quoted accordingly giving the basic price, GST, if any.
- 1.3. The rate of GST applicable to IISER Tirupati is 5% for the items procured for Research purpose as per Notification No. 45/2017-Central Tax (Rate) New Delhi, 14th November, 2017 and Notification No. 47/2017-Integrated Tax (Rate) New Delhi, 14th November, 2017

#### A. For Goods manufactured in India:

(i) The price of the goods must be as per the BOQ.

(ii) In case of BOQ requesting for prices without GST. GST will be paid as per the norms.

(iii) The price mentioned in BOQ must be inclusive of transportation, insurance, loading and unloading and any other local service required for delivering the goods for the desired destination as decided by IISER Tirupati.

(iv) The installation, commissioning and training charges (If any) must be mentioned as per the BOQ (if requested separately in BoQ) else the price quoted will be taken as inclusive of installation, commissioning and training.

(v) The institute will not be responsible in case of the bidders failing to include any of the above mentioned prices in their bid. The price mentioned in the BOQ will be final and the bidder has to comply with that, if awarded the tender.

**(vi) UNLOADING OF THE GOODS AT IISER TIRUPATI IS STRICTLY IN THE SCOPE OF THE BIDDER. NO MANPOWER WILL BE PROVIDED BY IISER TIRUPATI.**

#### B. For Goods manufactured abroad:

(i) The mode of shipment must be clearly mention in the BOQ via Ex-works, FCA, FOB, CIP, DDP etc.

(ii) Courier mode of shipments will not be acceptable. IISER Tirupati will not pay the charges towards clearance goods arriving on courier mode.

(iii) The mode of shipment once mentioned cannot be changes without the Consent of IISER Tirupati.

(iv) Any financial implication leading to change of mode of shipment or any deviation from the bid submitted shall be borne by the bidder.

(v) The charges towards insurance and transportation of the goods and agency commission must be clearly mentioned.

(vi) The installation, commissioning and training charges including any incidental services, if any.

(vii) The installation, commissioning and training charges (If any) must be mentioned as per the BOQ (if requested separately in BOQ) else the price quoted will be taken as inclusive of installation, commissioning and training.

(viii) The institute will not be responsible in case of the bidders failing to include any of the above mentioned prices in their bid. The price mentioned in the BOQ will be final and the bidder has to comply with that, if awarded the tender.

**(ix) UNLOADING OF THE GOODS AT IISER TIRUPATI IS STRICTLY IN THE SCOPE OF THE BIDDER. NO MANPOWER WILL BE PROVIDED BY IISER TIRUPATI**

**C. We are exempted from payment of Customs Duty under notification No.51/96 dated 23.07.1996. Customs Duty, if any, should be shown separately. No other charges than those mentioned clearly in the quotation will be paid.**

**D. Bidders may also bid for High Sea sales**

**2. Services**

2.1. Details of services rendered as well as after-sales services offered by you are to be made clear in the tender.

**3. Delivery Schedule**

3.1. The bidders may please note that the delivery of the system should be strictly **within 15 days from the date of placement of firm order.**

3.2. Goods should not be dispatched until the Vendor receives a firm order.

#### 4. PREPARATION AND SUBMISSION OF OFFERS:

a) Quotation should be submitted directly by the original manufacturer/supplier or its sole authorized distributor/dealer/Indian Agent. In case of bid by authorized dealer/distributor/Indian Agent, the manufacturer authorization should be attached with the technical bid as per Annexure-‘A’.

