



भारतीय प्रौद्योगिकी संस्थान इंदौर

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IIT Indore

Request for Quotation

RFQ NO.: IITI(MM)/MEMS/1/1A/235/SSH/2017-2018

August 30, 2017

Sub.: Request for Quotation of “CNC Wire Cut Electrical Discharge Machine”

Last date of submission:

September 15, 2017, 3.00 PM

Date of Opening :

September 15, 2017, 3.30 PM

Dear Sir,

It is proposed to buy the items mentioned below for our Institutional purpose. Accordingly, you are hereby requested to submit your valid and firm quote for supply, installation, commissioning, certification etc. as per the terms & conditions indicated herein below in respect of the following items sealed in **Single-way bid basis** your quotation should be dropped in the Tender Box kept in the **IITI, Simrol Campus, Near Security Control Room in Workshop Building, Indore- 453552, M.P.** only.

Sl.No.	Item with specifications	Quantity																																													
01	CNC Wire Cut Electrical Discharge Machine Machining Features and Capacities: <table border="1"><tr><td>1.</td><td>Machine Type</td><td>CNC Electrical Discharge Machine (Wire Cut Type), Fixed Column, Table moving, Single Cut Type.</td></tr><tr><td>2.</td><td>Overall Dimension of M/c (mm.)</td><td>Within: L-1400, W-1200, H-1400</td></tr><tr><td>3.</td><td>Net Weight of M/c (kg.)</td><td>1000 -1600 kg.</td></tr><tr><td>4.</td><td>Work Table Size</td><td>600 × 450 mm. or more</td></tr><tr><td>5.</td><td>Controlled Axis</td><td>5 Axis control- simultaneous- X,Y and U & V; Z independent.</td></tr><tr><td>6.</td><td>Traverses (X,Y,Z)</td><td>350, 250, 250 mm. or more</td></tr><tr><td>7.</td><td>U, V Travel</td><td>80 × 80 mm. or more</td></tr><tr><td>8.</td><td>Max. Job Weight</td><td>200 kg. or more</td></tr><tr><td>9.</td><td>Max. Work-Piece Height</td><td>250 mm. or more</td></tr><tr><td>10.</td><td>Dielectric Tank Dimension</td><td>650 × 450 × 500 mm. or more</td></tr><tr><td>11.</td><td>Type of Dielectric Fluid</td><td>De-ionized water</td></tr><tr><td>12.</td><td>Type of Wire Material</td><td>Brass, Molybdenum</td></tr><tr><td>13.</td><td>Wire Diameter</td><td>Ø 0.12- 0.25 mm. The machine should have provision to accommodate wire diameter of 0.15, 0.20 & 0.25 mm. for both coated and uncoated type.</td></tr><tr><td>14.</td><td>Max. Cutting Angle</td><td>15⁰ or more</td></tr><tr><td>15.</td><td>Cut Speed Range</td><td>150-180 mm²/min.</td></tr></table>	1.	Machine Type	CNC Electrical Discharge Machine (Wire Cut Type), Fixed Column, Table moving, Single Cut Type.	2.	Overall Dimension of M/c (mm.)	Within: L-1400, W-1200, H-1400	3.	Net Weight of M/c (kg.)	1000 -1600 kg.	4.	Work Table Size	600 × 450 mm. or more	5.	Controlled Axis	5 Axis control- simultaneous- X,Y and U & V; Z independent.	6.	Traverses (X,Y,Z)	350, 250, 250 mm. or more	7.	U, V Travel	80 × 80 mm. or more	8.	Max. Job Weight	200 kg. or more	9.	Max. Work-Piece Height	250 mm. or more	10.	Dielectric Tank Dimension	650 × 450 × 500 mm. or more	11.	Type of Dielectric Fluid	De-ionized water	12.	Type of Wire Material	Brass, Molybdenum	13.	Wire Diameter	Ø 0.12- 0.25 mm. The machine should have provision to accommodate wire diameter of 0.15, 0.20 & 0.25 mm. for both coated and uncoated type.	14.	Max. Cutting Angle	15 ⁰ or more	15.	Cut Speed Range	150-180 mm ² /min.	01
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एस.पी.होता/S. P. HOTA
उप कुलसचिव/Deputy Registrar
आई.आई.टी., इन्दौर/IIT Indore

