



**FOUNDATION FOR TECHNOLOGY AND BUSINESS INCUBATION (FTBI)
NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA – 769 008, ORISSA**

Advertised Tender Enquiry

Department: FTBI

Tender notification no: - NITR/PW/FTBI/2019/122

Date: 04/06/2019

To

Important Dates

**Through,
CPP Portal
(e-procurement)**

Event	Date	Time
Pre-bid Conference	NA	NA
Last Date of submission of bid	24/06/2019	11:00 AM
Date of opening of techno-commercial bid	25/06/2019	11:00 AM

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:

PIC (FTBI): Prof. Rajeev Kumar Panda
FOUNDATION FOR TECHNOLOGY AND
BUSINESS INCUBATION, (TIIR)
NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA – 769 008, ORISSA

Yours sincerely,

Name: Prof. Rajeev Kumar Panda
PIC (FTBI)

Encl:

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

1. Schedule of requirements

Item No	DESCRIPTION	Total Quantity
1	Fabrication Laboratory Equipment/Machines(All the five items are mentioned in Annexure- I)	5 nos.

2. Specifications and allied Technical Details

*** Attach Annexure-I**

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 date of opening of techno-commercial bid.

6. Some important dates:

i. Pre-bid Conference	Date: NA	Time: NA
ii. Last date for submission of Bid:	Date: 24/06/2019	Time: 11:00 AM
iii. Date of opening of Techno-commercial bid:	Date: 25/06/2019	Time: 11:00 AM

7. Warranty of minimum one year or six months must be provided.

8. GST: GST should be charge according to applicable rates.

9. Bid Security and Tender Cost: Bid Security in shape of DD (Demand Draft) for **INR 60,000/- (Rupees Sixty thousand Only)** and **Tender Cost (Non- refundable)** in the form of DD for **INR 500/- (Rupees Five Hundred Only)** in favour of **Director, NIT Rourkela Payable at Rourkela** from any Scheduled Commercial Bank except Co-operative and Gramin bank. And 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 **30th 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: PIC(FTBI) on or before **25/06/2019 at 11:00 AM.**

10. Performance Security: (See Item 2.10 of instructions): In shape of Bank Guarantee/DD (Demand Draft) of **Rs.1,50,000** in favor of **Director, NIT Rourkela** Payable at Rourkela from any Scheduled Commercial Bank except Co-operative and Gramin bank.

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. Rajeev Kumar Panda
FOUNDATION FOR TECHNOLOGY AND BUSINESS INCUBATION,
(TIIR)
National Institute of Technology,
Rourkela - 769 008
Phone: 0661 - 2462804
E-mail: rkpanda@nitrkl.ac.in



**FOUNDATION FOR TECHNOLOGY AND BUSINESS INCUBATION (FTBI)
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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, Odisha, 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 Each bidder shall submit only one bid. A bidder, who submits more than one bid, shall be disqualified and considered non-responsive.
- 1.8 (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.
- 1.9 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.

2. Conditions of the bid

- 2.1 The rates quoted should preferably be net, inclusive of all taxes and duties, packing, forwarding, freight, Insurance and all other incidental charges. 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 etc., when quotes separately are reimbursable at actuals. 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 availing custom duty exemption in terms of notification no 51/96 – Customs dt. 23.07.1996, Notification no.- 47/2017-Integrated Tax (Rate) dt. 14.11.2017 and Notification No- 45/2017 – Central tax (Rate) dt. 14.11.2017 [vid Registration No.: TU/V/RG-CDE (227)/2016, dated: 13.11.2018].

