

Maulana Azad

National Institute of Technology Bhopal- 462 003

(An Institution of National Importance under MoE, Govt. of India)



LIMITED TENDER ENQUIRY
FOR
SUPPLY OF IRON-MELTING FURNACE

Website: www.manit.ac.in
Email Address: info@manit.ac.in

Fax No: 0755-2670562
Telephone No: 0755-4051000, 0755-4052000

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No. MANIT/MME/2022:15

Date: 06/06/2022

NOTICE INVITING TENDERS

Sub: ***Supply of Iron-Melting Furnace.***

Tenders are invited for *Supply of Iron-Melting Furnace*. Interested Manufacturers/Authorized Partner/Agencies may log on Institute website www.manit.ac.in and CPPP website www.eprocure.gov.in/epublish/app for further details. Tender Document can be downloaded and the duly completed be submitted to the Assistant Registrar, Stores & Purchase, Maulana Azad National Institute of Technology- Bhopal- 462 003.

Last date of receipt of complete tender document is 27/06/2022 up to 12.00 hours. The Director of the Institute reserves the right to accept or reject any or the entire tender in full or in part without assigning any reason whatsoever.

Registrar

Maulana Azad
National Institute of Technology Bhopal- 462 003

IMPORTANT INFORMATION AT A GLANCE		
Tender No & Date	No. MANIT/MME/2022:15	
	Date: 06/06/2022	
SCOPE OF TENDER		
Brief Description of Goods/Items	Quantity	Remarks
Iron-melting Furnace	01 set	Detailed Specification at Annexure-I
Estimated cost of Tender	Rs. 12,00,000/-	
Location of Supplies & Installation	Materials and Metallurgical Engineering Department at Institute	

TENDER DOCUMENT	
Tender Document can be downloaded free of cost from Institute website www.manit.ac.in and CPPP website www.eprocure.gov.in/epublish/app	
Last Date & Time of Submission of Tender	27/06/2022 up to 12:00 hours
Date & Time of Opening of Bids	28/06/2022 at 15:00 hours
Expected Delivery Period	Six weeks from issuance of order
Details of Contact Persons for Query if any	
Name: Mr. Rakesh Singh Designation : Junior Assistant Tel No: 07554051808 Email:	Name: Dr. R. K. Nayak Designation: Assistant Professor Tel No: 0755 - 4051803 Email: rameshkumarnayak@gmail.com

INSTRUCTIONS TO BIDDERS		
1	Scope of Supplies & Work:	
a	The Goods/ Items shall be supplied as per the Bill of Quantity and Specifications mentioned in ANNEXURE-I . However higher specification of equipment may be considered subject to their cost economics competitiveness.	
b	Bidder should supply illustrated leaflet giving technical details of Goods/ Item and attach the same with the tender to facilitate evaluation.	
c	Bidder should quote the price of only one best & appropriate model of Goods/Item available with them.	
d	Bidder should quote preferably make in India items.	
e	Where ISI certification marked goods are available in market, procurement should generally be limited to goods with those or equivalent marking only. The warranty/AMC required must be specified	
f	After the supply of Goods/ Items & Accessories as mentioned in the ANNEXURE-I , the bidder has to execute its installation at the designated location(s).No extra cost shall be paid for this reason.	
2	Delivery of Supplies & Installation:	
a	The purchaser interested for complete delivery of Goods/items along with Installation by bidder within stipulated time limit.	
b	The material shall be inspected on receipt at site and bidder shall be responsible for any damage during the transit of Goods/Items.	
c	The insurance cover including insuring the goods against the loss or damage incidental to manufacture or acquisition, transportation, storage and delivery/ installation shall be obtained by bidder in his own name and not in the name of purchases.	
3	Warranty & After Sales Services:	
a	The bidder shall offer on-site comprehensive warranty of Good/Items for 01 (one) year from the date of successful commissioning of goods at the designated location & shall cover each and every part of the goods including parts having limited life etc. The purchaser is not liable to pay any extra charges on any account during warranty period.	
b	The bidder shall ensure to render after sales services during the warranty period to the satisfaction of purchaser.	
c	The performance Bank Guarantee 3% of the basic value is required for the warrantee period.	
4	Eligibility Criteria:	
a	Bidder should have registered with appropriate Authority.	
b	Bidder should have minimum annual turnover (Double value of estimated cost of tender) in last year .CA certification in this regard is to be submitted.	
c	Bidder should have GST Number & Income PAN both.	
d	OEM Authorization Letter	
e	The manufactures or their authorized dealer/supplier/vendor must have supplied furnace in national institutes or laboratories. Reference order of the same must be provided by the authorized dealer/ supplier / vendor / manufacturer.	
f	ISO Certificate should be attached along with the Tender Document.	