16.	Cut Accuracy (mm)	≤ 0.015
17.	Best Finish (Ra)	With single cutting ≤ 2.5
18.	Repeatability (mm)	0.01-0.02
19.	Power Supply	3 Phase AC, 380-420 V, 50-60 Hz, 6A, $P \leq 2$ Kw
20.	Work piece mounting	With necessary clamping system; should be provided to mount work-piece directly on the machine bed.
21.	Machining Technology for cutting following work piece materials to be provided:	Aluminium Alloy, Mild Steel, Carbon & Alloy steels, Titanium Alloys, Cu Alloys and Ni based Alloys., etc.
<u>CNC Control Panel/Software Program Features:</u>		
22.	<ul style="list-style-type: none"> (a) Standard coding language, of ISO standard. (b) High quality 12"-15" LCD color display monitor. (c) Online editing of program should be possible. (d) Software should indicate the cutting parameters: cutting speed, cutting length, and cutting angle, etc. during operation. (e) Software should have the option to control the machining operation automatically by selecting parameters intelligently for any change in surface finish quality or other parameter. (f) Dedicated software system should be provided for generating program for user defined path, like- for research related any work. (g) The software should support: taper cutting, sharp corner cutting, constant corner or constant radius taper cutting (up to $\pm 20^\circ$). (h) Programmed data storage capacity/memory unit. (i) Printable Report option from saved memory. (j) Emergency STOP option. 	
<u>Accessories, Spare Parts and Consumable Items:</u>		
23.	Standard Tools (Wrenches/Hand tools) with tool box required for machine operation and maintenance.	1 Set
24.	Standard Wire Guides	1 Set for each: $\varnothing 0.15$ mm, $\varnothing 0.20$ mm & $\varnothing 0.25$ mm
25.	Molly/Brass/Standard Wire	1 Spool of standard weights in Kg
26.	Wire Tighten Pulley and Wire Feed Rollers	1 set
27.	Wire Vertical Setting Block	1
28.	Ball Screw for Table Movement	1 set
29.	Stepper Motor (s)	For X,Y,U,V axis travel
30.	Servo Motor (s)	For Z axis travel
31.	Variable Speed AC Motor for Wire Drum Assembly	1
32.	CNC Pulse Generator	High speed. Details of Generator type should be provided with the offer.

33.	Flexible Job Stand for job Mounting	1
34.	Inspection Lamp fitted on M/C	1 No. (LED Type)
35.	Flushing Nozzles	2 Sets
36.	Paper Filter Cartridge for Dielectric Filtering Unit	2 Sets
37.	Coolant/Cutting Oil	1 Set of standard packing
38.	Instruction Manual and Technology Guidelines	1 No. (Hard and Soft copy)
39.	Ion Exchange Resin	5 Liter or more capacity packing.
40.	Other Items: (a) Standard Accessories (b) Standard Spares (c) Standard Consumables (d) Free of Cost Accessories	As needful/applicable
<u>Any Other Point:</u>		
41.	Should provide the evidences of supplying same / similar equipment to the reputed organizations / industries in India / abroad.	
* Installation , Commissioning & Training is required		

(Note :- Bidders may mention clearly deviation of features, if any.)

Instructions to Bidder (ITB):

Please Note:

You are requested to kindly go through the detailed **Terms & Conditions** mentioned below and overleaf and submit your most competitive bid applicable to Educational and Research Institutes.