- 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 has to furnish "Performance Security" for an amount specified in the enquiry, in the form of Account Payee Demand Draft/or unconditional Bank guarantee encashable on demand from the Director, NIT, Rourkela, from a Commercial Bank with validity period of sixty days beyond the date of completion of all contractual obligations of supplier including guarantee/warranty obligations. The Performance Security is to be furnished in favour of the Director, National Institute of Technology, Rourkela, within ten days of intimation, failing which his bid security will be forfeited.
- 2.11 The successful bidder may be required to execute a contract, where applicable.
- 2.12 The bidder has to furnish up to date GST and Income Tax Clearance Certificate along with the bid.
- 2.13 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.
- 2.14 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.
- 2.15 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.
- 2.16 The bid document/resultant contract will be interpreted under Indian Laws.

Fabrication Laboratory Equipment/Machines	
1. Drill Machine - 1 no	
Column diameter	Approx. 60 mm
Length	Approx. 425 mm
Width/depth	Approx. 475 mm
Height	Approx. 980 mm
Drilling performance steel	Approx. 16 mm
Continuous drilling performance steel	Approx. 13 mm
Thread tapping steel	M8
Workspace length	Approx. 290 mm
Workspace width	Approx. 290 mm
T-groove size	Approx. 10 mm
T-groove number	2
T-groove spacing	Approx. 100 mm
Min. distance chuck - drilling table	Approx. 98 mm
Max. distance chuck - drilling table	Approx. 315 mm
Main motor	1,0 kW
Supply voltage	230 V
Min. distance chuck - machine base	0 mm
Max. distance chuck - machine base	Up to 385 mm
Work area length	Up to 290 mm
Work area width	Up to 280 mm
Machine base T-groove size	Approx. 14 mm
Machine base T-groove number	2
Machine base T-groove spacing	Approx. 100 mm
Speed range	Approx. 50 – 4000 min ⁻¹
Speed control	electronically adjustable
Drill stroke	60 mm
Spindle chuck	B 16
Reach	Approx. 235 mm
Machine Vice	
Span	Approx. 70 mm
Jaw height	Approx. 27 mm
Jaw width	Approx. 85 mm
Best power transmission through aluminum pulleys	
Emergency stop impact switch	
Drill spindle with precision ball bearings	
Guaranteed concentricity accuracy less than 0.03 mm measured at the drilling spindle	
Dirt and water resistant, easy to clean membrane keyboard with high-contrast OLED display	
Glare-free LED lighting integrated on the left and right in the drill head. No disturbing shadows	
Threading mode	
Digital reference point	
Digital parts counter	
Acoustic signal when reaching the drilling depth	
Reduced speed in tapping mode	
Height-adjustable feed guard with microswitch for maximum protection	
Precision machined drill table with parallel T-slots, precision surface finish	
Turnable drill table	
Solid base plate with parallel T-slots	

2. Laser Engraving & Cutting Machine – 1no	
Engraving Area	Approx. 24" x 12" (610 x 305mm)
Maximum Material Thickness	Approx. 5.5" (140 mm)
Maximum Material Thickness with Table Removed	About 8" (203 mm) with a 23.5" x 11.75" (597 x 298 mm) engraving area.
Laser Wattage	About 30W
Laser Source	State-of-the-art, digitally controlled, air-cooled CO2 laser tubes are fully modular, permanently aligned and field replaceable.
Intelligent Memory Capacity	Multiple file storage up to 64 MB. Rolling buffer allows files of any size to be engraved.
Air Assist	Attach an air compressor to our included Air Assist to remove heat and combustible gases from the cutting surface by directing a constant stream of compressed air across the cutting surface.
Laser Dashboard	The Laser Dashboard™ controls your Epilog Laser's settings from a wide range of software packages - from design programs to spreadsheet applications to CAD drawing packages.
Red Dot Pointer	Since the laser beam is invisible, the Red Dot Pointer on Epilog's Mini and Helix Lasers allows you to have a visual reference for locating where the laser will fire.
Relocatable Home	When engraving items that are not easily placed at the top corner of the laser, you can set a new home position by hand with the convenient Movable Home Position feature on the Legend Series Lasers.
Operating Modes	Optimized raster, vector or combined modes.
Motion Control System	High-speed, continuous-loop, DC servo motors using linear and rotary encoder technology for precise positioning.
X-Axis Bearings	Ground and polished stainless steel NeverWear Bearing System
Belts	Advanced B-style Kevlar Belts.
Resolution	User controlled from about 75 to 1200 DPI.
Speed and Power Control	Computer or manually control speed and power in 1% increments to 100%. Vector color mapping links speed, power and focus to any RGB color.
Print Interface	10 Base-T Ethernet or USB Connection. Compatible with Windows® XP/Vista/7/8/10.
Size (W x D x H)	About 34.5" x 26" x 16" (876 x 660 x 406 mm)
Electrical Requirements	Auto-switching power supply accommodates 110 to 240 volts, 50 or 60 Hz, single phase.
Normal Sound Level	59 db
Ventilation System	350 - 400 CFM (595-680 m3/hr) external exhaust to the outside or internal filtration system is required. There is one output port, 4" in diameter.
1. Auto Focus	
2. Red Beam Pointer	
3. Hi Speed High Precision DC Servo Motors	
4. Linear Encoders	
5. B-Style Kevlar Belts	

