

दूरभाष :
TELEPHONE :
तार : बार्क-मुंबई, चेम्बूर.
TELEGRAMS : BARC-MUMBAI, CHEMBUR.
टेलिक्स : ०११-६१०१७/०११-६१०२२ बार्क इन
TELEX : 011-61017/011-61022 BARC IN
फैक्स संख्या : ११-२२-५५६०७५०
FAX NUMBER : 01-22-5560750



हॉम्बे,
मुंबई-४०० ०८५.
TROMBAY,
MUMBAI-400 085.

भारत सरकार
GOVERNMENT OF INDIA
भाभा परमाणु अनुसंधान केंद्र
BHABHA ATOMIC RESEARCH CENTRE

Product Development Section

Tender Enquiry

21 AUGUST 2019

1. Tender number : PDS/2019/131
2. Description of the work : Fabrication, pre-dispatch inspection, packing, forwarding, supply, installation, commissioning & guarantee of Re-circulating cooler along with spares as per Annexure -1.
3. a) Sketch/Dwg. No
b) Specifications : As per Annexure- 1
4. Due date & Time : 10th September, 2019, 14:30 hrs.
5. Mailing Address : Shri. Pradeep Samui
SO(E), Product Development Section
S-62, South Site, BARC, Trombay
Mumbai - 400 085
6. Person to contacted for any clarification : Shri. Pradeep Samui., SO(E), PDS
Tel No. 2559 4476/4462/4802
7. Terms of Submission : Bidders should quote against this inquiry in two parts in two separate sealed envelopes

Part - 1 should consists of only technical details of the product without commercial values and Part - 2 should consists of commercial values along with taxes and other charges. Financial bid of those firms whose technical bids are qualified only will be opened. Quotation to be submitted in sealed envelope super scribing with i) Tender No. ii) Due Date & iii) Name of work by Indian post only.

(P.K. Pujari)
Associate Director
RC & I Group

डॉ. प्रदीप कुमार पूजारी
Dr. Pradeep Kumar Pujari
Associate Director/सह-निदेशक
रेडियो रासायनिक एवं आइसोटोप वर्ग,
Radiochemistry & Isotope Group,
भाभा परमाणु अनुसंधान केंद्र,
Bhabha Atomic Research Centre,
Trombay, Mumbai - 400 085.

Terms and Conditions:

1. Quotation are to be on printed Letter Head/Quotation Format Which should consist of
 - a. GST number
 - b. Tax component to be separately indicated in the invoice.
 - c. PAN number
 - d. CST registration number of the firm.
2. Please mention the delivery period, validity of offer and payment terms clearly in the offer.
3. BARC is a Central Govt. Institution and the materials fabricated through this tender inquiry will be utilized for R&D purpose, hence, GST concessional rate of 5% is admissible against the certificate issued by the competent authority.
4. Incomplete quotation will not be considered.
5. Price quoted shall be for **free delivery** up to our site at BARC, Trombay, Mumbai PIN- 400 085 and free of installation & commissioning charges.
6. No Free Issue Material will be supplied for the fabrication job.
7. The material supplied will be covered by guarantee for two year from the date of completion of the work order. Guarantee / Warranty certificate should be produced along with the bill.
8. Delivery & Completion: Within 8 weeks from the date of receipt of this order, delivery free of charge at PRAFPUL, South site, BARC, Trombay, Mumbai.

Any delay which is attributable to the contractor is liable for penalty @½% per week (max. 5 %) to be imposed on the contractor.
9. No FIM: No Free Issue Material will be supplied for the fabrication job.
10. Payment: No advance is admissible. Payment will be released only after satisfactory completion of the work on submission of following documents:
 - a. Satisfactory work completion certificate from our officer
 - b. Invoice in triplicate
 - c. Advance stamped receipt
 - d. Guarantee certificate
11. Income Tax: Income tax @ 2% and surcharge on IT as applicable shall be deducted from your bill. Education Cess @ 3% will also be deducted on it & SC.
12. Officer-in-charge for this work will be **Shri. Pradeep Samui; SO(E)**, any clarification regarding the above work can be obtained from him on Tel. 25594476 / 4462 or by email: psamui@barc.gov.in.
13. All other terms of general contract are also applicable.

IMPORTANT: Following clauses are part of terms and conditions of this contract.

I. CONFIDENTIALITY

No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any information identified as "PROPRIETARY" in nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party.

This clause shall apply to the sub-contractors, consultants, advisers or the employees engaged by a party with equal force.

II. "RESTRICTED INFORMATION" CATEGORIES UNDER SECTION 18 OF THE ATOMIC ENERGY ACT, 1962 AND "OFFICIAL SECRETS" UNDER SECTION 5 OF THE OFFICIAL SECRETS ACT, 1923:-

Any contravention of the above-mentioned provisions by any contractor, sub-contractor, consultant, adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation.

III. Prohibition against use of BARC's name without Permission for publicity purposes.

The contractor or sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC's name for any publicity purpose through any public media like Press, TV, Radio or Internet without the prior written approval of BARC.



