



**NOTICE INVITING QUOTATIONS**

File No.	582/22-23/PROD/MDS/OM/003	Date:	10.05.2023
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**To**

(Supplier Address)

Sealed quotations are invited from reputed Authorized Dealers / manufacturers for the supply of the Items.

- Name of the Item : Maintenance of Robot  
Specification : (As per enclosed Schedule Annexure – I)
1. Quotation Reference No. : 582/22-23/PROD/MDS/OM/003
  2. Last date and Time for receipt of quotation : 31.05.2023 before 03.00 PM
  3. Date & Time of opening of Quotation : 31.05.2023 at 03.30 PM
  4. EMD Amount : 2%
  5. Validity (Days) : 90 days
  6. Address to which quotations are to be sent

The Director,

National Institute of Technology,

Tiruchirappalli – 620 015, Tamil Nadu, India

**Kind attention to** : Dr. M. Duraiselvam

Phone : 04312503509

E-mail : durai@nitt.edu

7. Quotations should be submitted in the format given in Annexure – I and Annexure-II
8. The envelope should contain the following details:

**“QUOTATION AGAINST ENQUIRY (Maintenance of Robot, 582/22-23/PROD/MDS/OM/003)**

**Kind attention to: Dr. M. Duraiselvam**

**Last date and Time for receipt of quotation : 31.05.2023 before 3 PM**

## Terms and Condition

1.	The quotation must be in the format furnished by NIT Tiruchirappalli and should be free from corrections/erasures. In case there is any unavoidable correction it should be properly attested. If not the quotation will not be considered. Quotation written in pencil and incomplete will be rejected.
2.	You are invited to submit your most competitive quotation for the supply of goods according to the specifications and delivery terms as given. Bank guarantee submitted for EMD shall be valid for 45 days beyond bid validity period.
3.	Bidders may send the quotations in sealed covers with the quotation reference number and last date for receipt of quotations duly superscribed on the cover. <b>Kind Attention to: Dr. M. Duraiselvam as mentioned in the point No. 6</b> NB: Mention the company Contact Number / E-mail id on the cover.
4.	Quotation will be opened on the due date at <b>3.00 PM at the R &amp; C Section, NIT, Tiruchirappalli</b> in the presence of the tenderers or their representatives who may wish to be present. (Any change in the date, time and venue of the quotation opening will be informed to the bidders through telephone / E-mail)
5.	The National Institute of Technology, Tiruchirappalli reserves the right to accept or reject any quotations, and to cancel the bidding process, and reject all quotations at any time prior to the award of order without assigning any specific reason thereof.
6.	Manufacturer's name and country of origin of materials offered must be clearly specified. Printed brochures, Purchase preference is only for Micro & Small enterprises ( <b>MSE's</b> ) register in <b>UDYAM</b> Portal or <b>NSIC</b> as per Ministries policy for <b>MSE's</b> . Proof to be attached
7.	Samples must be submitted where specified along with the quotations. Samples must be carefully packed, sealed and labelled clearly with enquiry number, subject and sender's name for easy identification. Rejected samples will be returned at your cost if insisted
8.	All supplies are subject to inspection and approval before acceptance. Manufacturer / supplier warranty certificates and manufacturer / Government approved lab test certificate shall be furnished along with the supply, wherever applicable
9.	National Institute of Technology, Tiruchirappalli reserves the right to modify the quantity specified in this enquiry.
10.	Startup company exempted from prior turnover & prior experience (startup certificate registered with DIPP should be enclosed)
11.	The bidder has to submit the bids in sealed envelope, (separate for each tender). Further Bidder should not send clubbing many tenders in one envelope, in such case all the bids will be rejected.