**One Indian Agent can participate in a tender on behalf of one manufacturer only. No offer will be entertained if the same Indian Agent is representing another manufacturer for the same item. Bids from only one authorized distributor/retailer/reseller will be entertained, who has authorization from the company to quote for this tender.**

**Multiple bids from various distributors from the same manufacturer will not be entertained & the company / principle providing multiple authorizations will be rejected from the tender.**

b) In case a bidder is not doing business within India, it shall furnish the certificate to the effect that the bidder is or will be represented by an agent in India equipped and able to carry out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period or ensure a mechanism at place for carrying out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period.

c) The bidder shall bear all costs associated with the preparation and submission of its bid irrespective of the conduct or outcome of the bidding process.

d) The bidder should not indulge in any corrupt, fraudulent, collusive, coercive practices during the entire process of procurement and execution of contract/order.

e) Before the deadline for submission of the bid, IISER TIRUPATI reserves the right to modify the bidding document and to extend or not to extend the date of submission. Such amendment/modification will be hosted on e-Procurement portal (<https://eprocure.gov.in/eprocure/app>) or on IISER TIRUPATI website.

f) Conditional tenders will be summarily rejected

#### 5. Warranty / Support:

a) The items covered by the schedule of requirement shall carry minimum three years of comprehensive warranty from the date of acceptance of the equipment by IISER, TIRUPATI. Warranty shall include free maintenance of the whole equipment supplied including free replacement of parts. The defects, if any, shall be attended to on immediate basis but in no case any defect should prolong for more than 24 hours. The comprehensive warranty includes onsite warranty with parts.

- b. The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes cost, insurance, freight, custom duty, octroi, local taxes if any should be borne by the beneficiary or his agent. A clear confirmation should be given for this item.
- c. The warranty on the associated software should cover providing of upgraded version/s, if any, released during the warranty period free of cost. The turnaround time for resolving of any issue in case of indigenous bidders 15 days and in case of import is 30 days from the date of intimation from institute via e-mail any delay in resolving the issue will lead to forfeiture of their PBG. The delay in resolving the issue beyond the stipulated period mentioned above shall lead to extension of warranty period.
- d. The BIDDER shall assure the supply of spare parts after warranty is over for maintenance of the equipment supplied if and when required for a period of 10 years from the date of supply of equipment on payment on approved price list basis.
- e. The equipment must be supported by a Service Centre in India manned by the principal vendor's technical support engineers. The support through this Centre must be available 24 hours in a day, seven days a week and 365 days a year. Also it should be possible to contact the Principal's vendor support Centre on a toll free number/web/mail.
- f. An undertaking from the manufacturer is required in this regard stating that they would facilitate the BIDDER on regular basis with technology / product updates & extend support for the warranty as well.
- g. The vendor will have to arrange for all the testing equipment & tools required for installation, testing & maintenance etc.
- h. The principal vendor must have a local logistics support by maintaining a local spares depot in the country of deployment of the equipment. This is to ensure immediate delivery of spares parts from Principal Vendor of equipment to its channel partner/system integrator.
- i. Details of onsite warranty, agency who shall maintain during warranty and undertake Annual Maintenance Contract/Comprehensive Service Maintenance Contract beyond warranty shall be given in the offer. In case of foreign quote, the Indian Agent who shall maintain during warranty and AMC beyond warranty shall be given in the Technical Offer.
- j. COMMENCEMENT OF WARRANTY PERIOD:**

The warranty period of an item shall commence from the date of successful installation, commissioning and demonstration at IISER Tirupati. The warranty period and validity of Performance Guarantee shall be extended for the period of delay in satisfactory installation and delay in warranty services.

**6. Indemnity**

The vendor shall indemnify, protect and save IISER, TIRUPATI against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of all the equipment supplied by him.

**7. Freight & Insurance**

The equipment's to be supplied will be insured by the vendor against all risks of Loss or damage from the date of shipment till such time it is delivered at IISER, TIRUPATI site.

**8. Payment**

8.1. No advance payments are allowed under any circumstances.

8.2. Payment will be made directly to the suppliers by wire transfer for 100% of the Invoice value after receipt of the goods in our Stores, tested /inspected and found satisfactory with regard to quality, quantity, and specifications ordered for and after satisfying that the terms and conditions of supply have been fulfilled.

8.3. By Irrevocable Letter of Credit for 100% of the Invoice value. However, 90% of the Invoice value will be paid on presentation of original shipping documents to our bankers and balance 10% will be paid after receipt of material and acceptance of the goods at IISER Tirupati.

