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Maulana Azad National Institute of Technology Bhopal
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(An Institution of National Importance under MoE, Govt. of India)



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LIMITED TENDER ENQUIRY

lkexh@oLrdkuke **“Dual Arc-melting Furnace” assembly**
Name of Goods/Items

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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Maulana Azad National Institute of Technology Bhopal
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(An Institution of National Importance under MoE, Govt. of India)

No. MANIT/PHY/2025:14

fnukd@Date:04/11/2025

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NOTICE INVITING TENDERS

lkexh@oLr dk uke **“Dual Arc-melting Furnace” assembly**
Name of Goods/Items

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lEi.k fufonk e; nLrkot çLrr dju dh vfre frfFk -27/11/2025- vijkuG 12-00 ctrdgAILFkkufun'kd] fcukdkbdkj.kcrk, fd l h ;k li.kfufonkdkk.k ;k vkf'kd :i l Lohdkj ;k vLohdkjdjudkvf/kdkj l jf{rgA

dylfpo

Tenders are invited for aforesaid Goods/ Items. 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- 462003.

Last date of submission of complete tender document is 27/11/2025 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

मौलाना आज़ाद राष्ट्रीय प्रौद्योगिकी संस्थान
Maulana Azad National Institute of Technology Bhopal

,d utj e egROI.k tkudkfj;k		
IMPORTANT INFORMATION AT A GLANCE		
fufonkØekd ,ofnukd Tender No & Date	No. MANIT/PHY/2025:14	
	Date: 04/11/2025	
fufonkdkd;k ;{k=@SCOPE OF TENDER		
I kexh@oLrdk l f{klrfooj.k	I [;k	fVli.kh
Brief Description of Goods/Items	Quantity	Remarks
“Dual Arc-melting Furnace” assembly	01	I yXud&Ai jfoLrrfooj.k Detailed Specification at Annexure-I
fufonk dh vuekfurykxr Estimated cost of Tender	Rs. 20,00,000/-	
vkifr ,oLFkkiukdkLFkku Location of Supplies & Installation	Physics Department at Institute	
fufonknLrko t dhmiyC/krk Availability of Tender Document	www.manit.ac.in www.eprocure.gov.in/epublish/app	
fufonk tekdju d vfrefnukd ,o le; Last Date & Time of Submission of Tender	27/11/2025 up to 12:00 hours	
fufonk [kyu dh fnukd ,o le; Date & Time of Opening of Bids	27/11/2025 at 15:00 hours	
fufonko/krk dh vof/k Tender Validity period	90 days from the date of opening of the Technical Bid	
forj.k@vkifr dh vof/k Delivery/ Supply period	08 to 10 weeks from the date of issue of Supply Order	
okjVhvof/k Warranty Period	01 year (s) from the date of successful Installation & Commissioning of equipment/ items	
ckyh l j{jkk@c ; kukj kf'k Bid Security/ EMD	As per slab mentioned in the document.	
fu"i knu l j{jkkj kf'k Performance Security Amount	As per slab mentioned in the document	

cl;hnrk d fy;fun'k@vun'k 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	Preference to Make In India products (For bids < 200 Crore):Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate.
	e	Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs). If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer)of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25%(selected by Buyer) percentage of total QUANTITY.
	f	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
	g	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 equipments along with Installation, Testing and Commissioning within the period as mentioned at IMPORTANT INFORMATION AT GLANCE sheet.However, the bidder has an option to submit the best delivery with installation time.

