

**NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND RESEARCH  
(N.I.T.T.R.)**

**[Government of India, Ministry of Human Resource Development,  
(Dept. of Higher Education)]**

**Taramani, Chennai – 600 113**

**☎ 044 - 2254 5436 / 2254 5400 Fax: 2254 1126 email: [dir@nitttrc.ac.in](mailto:dir@nitttrc.ac.in)**

Tender No: NITTTRC/ME/EDM/2018

Date: 03.01.2018

To

Due Date: 22.01.2018 by 03.00pm

Date & Time of Technical bid Opening: 22.01.2018 by 03.30pm

Sirs,

On behalf of the NITTTR, Chennai, offers are invited for supply of “**EDM Drilling Machine**” with appropriate controllers and the accessories” conforming to the specification given in Annexure.

**I) Instruction to the Bidder**

- 1. Preparation of Bids:-** The tenders should be submitted under two bid systems (i.e.) Technical bid and Financial bid. The technical bid should consist of all technical details along with commercial terms and conditions. Financial bid should indicate item wise price for the items mentioned in the technical bid. The Technical and financial bids should be put in separate covers and sealed. Both the sealed covers should be put into a single cover and to be sealed. The tender reference number for the supply “**EDM Drilling Machine**” should be superscripted on the outer cover and addressed to **The Director, NITTTR, Taramani, Chennai-600113, India.**
- 2. Delivery of Tender:-** The tender shall be sent to the above mentioned addressee either by Registered post/speed post so as to reach this office on or before the due date and time specified in the Schedule. The offer/bid can also be dropped in the tender box on or before the due date and time specified in the schedule. The tender box is kept in the office of the “NITTTR, Taramani, Chennai-600113”.
- 3. Opening of the tender:-** The offer/bids will be opened by a committee duly constituted for this purpose. The technical bids will be opened first and it will be examined by a technical committee as per the Institute specification and requirement. The financial offer/bid will be opened only for the offer/bids which meets all our technical requirements as per the specification which will be intimated later. The bidder who wishes to participate should produce authorization letter from their company during the tender opening. Only one representative will be allowed to participate in the tender opening.

4. **Prices:-** The price quoted should be in Indian currency and must include all packing and delivery charges upto NITTTR, Taramani, Chennai. The offer/bid should separately indicate taxes and duties as applicable.
5. **Terms of Delivery:-** The item should be supplied to our destination at NITTTR, Taramani, Chennai – 600 113 on or before 31<sup>st</sup> March 2018, failing which the Purchase Order stands cancelled. The installation, commissioning and training should be completed as specified in the important Instructions and conditions of the tender.


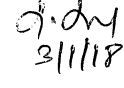
Yours faithfully,



**Dr. Sudhindra Nath Panda**

Director

NITTTR, Chennai

 23/01/18  
 31/1/18

**Note:**

For any technical query related to enquiry you may feel free to contact **Dr. S. Somasundaram / Dr. M. Ganesan**, Department of Mechanical Engg., Mobile No. +91 94444 49551, +91 94444 49547, E-mail: somasundaram@nitttrc.ac.in