5	<p>Amendment of Tender Document:</p> <p>a At any time prior to the date submission of bids, the purchaser, may, for any reason, whether at its own initiative or in response to a clarification sought by a prospective bidder, amend bid document by issuing corrigendum. The corrigendum will be notified/ published in e-tendering website www.eprocure.gov.in/epublish/app and Institute website only.</p>
6	<p>Price Bid</p> <p>a The Prices should be quoted in Indian Rupees only.</p> <p>b Purchaser (being a research Institution) is registered with the Department of Scientific & Industrial Research (DSIR) for the purpose of availing custom duty exemption in terms of GoI Notification No. 51/96-Customs dated 23 July 1996. The bidder should quote their prices considering the exemption certificate. If any certification needed by bidder, may be given to avail this benefit.</p> <p>c Government of India, Ministry of Finance (Department of Revenue) Notification No: 47/2017 integrated Tax dated 14/11/2017, the NITs are exempted from GST in excess of the amount calculated at the rate of 5 per cent under the following categories: (a) Scientific and technical Instruments, Apparatus, Equipment (including Computers); (b) Accessories, Parts, Consumables and live animals (experimental purpose); (c) Computer Software, Compact Disc-Read only Memory (CD-ROM), recorded magnetic tapes, Microfilms, Microfiches; (d) Prototypes, the aggregate value of prototypes received by an institution does not exceed fifty thousand rupees in financial years.</p> <p>The bidder should quote their prices considering the exemption. If any certification needed by bidder, may be given to avail this benefit.</p> <p>d Bidder shall take into account all costs including unloading at the location of purchaser, cartage etc. for giving delivery of material at site(s) before quoting the rates. In this regard no claim what so ever shall be entertained.</p> <p>e The bidders are advised not to indicate any separate discount. Discount, if any, should be merged with the quoted unit prices.</p> <p>f The price quoted in price bid shall be firm but subject to change in rate of applicable taxes if any.</p> <p>g The Bidder should avoid the use of vague term such as “Extra as applicable”. Such offers shall be treated as non-responsive.</p> <p>h No extra payment shall be paid on account of any discrepancy in nomenclature of items. The bidder shall seek clarifications if any before submitting the tender.</p>
7	<p>Bid Submission:</p> <p>The tender must be placed in a properly sealed envelope super-scribed “<i>Tender for the Supply of Iron-Melting Furnace .</i>” with tender inquiry number and its due date addressed to The Director, Maulana Azad National Institute of Technology-Bhopal- 462003 and must reach the office of the Assistant Registrar- Stores & Purchase, Maulana Azad National Institute of Technology, Bhopal on or before as mentioned at IMPORTANT INFORMATION AT GLANCE sheet. The</p>

