

	<p style="text-align: center;"><b>INDIAN INSTITUTE OF TECHNOLOGY MADRAS</b> Chennai 600 036</p> <p>Telephone: [044] 2257 8356/9760      FAX : [044] 22570545/8366 E-mail: <a href="mailto:arpp@iitm.ac.in">arpp@iitm.ac.in</a></p>	
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P. SARVAHARANA  
Assistant Registrar (Project Purchase)

Ref: ICS/14-15/022/IITM/PBSU  
Date: 29.01.2016

Tender No: ICS/PBSU/023/2015

**Technical Bid Opening meeting on 24.02.2016 at 3.00 PM**  
**Pre-Bid Meeting on 08.02.2016 at 11.00 AM**  
**Due Date: 22.02.2016 at 5.00 PM**

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, offers are invited for the supply of **"Lathe Machines – 10 Nos, Universal Milling Machine – 1 No and Vertical Milling Machines – 2 Nos"** conforming to the specifications given in (Annexure – I):

**Instructions to the Bidder**

- (i) **Preparation of Bids:** - The tenders should be submitted under two-bid system (i.e.) Technical bid and Financial bid.
- (ii) **Delivery of the tender:** - The tender shall be sent to the below-mentioned addresses either by post or by courier so as to reach our office before the due date and time specified in our 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 **"Assistant Registrar, Project Purchase" IC & SR Building 2<sup>nd</sup> floor, I.I.T. Madras, Chennai – 600 036, which is also the address for communication.**
- (iii) **Pre-bid Meeting and Opening of the tender:** - All potential bidders can attend the pre-bid meeting to be held on 08.02.2016 at 11.00 am at BSB 205, 1<sup>st</sup> Floor, Department of Civil Engineering, Building Sciences Block, IIT Madras, Sardar Patel Road, and Chennai 600036. 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 which will decide the suitability of the bid as per our specifications and requirements. The bidders will be invited for opening of Technical bids scheduled on 24.02.2016 at 3.00 PM at BSB 205, 1<sup>st</sup> Floor, Department of Civil Engineering, Building Sciences Block, IIT Madras, Sardar Patel Road, and Chennai 600036. Only the bidders who are technically qualified will be called for the opening of the financial bids.

- (iv) **Prices:** - The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges to various Departments/Institutions. The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However the percentage of tax & duties should be clearly indicated.

The price should be quoted without custom duty and excise duty, since I.I.T. Madras is exempt from payment of excise duty, and the custom duty will be paid at concessional rate against duty exemption certificate.

In case of import supply, the price should be quoted on EX-WORKS and CIP basis indicating the mode of shipment.

- (v) **Agency Commission:** - Agency commission, if any, will be paid to the Indian agents in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in the case of 'Nil' commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent. The foreign Principal should indicate about the percentage of payment and it should be included in the originally quoted basic price, if any.
- (vi) **Terms of Delivery:** - The item should be supplied to our various Departments as per Purchase Order. In case of import supply, the item should be delivered at the cost of the supplier to our Institution. The Installation/Commissioning should be completed as specified in our important conditions.
- (vii) **Other Terms & Condition:** - please refer the specifications for other terms & conditions.
- (viii) IIT Madras reserves the full right to accept / reject any tender at stage without assigning any reason.

Yours sincerely,



P. SARVAHARANA  
Assistant Registrar (Project Purchase)  
IC&SR, I.I.T. Madras

## SCHEDULE

### Important Conditions of the tender

1. The due date for the submission of the tender is **22.02.2016 at 5.00 PM**
2. The offers / bids should be submitted in two bids systems (i.e.) Technical bid and Financial bid. The Technical bid should consist of all technical details / specifications only. The Financial bid should indicate item-wise price for each item and it should contain all Commercial Terms and Conditions including Taxes, transportation, packing & forwarding, installation, guarantee, payment terms, pricing terms etc. The Technical bid and Financial bid should be put in separate covers and sealed. Both the sealed covers should be put in a bigger cover. The Open Tender for supply of "**Lathe Machines – 10 Nos, Universal Milling Machine – 1 No and Vertical Milling Machines – 2 Nos**" should be written on the left side of the Outer bigger cover and sealed.
3. **EMD:** EMD should be at 2% (two percent) of the tender value quoted by the bidder. The EMD should be included in the Financial bid which will not be opened for Technical evaluation. Enclosing the EMD in the Technical bid will automatically disqualify the tenderer. EMD should be in the form of DD in favour of "The Registrar, Indian Institute of Technology Madras" and payable at Chennai. The tender without EMD would be considered as UNRESPONSIVE and REJECTED. Photo/FAX copies of the Demand Draft/Banker's pay orders will not be accepted. No interest will be paid for the EMD and the EMD (Bid Security) will be refunded to the successful bidder on receipt of Performance Security.
4. **Performance Security:** The successful bidder should submit Performance Security for an amount of 5% of the value of the contract/supply. The Performance Security may be furnished in the form of an Account Payee DD, FD Receipt from the commercial bank, Bank Guarantee from any nationalized bank of India will be an acceptable.  
**Only after submission of Performance Security, Purchase Order/Work Order will be released / L.C will be opened.**  
**Performance Security in the form of Bank Guarantee:-** In case the successful bidder wishes to submit Performance Security in the form of Bank Guarantee, the Bank Guarantee should be routed through the Beneficiary Bank to the end user bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee through a Nationalized Bank of India. The Bank Guarantee should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including the warranty obligations.
5. If an Indian agent is involved, the following documents must be enclosed:  
Foreign principal's proforma invoice indicating the commission payable to the Indian Agent and nature of after-sales service to be rendered by the Indian Agent.
  - ✓ Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.
  - ✓ The enlistment of the Indian agent with Director General of Supplies & Disposals under the Compulsory Registration Scheme of Ministry of Finance.

