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



#### LIMITED TENDER ENQUIRY

FOR SUPPLY OF

ELECTRICAL RESISTANCE FURNACE WITH STIRRER FOR CASTING
IN
THE DEPARTMENT MATERIALS AND METALLURGICAL
ENGINEERING (MME), MANIT BHOPAL

Website <u>www.manit.ac.in</u> Fax No: 0755-2670562

Email Address: <u>info@manit.ac.in</u> Telephone No: 0755-4051000, 0755-4052000

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

No. MANIT/MME/EQ/2019/01

#### NOTICE INVITING TENDERS

Sub: Supply of Goods/ Items in "Electrical Resistance Furnace with Stirrer for casting"

Tenders are invited for *Supply Goods/Items in Electrical Resistance Furnace with Stirrer for casting*" Interested Manufacturers/Authorized Partner/Agencies may log on Institute website <a href="www.manit.ac.in">www.manit.ac.in</a> and CPPP website <a href="www.eprocure.gov.in/epublish/app">www.eprocure.gov.in/epublish/app</a> 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 **04.09.2019** up to 17.00 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

Date: 13.08.2019

IMPORTANT INFORMATION AT A GLANCE					
Tender No & Date	No. MANIT/MME/EQ/2019/01				
	Date: 13.08.2019				
SCOPE	OF TENDER				
Brief Description of Goods/Items	Quantity	Remarks			
	1 De	etailed Specification			
Electrical Resistance Furnace with		at Annexure-I			
Stirrer for casting"					
Estimated cost of Tender	Rs. 4,00,000				
Location of Supplies & Installation	MME Department,	,			
	at Institute				

TENDER DOCUMENT			
Tender Document can be downloaded free of cost			
	from		
Institute website www.m	nanit.ac.in and CPPP website		
www.eprocure	.gov.in/epublish/app		
Last Date & Time	04.09.2019 up to 17:00 hours		
of Submission of Tender			
Date & Time	05.09.2019 at 15:30 hours		
of Opening of Bids			
<b>Expected Delivery Period</b>	Four to six weeks from issuance of		
order			
Details of Contact	Persons for Query if any		
Name: Mr. Rakesh Singh	Name: Dr. Mangesh Lodhe		
Designation: Junior Assistant	Designation : Assistant Professor		
Tel No: 7869301990 Tel No: 9444239526			
Email: Email: mmlodhe@gmail.com			
rakesh_singh18@rediffmail.com			

		INSTRUCTIONS TO BIDDERS					
	INSTRUCTIONS TO BIDDERS						
1	Scope	of Supplies & Work:					
	a	The Goods/ Items shall be supplied as per the specification & drawing mentioned					
		in ANNEXURE-I.					
	b	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					
	c	After the supply of Goods/ Items & Accessories as mentioned in the					
		ANNEXURE-I, the bidder has to execute its installation at the designated					
	D 11	location(s).No extra cost shall be paid for this reason.					
2		ry of Supplies & Installation:					
	a	The purchaser interested for complete delivery of Goods/items along with					
	b	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					
	C	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	Warra	nty & After Sales Services:					
	a The bidder shall offer on-site comprehensive warranty of Good/Items for 01 (c						
		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.					
	С	The performance Bank Guarantee 10% of the basic value is required for the					
4	Fligibi	warrantee period.  lity Criteria:					
4	a	Bidder should have registered with appropriate Authority.					
	b	Bidder should have minimum annual turnover (Double value of estimated cost of					
	U	tender) in last year .CA certification in this regard is to be submitted.					
	С	Bidder should have GST Number & Income PAN both.					
	d	OEM Authorization Letter					
5		Iment 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.					

6	Price B	lid				
	a The Prices should be quoted in Indian Rupees only.					
	b Purchaser (being a research Institution) is registered with the Departi					
	Scientific & Industrial Research (DSIR) for the purpose of availing custo					
exemption in terms of GoI Notification No. 51/96-Customs dated 23 Ju						
	The bidder should quote their prices considering the exemption certificate					
certification needed by bidder, may be given to avail this benefit.						
	Government of India, Ministry of Finance (Department of Revenue) Notification					
c Government of India, Ministry of Finance (Department of Revenue) No: 47/2017 integrated Tax dated 14/11/2017, the NITs are exempted						
in excess of the amount calculated at the rate of 5 per cent under the						
		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.				
		and the state of t				
	The bidder should quote their prices considering the exemption. If					
certification needed by bidder, may be given to avail this benefit.						
	Bidder shall take into account all costs including unloading at the location of					
d Bidder shall take into account all costs including unloading at the purchaser, cartage etc. for giving delivery of material at site(s) before						
	rates. In this regard no claim what so ever shall be entertained.					
e The bidders are advised not to indicate any separate discount. Discount						
	should be merged with the quoted unit prices.					
	f The price quoted in price bid shall be firm but subject to change in rate					
		applicable taxes if any.				
	g	The Bidder should avoid the use of vague term such as "Extra as applicable".				
		Such offers shall be treated as non-responsive.				
	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.				
7	Bid Su	bmission:				
		The tender must be placed in a properly sealed envelope super-scribed "Tender"				
		for the Supply of Goods." 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 by 04/09/2019 up to 17.00 hours. The				
	sealed Envelop should be consisting of followings:					
a INSTRUCTION TO BIDDERS duly signed and accepted						
	b ANNEXURE-I duly signed and accepted.					
d Copy of Certificate of Registration of Company/ firm/ Agency						
	e f	Copy of valid GST Number & PAN both.				
		Certificate mentioning of Turnover for the last year.				
	g	Copy of OEM Authorization Letter				

	h	The bidder would have to quote the prices for the total scope of work in the				
	ANNEXURE-II. Partial quote are liable to be rejected					
8	Evaluation of Bids:					
		titute shall evaluate all the items together or separately depending upon nature of				
		of circumstance and compare the quotations determined to be substantially				
	respons	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.				
9	Validit	y 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				
1.0	N.Y 4.04	request and the responses shall be made in writing.				
10		ation 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				
11	the <i>Supply of Goods/ Items</i> with the details of selected location.  Penalty Clause:					
11		The bidder shall indicate the period within which the ordered quantity will be				
	a	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 @ 01% 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.				
We	We confirm with our acceptance to the instructions (Sl.No-1 to 13 above) as given above.					
	, , , , , , , , , , , , , , , , , , , ,					
Date	:	BIDDER'S NAME &				
		SIGNATURE WITH SEAL				
Thes	o duly si	oned "Instructions to the Ridders" as under shall be attached with hid of the tender				

These duly signed "Instructions to the Bidders" as under shall be attached with bid of the tender as a mark of acceptance of bidder and any tender not confirming the instructions as under is liable to be rejected.

Technical Specification of Electrical Resistance Furnace with Stirrer Attachment (Temperature up to 1200 °C)

We need a Electrical Resistance Furnace, temperature would be achieved up to 1200 °C, and a mechanical stirrer is to be attached with the furnace for stirring the liquid metals / alloys. The detailed technical specifications of the above mentioned equipment is given below:

S.N	Broad Specification of	Quantity	Remarks	
0				
1	Mild steel shells with powder coated and with appropriate thickness to hold the load.	Colour of the powder coating should be light blue or silver	01	
2	Outside structure size : 600x600x1200 mm Inside size: 30x30x25 mm	+/- 2 mm acceptable		
3	High quality Alumina fibrous insulation liners	Temperature just out side of the furnace should not more than 5 °C from ambient temperature		
4	Quantity of Aluminium to be melted is 6-7 kg in each heat			
5	2 No of Silicon Carbide or Graphite Crucible to be supplied for melting of Aluminium.	Size of the crucible should hold 6-7 kg of Al during stirring the melt at 600 RPM.		
6	Maximum temperature of the furnace is 1200 °C (Working temperature is 1000°C	Uniform heating in all four sides of the furnace		
7.	Heating Rate 10 °C/min programmable		1	
8	A1 Kanthal wire should be used as heating purpose.	(One set of coil should be supplied along with the furnace)		
9	Pouring System: Manual Type	2 Nos of spoons are to be supplied along with furnace for pouring purposes. Spoon size to hold halg kg of Al melt		

