THE QUOTATION MUST BE SENT IN A SEALED COVER SUPERSCRIBED WITH OUR REFERENCE NO. & DUE DATE.

INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI-110016 (INDIA)

DATE: 27.02.2012 DUE DATE: 12.03.2012.

NOTICE INVITING QUOTATION

REFERENCE NO. IITD/PHYS/2012/BRM//CHLR

Sealed quotations along with **complete details** (**brochures/web-site details**) are invited for procuring a **Water Chiller** (Qty. - 1) as per following desired specifications:

S.No.	Parameter	Specification
1.	Cooling Capacity	\geq 6000 kcal/hr at +15 °C
2.	Water Circulating Pressure	≥ 4 bar
3.	Water Flow Rate	≥ 25 LPM
4.	Water Temperature: (a) Operating Range (b) Required temperature (c) Ambient temperature	+15 °C to +20 °C +15 °C + 45 °C
5.	(a) End Connections for water inlet/outlet	1" for GI/flexible pipe connection (inlet/outlet, fitted with GATE valves at inlet and outlet)
6.	Power Supply	3Ø, 380/400 VAC 50Hz 15 Amp
7.	Tank Capacity and Material	100 Liters SS, TIG Welding with polynitrile rubber insulation
8.	Construction of Frame & Tank: (a) Frame Material: (b) Tank Material:	MS angle frame; MS panels duly Powder Coated SS 302 or better sheet, duly polished with full opening cover with puff insulated

9.	Refrigeration/Compressor/Control	
	System (a) Compressor (b) FAN	DX Type cooling coil with Danfoss/Emerson make compressor with air-cool condenser Axial Flow type heavy duty CE compliance/Weiguang make Fan/Motor (F class insulated) (Specify the make).
	 (c) Evaporator (d) Filter drier (e) Expansion Valve (f) Antifreeze Thermostat (g) HP/LP Switch (h) MCB/Contactor/Rotary switch/indicators (i) Wiring (j) Fuses 	CBE type (GEA/KAORI/SWEP make) Danfoss/Sporlon/Alco Danfoss/Sporlon/Alco Sub-zero Danfoss/Sporlon/Alco All Telemechanique make Lapp Cable/Finolex make Supply 5 sets of spare fuses
10.	Refrigerant	R-22
11.	Water Pump	Centrifugal Vertical Multistage type water circulating SS pump (Grundfos/Ebara make) with strainer and pressure regulating valve and gauge)
12.	Temp Controller	Carel /Dixell make
13.	Safety with interlocks	 High 30° temp and Low 10° Temperature cut with microprocessor control. High and Low Refrigerant pressure cut. Water low-level Alarm, and Trip. Single Phasing and Reverse Phasing cut. Over load cut. Antifreeze Thermostat trip feature
14.	Accuracy of Temperature	Less than or equal to ± 2 °C

15.	Overall Chiller's SIZE/dimension	Chiller should be compact, so as to move through an entrance door of size: Breadth< 38" & Height< 80". The length should be less than 84".
16.	Noise (sound) level at 1m distance	≤ 70 dB. Satisfactory demonstration of noise level at the time of commissioning will be the criteria for release of payment
17.	Warranty	At least One year from the date of installation
18.	 (a) Vendor must submit the list of institutions/industry/laboratory along with the contact tel. no./e-mail of the concerned customers as in. (b) The vendor should submit/supply the detailed Wiring/Block diagram together with Operating manual. (c) The initial charge of refrigerant /oil should be provided by the vendor (d) The installation and successful commissioning at our site be demonstrated. Necessary installation charges, if any, must be clearly indicated in the offer. (e) All electrical wiring should be in the scope of the work. We shall arrange the 3 phase Power outlet. 	

Terms and conditions covering submission of quotations:

- 1. **Delivery:** The rates quoted must be for **C.I.F. IIT Delhi**
- 2. **Terms of payment** should be clearly stated.
- 3. Validity of quotations: Quotations will be considered valid for three months.
- 4. No correspondence regarding acceptance/rejection of a quotation will be entertained.
- 5. Submission of quotations: Quotations should be sent at the below address in a sealed cover marked at the top our NIQ reference. The technical and financial bids should be sealed in separate envelopes before putting them together in the sealed cover.
- 6. Prof. B. R. Mehta

Department of Physics

IIT DELHI, HAUZ KHAS

NEW DELHI-110 016, INDIA

7. **Rejection:** Quotations not conforming to the set procedure as above will be rejected.

8. **Discount/Rebates:** Special discount/rebate wherever admissible keeping in view that

the supplies is being made for educational purpose in respect of public institution of

National importance may please be indicated.

9. Necessary information may also be provided regarding the following:

• Warranty

• Delivery time

• Penalty clause for delay in delivery

10. Institute's rights: Institute reserves the rights of acceptance or rejection of any or all

quotations without assigning any reason(s). The discretion for increasing or

decreasing of the quantities demanded also vests with the Institute.

Prof. B. R. Mehta (PI)

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