1. Please **mention the enquiry no. & due date** on the top of the Bid envelop.
2. Please submit copy of **your Income Tax Number, GST and copies of PAN** with your offer.
3. The offer must be submitted in **Single way bid** system mentioning technical specification and rate quote clearly.
4. **No Tender is to be handed over** to any of our staff/ any other person.
5. All tenders/quotations should be sent or deposited in the tender box at the following address: **Deputy Registrar (MM), IIT, Room No. WS-102, Ground floor, Workshop Building Simrol Campus, Indore- 453552, M.P. only**
6. Tenders/Quotations must be sent **sufficiently in advance** so that it reaches us on or before the due date and time. Quotation received after the due date & time will not be considered.
7. **OEM** can submit the bid for the items either directly as bidder /vendor or through their authorized distributor/ agent against the tender. However the OEM & their authorized distributor/Agent cannot quote for the same item together.
8. If the firm quoting for above mentioned items is authorized dealer of the manufacturer. Copy of **authorization certificate** should be enclosed with the quotation. Offers submitted without proper authorization shall be rejected summarily.
9. The **Bank/RTGS** detail must be submitted along with the quotations /Tenders on the letter head.
10. All communications related to this tender should be addressed to the undersigned only.

Terms & Conditions

The offer must comprise of the following failing which it will be treated as non-responsive hence rejected:

1. **Price:** The **basic price** must not be higher than price of the principal, if any additional accessories/Optional items are required in enquiry, it must be quoted separately. Price list in case of proprietary items must be submitted.
2. Items need to be quoted per **Unit Price**, thereby totaling the net price at the end of the **Price Bid form**.
3. **Earnest money deposit of Rs. 54,000.00 (Rupees Fifty Four Thousand Only)** to be submitted in the form of **on line** by visiting to the link : <http://deposit.iiti.ac.in/mms>. **Bids received without EMD will be rejected.**
4. **Earnest Money Deposit (EMD / Bid Security (BS))** has to be submitted by bidders except those who are registered with
 5. I.) Central Purchase Organization (CPO) i.e. DGS & D.
II.) National Small Industries Corporation (NSIC). However, this certificate should be for manufacturing of the item indented and not for selling items manufactured by other firms. The NSIC should be valid for a period of six months (180 days) beyond the Bid validity.
III.) Concerned Ministry / Department.
6. No interest will be payable by the Purchaser on the Earnest Money Deposit. The earnest money of all the unsuccessful tenderers will be returned to them at the earliest. The Earnest Money of successful bidder shall be returned on receipt of Performance Security. If the successful bidder fails to furnish the performance security or fails to supply the item as per Purchase Order (PO) terms and conditions within stipulated period, the earnest money shall be liable to be forfeited by IIT Indore.
7. **Performance Bank Guarantee:** The firm has to submit a performance security of 10% of the total order value to be submitted from an Indian Scheduled Bank before release of final payment and after successful installation and commissioning of the equipment in the form bank guarantee valid for 2 months beyond the warranty period. No interest will be payable by the Purchaser on the Performance Security deposited. In case supplier fails to provide satisfactory after sale service within the warranty period, the Performance Security submitted by the firm is liable to be forfeited.
8. **Price Bid format:** Please fill up the relevant formats enclosed depending on the offer as **Annexure- I & II**.
9. **Taxes and Levies:** Taxes as applicable should be mentioned clearly in Percentage (%) and in exact Figure. If No Tax is mentioned it will be presumed that the Price is Inclusive and the Bidder is responsible for all Tax related Compliances. Statutory Levies will be accepted on production of valid documents.
10. **Concessional Sales Tax Certificate** not against 'C/D' form along with GST Number etc if applicable.
11. **Overhead Charges:** The quoted price (final offer) must be F.O.R. - IIT Indore, Indore including all overheads such as Packing, Forwarding, Loading/Unloading, Transporting, Postage/Courier, Octroi, Freight, Insurance etc. with detail break-up.
12. **Additional Charges if any,** for Installation, Commissioning, Certification, Extended Warranty any other charge(s) must be mentioned clearly.