12.	<p><b>Bid Price</b></p> <p>a. The contract shall be for the full quantity Bidders must quote for entire quantity. Each bidder shall submit only one quotation in Indian Rupee only.</p> <p>b. Post work orders &amp; completion certificate should be submitted, wherever applicable.</p> <p>c. The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.</p> <p>d. GST, packing, forwarding and delivering other allied items at the destination shall be included in the price. All such price components may be shown in the quotation. If there is no indication regarding above charges. It will be considered as inclusive of all charges.</p> <p>e. If any arithmetic mistake in total / GST calculation is observed, the same shall be corrected by the purchaser with an intimation to bidder</p> <p>f. In case the items in the enquiry are covered by any rate contract or any other state or central Government, it should be specified in your quotation and accepted contract rates should also be mentioned. It should be confirmed whether you could supply at the RC rates outside rate contract</p> <p>g. Quotations containing conditions like “subject to prior sale” may not be considered.</p> <p>h. Delivery period required for supplying the material should be invariably specified in the quotation</p> <p>i. If there is a discrepancy between unit price and total price, the unit price will be considered. If there is any mismatch between figure and word, the amount in word shall prevail.</p>
13.	<p><b>Evaluation of quotations:</b> Quotations will be evaluated item-wise or lump sum basis. The purchase committee will evaluate and compare the quotations determined to be substantially responsive i.e. (i) are properly signed; (ii) Conform to the terms &amp; conditions and specifications; and (iii) price offered are competitive.</p>
14.	<p><b>Award of contract</b></p> <p>a. The National Institute of Technology, Tiruchirappalli will award the Order for supply of Goods / Services to the bidder whose quotation has been determined to be substantially responsive, and who has offered the lowest evaluated quotation price.</p> <p>b. The Bidder should furnish the contract agreement and performance security within 15 days from the date of receipt of the order for supply of goods / services, failing which the order will be cancelled without further notice and awarded to next eligible bidder.</p> <p>c. Notwithstanding the above, National Institute of Technology, Tiruchirappalli reserves the right to accept or reject any quotations, and to cancel the bidding process, and reject all quotations at any time prior to the award of order without assigning any specific reason thereof.</p> <p>d. National Institute of Technology, Tiruchirappalli, prior to the expiration of the quotation validity period, will notify the bidder whose bid is accepted for the award of contract. The terms of accepted offer shall be incorporated in the purchase order.</p>
15.	<p><b>Warranty:</b> Nil</p>
16.	<p><b>Performance Security:</b> NIL</p>
17.	<p><b>Payment:</b> 100% will be paid after acceptance of work order. The invoice should be raised in favor of “The Director, National Institute of Technology, Tiruchirappalli, Tamil Nadu, India.” with institute GST No. 33AAATN5491Q1ZZ.No advance will be provided to the supplier and installer.</p>
18.	<p><b>Liquidity damages</b> If the bidder / supplier, after accepting the Purchase Order or supply of Goods / Services, fails to deliver any or all of the Goods or to perform Services within</p>

	the period(s) specified in the Order, The National Institute of Technology, Tiruchirappalli shall impose penalty without assigning any reasons to the bidder / supplier a sum equivalent to 0.50 % of the total cost as indicated in the Purchase Order (which will be deemed as agreed price) for each week or part thereof of delay until actual delivery or performance is completed and such penal charges shall be limited to a maximum of 5% of the agreed price. Once the maximum is reached The National Institute of Technology, Tiruchirappalli, may proceed on its own to consider the termination / cancellation of the Order and may inform the bidder about the cancellation of the said purchase order. unless extension is obtained in writing from the office / Department on valid ground before expiry of delivery period
19.	If the deliveries are not maintained and due to that account Procuring Entity is forced to buy the material at your risk and cost from elsewhere, the loss or damage that may be sustained there by will be recovered from the defaulting supplier
20.	Dispute clause: Any dispute relating to the Enquiring /Tender of the indented item shall be under the Hon'ble Court having its jurisdiction over Tiruchirappalli only
21.	Startup company exempted from Prior Turnover & Prior Experience (Startup certificate registered with DIPP should be enclosed)
22.	Bids submitted without EMD ( <b>unless exempted</b> ) will be treated as disqualified.
23.	The successful bidder should submit <b>Security Deposit/PBG</b> within 15 days from the date of placement of order. The <b>EMD</b> shall be returned only after receipt of SD. If the bidder fails to deliver the material, then the <b>EMD/SD</b> shall be forfeited.
24.	In LTE, bidder has to submit in sealed envelope (separate for each tender). <b>Further Bidder should not send clubbing many tenders in one envelope, in such case all the bids will be rejected.</b>

For any details / clarifications regarding could be obtained, contact Research & Consultancy section from the National Institute of Technology, Tiruchirappalli on all working days during 10 AM to 5 PM.

