NIQ FOR REVERSE OSMOSIS (RO) PLANT

PREAMBLE

I.I.T. Delhi is in the process of procuring "REVERSE OSMOSIS (RO) PLANT with DOSER for pH CORRECTION" for its project site at village Malunga, district Jodhpur, situated 37 km NW of Jodhpur city, Rajasthan.

1. Sealed quotations are invited from prospective bidder containing the "Technical Bid" and the "Financial Bid", described in para 2 and 3 below. The following should be superscribed prominently on this outer cover, 'QUOTATION for "RO PLANT", RP02260'.
2. A separate sealed envelop containing the 'Technical Bid', giving the detailed technical specifications of items offered by you with 'Technical Bid for "RO SYSTEM WITH DOSER" RP02260' superscribed on the envelop.
3. A separate sealed envelop containing the 'Financial Bid' giving detailed financial bid corresponding to the items specified in the technical bid, again superscribing the envelop with 'RO with Doser", RP02260'.
4. Authority of I.I.T. Delhi reserves the right to reject any or all quotations without assigning any reasons.

ELIGIBILITY

You should have been in area of RO plants at least for the past 5 years. Printed brochure/Order numbers/Order copies/Other proof for 3 such plants should be enclosed (Without which the bid will be summarily rejected).

SCOPE OF WORK

The scope of work includes, design, fabrication, testing, transport to site, erecting, testing and commissioning of the plant described under "Technical Details" attached. Also power will be available at one location. All internal piping and cabling are included in the scope of this work. The electric points for all the machinery are included in the scope of work.

All necessary, statutory approvals, as applicable, is the responsibility of the supplier.

DETAILS TO BE INCLUDED IN 'TECHNICAL BID'

1. Please note that the 'Technical Bid' and 'Financial Bid' should be separate.
2. Do not include price in 'Technical Bid'.
3. General credentials of your firm with all commercial and all governmental registration details must be provided.
4. List of organizations, with addresses and phone numbers (if available), where you have supplied RO plants (with or without doser for pH correction).

FINANCIAL BID

1. Please give 'Financial Bid' **separately** as detailed in para(3) under "PREAMBLE".

SUBMISSION AND OTHER DETAILS

1) Send in your quotation, along with other documents asked for, under sealed cover, to reach by 14 days of publication of the web advertisement as above, or, last date as mentioned, to the following address, and with the words “RO SYSTEM WITH DOSER, RP02260”, prominently written on the outer cover. **Do not send any document by email**.
2) The technical details and specifications of the equipment required by us are enclosed herewith.
3) Delivery F.O.R., Installation and Commissioning to be done at Project Micro-Industry site at village Malunga, District Jodhpur, situated 37 km NW of Jodhpur city, Rajasthan.
4) Please indicate terms for Maintenance/Replacement/Servicing etc. Warranty should be for minimum one year.
5) Kindly send in your quotation to:

PRINCIPAL INVESTIGATOR (RP02260)
Head’s Office, Room No. IV-236
Department of Applied Mechanics
Indian Institute of Technology, Delhi
New Delhi-110016

RO SYSTEM WITH DOSER FOR PH CORRECTION"

TECHNICAL SPECIFICATIONS

(INCLUDE IN TECHNICAL BID AS ASKED BELOW)

1) **The RO plant will be for boiler grade water, and not for drinking water.**

2) **Input Raw Water Quality (ppm: parts per million)**

pH	6.5
TDS of Input water	≤ 1,500 ppm
Total hardness (Ca + Mg)	≤ 10 mg/l
Input feed water rate	7000 LPH

3) **Output Treated Water Quality plus capacities (mandatory)**

Total hardness (Ca + Mg)	≤ 10 mg/l
TDS of treated water (after doser)	≤ 40 ppm
pH (after doser)	8.5
Input feed water rate	7000 LPH
Reject water rate (in the range)	3000 LPH
Product water rate (should not be less than)	4000 LPH

LPH: Litres per hour; mg/l: milligrams/litre

Please furnish the details of the following sub-systems/units, as asked. This is mandatory. These details will be used to check the supplied items in the plant, in case your bid is successful.

1) **FEED WATER PUMP**
2) **REVERSE OSMOSIS BLOCK**
   a) **High pressure Pump**
   b) **R.O. Specifications**
   c) **Instrumentation**
   d) **Skid**
   e) **Other ancillaries like Control panel**
3) **pH DOSING SYSTEM**
4) **MEMBRANE FLUSHING / CLEANING SYSTEM**
   a) **Premeate Water Storage Tank**
   b) **Flushing Pump**

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