	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 equipments as mentioned at IMPORTANT INFORMATION AT GLANCE sheet at the designated location & shall cover each and every part of the equipments 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.			
4	Eligibility Criteria:				
	a	Bidder should be a Company/Partnership firm/ Proprietary firm/ Agency and operational from at least 03 years (Three) as on close date of tender. Copy of registration shall be attached.			
	b	The Bidder/OEM must have supplied same/similar Goods/ Items in last three years to Central/State government/ Quasi-Government organization/ Public listed company in India. Copies of Purchase Order (PO) shall be attached.			
	c	Bidder/OEM should have minimum annual turnover (Double value of estimated cost of tender) in last year .CA certification in this regard is to be submitted.			
	d	The Earnest Money Deposition Slip/proof of payment.			
	e	Bidder should have GST Number & Income PAN both.			
	f	Bidder should be authorized Distributor/ Dealer/ Partner of Original Equipment Manufacturer (OEM). Copy of Authorization should be submitted.			
5	Earnest Money Deposit:				
	The bidder is instructed to submit EMD in the form of DD/FDR/RTGS/NEFT/BG/Bank deposition slip along with bid to prove the transfer of payment to the purchaser's Account as per EMD slab mentioned below:				
	Tender Value		EMD Rate		Remarks
	Less than 2.50 Lakhs		NIL		
	Between 2.50 lakhs to 25.00 Lakhs		2% of Tender Value rounded off in nearest in 100 rupees.		
	a	Purchaser's Bank Account details:			
		Account Name	Bank Name	A/c No.	IFS Code
		Director MANIT Bhopal	State Bank of India	10020150107	SBIN0001608
	b	The EMD will be returned to the unsuccessful bidders soon after placement of order and successful bidder shall get its EMD after supply of material.			
	c	The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category. Manufacturers for goods and service providers for services are eligible for exemption from EMD under MSE Category. Traders are excluded from the purview of this policy.			
6	Amendment of Tender Document:				
	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.
7	Price Bid	
	a	The Prices should be quoted in Indian Rupees only.
	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.
	c	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.
	d	The bidders are advised not to indicate any separate discount. Discount, if any, should be merged with the quoted unit prices.
	e	The price quoted in price bid shall be firm but subject to change in rate of applicable taxes if any.
	f	The Bidder should avoid the use of vague term such as “Extra as applicable”. Such offers shall be treated as non-responsive.
	g	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.
8	Bid Submission:	
		The bidder is instructed to give their offline offer through two bid system (technical bid and financial bid in separate envelope) for this tender. The tender must be placed in a properly sealed envelope super-scribed “ Tender for the Supply of “Dual Arc-melting Furnace” assembly ” 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 sealed Envelop should be consisting of followings:
	a	Copy of Certificate of Registration of firm, GST Number and Income Tax PAN.
	b	Copy of Purchase Order (PO) received from government shall be attached.
	c	The Earnest Money Deposition Slip/Proof of payment. If any
	d	Certificate mentioning of Turnover for the last year and OEM authorization letter.
	e	BOQ Annexure-I and Price Bid Annexure-II duly filled and signed.
9	Evaluation of Bids:	
		The Institute may evaluate all the required goods/items in this tender together or independent depending upon nature of items & compatibility 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).
10	Validity of Tender:	
	a	The tender shall be valid as mentioned at IMPORTANT INFORMATION AT GLANCE sheet. Terms and financial details submitted in the bid shall be treated as firm during the validity 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.
11	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.
	b	Purchase/ Contract order shall preferably be issued in favour of bidder. Bidder may request in advance for issuance of Purchase/ Contract order in favour of OEM of product. In this case billing and payment shall be made to OEM only.
12	Performance Security Deposit: The bidder is required to submit Performance Security in the form of DD/FDR/RTGS/NEFT/BG/Bank Deposit after installation of material along with the bill to the Institute as per slab mentioned below:	
	Order/ Contract Value	PSD Rate
	Less than 2.50 Lakhs	NIL
	Between 2.50 lakhs to 25.00 Lakhs	5% of Tender Value rounded off in nearest in 100 rupees.
		Warranty period plus two month extra
	a	Purchaser's Bank Account details:
		Account Name
		Bank Name
		A/c No.
		IFS Code
		Director MANIT Bhopal State Bank of India 10020150107 SBIN0001608
	b	In case of breach of contract, performance security shall be forfeited and the bidder shall be blacklisted for such period as decided by the competent authority in addition to cancellation of order.
	c	Performance Security shall be returned to the bidder without any interest, whatsoever, after completion warranty period as specified in the tender.
13	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 price bid of this tender, penalty @ 0.50 % on total value of the PO per week of delay would be levied subject to maximum 20 weeks. It means, the bidder shall have the liability of delayed supply to the maximum of 20 weeks after expiry of scheduled delivery date.
14	Terms of Payment:	
	a	The Payment shall be made within 30 days by purchaser after supply and installation of Goods/ Items.
15	Jurisdiction:	
	a	In the event of any dispute the legal matter shall be subjected to the jurisdiction of Bhopal court only.
16	Details of Contact Persons for Query if any	
	Name	Dr Santanu Pakhira
	Designation	Assistant Professor
	Tel No	90626-67749
	Email	santanu@manit.ac.in
		Dr R.M. Yadav
		Superintendent
		78693-01955
		rmyadav@manit.ac.in