13. **Discounts:** The bidder need to mention clearly the exact figure of discount offered and also the Percentage, if any.
14. **Concession/Exemptions:** IIT-I being an academic institute is entitled for payment of Concessional Customs Duty on import of Scientific Instruments for Academic and Research purposes in terms of Govt. Notification No. 51/96 dated 23.07.1996 and Central Excise Duty Exemption in terms of Govt. Notification No.10/97-Central Excise Dated 01.03.1997 as amended from time to time.
Presently this is valid till 31.08.2021 vide Order No. TU/V/RG CDE (1145) /2016 Dt.25.04.2017 issued from DSIR-Min. of Sc & Tech; Govt. of India.
15. **Validity of the Quote:** The validity period of the offer should be clearly specified. It should be at least for **60 (Sixty) days** from the last date of submission of quotations.
16. **Delivery Terms:** Our standard Delivery Terms is FOR, IIT, Indore destination Simrol Indore. Rates should be quoted accordingly.
17. **Delivery Schedule:** Items should be delivered only on Working Days (Monday to Friday) during office Hours only i.e. between 10.00am to 04.00pm within **4 to 6 weeks**.
18. **Place of Delivery:** IIT Indore, Simrol Khandwa Road Indore-453552
19. **Receipt of Goods:** The items ordered should be delivered at appropriate place in Good condition and with proper package. The Items would be weighed, counted and measured, if required to confirm the accuracy and a provisional acknowledgement will be given.
20. **Terms of Acceptance:** The items will be treated Accepted only after Inspection for Features and Functions. This includes delivery, installation & commissioning, Inspection, demonstration, Training schedule etc.
21. **Specification and Make:** Quotation should confirm the exact specification and make, Model, if any shown in the enquiry against Sl. No. of the item. In the view of the supplier there is any other alternative item which can serve our purpose; quotation may also be given for the same separately. Client list along with the order copy of similar equipment supplied to any IITs / any Govt. Organization including detail of price & all charges must be attached.
22. In the case of items quoted having specifications different than those mentioned in the enclosed Tender format, kindly submit the information and the prices in the same format but on additional Sheet.
23. **Insurance:** The date of delivery should be strictly adhered to failing which the purchase order is liable to be cancelled. Penalty may be imposed as per P.O. terms & conditions. Goods should be securely, safely and adequately packed & dispatched and delivered at the risk of supplier. In case of damage consignment the same should be replaced without any cost to the Buyer and the supplier can collect the damaged consignment after satisfactory replacement.
24. **Payment:** Payment will be released through wire transfer/bank RTGS transfer after arrival, testing, inspection, installation of the item(s) and if found satisfactory with regard to quality, quantity and specifications ordered. The payment will be released after statutory deductions. For the payment, the firm has to submit bill(s), challans(s), warranty certificate, bank details/cancelled cheque, installation report, performance bank guarantee (if required) etc. to the Deputy Registrar (MM), IIT Indore. The payment will be released within 30 days after receiving of the bills as mentioned above and from the date of received, tested/inspected/commissioned and found satisfactory with regard to quality, quantity and specifications ordered. In case of import, the payment term may be 100% through Letter of Credit (LC)/Wire Transfer - 80% against dispatch documents and balance 20% after successful delivery & installation.
25. **Guarantee/ Warranty:** The equipment should be guaranteed On site (in situ) against any manufacturing defect for a period of at least **03 year** by OEM from the date of installation and final acceptance.

26. In case any part or whole of the equipment is found to be defective during the guarantee period, then the same will have to be replaced/repared free of cost at our premises. In case the Part or equipment is to be taken out of IIT, the Supplier has to furnish an undertaking and also take it at their own cost and Risk.
27. **Liquidated Damages:** As Time is the essence of this order, the date of delivery should be strictly adhered to, otherwise the delivery in full or in part may not be accepted and penalty for late delivery will be imposed @ 0.5% per week subject to a maximum of 10% of the total value of supply order & beyond 10% subject to approval of IIT. In case of delay in installation and Commissioning, Inspection, Certification etc also the same rate of penalty shall be leviable.
28. **Cancellation:** IIT- Indore reserves the right to accept or reject or cancel any or all enquiries or quotations at any stage without assigning any reason thereof.
29. In case of cancellation of order due to Non-compliance of the Terms and Conditions and Breach of the Contract, No compensation will be paid towards progress of order/procurement.
30. For any dispute, the place of jurisdiction shall be Indore, India only.

Yours' faithfully,


Deputy Registrar
Material Management Section
IIT Indore

एस.पी.होता/S. P. HOTA
उप कुलसचिव/Deputy Registrar
आई.आई.टी., इन्दौर/IIT Indore