## Schedule for invitation of the tender

### **II) Important Conditions of the tender to be abided by the tenderer**

1. **Due date of submission:** The last date for the submission of the offer/bid is 22.01.2018, 03.00pm (on all working days except holidays).
2. The offer/bids should be sent only for a machine that is available in the market and supplied to number of customers. A list of customers in India and abroad with details is to accompany with the quotations. Quotations for a prototype machine will not be accepted.
3. Original catalogue (not any photocopy) of the quoted model duly signed by the Principals must accompany the offer/bid including country of origin.
4. Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the Principal.
5. **Payment:** No Advance payment will be made for the purchase. 100% Payment will be made only after delivery, installation, commissioning and satisfactory training at NITTTR, Taramani, Chennai
6. **EMD:** The tenderer should submit an EMD amount of Rs.20,000/- (Rupees Twenty Thousand only) along with the tender by way of Demand draft / BG/ Banker pay order drawn in favour of “**The Director, NITTTR, Chennai-600113**” and payable at Chennai from any nationalized bank valid for six months. The Technical Bid without EMD would be considered as UNRESPONSIVE and will not be accepted. The EMD will be returned without any interest to the unsuccessful bidders immediately after the award of contract.
7. **Performance Security :** The successful bidder to submit performance security for an amount of 10% of the order value in the form of DD / BG from any nationalized bank and should be valid for 60 days beyond the date of completion of all contractual obligation including warranty obligation. The performance security will be returned after 60 days on successful completion of warranty period.
8. **Warranty/Guarantee:** The offer should clearly specify the warranty or guarantee period for the machinery/equipment. Any extended warranty if offered has to be mentioned separately.
9. **Late offer :** The offers received after the due date and time will not be considered.
10. **Acceptance and Rejection :** NITTTR, Taramani, Chennai has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason, there for.
11. **Disputes and Jurisdiction :** Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Chennai in Tamilnadu.
12. **Acknowledgement:** It is hereby acknowledged that we have gone through all the conditions mentioned above and we agree to abide by them

**SIGNATURE OF TENDERER  
ALONG WITH SEAL OF THE  
COMPANY WITH DATE.**

### Technical Specifications for EDM drilling machine

<b>Description:</b> An EDM Drilling machine in a ready to use condition including appropriate accessories and control system.		
Sl.No.	Feature	Requirements
1	Work table	Minimum 450 x 300 mm
2	Work table material	Stainless steel / granite / cast iron
3	X – axis Travel	Minimum 300 mm
4	Y – axis Travel	Minimum 250 mm
5	Z - axis Travel	Minimum 300 mm
6	Size of electrode diameter	0.3 – 3.0 mm
7	Electrode length	400 mm
8	Electrode rotational speed	Variable rotational speed with display unit for electrode rotational speed indication
9	Maximum Drilling Depth	300 mm (approx.)
10	Maximum job weight	350 kg
11	Dielectric fluid	Water / DM water
12	Current	25 Amps or higher
13	Power	3 kVA or higher
14	Power supply	AC 415V, 3 Phase, 50Hz
15	On time setting	10 steps frequency
16	Off time setting	10 steps frequency
17	Controller	Automatic Z - axis
18	Digital display	DRO for 3 axis with PCD setting facilities

19	<p><b><u>Essential accessories</u></b>  <b>(must be quoted)</b>  <b><u>Sl.No. Description</u></b></p> <ol style="list-style-type: none"> <li>1. <u>Voltage stabilizer</u> for power rating of EDM drill quoted</li> <li>2. <u>Ruby guide</u> 0.3 mm,0.4 mm,0.5 mm, 0.6 mm,0.7 mm,0.8 mm, 0.9 mm,1.0 mm,2.0 mm and 3.0 mm</li> <li>3. <u>Rubber stopper</u></li> <li>4. <u>Brass Electrode – 400mm length</u> of following dimensions 0.3 mm,0.4 mm,0.5 mm, 0.6 mm,0.7 mm,0.8 mm, 0.9 mm,1.0 mm,2.0 mm and 3.0 mm</li> <li>5. <u>Copper Electrode – 400mm length</u> of following dimensions 0.3 mm,0.4 mm,0.5 mm, 0.6 mm,0.7 mm,0.8 mm, 0.9 mm,1.0 mm,2.0 mm and 3.0 mm</li> <li>6. <u>Work materials samples</u> Steel / Brass / Aluminum / other conductive material. Size: 50 x 100 mm as per following thickness requirements 5 mm, 10mm and 15mm.</li> </ol>	<p><b><u>Quantity</u></b></p> <p>1 no.</p> <p>2 nos. in each electrode size (Total of 20 nos.)</p> <p>50 nos.</p> <p>10 nos. in each size of electrode (Total of 100 nos.)</p> <p>10 nos. in each size of electrode (Total of 100 nos.)</p> <p>5 nos. in each thickness (Total of 15 nos.)</p>
20	Dielectric unit	<ol style="list-style-type: none"> <li>1. Automatic flushing.</li> <li>2. In filled and ready to use condition at time of installation.</li> </ol>
21	Documentary support	The bidder must provide with quotation the user manual and service manual in support of the technical specifications.
22	Warranty	The equipment should be supplied with one year warranty from the date of installation and commissioning at NITTTR, Chennai.
23	Training	Supplier shall provide training for equipment at NITTTR, Chennai and demonstrate the drilling from 0.3 – 3 mm.