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Maulana Azad National Institute of Technology Bhopal

Lkkexh dh ek=k ,o fooj.k BILL OF QUANTITY AND SPECIFICATION	
Name of Product/ Items and its specifications	Qty
“Dual Arc-melting Furnace” assembly	01
Parameter	Specification
Operating Temperature:	The maximum temperature should be in the range 3500°C- 4000°C(6332°F - 7232°F). Time to temperature: Instantaneous
Utility Requirements:	Electrical – 800 amps, 80/40 volts, D.C. Water – 1 GPM @ 70°F and 50 PSI Inert Gas – 1 to 5 CFH – Argon or Helium; The supplier should provide at least 3 working gas cylinders with regulators and connecting pipes. Water-Cooled Power Cables Load-Lock (optional) Crystal Puller Spares: Replaceable Electrodes, Extra Hearths. Other essential tools/accessories and spares must be provided.
Furnace Chamber:	The water-cooled chamber with front door is fabricated out of SS304 material. The chamber is used for Melting and making of metal and inter-metallic alloys under high vacuum and inert atmosphere. All the ports will be provided with O' ring grooves to achieve vacuum sealing in the chamber.
Electrode Assembly:	The Two/Three electrodes should be equally displaced around the top of the furnace, allow access into the furnace along its central vertical axis crystal pulling rods, splat rods, thermocouples, etc. Heating the specimen from the outside in ward permits more even heating and maintains the specimen in a molten state longer. The assembly comprises of electrolytic grade copper pipes of approx. size will be provided. The copper pipe is provided with water in and out connections near the top portion of the copper electrode. It will pass through a socket seal. Collect to be welded with a collet type tip fixing arrangement. Top portion of the electrode is fitted with handles and lug clamps for fixing power cables.
DC Power Supply and Electrical Controls:	Power supply: 800 Amps or more, output operating voltage 80/40 volts, D.C. Suitable transformer should be provided. All the control panels will be provided in front of frame fitted with ON/OFF switches and all other control console. Short circuit protection should be

	provided.
Water cooled hearth/crucible:	1 No of water-cooled oxygen-free high-conductivity (OCFC) copper crucibles, suitable for making around 20-25 gm of material in single run, are melting alloys. One more sample holder copper hearth for the preparation of rod samples should be provided. The copper crucibles will be able to hold approx. of 20-25gms of material for melting. Water cooled copper hearth fabricated out of Electrolytic grade copper Getter provision. Water cooled jacket made of SS is fitted at the bottom of copper heart with proper gas sealing arrangement. Suction casting unit should be provided and capable of casting cylindrical rod. A suitable water chiller and related accessories should be provided for water cooling.
Vacuum Pumping System:	Vacuum In Range of 1×10^{-8} mbar Vacuum System: Total system should be of same make only Valves: Pneumatically operated valve acts as a high vacuum valve, other valve acts as backing
Sample preparation accessories, visualization and measuring equipment for melting process:	Suitable balance to weigh raw materials for material synthesis. Weighing capacity: 200-300 gm; Minimum display: 0.1mg or better; Power supply: 100-240 V AC, 50/60 Hz Raw materials (to be used for melting process) cleaning polishing drill machine with fully variable speed. It should be useful for cutting, sanding, polishing, grinding and engraving right away. Rated power input 150 W or more. Related accessories like silicon carbide grinding stone 2-3 mm (minimum 20 nos.) should be provided. Suitable PC system to visualize melting and pulling process along with accessories for data and record managements
Testing:	All individual components as well as total system should be leak tested using helium mass spectrometer leak detector to an individual leak rate to 1×10^{-9} std.cc/sec or better. Leak test certificate should be provided.
Installation and Training:	Installation and Training to be given by the supplier. A pre-installation visit of the supplier engineer is mandatory before installation.
Safety Interlock and mounting stand:	Mounting stand and necessary safeties to be provided to protect the system and operator from mal functions and possible operator's errors.
Warranty:	1 year or more
We confirm with our acceptance to the technical specifications with note 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:	Tender Document No. MANIT/PHY/2025:14, Date : 04/11/2025
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SN	Product Description with make & Model	Discounted unit price	Qty	Qty Price	GST	Total Price
1	2	3	4	5	6	7(5+6)
1	“Dual Arc-melting Furnace” assembly		01			
Total offered Price						
Total (In Words):						
Delivery Period required:						
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	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: