



**SPONSORED RESEARCH, INDUSTRIAL CONSULTANCY & CONTINUING  
EDUCATION CELL  
NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA – 769008, ODISHA**

**Advertised Tender Enquiry**

**Department: Mechanical Engineering**

**Tender Notice No: NITR/PW/ME/2018/51**

**Date: 10/09/2018**

To,

**Important Dates**

CPP Portal

(e-procurement)

<b>Event</b>	<b>Date</b>	<b>Time</b>
Pre-bid Conference	NA	NA
Last Date of submission of bid	<b>03/10/2018</b>	<b>11:00 AM</b>
Date of opening of technical bid	<b>04/10/2018</b>	<b>11:00 AM</b>

Dear Sir,

We intend to purchase the commodities specified below and invite quotations in accordance with the terms and conditions detailed in the bid document. If you are interested, kindly send your offer with prices and complete terms within the time mentioned above.

For any clarification:

**ATTENTION:**

Principal Investigator: **Prof. Tarapada Roy**  
Department of Mechanical Engineering  
NATIONAL INSTITUTE OF TECHNOLOGY  
ROURKELA – 769 008, ORISSA

Yours sincerely,

\_\_\_\_\_  
Name: Prof. Tarapada Roy  
Principal Investigators  
Project Code: NITR/SR/17/ME/002

**Encl:**

- (1) Schedule of requirement, specifications, dates etc.**
- (2) Bid document containing detail terms and conditions.**

**1. Schedule of requirements**

Item No	DESCRIPTION	Quantity
1	<b>Semi-automatic pick and place machine</b>	1 Unit
2	<b>High Precision Manual Stencil Printer</b>	1 Unit
3	<b>Hot Air Convection Reflow Oven</b>	1 Unit

**2. Specifications and allied Technical Details**

\* Attach User list along with the quotation

**3. Format of Quotation** (tick appropriate box)

It is a two part bid with separate techno-commercial and price bids

4. The bid should be submitted through <https://eprocure.gov.in/eprocure/app>

5. Quotations should be valid for a period of **90** days from the closing date of the bid.

**6. Some important dates:**

i. Pre-bid Conference	Date: NA	Time: NA
ii. Last date for submission of bid:	Date: <b>03/10/2018</b>	Time: <b>11:00 AM</b>
iii. Date of opening of technical bid	Date: <b>04/10/2018</b>	Time: <b>11:00 AM</b>

7. **Warranty** of minimum **03** years must be provided.

8. **GST:** GST should be charge as per the applicable rates.

9. **Bid Security and Tender Cost:** Bid Security in shape of Bank Guarantee/DD (Demand Draft) for **INR 14,000/-** (Rupees Fourteen thousand Only) and Tender Cost (Non- refundable) in the form of DD for **INR 500/-** (Rupees Five Hundred Only) in favor of **Director, NIT Rourkela** Payable at Rourkela from any Scheduled Commercial Bank except Co-operative and Gramin bank. And Bank Guarantee/DD for the Bid-Security should remain valid for a period of **45 days** beyond the bid validity period from the date of opening of bids. Bid security of unsuccessful bidders should be return to them at the earliest and latest on or before the **30<sup>th</sup> days** after the award of the contract. **EMD (Earnest Money deposit)** and **Tender Cost** should reach physically through speed post/ register post/courier, containing in an envelope & superscripted with subject, tender reference number addressing to **Registrar, NIT Rourkela- 769008, Odisha**; Attention: HOD(ME) **on or before 04/10/2018 at 11:00 AM**

10. **Performance Security: Not applicable**

11. Please go through the enclosed "bid document" carefully for other bidding instructions.

12. Please send your quotations through <https://eprocure.gov.in/eprocure/app>

**13.**For technical details, you may contact

**Prof. Tarapada Roy**

Principal Investigator:

Project Code: NITR/SR/17/ME/002

Department of Mechanical Engineering,

National Institute of Technology,

Rourkela - 769 008

Phone: 0661 - 2462507

Fax: +91 - 661 - 2462501

E-mail: tarapada@nitrrkl.ac.in/tarapadaroy@gmail.com

NB: ***Please furnish your Dealership Certificate (must) and Proprietary Nature Certificate (If applicable)***



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**BID DOCUMENT**

**1. Instructions to the bidders**

- 1.1 Bids are invited on behalf of the Director, National Institute of Technology (NIT), Rourkela – 769 008, Orissa, from the intending bidders for supply of the goods/stores/ equipment for the Institute as detailed in the enquiry letter.
- 1.2 The bidders should quote their offer/rates in **BOQ** in clear terms without ambiguity.
- 1.3 In case of any discrepancy between the rates in figures and that in words, the rate in words will be accepted as correct.
- 1.4 The last date for receipt of the bid is marked in the enquiry.
- 1.5 The bids should be uploaded in <https://eprocure.gov.in/eprocure/app> Please follow the guidelines of the site.
- 1.6 If a prospective bidder requires any clarification in regard to the bidding documents, he may make a request the concerned officer or faculty member at least 15 days before the deadline for receipt of bids.
- 1.7 Bids received after the deadline of receipt indicated in para 1.4 above, shall not be taken in to consideration.
- 1.8 Each bidder shall submit only one bid. A bidder, who submits more than one bid, shall be disqualified and considered non-responsive.
- 1.9 (In respect of high value plant, machinery etc. of a complex and technical nature). The bids may be submitted in two parts, viz., technical bid and financial bid.
- 1.10 The bidder has to sign in full at all pages of the scanned part of the bidding document. No over-writing in those pages is acceptable.
- 1.11 If any bidder does not fulfill technical specification, his/her eligibility will be cancelled even if his/her price got L1 status.

**2. Conditions of the bid**

- 2.1 The rates quoted should preferably be net, inclusive of packing, forwarding, freight, Insurance and all other incidental charges excluding taxes. In case these charges are quoted extra in addition to the quoted rates, the amount thereof or Ad Valorem rate must be specified. Packing, forwarding, freight, entry tax etc., when quotes separately are reimbursable at actual. If external agencies are employed, their receipts must be enclosed with the invoice.
- 2.2 Duties and Taxes are to be quoted separately. Ad Valorem rates thereof should be clearly indicated with reference to the relevant Acts and Rules.

**It may be noted that the Institute is exempt from paying Excise Duty vide Government Notification No. 10/97 dated 01.03.1997 [Registration No.: TU/V/RG-CD (227)/2011, dated 10.10.2011.**

- 2.3 The goods are required to be delivered at the indenting Department of NIT, Rourkela, and must be reached within **60 days** from the date of placement of the supply of order under the risk and arrangement of the bidder and offers with delivery beyond the above period shall be treated as unresponsive. In case the delivery time is higher, the same must be mentioned clearly in the quotation.
- 2.4 The bid should remain valid for a period of **90 days** from the date of opening. In case your offer has a different validity period that should be clearly mentioned in the quotation.
- 2.5 Conditional discount, if any, offered by the bidder shall not be considered at the time of evaluation.
- 2.6 The goods offered should strictly conform to the specification and technical details mentioned in **Annexure-I**.
- 2.7 The Institute may like to conduct pre-dispatch inspection of goods, where applicable.
- 2.8 Period of guarantee/warranty, where applicable, should be specified in the bid.
- 2.9 If the successful bidder, on receipt of the supply order, fails to execute the order within the stipulated period, in full or part, it will be open to the Director, NIT, Rourkela to recover liquidated damage from the firm at the rate of 1 percent of the value of undelivered goods per month or part thereof, subject to a maximum of 5 percent of the value of undelivered goods. Alternatively, it will also be opened to the Director, to arrange procurement of the required goods from any other source at the risk and expenses of the bidder.
- 2.10 The successful bidder may be required to execute a contract, where applicable.
- 2.11 The bidder has to furnish up to date GST and Income Tax Clearance Certificate along with the bid.
- 2.12 Payment (100 percent) will be made by Account Payee Cheque /Bank Draft, within 30 days from the date of receipt of the goods in good condition or receipt of the bill, commissioning of the equipment, and after successful installation and demonstration where ever applicable, whichever is later/latest.
- 2.13 In case of Advance payment, the payment will be made on either in Foreign Demand Draft or Wire Transfer only. The proforma invoice copy need to be sent for advance payment.
- 2.14 In the event of any dispute arising out of the bid or from the resultant contract, the decision of the Director, NIT, Rourkela shall be final.
- 2.15 The bid document/resultant contract will be interpreted under Indian Laws.