24	AMC	Bidder shall offer for 2 years AMC after warranty period for the equipment as an option clearly indicating scope of AMC.
25	Spares, consumables and standard samples	<ol style="list-style-type: none"> <li>1. The bidder will offer list of important spare parts, consumables and accessories with their part number and costing essential for five years.</li> <li>2. The consumables required for installation and standardization of system to be given free of cost.</li> </ol>
26	Transportation	The supplier will provide transportation of the equipment up to the point of installation at NITTTR, Chennai.
27	Operational tools and service manual	The supplier will provide the operation and instruction manual triplicate in hard and one soft copy in CD. Stud & nut with strap and necessary Tool kit also to be provided.

**Note:**

1. The bidders are welcome to send their representative, limited to one representative for each bidder for the technical bid opening.
2. The Financial bids of technically qualified participants will be opened at a suitable date fixed by NITTTR. The technically qualified bidders may participate in the same.
3. Only the bids comprising all of the following documents will be considered for technical evaluation.
4. Indicating yes in the compliance statement will not necessarily make a bid qualify unless supported by adequate documentary evidence.
5. Successful bidder has to provide a Performance Security as per condition (II), sl.no.7.

## **CHECK LIST**

1. Check list as given in prescribed form in Annexure 1
2. Technical bid: comprising of
  - i. Product description, catalogue as mentioned sl.no. 3 of important conditions of the tender.
  - ii. Compliance statement in prescribed format in Annexure 2.
  - iii. Scope of AMC.
  - iv. List of customers with contact details as mentioned in sl.no. 2 of important conditions of the tender.
  - v. Documentary support as mentioned in sl.no. 21 of Technical specification.
  - vi. EMD
3. Financial bid
  - i. Financial bid in prescribed format in Annexure 3.

**Check list format**

Product description and catalogue as mentioned in sl.no.3 of important conditions of the tender	
Compliance statement in prescribed format in Annexure 2	
Scope and charges of AMC	
List of customers with contact details as mentioned in sl.no.2 of important conditions of the tender	
EMD	
Documentary support as mentioned in sl.no. 21 of Technical specification	
Financial bid in prescribed format in Annexure 3	



### Compliance statement

Name of the instrument	
Make of the instrument	
Manufacturers Details – Address, URL	
Model	

<b>Description:</b> An EDM Drilling machine in a ready to use condition including appropriate accessories and control system.				
Sl.No.	Feature	Requirements	Compliance (Yes / No)	Deviation, if any
1	Work table	Minimum 450 x 300 mm		
2	Work table material	Stainless steel / granite / cast iron		
3	X – axis Travel	Minimum 300 mm		
4	Y – axis Travel	Minimum 250 mm		
5	Z - axis Travel	Minimum 300 mm		
6	Size of electrode diameter	0.3 – 3.0 mm		
7	Electrode length	400 mm		
8	Electrode rotational speed	Variable rotational speed with display unit for electrode rotational speed indication		
9	Maximum Drilling Depth	300 mm (approx.)		
10	Maximum job weight	350 kg		
11	Dielectric fluid	Water / DM water		
12	Current	25 Amps or higher		
13	Power	3 kVA or higher		
14	Power supply	AC 415V, 3 Phase, 50Hz		
15	On time setting	10 steps frequency		
16	Off time setting	10 steps frequency		

