

**Department of Biochemical Engineering and Biotechnology
Indian Institute of Technology Delhi**

November 14, 2011

NIQ for the purchase of “Recirculating Chiller”

Sealed quotations are invited for the purchase of Recirculating Chiller.

Please submit the TECHNICAL and FINANCIAL bids in separate sealed envelopes. Mark the two envelopes as “**Technical Bid**” and “**Financial Bid**”. These two sealed envelopes should be sent in a single sealed envelope, marked as “**Quotation for Recirculating Chiller**”.

The quotations should be submitted in the name of Prof. Saroj Mishra, Department of Biochemical Engineering and Biotechnology, Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 110016.

The last date for submission of quotations is 28.11.2011, 4.00 PM.

For any clarifications, contact Mr. Ashwani/ Shivkant in pilot plant of the department.

Specifications:

Working temperature range	:	-20 40 °C
Temperature control	:	PID
Temperature stability	:	±0.5 °C
Display	:	LED
Display resolution	:	0.1 °C
Pump capacity	:	Pressure – 0.5 ... 3 bar; Flow rate – 40 LPM
Filling Volume	:	15 L
Cooling capacity	:	20 10 0 -10 -20 °C
Dimension	:	≈ 50 x 76 x 64 cm
Ambient temperature	:	5 ... 40 °C

1. The system should be of continuous duty class for process lasting up to two weeks.
2. There should be at least 2 minute time delay between power switch ON (or on power resumption after power failure) and compressor ON.
3. Chiller unit should have auto start function at the previous setting, on resumption of power after power failure.
4. Any accessory required for mounting to the recirculating chiller in our existing fermentor out let must be included.

Terms and conditions:

- Please quote prices at FOB/CIF New Delhi, inclusive of installation charges.
- Validity for quotation should be at least for three months.
- Attach all the technical literature and a list of similar installations done in India.
- A minimum of three years comprehensive onsite warranty, also exclude warranty for three years.
- Kindly mention if you can provide any technical support like training of IIT Delhi personnel at IIT Delhi or in your factory and providing a technical person for operation of the machine for the initial period of two years.
- If the quote is being submitted by the representative of the Principals/manufactures themselves, a valid Agency ship/Dealership Certificate authorizing the agent to quote to IIT Delhi on behalf of the Principals should be enclosed.
- Complete set of manuals for the operation and servicing of equipment should be given. All circuit diagrams, other mechanical and electrical schematics must be provided to main unit, sub systems and accessories.
- Spare set- A complete set of spares and consumables should be supplied for three years of trouble free operation.
- Delivery period should be clearly mentioned
- Clearly specify the installation requirements such as space, power, frequency, and environment (Temperature and humidity) etc.
- If the item quoted are proprietary in nature, please enclose proprietary certificate from the principals stating "certified that.....is a proprietary item of M/s.....and no other manufacture make these items".
- If the bidder is Indian agent, the agency certificate should be enclosed.
- Please produce compliance certificate for the specification.
- Please ensure that the Indian agent has been enlisted with the Department of Expenditure, evidence may please be attached.
- The Institute reserves the right to accept or reject any one or all the quotations without assigning any reason.