For further detail kindly contact Dr. M. Duraiselvam (Purchase initiator)

(NB: Mention the Contact Number / E-mail on the cover. Any change in the date, time and venue of the tender opening will be informed to the bidders through telephone / E-mail)

**Enclosures:**

Specifications of the work order	Annexure - I
Price Format	Annexure - II
Bid Security Declaration form	Annexure – III
Bank Mandate Form	Annexure – IV



**NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI - 620 015**  
**DEPARTMENT OF PRODUCTION ENGINEERING**

**Annexure- I**

**Specifications of the item**

**Ref:** 582/22-23/PROD/MDS/OM/004

**Date:** 10.05.2023

<b>Sl. No.</b>	<b>Specification of NIT-T</b>	<b>Specification of the Supplier</b>	<b>Reasons (if there is difference in specification)</b>
1.	<p><b>Maintenance of Robot</b></p> <ol style="list-style-type: none"><li>1. The vendor shall execute the "Annual Maintenance Contract" for a Period of 1 Year for Robot system installed at NIT, Tiruchirappalli.</li><li>2. The scope of maintenance include running of complete system including all items related with maintenance of the Robot system with proper maintenance schedule. Replacement of defective components, providing of spares and all other associated accessories are not covered. The Vendor should also carry out any other schedule jointly decided by Engineer-in-charge/NITT.</li><li>3. Tenderers are advised to visit the site &amp; acquaint themselves with the robot system and quote accordingly.</li></ol> <p><b>4. Scope of Services:</b></p> <ol style="list-style-type: none"><li>a. Services shall consist of Preventive and Breakdown Maintenance.</li><li>b. Vendor's Engineer shall visit and check complete system once in THREE months for its preventive maintenance &amp; record the observations in the Log Book maintained by the NITT's representative with signature. The preventive maintenance shall not affect the functioning of the system.</li><li>c. Maintenance of complete robot system so that performance of the system is satisfactory.</li><li>d. <b>Registration of the complaint:</b> The vendor should have arrangement to receive complaints during normal service hours. Outside normal service hours and during emergencies special telephonic support shall be made available. The Vendor shall advise the details for registering complaints viz. service person's name, mobile/phone number, email id etc for prompt registration of the complaint. Within 2 weeks of issue of LOA, the Escalation Matrix shall be submitted to the employer. Escalation Matrix Tender No.:582/22-23/PROD/MDS/OM/003 shall contain Names, Designation, Address, Contacts (Mobile/Landline) and email id's of the first level and higher level service personnel.</li><li>e. In emergency cases, the vendor might be asked to provide services beyond normal working hours and on holidays at no extra cost.</li><li>f. Vendor shall decide for telephonic support via public</li></ol>		

	<p>network and remote diagnostics i.e. fault localization for hardware problems if possible via remote access. Telephonic support shall also be provided to NITT for-general questions on system configuration, on installation and questions relating to operation of the system, regulation information about new technical development on the system, i.e. new hardware and software releases, recommendations and useful tips. The vendor shall provide availability of telephonic consultation with product specific and system-specific specialists during Normal Service Hours.</p> <p>g. For such failure which cannot be rectified through remote diagnostic support, the rectification shall be effected with onsite deployment of the service technician by the vendor.</p> <p>5. Normal service hours are Monday to Friday from 9.00 AM to 6.00 PM (excluding Holidays). If any maintenance is required to be carried out on Saturday &amp; Sunday or any Gazetted Holidays, the vendor will give at least 24 hours advice to the NITT.</p> <p>a. In order to attend breakdowns of the robot system, the engineering works and electrical works required if any, shall be in the scope of work.</p> <p>b. The vendor shall provide operational support for Administration and configuration of robot system, etc. at NIT, Tiruchirappalli.</p> <p>c. The successful bidder shall maintain adequate inventory for parts/spares/system/sub-system for NITT. In case of the item/spare parts being not available due to any reason, the bidder shall provide an equivalent or latest item/spare part in lieu of the original item/spare part subject to the approval of the NITT, to avoid any hindrance in the functioning of NITT's robot system.</p> <p>6. <b>Deployment of maintenance staff:</b> The vendor will depute technically qualified, competent and experienced staff in adequate number for the maintenance.</p> <p>a. The work is to be carried out as per International Norms/Standards and in such a manner that all premises always look Neat &amp; Clean.</p> <p>b. The Man-power deployed by the vendor shall carry proper and valid ID card with them while carrying out Breakdown/Maintenance work at the sites.</p> <p>7. <b>Penalty for delay in Maintenance work:</b> In case of any failure or shutdown of robot system during the AMC period, the vendor must attend and identify the fault within 48 hours (for the system installed in NIT, Tiruchirappalli). The system must be made functional within SEVEN DAYS of the registration of the complaint, excluding day of registration, failing which penalty of Rs. 500/- per day for Minor breakdown and Rs. 1000/- per day for Major breakdown will be charged. The cumulative penalty shall be subject to maximum of 10% of Contract value. The time mentioned above shall be exclusive of Sundays</p>		
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**Specifications of the Robot System**