		sealed Envelop should be consisting of followings:
	a	Copy of Certificate of Registration of firm, GST Number and Income Tax PAN.
	b	Certificate mentioning of Turnover for the last year and OEM authorization letter.
	c	Copy of ISO Certificate from OEM or Bidder.
	d	Copy of PO in respect of similar product supplied in Government/ Research Institution
	e	BOQ Annexure-I and Price Bid Annexure-II duly filled and signed.
8	Evaluation of Bids:	
	The Institute shall evaluate all the items together or separately depending upon nature of items of circumstance and compare the quotations determined to be substantially responsive i.e. which	
	a	are properly signed;
	b	Confirm to the eligibility criteria of the vendor; and
	c	Confirm to the terms & conditions, and technical specifications.
	d	In case, required goods/items in this tender are independent and complete in nature. Institute may evaluate independently as far as price is concerned for placing order(s).
	e	All the items will be evaluated independently
9	Validity of Tender:	
	a	The tender shall be valid for a period of 60 days from the date of opening of the bid of tender. Terms and financial details submitted in the bid shall be treated as firm during the 60 days period.
	b	In exceptional circumstances, prior to the expiry of the bid validity period, the purchaser may request bidders to extend the period of validity of their bids. The request and the responses shall be made in writing.
10	Notification of Award:	
	a	Prior to the expiry of the period of bid validity, the purchaser shall notify the successful bidder, in writing, that its bid has been accepted. The notification letter shall specify the sum that the purchaser will pay to the bidder in consideration of the Supply of Goods/ Items with the details of selected location.
11	Penalty Clause:	
	a	The bidder shall indicate the period within which the ordered quantity will be supplied along with Installation & Commissioning of Goods/ Items. The bidder shall note that in case bidder fails to do so within the period of delivery indicated by the bidder in bid of this tender, penalty @ 0.5% of value of the order per week of delay would be levied subject to maximum 10 weeks. It means, the bidder shall have the liability of delayed supply to the maximum of 10 weeks after expiry of scheduled delivery date.
12	Terms of Payment:	
	a	The Payment shall be made within 30 days by purchaser after supply and installation of Goods/ Items.
	b	The payment of AMC shall be staggered over the period of AMC and be made at the end of each Quarter.
13	Jurisdiction:	
	a	In the event of any dispute the legal matter shall be subjected to the jurisdiction of Bhopal court only.

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National Institute of Technology Bhopal- 462 003

BILL OF QUANTITY

SN	Technical Specification	Quantity in Set	Remarks																																						
1	Iron Melting Furnace Specification <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Capacity</td> <td>20-30 Kw</td> </tr> <tr> <td>Input voltage</td> <td>415 V \pm5</td> </tr> <tr> <td>Oscillate Frequency</td> <td>08 khz to 14 khz</td> </tr> <tr> <td>Frequency tuning</td> <td>Self (automatic)</td> </tr> <tr> <td>Soft start</td> <td>Yes</td> </tr> <tr> <td>Furnace Temperature Range</td> <td>Minimum 1700 °C</td> </tr> <tr> <td>Water inlet</td> <td>25° c to 30°</td> </tr> <tr> <td>Water outlet</td> <td>45°</td> </tr> <tr> <td>Power factor</td> <td>99%</td> </tr> <tr> <td>Matching capacitor bank</td> <td>Water cooled</td> </tr> <tr> <td>Water inlet outlet manifold</td> <td>Brass/SS Nipple+Pipe</td> </tr> <tr> <td>Module Cooling Plate</td> <td>Aluminium/Copper</td> </tr> <tr> <td>Internal Wiring</td> <td>Fiberglass Insulated to prevent from excess heat</td> </tr> <tr> <td>Cabinet cooling system</td> <td>Highspeed cooling fan</td> </tr> <tr> <td>Induction Coil</td> <td>Custom as per the job size</td> </tr> <tr> <td>Technology</td> <td>IGBT (Advanced ultrafast heat) – Germany/Japan</td> </tr> <tr> <td>Control Panel Cabinet</td> <td>Highly durable powder coating body</td> </tr> <tr> <td>MCB/Start-Stop Buttons</td> <td>Schneider – France</td> </tr> <tr> <td>Nut Bolts, Clamps</td> <td>Brass / Copper / SS304</td> </tr> </table>	Capacity	20-30 Kw	Input voltage	415 V \pm 5	Oscillate Frequency	08 khz to 14 khz	Frequency tuning	Self (automatic)	Soft start	Yes	Furnace Temperature Range	Minimum 1700 °C	Water inlet	25° c to 30°	Water outlet	45°	Power factor	99%	Matching capacitor bank	Water cooled	Water inlet outlet manifold	Brass/SS Nipple+Pipe	Module Cooling Plate	Aluminium/Copper	Internal Wiring	Fiberglass Insulated to prevent from excess heat	Cabinet cooling system	Highspeed cooling fan	Induction Coil	Custom as per the job size	Technology	IGBT (Advanced ultrafast heat) – Germany/Japan	Control Panel Cabinet	Highly durable powder coating body	MCB/Start-Stop Buttons	Schneider – France	Nut Bolts, Clamps	Brass / Copper / SS304	01	
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Advanced Control Panel	Control panel system with all necessary interlocks and indicators
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For one set of Iron/steel/Al/Brass melting furnace the following items and quantity is compulsory