**9. Penalty for delayed Services / LD**

9.1. As time is the essence of the contract, Delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise the IISER will forfeit EMD/SD and also LD clause will be applicable /enforced.

9.2. If the supplier fails to Supply, Install as per specifications mentioned in the order within the due date, the Supplier is liable to pay liquidated damages of 1% of order value per every week of delay subject to a maximum of 10% beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier.

9.3. IISER, TIRUPATI reserves the right to cancel the order in case the delay is more than 10 weeks. Penalties, if any, will be deducted from the Security Deposit.

**10. Jurisdiction**

The disputes, legal matters, court matters, if any, shall be subject to Tirupati Jurisdiction only.

### **11. Discrepancies**

If there are any discrepancies in price schedule and tender document please refer to the BOQ in the Central Public Procurement Portal, the BOQ item/words/conditions mentioned in BOQ prevails.

### **12. Comparisons of Bids**

The Purchaser shall compare all substantially responsive bids to determine the lowest valued bid.

This Institute is following and abide with the Public Procurement (Preference to Make in India), Order 2017, DIPP, MoCI Order No. P-45021/2/2017-B.E.II dated 15th June 2017 and subsequent amendments to the order. Accordingly, preference will be given to the Make in India products while evaluating the bids, however, it is the sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India product along with respective documentary evidence as stipulated in the aforesaid order and the quality as mentioned in the tender in the technical bid itself.

### **13. Force Majeure**

IISER, TIRUPATI may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that the delay, in performance or other failure to perform its obligations under the Contract, is the result of a Force Majeure.

Force Majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, storms etc.) acts of states, the direct and indirect consequences of wars (declared or undeclared) hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises.

### **14. Arbitration**

All disputes of any kind arising out of supply, commissioning, acceptance, warranty maintenance etc. shall be referred by either party (IISER, TIRUPATI or the bidder) after issuance of 30 days notice in writing to the other party clearly mentioning the nature of dispute to a single arbitrator acceptable to both the parties. The venue for arbitration shall be IISER, TIRUPATI India. The jurisdiction of the courts shall be Tirupati, Andhra Pradesh, India.

**15. FOR BIDDER'S SHARING LAND BORDER WITH INDIA:**

Vide Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.

- i. Any bidder from a country sharing a land border with India will be eligible to bid in this tender only if the bidder is registered with the Department for Promotion of Industry and Internal Trade (DPIIT).
- ii. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- iii. "Bidder from a country which shares a land border with India" for the purpose of this Order means:
  - a) An entity incorporated, established or registered in such a country; or
  - b) A subsidiary of an entity incorporated, established or registered in such a country; or
  - c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
  - d) An entity whose beneficial owner is situated in such a country; or
  - e) An Indian (or other) agent of such an entity; or
  - f) A natural person who is a citizen of such a country; or
  - g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

For details about registration procedures please visit the above mentioned OM. Mandatory documentary evidence regarding the bidder's registration with DPIIT is to be submitted along with the tender, failing which the tender shall be liable for rejection. Bidders are also requested to submit the Model Certificates for this tender as mentioned in the Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.

**Assistant Registrar (Admin & Purchase)**



## **CHAPTER 4**

### **TECHNICAL SPECIFICATION**

**PLEASE NOTE: DETAILED TECHNICAL SPECIFICATION OF THE OFFERED MODEL, MODEL NO, MAKE, COUNTRY OF ORIGINAL MANUFACTURER ALONG WITH LEGAL & VALID TECHNICAL LITERATURE APPROVED BY THE MANUFACTURER TO BE PROVIDED THE MODEL QUOTED MUST ALSO BE AVAILABLE ON THE PUBLIC DOMAIN**

### **TECHNICAL SPECIFICATIONS FOR R.O. PLANT**

Supply, installation, testing and commissioning of R.O. Plant capacity of 500 LPH (Complete system to be compact type, skid-mounted / cabinet enclosed with digital display & electrolytic system sanitization unit should have a capacity to connect with inlet raw water of TDS 1500ppm, as per detailed shop drawings to be approved) for the following parameters and consisting of (but not limited to) the following main components: -

Raw Water pumps of horizontal, centrifugal type suitable for a flow rate of 1000 LPH at 25m head. The Pump construction shall be of SS-304 & impeller shall be also SS-304. The motor shall be TEFC suitable for a supply of 415V/3- phase/50Hz supply. The pump shall be supplied complete with base channel coupling foundations, bolts, pressure gauge at inlet and outlet of each pump. - 2 Nos.

Dual Media filter (Sand & Activated carbon media) for online installation before the RO Plant suitable for a flow rate of 1000 LPH. The material of construction shall be composite FRP with back wash provision & min 2 years life for media. The unit shall be supplied complete with multi-port valves, inlet and outlet branches removal caps of replacement of elements inlet and outlet pressure indicators. -- 1 Set

RO High Pressure feed pumps of vertical, multistage centrifugal type suitable for a flowrate of 1000 LPH of required Head (or as per design calculation). The pump construction shall be of SS-304 & impeller shall be also SS-304. The motor shall be of TEFC suitable for a supply of 415V/3 phase/50 Hz supply. the pump shall be supplied complete with base channel coupling foundation, bolt, pressure gauge at inlet and outlet of each pump. - 2 Nos

R.O. modules made out of Spiral Wound Thin Film composite suitable to withstand pressure of 20kg/sq.cm. Suitable BSPT/NPT connections shall be used for connecting feed & reject ends. the modules shall be supplied complete with all necessary instrumentation, valves for sampling, drain, reject & permeate, epoxy-coated structural steel bases and supports, as per following system capacity requirements:

- (i) Total net treated water output of system = **500 LPH**
- (ii) System recovery = **60 - 70 %**
- (iii) Number of membranes = The total number of membranes required shall be as per requirements, supported by calculations from the vendor.
- (iv) System should have suitable water saver cartridges for obtaining high recovery & provisions to avoid scaling
- (v) System should have Auto Sanitization

Clean in place pump of horizontal end suction suitable for a flow rate of 1000 LPH at required head with 500 ltr. HDPE tank. The pump construction shall be of stainless steel SS-304. The motor shall be TEFC suitable for a supply of 415V/3 phase/50Hz supply. The pump shall be supplied complete with base channel, coupling, foundation bolts, pressure gauge at inlet & outlet of the pump. -- 1 Set

Digital Display's should be arranged along which should have the following interlocks:-  
High Pressure Pump unit trip in case of Low suction pressure.

1. High Pressure Pump unit trip in case of High discharge pressure.
2. High Pressure Pump unit trip in case of Low suction pressure.
3. In all above cases Buzzer indicates nature of malfunctioning.
4. The System should display the TDS R.O. Water, Flow Rate of Inlet, Outlet & Reject Water simultaneously.

Instrumentation mounted in R.O. system/panel as follows:-

1. Digital Flow meters to measure and control the flow of feed/product/reject
2. Pressure Gauges made out of SS316 (glycerine filled) of pricol/equivalent
3. Digital Conductivity probes for conductivity display -- 1 Nos.
4. Display of self life of each and every filters : 2 no's
5. Pressure Switches to control pressure and given High/Low pressure trip. (Danfoss /Switzer/Square D makes) -- 4 Nos.
6. Level switches to control water level in the output storage tank and soft Water Tank. -- 2 Nos.
7. MCC panel for automation of complete system 1 no

First fill of all chemicals and lubricants to commission and operate the plants. --1 Lot

All interconnecting piping work with valves :-

1. Low Pressure Side till R.O. feed water pump. Piping shall be of extra strong PVC and all valves shall be of extra strong PVC and all valves shall be PVC ball valves. -- 1 Lot
2. High Pressure side piping from the R.O. high pressure pumps to the reject stream control valves shall be of SS - 304 using all SS fittings ball valves of suitable pressure rating shall be used till 25 mm size, above 25 mm, flanged globe/ wafer butterfly valves in SS construction shall be used. Rejects pressure control valves shall be globe valve and feed flow control valve shall be of SS-304. – Lot

Complete SS treated water storage tank of capacity 1000 litre including all inlet/outlet connections, accessories, valves, seal manhole covers, insulation etc. Fabrication to be done as per approved shop drawing.