6. Never wear Bearings
7. Permanent Memory Storage of Jobs
8. Networking capabilities with Ethernet, Also USB connectivity
9. Resolution from 75 DPI to 1200 DPI
10. Relocatable Home Position
11. Engraving / Cutting Colour Mapping
12. 3D Laser Engraving
13. Rubber Stamp Mode
14. Adjustable Speed and Power while engraving
15. Laser Dashboard Print Driver
16. Front Door Table Access

3. Vinyl Cutter – 1no

Driving method	Digital control servo motor
Cutting method	Media-moving method
Acceptable media	Approx. 50 - 700 mm
Max. cutting area	Width: Approx. 584 mm Length: Approx. 25 m
Acceptable tool	Special blade for CAMM-1 series
Max. cutting speed	Approx. 500 mm/s (all directions)
Cutting speed	Approx. 10 - 500 mm/sec (all directions)
Blade force	Approx. 30 - 350 gf
Mechanical resolution	Approx. 0.0125 mm/step
Software resolution	Approx. 0.025 mm/step
Distance accuracy* ¹	Error of less than ± 0.2 % of distance travelled, or ± 0.1 mm
Repetition accuracy* ^{1*2}	± 0.1 mm or less
Alignment accuracy for printing and cutting when loading printed material	± 1 mm or less for movement distance of 210 mm or less in material-feed direction and movement distance of 170 mm or less in width direction
Interface	USB 2.0
Replot memory	2MB
Instruction system	CAMM-GL III
Power supply	Dedicated AC adapter Input: AC 100 to 240 V ± 10 % 50/60 Hz 1.7 A Output: DC 24 V, 2.8 A
Power consumption	Approx. 30 W (including AC adapter)
Acoustic noise level during operation	Up to 70 dB (A)
Acoustic noise level during standby	Up to 40 dB (A)
Dimensions	Approx. 860 (W) x 319 (D) x 235 (H) mm
Packaging size	975 (W) x 450 (D) x 390 (H) mm

4. 3D Printer – 1no

Build Size	Approx. 25 x 25 x 30 cm
Heated bed	Yes, about 150 C
Features	Filament sensor, camera
Extruders	01
Heated chamber	No
Connectivity	USB, Wifi

Touch screen	Yes
Camera	Yes
Materials	PLA, ABS, FLEX, Nylon
PEI Coated SS Magnetic Build surface	
Hex drive Extruder	
Quick Swap Nozzle	
Mesh Levelling bed compensation	
Core XY Gantry	
Print resurrection	
Filament Sensor	
FFC Wire harness	
Capacitive touch screen	
32Bit Onboard computing	
5. ESD Workstation – 1 no	
Size	Table Top About 1200 mm x 600 mm over all Height 1500 mm
