



भारतीय प्रौद्योगिकी संस्थान कानपुर Indian Institute of Technology Kanpur

पदार्थ विज्ञान एवं अभियांत्रिकी विभाग
DEPARTMENT OF MATERIALS SCIENCE & ENGINEERING

अमरेन्द्र कुमार सिंह
प्राध्यापक

Amarendra K. Singh
Professor

डाकघर - आई.आई.टी. कानपुर- 208016 (भारत)
Post Office: IIT Kanpur - 208016 (India)

Enquiry number: MSE/ 2017-18/01

Date: 06/07/2017

Closing Date: 31/07/2017

Subject: Quotations from prospective suppliers are invited for the supply and commissioning of **10 kg (steel equivalent) Vacuum Induction Melting Furnace** with following technical specifications:

Technical Specifications:

- Vacuum Induction Melting Furnace capable of melting fully refined and degassed steel and steel based melting alloys under vacuum of 10^{-3} / 10^{-4} mbar/melting of metal and slag under controlled condition consisting of:
- 10 kg Vacuum Induction Melting furnace with vacuum melting Chamber (double walled water cooled).
- Vacuum Pumping system suitable for 10 kg.
- Arrangements for creating controlled atmosphere (e.g. argon at specified pressure)
- Mould table to keep mould with up-down arrangement OR mould heating arrangement.
- Alloy Addition System & Bridge breaker system.
- Temperature Measurement- immersion type thermocouple.
- Control Console for vacuum system, consisting of SCADA/PLC and Display system with vacuum measuring gauges and instruments.
- High Frequency Induction Melting Power Supply 30 Kw, Quick Trak with input voltage of 415 volts-50Hz.
- 10 Kg Induction coil. 1 no.(Manual tilting arrangement)with 3 nos. of High Alumina OR MgO Crucibles
- Water cooled copper mould for metal pouring in chamber.
- Safety device including pressure & temperature sensing
- Water chiller for High Vacuum Pumping system.
- Consumable spares (rubber seal, O'rings, T/C tips-50 nos, set of crucibles for 10 kg coil, ramming mass etc) for 1 year of operation

Terms and Conditions:

1. Supplier/Vendors should submit technical and financial bids together in separately sealed envelopes.
2. Financial bid will be open only for those, who meet tender technical specification.
3. Please do mention tender number clearly on envelop.
4. The supplier must have supplied systems to institutions and/or companies of national and/or international repute.
5. Warranty/Guarantee should be clearly mentioned. The Warranty must start from the date of installation at IITK.
6. Quotation should carry proper certifications like proprietary certificate, authorization certificate from manufacturer, etc.
7. Validity of quotation should be at least for 60 days.
8. Maximum educational discounts should be applied.
9. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.
10. Kindly send the quotation in sealed envelopes latest by **3:00pm on 31/07/2017** to the following address:

To,

Prof. A. K. Singh

WL-101

Department of Materials Science and Engineering

Indian Institute of Technology Kanpur,

Kanpur – 208016, Uttar Pradesh, India