		and extended portion of	
		the spoon should be 90 degree with the base	
		and approximate length	
		-3 feet.	
		Foundry Clay Graphite	
		Crucible Tongs For A 7	
		to 8 Kg Crucible	
10	Temperature Controller: PID	Temperature should not	
	automatic controller and auto-	vary more than +/- 2°C	
1.1	tune function		
11	Built-in protection for the over-		
12	heated and broken thermocouple  K type thermocouple with digital	One no of thercouple	1
12	temperature recorder	with digital	
	The second secon	temperature display to	
		be supplied as extra to	
		record the melt	
1.2	V1	temperature.	
13	Variable speed motor ,(25-1000 RPM) with digital RPM indicator		
	will be used for stirring the		
	stirrer.		
14	Stirrer: up and down by leed	Stirrer should not	
	screw with push botton operation	bubble and touch the	
	One stirrer should be supplied as	side of the crucible at	
	extra along with the furnace	1000 PRM. Blades of	
		the stirrer are welded at 45 degree with the	
		srirrer rod. Stirrer blade	
		neither touch the inner	
		surface of the crucible	
		nor the bottom portion	
		of the crucible. Blades	
		should be at least 1	
		inch away from the inner surface and	
		bottom of the crucible.	
15	Warranty: 1 Year warranty for all	In warranty period any	
	the parts of the Furnace including	brakedown of the	
	the heating coils and stirrer	Furnace and strrer	
	assembly, motor etc. Mechanical	assenbly must be	
	stirrer should be attached to the	attended by the supplier	
	motor with threaded.	with in 48 hrs	L

		otherwise penalty will	
		be charged @ of Rs.	
		5000/- per day.	
16	After Installation and	During training period	
	commissioning, 1 day training	4 kg Al alloy will be	
	will be given by the supplier to	melted and stirring	
	the faculty / technical staff of	operation will be	
	MANIT Bhopal	demonstrated by the	
		supplier.	
17	Power supply available	Single phase 220 Volts	
		and 3 Phase 440 Volts	
		and current 5 and 15	
		Amp. Frequency: 50	
		Hz	
		Please Note if the	
		machine draws high	
		Amp current than 5	
		and 15 amp on that	
		case MCB with	
		required higher amp.	
		Should be supplied by	
		the supplier.	

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
	FORMA	T FOR SUBM	IITTIO	N OF BID	PRICE	
To,						
	Director					
MAN	NIT- Bhopal- 462 003					
	1					
Sub:	Price Bid with referen	ce to Tender D	ocument	No:	dated	
			1		1	
SN	Product Description	Discounted	Qty	Qty	GST	Total Price
	with make & Model	unit price		Price		
-	2					7(5:0)
1	2	3	4	5	6	7(5+6)
				Total offe	red Price	
Total	l ( In Words)			Total offe	rea i iiee	
1014	i ( iii words)					
The	followings things are confi	rmed and unde	rtake by	us that:		
a	The price quoted above				utory levi	es and taxes duties
а	Transportation, Incidenta					
	Forwarding charges, Inst			isurance, i	Jouanney u	modulis, racking &
b	Taxes are subject to char		Site.			
c	Offer price shall be valid	d for a period o	of 60 day	vs from the	e date of o	pening of bid of this
	tender.	a for a perioa (	or 00 <b>uu</b> .	y o mom un	01 0	penning of old of time
d	We will be agreed to o	ffer services fo	r on-site	comprehe	ensive war	ranty on the Goods/
	Items supplied through the					J
e	We agree with the tern	ns and condition	ons spec	ified in "I	nstructions	s to Bidders" and if
	selected, the execution o					
	•					
Date					_	of Authorized Bidder
					with	proper rubber stamp
		Name:				
		Designation:				
		Mobile No:				