### Specifications of Semi-automatic pick and place machine and accessories

Item No	DESCRIPTION
1	<p style="text-align: center;"><b><u>Specifications of Semi-automatic pick and place machine:</u></b></p> <p>SEMI AUTOMATIC PICK AND PALCE WITH INTERFACE SOFTWARE  PCB holder: Micro adjust holder (X, Y, theta)  <b>Placement speed:</b> 400-600 cph  <b>Placement speed IC:</b> 100-200 cph  <b>Dispensing Speed:</b> 1000-1500 dots/hour  <b>Tunable capacity:</b> 45 or 90 bins  <b>Tape/stick capacity:</b> 12 feeders (8 mm, 12mm, 16mm, SOP-8 to PLCC84)  Traytable capacity: 1 jdec  <b>Mini tray 40 ×40 mm capacity:</b> 22 pieces per turntable  <b>Backside feeder capacity:</b> 25 ×8 mm tapes instead of turntable  <b>Tape strip feeder:</b> 3 ×8 mm +1 ×12 mm+1 ×16 mm  <b>Component range:</b> 0402 to infinite, 0201 with optional micro camera  <b>Min. lead pitch:</b> 0.4 mm (with prism)  <b>Min. PCB dimension:</b> 25 ×25 mm  <b>Min. PCB dimension:</b> 410 ×246 mm  <b>Temperature:</b> 15-25° C  <b>Pickup needle set:</b>  Inner diameters 0.4mm, 0.51 mm, 0.84mm, 1.6 mm, fine pitch needle (out. Diameter 6 mm), and automated placement</p>
2	<p><b><u>Specifications of High Precision MANUAL STENCIL PRINTER:</u></b></p> <p>Application: Print the Solder Paste onto the Bare PCB thru Laser cut Stencil, this sources applying Controlled Amount of the Solder Paste in Good Printing Accuracy &amp; repeatability.</p> <p>i. Localization way: trilateral positioning or PIN location  ii. Calibration method: manual fine-tuning  iii. Calibration direction: X direction, Y direction,  iv. Screen printing effective area: 400mm × 250mm  v. Overall dimension: 565mm × 430mm × 255mm</p>

3

**Specifications of Hot Air Convection Reflow Oven:**

The heating zone quantity: upper3/down2

The length of the heating zone: 960mm

The heating type: intelligent level sirocco and rapid infrared heating

The cooling zone quantity: 1

Maximum width of PCB board: 300MM

The operation direction: left→right

The speed of conveyer belt: 0-1600mm/min

The power supply: Three phase 5 line 380V 50/60Hz

Peak power: 4.5KW

Heating up time: Around 15 mins

Temperature control range: Room temperature to 300°C

Temperature control mode: PID closed-loop control

Temperature control accuracy: ±1°C

PCB temperature distribution deviation: ±2°C

**Other Qualification Criteria:**

1. Web references must be provided along with the technical bid.
2. Pointwise technical compliance along with any deviation of the mentioned specifications (**Annexure-I**) must be indicated along with technical documents.
3. Customized equipment and accessories (as per **Annexure-I**) will not be accepted. The standard equipment and accessories (as per **Annexure-I**) will only be accepted.
4. Make and model no. should be mentioned along with the technical bid
5. Dealership Certificate and Proprietary Nature Certificate (If applicable) must be provided along with technical bid.