6. The offer/bids should be sent only for a machine that is available in the market and supplied to a number of customers. A list of customers in India and abroad with details must accompany the quotations. Quotations for a prototype machine will not be accepted.
7. Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the Technical bid. No prices should ever be included in the Technical bid.
8. Documentary proof for the claimed position and repetition accuracies must be obtained from the principals and submitted along with the relevant pages of the standards.
9. Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal.
10. **Validity:** Validity of Quotation not less than 90 days from the due date of tender.
11. **Delivery Schedule:** The tenderer should indicate clearly the time required for delivery of the item. In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.
12. **Place of Delivery:**  
Indian Institute of Technology Palakkad,  
Ahalia Integrated Campus,  
Kozhipara P. O, Palakkad,  
Kerala - 678557  
Ph: +91 04923 226 300
13. **Risk Purchase Clause:** In the event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from other sources on the total risk of the supplier under risk purchase clause.
14. **Payment:** No Advance payment will be made for Indigenous purchase. However 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released shipping documents and 10% after successful installation wherever the installation is being done).
15. **Advance Payment:** No advance payment is generally admissible. In case of specific percentage of advance payment is required, the Foreign Vendor has to submit a Bank Guarantee equal to the amount of advance payment and it should be routed through the Beneficiary Bank to the end user Bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee through a Nationalized Bank of India.

16. **On-site Installation:** - The equipment or machinery has to be installed or commissioned by the successful bidder within 15 to 20 days or based on call from the date of receipt of the item at site of IIT Palakkad.

**Mailing Address:**

Prof. P.B. Sunil Kumar  
Indian Institute of Technology Palakkad  
Ahalia Integrated Campus  
Kozhipara P. O.  
Palakkad, Kerala – 678557  
Ph: +91 04923 226 300

17. **Warranty/Guarantee:** The offer should clearly specify the warranty or guarantee period for the machinery/equipment. Any extended warranty offered for the same has to be mentioned separately.
18. Quotations will be accepted only from manufacturers for branded items. If they are not in a position to quote, they may authorize only one exclusive Accredited Resellers/Channel Partners/Deluxe Premium Service Partners who may quote along with proof for authorization.
19. **Late offer:** - The offers received after the due date and time will not be considered. The Institute shall not be responsible for the late receipt of Tender on account of Postal, Courier or any other delay.
20. **Acceptance and Rejection:** I.I.T. Madras 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.
21. **Do not quote the optional items or additional items unless otherwise mentioned in the Tender documents / Specifications.**
22. **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 Tamil Nadu.
23. All Amendments, time extension, clarifications etc., will be uploaded on the website only and will not be published in newspapers. Bidders should regularly visit the above website to keep themselves updated. No extension in the bid due date/ time shall be considered on account of delay in receipt of any document by mail.

**Acknowledgement:** It is hereby acknowledged that the tenderer has gone through all the conditions mentioned above and agrees to abide by them.