**NOTE:**

1. Vendors should give point by point compliance to the specification. Vendor should provide technical literature and brochure of the offered model.
2. Point by point compliance of the bid. w.r.t specifications along with reference to the technical literature provided is to be clearly mentioned and submitted.
3. Non-compliance to any of the two points above shall be treated as INCOMPLETE/PARTIAL BID & shall not be considered for further process.



**CHAPTER-5 PRICE SCHEDULE**

<b>CHAPTER:5 PRICE SCHEDULE</b>								
<b>Sr. No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Units</b>	<b>BASIC RATE (Per Unit) In Figures To be entered by the Bidder in Rs. P</b>	<b>GST %</b>	<b>GST Amount</b>	<b>TOTAL AMOUNT Without Taxes in Rs. P</b>	<b>TOTAL AMOUNT With Taxes</b>
01	R O Plant	02	Nos					



**MANUFACTURER'S AUTHORIZATION FORM**

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that re binding on the Manufacturer]

Date: [Insert date (as Day, month and year) of Bid submission]

Tender No.: [Insert number from Invitation for Bids]

To: [Insert complete name and address of Purchaser]

WHEREAS

We [insert completer name of Manufacturer], who are official manufacturers of [Insert type of goods manufactured] having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following goods, manufactured by us [insert name and or brief description of the goods], and to subsequently negotiate and sign the contract.

We hereby extend our full guarantee and warranty in accordance with the Terms and Conditions of Contract with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on \_\_\_\_\_ day of \_\_\_\_\_ [insert date of sign in]

**CHAPTER – 6 : Checklist: Eligibility Criteria for Bidders**

Bidders to indicate whether the following are enclosed by striking out the non-relevant option.

Sr. No	Content	Document Attached	Please mention Page no in accordance with attached documents
(a)	Self-Attested copy of GST number as applicable	( Yes / No )	
(b)	Agreements / Purchase orders / Completion certificates, if any, from the clients for whom similar supply has been made by the bidder in last three years	( Yes / No )	
(c)	Compliance sheet with any deviation w.r.t. the terms	( Yes / No )	
(d)	LD clause agreeable.	( Yes / No )	
(e)	Acceptance of warranty period and Free replacements during warranty period	( Yes / No )	
(f)	Deviation Sheet to be Attached	( Yes / No )	



## IMPORTANT NOTICE

TENDERERS RESPONDING TO THIS ENQUIRY SHALL BE DEEMED TO BE AGREEABLE TO THE TERMS AND CONDITIONS HEREIN CONTAINED. THESE TERMS AND CONDITIONS SHALL BE BINDING ON THE SUCCESSFUL TENDERER. CONDITIONAL TENDERS ARE LIABLE TO BE REJECTED. IISER TIRUPATI WILL PROCESS THE TENDER AS PER IISER TIRUPATI STANDARD PROCEDURES. THE DIRECTOR OF THE INSTITUTE RESERVES THE RIGHT TO REJECT ANY OR ALL OR PART OF TENDER WITHOUT ASSIGNING ANY REASON AND SHALL ALSO NOT BE BOUND TO ACCEPT THE LOWEST TENDER. IISER TIRUPATI WOULD NOT BE UNDER ANY OBLIGATION TO GIVE ANY CLARIFICATIONS TO THE AGENCIES WHOSE BIDS ARE REJECTED.

I agree to all terms and conditions mentioned in the tender document of the Institute

Signature of the Tenderer