

Dr. Ashis Kumar Sen
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Indian Institute of Technology Madras
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Form for Inviting Quotations

Reference No. AS/RFTP/DIWS/2016

Date: 02-07-2016

Subject: Supply and Installation of “DI Water System” for lab use by Indian Institute of Technology Madras

Quotation Due Date: 25-07-2016

Dear Sirs:

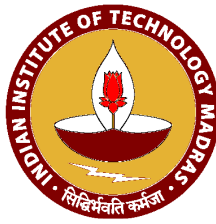
Quotations are invited for **supply and installation** of the equipment “DI Water System” as per details in Annexure-I under the following terms and conditions.

Terms and Conditions (Foreign Vendors/Suppliers):

1. The total amount indicated is Ex. Works / FOB / CIF. Madras Value.
2. The consignment to be addressed to **Dr. Ashis Kumar Sen, 213 Hydroturbomachines Lab, Department of Mechanical Engineering, I.I.T. Madras, Chennai – 600 036, India.**
3. The consignment to be dispatched by surface / Air Post Parcel / Ocean Freight / Air Freight.
4. Please send three advance copies of Invoice direct to us immediately after dispatch to avoid delay in clearance. DEMURRAGE CHARGES, IF ANY, PAYABLE ON ACCOUNT OF DELAY IN RECEIPT OF ADVANCE COPIES OF INVOICE WILL BE DEBITED TO YOUR ACCOUNT.
5. The following set of documents is required in all cases:
 - a. Complete set of Clean Bill of Lading / Airway Bill / Air or surface Parcel Receipt, showing that the goods have been shipped and freight prepaid.
 - b. Insurance Policies / Certificates in duplicate covering Marine Insurance as per Institute Cargo Clauses (All risks) and perils as per Institute Strikes, Riots and Civil Commotion Clauses, War risks as per Institute, Clauses. Cover for CIF value plus 10 percent.

General Terms and Conditions:

1. The Quotations duly sealed super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
2. The quotations are invited as two-bid system i.e., technical bid and financial bid.
3. The Quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for, should be submitted free of charges, and collected back at the supplier’s expense.

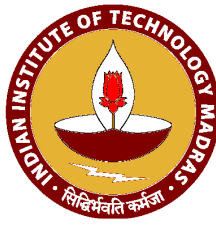


6. Local Firms: Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
7. Firms outside Madras: Quotations should be for F.O.R. Madras. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
8. The rate of sales / General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales / General Taxes will be admitted at any stage and on any ground whatsoever. The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to non-Government Educational Institutions run with no profit motive for which a concession. Sales Tax Certificate will be issued at the time of final settlement of the bill.
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. Payment : Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later

ANNEXURE-I

TECHNICAL SPECIFICATIONS FOR PURCHASE OF “DI WATER SYSTEM”

S. No.	Basic	Description	Quantity
1	General	Water purification system providing Ultra-Pure Water from a potable water feed supply. Pure water should be recirculated through a wrap-around reservoir to maintain consistent peak water purity. The purifier should have front-entry service doors for easy access to consumables. Data collection capabilities through a user interface for compliance with GLP guidelines. It should have Bio filter to produce water free from biologically active impurities such that it is suitable for use in applications which require endotoxin free ultra-pure water, bacteria free water, and nuclease free ultra-pure water. It should deliver 7 litres of water per hour with a dispense flow rate of 1 litre per minute. Output rated for a feed water supply at 15° C and 4 bar pressure. The system should include pre-treatment, RO module, UV and deionization modules. An installation kit, operator’s manual and initial set of consumables should be included with the system. It should have a Multimedia DI Cartridge (90,000 litres/1mS-cm feed water to the cartridge)	1
2	System Performance	Inorganics level should be upto 18.2 MOhm/cm. TOC (typical) can be: 1-3 ppb (subject to suitable feed water) Bacteria: <1CFU/ml (with 0.2mm POU filter) pH level: effectively neutral Bio filter should provide Endotoxin specification and improved bacterial specification	
3	System Feed water Requirements	For potable water as the source, maximum Fouling Index level should be 10, maximum conductivity should be 1400mS-cm, Chlorine levels should be <0.5ppm. Pressure (max): 6 bar (90psi)	



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		Pressure (min): 4 bar (60psi) System should include recirculation of product water throughout the reservoir. It should include full user microprocessor control and specific alarms on water quality. Complete sanitization is required. Interface should be GLP compliant. It should remind to change the consumables.	
4	Docking Vessel	We require 25L capacity. The docking vessel can have 5 level switches. There should not be any static water areas and it should be constructed of inert polyethylene. It should include free interior with self-draining base.	1
5	Bio filter	It should remove residual biologically active contaminants. The levels of Endotoxin should be < 0.001 EU/ml RNase should be < 0.002 ng/ml DNase should be < 20 pg/ml Bacteria level should be < 0.1 CFU/ml	1
6	Pre-filtration kit	Pre-filtration kit should be supplied at the time of installation	1

Thank you.

Sincerely,

Dr. Ashis Kumar Sen
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