17	Controller	Automatic Z - axis		
18	Digital display	DRO for 3 axis with PCD setting facilities		
19	<p><b><u>Essential accessories</u></b> <b>(must be quoted)</b></p> <p><b><u>Sl.No. Description</u></b></p> <p>1. <u>Voltage stabilizer</u> for power rating of EDM drill quoted</p> <p>2. <u>Ruby guide</u> 0.3 mm,0.4 mm, 0.5 mm, 0.6 mm, 0.7 mm,0.8 mm, 0.9 mm,1.0 mm,2.0 mm and 3.0 mm</p> <p>3. <u>Rubber stopper</u></p> <p>4. <u>Brass Electrode –</u> <u>400mm length of</u> <u>following dimensions</u> 0.3 mm,0.4 mm, 0.5 mm, 0.6 mm, 0.7 mm,0.8 mm, 0.9 mm,1.0 mm,2.0 mm and 3.0 mm</p> <p>5. <u>Copper Electrode –</u> <u>400mm length of</u> <u>following</u> <u>dimensions</u> 0.3 mm,0.4 mm, 0.5 mm, 0.6 mm, 0.7 mm,0.8 mm, 0.9 mm,1.0 mm, 2.0 mm and 3.0 mm</p> <p>6. <u>Work materials/</u> <u>samples</u> Steel / Brass / Aluminum / other conductive material. Size: 50 x 100 mm as per following thickness requirements 5 mm, 10mm and 15mm.</p>	<p><b><u>Quantity</u></b></p> <p>1 no.</p> <p>2 nos. in each electrode size (Total of 20 nos.)</p> <p>50 nos.</p> <p>10 nos. in each size of electrode (Total of 100 nos.)</p> <p>10 nos. in each size of electrode (Total of 100 nos.)</p> <p>5 nos. in each thickness (Total of 15 nos.)</p>		

20	Dielectric unit	1. Automatic flushing. 2. In filled and ready to use condition at time of installation.		
21	Documentary support	The bidder must provide with quotation the user manual and service manual in support of the technical specifications.		
22	Warranty	The equipment should be supplied with one year warranty from the date of installation and commissioning at NITTTR, Chennai.		
23	Training	Supplier shall provide training for equipment at NITTTR, Chennai and demonstrate the drilling from 0.3 – 3 mm.		
24	AMC	Bidder shall offer for 2 years AMC after warranty period for the equipment as an option clearly indicating scope of AMC.		
25	Spares, consumables and standard samples	1. The bidder will offer list of important spare parts, consumables and accessories with their part number and costing essential for five years. 2. The consumables required for installation and standardization of system to be given free of cost.		
26	Transportation	The supplier will provide transportation of the equipment up to the point of installation at NITTTR, Chennai.		
27	Operational tools and service manual	The supplier will provide the operation and instruction manual triplicate in hard and one soft copy in CD. Stud & nut with strap and necessary Tool kit also to be provided.		

### Financial bid Format

Name of the instrument	
Make of the instrument	
Model	

Sl.No.	Feature	Cost
I	Basic Package	(A) Basic Machine including Packing, Delivery, Installation, commissioning and training at NITTTR, Taramani, Chennai
		(B) GST ( as applicable)
		Sub Total of I = (A + B )
II	Accessories packages	1. Voltage stabilizer - 1 no. as per sl.no.19 essential accessories
		2. Ruby guide - 2 nos each in all the electrode size (ie) Total of 20 nos. as per sl.no.19 of essential accessories
		3. Rubber stopper - 50 nos. as per sl.no. 19 essential accessories
		4. Brass electrode – each 10 nos. in all the electrode size (ie) Total of 100 nos. as per sl.no. 19 essential accessories
		5. Copper electrode – each 10 nos in all the electrode size (ie) Total of 100 nos. as per sl.no. 19 essential accessories
		6. Work material samples – 5 nos each in 5mm, 10mm, 15mm (ie) Total of 15 nos. as per sl.no. 19 essential accessories
		7. GST ( as applicable)
		Sub Total of II = (1+2+3+4+5+6+7)
III	Grand Total	Sub Total of I + II
IV	Other items	AMC charges

**Note:** Grand Total will be used for identification of the lowest bidder / offer.