(P.K. Pujari)

Associate Director

RC & I Group

डॉ. प्रदीप कुमार पूजारी
Dr. Pradeep Kumar Pujari
Associate Director/सह-निदेशक
रे. का. रासायनिक एवं आइसोटोप ग्रुप,
Radiochemistry & Isotope Group,
भाभा परमाणु अनुसंधान केंद्र,
Bhabha Atomic Research Centre,
Trombay, Mumbai-400 085.

Fabrication, pre-dispatch inspection, packing, forwarding, supply, installation, commissioning & guarantee of Re-Circulating Cooler along with necessary spares

The following re-circulating coolers (item-1 and item-2) will be used for routine cooling applications for industrial heater in the laboratory using **soft water**. The cooler should have ergonomic design, minimum foot print and easy operation with splash proof keypad with integrated switch and large bright LED display. The cooler controller should have reliable microprocessor PID temperature control with filling level indicator, fluid pressure gauge and by-pass valve to adjust fluid pressure. The cooler should be equipped with powerful centrifugal multi stage pumps, suitable for continuous operation (at least 10 h) with easy filling from the top with hinged protective lid with low liquid level protection with optical and audible alarm signal. The cooler should be equipped with integrated steel bath tanks (SS 304 or SS316), water level indicator with removable venting grid for cleaning of the condenser with high pressure trip, low refrigerant trip, water level low trip, overload relay trip. These coolers should operate on three Phase, 415 V, 50 Hz power supply. Wetted parts, cooler frame should be made of Non-corrosive, CRCA materials with high grade surface powder coating. The cooler should have front drain and no side vents. The cooler should be equipped with RS232 interface for PC-connection and IP class according to IEC 60529:21. The cooler should be equipped with pressure indicator, adjustable bypass valve for pump pressure, alarm output and potential-free change-over contact (max.30 VA). The overall footprint of the cooler should not exceed the area [650 mm (max. width) × 800 mm (max. length)] and will be installed “indoor”.

Item:1

Re-circulating cooler of capacity of 1.7 kW

Quantity: 01 No.

Parameters/ Item	Values/ Description
Heat load / Cooling capacity	1.7 kW at 20°C
Working temperature range (°C)	10°C to 40°C
Temperature stability	±0.5°C
Pump capacity flow rate	40 LPM @ 3 bar
Pump pressure (in bar)	0.5 – 3 bar with bypass valve feature to adjust pump pressure
Operating ambient temp.	10°C to 40°C
Type of temperature controller	LED, Digital Microprocessor, PID based
Type of condenser	Air Cooled
Reservoir	In-built made of SS 316L with 12– 17 Litre capacity
Sound pressure level (distance 1 m) max.	Less than 70 dBA

Item:2

Re-circulating cooler of capacity of 2.5 kW

Quantity: 01 No.

Parameters/ Item	Values/ Description
Heat load / Cooling capacity	2.5 kW at 20°C
Working temperature range (°C)	10°C to 40°C
Temperature stability	±0.5°C
Pump capacity flow rate	40 LPM @ 3 bar
Pump Pressure (in bar)	0.5 – 3 bar with bypass valve feature to adjust pump pressure
Operating ambient temp.	10°C to 40°C
Type of temperature controller	LED, Digital Microprocessor, PID based
Type of condenser	Air Cooled
Reservoir	In-built made of SS 316L with 24 – 30 Litre capacity
Sound pressure level (distance 1 m) max.	Less than 75 dBA

General Terms and Conditions

Quotation should also accompany complete fabrication diagram of the offered item including its accessories describing the technical specifications.

Manufacturer should quote along with necessary spares for 5 years trouble free operation of the chiller.

Offers without the fabrication drawing of the item & its accessories will not be accepted.

Pre-dispatch Inspection, testing and Certification: The entire re-circulating cooler unit along with its accessories shall be subject to pre-dispatch inspection and testing at manufacturer's site with the help of their expert. The supplier has to provide the testing facility with all adequate and available equipment with suitable electrical power supply at their workplace.

Acceptance criteria: The technical acceptance of the fabricated equipment will consist following tests:

- a. Footprint of the re-circulating chiller, noise level during operation
- b. 10 h continuous operation of re-circulating chiller
- c. Cooling capacity
- d. Temperature stability

Installation & commissioning: Company's representative shall install and commission the instrument and its accessories at user's site.

Packing and shipment: All components shall be packed properly to avoid damage during shipment.

Manuals: Manuals for installation, operation, troubleshooting and maintenance shall be provided with each systems of the unit.

Training at user's site: Training in installation, operation and maintenance, data acquisition and processing shall be provided at the user's site.

After Sales Services: The Company shall provide free after sales service during the warranty period and should provide maintenance services after the warranty period on payment basis.

Warranty: Warranty/Guarantee of equipment shall be furnished for at least two years from the date of delivery and/or two years after installation whichever is earlier.

Delivery Period: The equipment shall be delivered within **100 days** from the date of order.

Workmanship: Machined surfaces should be free from sharp corners, burr, sharp edges etc having an impact on a common application of the product. Components with manufacturing defects will not be accepted.