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

## Annexure - I

### 1. Centre lathe with following specifications: Quantity: 10 numbers

Swing dia over bed 250 -350 mm  
Centre height 125 -150 mm  
Over cross slides 140 -150 mm  
Distance between centre 500 mm

#### **Spindle:**

Spindle nose: Standard  
Spindle bore dia. 38 -50 mm  
Spindle internal taper MT 5  
Spindle Speed range – 50 – 4000 rpm/options for more than 18 steps/Variable speed drive

#### **Tail stock:**

Spindle travel: 80-125 mm  
Taper in spindle: 45-60 mm  
Taper in spindle: MT4/MT3  
Hand wheel graduation: 0.05 mm

#### **Carriage:**

Travel for apron box hand wheel/revolution: 25-40 mm  
Graduation in apron hand wheel: 0.2-0.25 mm  
Maximum travel of cross slide: 80-100 mm

#### **Feed/Thread and ranges:**

Longitudinal feed range: 0.03-0.07 mm/revolution with atleast 20 steps  
Cross feed: 0.015-0.35 mm/revolution with at least 20 steps  
Options for Metric/Whitworth/Module/DP thread cutting  
Set of change gears

#### **Other features:**

Coolant system  
Machine lamp  
Guide ways should be hardened and ground and it should be protected from ingress of swarf and coolant  
Guide ways sustain less wear and should offer stronger resistance to damage  
The structure of machine should be rigid and free from vibration for smooth machining  
Approximate distance from floor to spindle axis: 800-1000 mm

#### **Additional accessories:**

1. 3 jaw chuck - self centering - 1 no for each lathe
2. 4 jaw independent chuck - 2 nos.
3. Face plate - 1 no
4. Live center - 1 no
5. Dead center - 1 no
6. Drill chuck - 1 no
7. Revolving center - 1 no
8. Tool holders for CNMG, SNMG inserts with 100 inserts
9. Carrier - 3 no (20 mm, 25 mm, 35 mm)
10. Tool post spanner - 1 no
11. Tool holder for HSS turning tool

## 2. Universal Milling machine with following specifications: Quantity: 1 Number

- Longitudinal Movement (Manual& Automatic): 500-600 mm
- Transverse Movement (Manual& Automatic): 250-300 mm
- Vertical Movement: 300-400 mm
- Speed range: 45/60 - 1200/1800 rpm

### **Feed range:**

- Longitudinal and Transverse: 16/20 - 400/600 mm/min

### **Additional accessories:**

- Vertical milling head – 1 no
- Indexing head and tailstock- each 1 no
- Swivel base machine vice 160 mm width – 1 no
- DRO in X, Y and Z directions
- Sandvik make Carbide tip(insert) type milling cutters of diameters 50 mm, 80 mm and 100 mm – each 3 nos
- Inserts for above milling cutter – 10 nos for each cutter
- Mandrel for above milling cutters.

### **Other features:**

1. Coolant system
2. Table rapid longitudinal movement
3. The rigid spindle housing, cross ribbed box type column structure and the closed box type knee design ensure optimum chip removal and surface finish
4. Guide ways in all three axes should be hardened and ground and it should be protected from ingress of swarf and coolant
5. Guides in guide ways sustain less wear and should offer stronger resistance to damage
6. The structure of machine should be rigid and free from vibration for smooth machining for production of components
7. Separate feed drive and main drive motors
8. Electromagnetic or standard brakes for instantaneous stopping of speed and feed
9. Machines should have dovetail guide ways with compact design & should have more load carrying capacity
10. Machines should run with gear driven mechanism with motor
11. Overload relays or any other overload protection system for motor
12. Lead screw mechanism to be designed to reduce wear in lead screw
13. All gears & splines shafts are case hardened & ground
14. The machine shall be used for production purpose for machining different kind of metals

### 3. Vertical Milling machine with following specifications : Quantity: 2 numbers

- Longitudinal Movement (Manual& Automatic): 500-600 mm
- Transverse Movement (Manual& Automatic): 250-300 mm
- Vertical Movement: 300-400 mm
- Spindle quill stroke (manual): 50-100 mm
- Spindle taper: ISO 40/50 or any other standard
- Speed range: 45/60-1800/2000 rpm

#### **Feed range:**

- Longitudinal and Transverse: 16-800 mm/min

#### **Additional accessories:**

- Vertical milling head – 1 no
- Indexing head and tailstock- each 1 no
- Swivel base vice 160 mm width – 1 no
- DRO in X, Y and Z directions
- Sandvik make Carbide tip(insert) type milling cutters of diameters 50 mm, 80 mm and 100 mm – each 1 no
- Inserts for above milling cutter – 10 nos for each cutter
- Mandrel for above milling cutters.

#### **Other features:**

1. Coolant system
2. Table rapid longitudinal movement
3. The rigid spindle housing, cross ribbed box type column structure and the closed box type knee design ensure optimum chip removal and surface finish
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7. Separate feed drive and main drive motors
8. Electromagnetic or standard brakes for instantaneous stopping of speed and feed
9. Machines should have dovetail guide ways with compact design & should have more load carrying capacity
10. Machines should run with gear driven mechanism with motor
11. Overload relays or any other load protection for motor protection
12. Lead screw mechanism to be designed to reduce wear in lead screw
13. All gears & splines shafts are case hardened & ground
14. The machine shall be used for production purpose for machining different kind metals