S.NO	Description	Details
1.	Robot Make & Type & Year of Installation	ABB & IRB4600 M2004, 2015
2.	Robot Variant	IRB4600-45/2.05
3.	Handling Capacity (kg)	45
4.	Reach (m)	2.05
5.	Manipulator Weight(kg)	445
6.	Power consumption at max speed, Vmax (Kw)	1.43
7.	Turning Radius(mm)	Axis 1 – 400 Axis 2 – 900 Axis 3 – 1727 Axis 4 – 138 Axis 5 – 1276 Axis 6 – 960
8.	Maximum Axis Speed	Axis 1 – 175°/s Axis 2 – 175°/s Axis 3 – 175°/s Axis 4 – 250°/s Axis 5 – 250°/s Axis 6 – 360°/s
9.	Positional Accuracy (mm)	Average – 0.40 Max. – 0.80 %within 1 mm – 100
10.	Pose Repeatability (mm)	0.05
11.	Pose Accuracy (mm)	0.02
12.	Linear Path Repeatability (mm)	0.13
13.	Linear Path Accuracy(mm)	0.48
14.	Positional Accuracy (mm)	Average – 0.40 Max. – 0.80 %within 1 mm – 100

**Signature & Seal of Vendor with Date**



NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI - 620 015  
DEPARTMENT OF PRODUCTION ENGINEERING

Annexure- II

**PRICE BID FORMAT FOR BIDDERS**

Tender No. & Date : 582/22-23/PROD/MDS/OM/003 Dt. 10.05.2023

Bidder's Offer No. & Date :

S. No.	Description of item	Unit (Set / No)	QTY	Rate / Qty in Rs. (excluding GST)	GST in Rs.			Total Value + GST in Rs.
					SGST	CGST	IGST	
1.	<b>Supply portion</b> (The price indicated shall be exclusive of all accessories, spares etc. as given in the scope of supply)							
2.	Other accessories / spares etc. as given in scope of supply (Individual item-wise break-up price shall be attached as an annexure to this price bid format.)							
3.	Installation and Commissioning (extra, if any)							
4.	Packing & Forwarding charges (extra, if any)							
5.	Freight & Transit insurance charges, extra, if any							
6.	Total price (delivery, installation and commissioning at NIT-T)							
7.	Value of Annual Maintenance Contract							
8.	<b>Net cost to be paid by NIT-T</b>							

**Signature & Seal of Vendor**

**Note: The price bid should be submitted only as per the above format. No row shall be left blank. Please indicate NA, in case the item is "Not Applicable". If this format is not used or any column is left blank, then the bid will be rejected.**



**(TO BE PRINTED IN LETTER PAD OF THE FIRM)**

**EMD Returning Form**

To  
The Director  
National Institute of Technology,  
Tiruchirappalli – 620 015

Sub: Returning EMD amount

Sir / Madam,

Our firm has participated in the tender / quotation enquiry No mentioned below and produced the EMD amount through DD, details of the DD are given below.

Tender / Quotation Reference No	
EMD amount	
DD Number	
DD issued Bank	
Date of DD	

It is requested to return the EMD amount to our firm after completion of the purchase to the below mentioned Bank account.

Account Name	
Bank Account Number	
IFSC code	
Bank	

**Signature with Seal and Date**

**MANDATE FORM FOR ELECTRONIC FUND TRANSFER/RTGS TRANSFER**

Date: / /

To

The Director,  
National Institute of Technology,  
Tiruchirappalli – 620 015, Tamil Nadu

Sub	:	Authorization for release of payment / dues from National Institute of Technology, Tiruchirappalli through Electronic Fund Transfer/RTGS Transfer.
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1. Name of the Party / Firm / Company / Institute :
2. Address of the Party :
3. City \_\_\_\_\_ Pin Code \_\_\_\_\_
4. E-Mail \_\_\_\_\_ Mobile No: \_\_\_\_\_
5. Permanent Account Number \_\_\_\_\_
6. Particulars of Bank:

Bank Name:		Branch Name:	
PIN Code:		Branch Code:	
IFS Code:(11 digit alpha numeric code)			
Account Type	Savings	Current	Cash Credit
Account Number:			

**DECLARATION**

I hereby declare that the particulars given above are correct and complete. If any transaction delayed and not effected for reasons of incomplete or incorrect information I shall not hold Director, National Institute of Technology Tiruchirappalli responsible. I also undertake to advise any change in the particulars of my account to facilitate updating of records for purpose of credit of amount through NEFT/RTGS Transfer.

Place: \_\_\_\_\_ Date: \_\_\_\_\_

**Signature & Seal of the Authorized Signatory of the Party**

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