Sl. No	Name of the item	Quantity
01	Water Colling tower Unit with all accessories	01
02	Induction Melting Furnace built with advancedtechnology (IGBT) control panel	02
	High density Graphite Crucible Size: 170mm *220 mm (Minimum 7 to 8kg Aluminium)- 2 crucibles for Steel melting and 2 crucibles for Al and Brass Melting	04
	Melting Pot with concealed induction coil	02
	Heavy-duty Tilting Unit of the furnace	02
	Coil Coat Grout Bag	02
	Glass Wool Roll	02
	Degassing arrangement with N ₂ /Ar gas	01

The Equipment should have the following facilities and the supplier/vendor/manufacturer should agree with the given points below.

1. Easy to operate, no need for skilled operator
2. Localized, constant and precise heating
3. Easily integrated into production lines
4. Pollution free, fast and secure technology
5. Durable and compact design, loaded with safety features
6. Low maintenance, easy to install and move
7. Should have latest IGBT power units and frequency conversion control techniqueswith

	<p>high efficiency, low energy consumption and higher output.</p> <ol style="list-style-type: none"> 8. Constant current and power control function providing higher reliability, sustainability and increased productivity. 9. Hassle-free maintenance and minimal downtime. 10. Advanced controls with diagnostic features. 11. Temperature controller-works with thermocouple probe. 12. Durable body with high temp. top ensures hassle free heavy use. 13. Improved production values through higher melting/heating rates. 14. A controllable and localized method of heat without contact to the job 15. Variable ratio output isolation transformer for matching of a wide range of loads 16. The Induction coil will be water cooled through the distilled water re-circulating system. 		
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NB: Drawing/ Design is enclosed herewith.

We confirm with our acceptance to the technical specification as given above.		
Date:		BIDDER'S NAME & SIGNATURE WITH SEAL

ANNEXURE- II	
FORMAT FOR SUBMISSION OF BID PRICE	
To,	
The Director	
MANIT- Bhopal- 462 003	

Sub: Price Bid with reference to Tender Document No: _____ dated _____

SN	Product Description with make & Model	Discounted unit price	Qty	Qty Price	GST	Total Price
1	2	3	4	5	6	7(5+6)
Total offered Price						
Total (In Words)						

The followings things are confirmed and undertake by us that:	
a	The price quoted above are inclusive of basic price, statutory levies and taxes, duties, Transportation, Incidental services (including Insurance, Loading/ unloading, Packing & Forwarding charges, Installation etc.) at site.
b	Taxes are subject to change/ revision.
c	Offer price shall be valid for a period of 60 days from the date of opening of bid of this tender.
d	We will be agreed to offer services for on-site comprehensive warranty on the Goods/ Items supplied through this tender for one (01) year.
e	We agree with the terms and conditions specified in "Instructions to Bidders" and if selected, the execution of supplies would be made in compliance.

Date:	Signature of Authorized Bidder with proper rubber stamp
	Name:
	Designation:
	Mobile No: