

**Indian Institute of Technology, Delhi.**  
**Department of Chemical Engineering**

**Date: 26-10-2015**

**Subject: N.I.Q. for purchase of ATS furnace with thermocouple**

Quotations are invited for the purchase of the furnace and thermocouple as per following specification

Quotation should reach in the office of Prof. K. K. Pant (Room No. 185, Block 2, Chemical Engineering Department, IIT Delhi, Hauz Khas, New Delhi-110016) on or before 17-11-2015 (Before 5 PM).

<b>Sr. No.</b>	<b>Item</b>		<b>Specification</b>	<b>Material</b>	<b>Make</b>
1	Furnace	1	Vertical Split type two zone heating,  Working Temp: 1200°C (Maximum),  Design temp: 1200 °C  Heating Element: Kanthal A1 Embedded winding,  20 cm per zone, total heated length 40 cm  Heated Item OD: 3.4 cm (TOP), OD: 1.9 cm (BOTTOM)  Top End Disk thickness: 1.5 inch Bottom End Disk Thickness: 1.5 inch  Top End Disk Bore: 3.5 cm Bottom End Disk Bore: 2 cm  Hinge Location (Viewed from Top: On the Right side)  Top End Cap thickness: 1 inch Bottom End cap Thickness: 1 inch  Sealed terminal covers are needed.  950 watts/zone, Total 1900 watts,  Power supply: 230 VAC, 50 Hz,	Standard	ATS, USA

			Thermocouple port: 1/4" located at 1/3 and 2/3 of total length, Supported bracket for vertical use.		
2	Thermo-couple	2	"K" type with thermowell, 1/16" OD × 40 cm L Sheath Material : Alloy 600 Metal transition with strain relief With standard male plug Junction ungrounded	Alloy 600	Watlow, USA

**The following aspects should also be taken care of.**

1. Separate sealed technical and sealed financial bids should be given in a single sealed envelope.
2. Validity of the quote should be at least 120 days.
3. A company profile should be included in the technical bid.
4. The profile should include the following at the minimum:
  - A. The parent company's base in India, its customer list.
  - B. The Indian agent's profile highlighting its past experience and the number of ATS furnaces sold in India.
  - C. The Indian agent's capabilities of their maintenance team in India.
5. In case the bid is a given through an agent, a valid agent ship certificate should be attached.
6. If the item is a proprietary item, a proprietary certificate from the principal manufacturer should be included.
7. Essential accessories needed for functioning of the furnace should be included in the quote and clearly specified. Optional accessories available may also be quoted separately.
8. If some specifications are not being met, deviations may be clearly stated. In the unlikely event that none of the vendors are able to meet all the specifications, the committee reserves the right to waive or relax any of the requirements at the technical evaluation stage.
9. Training of Personnel: The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute

premises, immediately after completing the installation of the equipment for a minimum period of one week at the supplier's cost.

10. Institute makes payment after delivery and successful installation. In case the payment terms are different, it should be mentioned clearly. If equipment is to be imported, the address of the company in whose name the LC is to be opened should be stated. Payment will be made through wire transfer after successful installation.

11. The Quotation received after due date will not be considered.

12. The Institute reserves the right to reject any quotation without assigning any reasons. After opening the technical bids, a demonstration of the product may be sought in IIT. The committees will shortlist the bids based on an evaluation of the technical bid, the demo, the efficiency / efficacy / ease of use / ability to maintain and other aspects of the equipment vis-à-vis the requirements. Financial bid would be opened only for the shortlisted companies.

13. **Warranty:** Warranty period shall be 36 months from date of installation of Goods at the IITD site of installation.