

## Indian Institute of Technology Kanpur Department of Materials Science and Engineering

## **Tender Notice**

Reference No. MSE/AKS/2018-19/2

Opening Date:- 20<sup>h</sup> April, 2018

Closing date:- 14<sup>th</sup> May, 2018 extended to 23<sup>rd</sup> May, 2018

Sealed Quotations with all technical and financial details are invited under two bid process, i.e., technical and financial bids in separately sealed envelopes, for the supply of following item.

### Item:- 50kVA DC electric arc furnace for steel/iron/scrap melting

#### Specifications

Power rating	50 kVA
Capacity	20-30 kg steel/iron/scrap melting. The apparent density of the material varies from around 1000-7000 kg/m <sup>3</sup>
Electrodes	2 numbers of adjustable graphite electrodes
Arcing	Submerged, direct and indirect arcing should be possible
Working temperature of melt	1750°C
Furnace roof	The roof should be removable with a hole for facilitating sample collection, viewing, adding additives, temperature measurement etc.
Furnace shell	Should be manually tilting type with tap hole at bottom
Furnace wall	Water cooled
Refractory	Mg-Carbon bricks or better with the exposed surfaces gunned with protective coatings
Control panel	PLC or computer based
Dust control system	Adequate dust control system should be provided for furnace off-gas
Measurements	Power consumption in kWh, voltage, current, power factor, temperature

### **Terms and Conditions**

- 1. Vendors having proven experience of supplying electrical arc furnaces for metallurgical applications system to educational/research institutes of repute, capable of handling high temperature liquid metals will only be considered for bidding
- 2. The vendor should provide similar installation details in India along with customer feedback
- 3. The necessary drawings/schematic and materials of construction should be detailed in the technical bid
- 4. Warranty/guarantee should be clearly mentioned. The warranty must start from the date of installation at IITK.
- 5. Validity of quotation should be at least for 60 days.
- 6. Maximum educational discounts should be applied.



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- 7. Offer should be made on FOR IIT Kanpur basis.
- 8. It is a two-bid process. So submit the quotations in two separately sealed envelopes, clearly mentioned as "Technical Bid" and "Financial Bid" along with the tender reference number and your reference number clearly written on both the envelopes.
- 9. Financial bid will be open only for those, who are compliant as per our technical specifications.
- 10. The item should be provided with all necessary accessories and safety features over and above the specifications mentioned in this document.
- 11. The firm should give a declaration that they have not been blacklisted/debarred for dealing by Government of India in the past.
- 12. The payment term applicable is "80% on delivery of the items and remaining 20% after satisfactory installation/inspection".
- 13. Validity of quotation should be at least for 60 days.
- 14. Delivery period should not be more than 12 weeks
- 15. GST applicable would be 5%, as per the Notification No. 45/2017 (CGST)

The quotation in sealed envelope should be sent to the following address. The quotations received after the tender closing date will not be considered. In case of any clarifications needed, please contact the undersigned, in office hours.

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