

# Department of Materials Science & Engineering Indian Institute of Technology, Kanpur

Enquiry No : IITK/MSE/GPB/11-12/06

Enquiry Date: 16/01/2012

Closing Date: 27/01/2012

## Call for Quotation: Lab Scale Instrumented Rolling Mill

We are interested in the purchase of 'Instrumented Rolling Mill'. We are hereby calling for quotations from the prospective suppliers for the "Instrumented Rolling Mill" with the following minimum specifications/requirements:

1. **Mill type:** Reversing 2Hi/4Hi Backup roll driven
2. **Deformation capability:** Both Cold and hot rolling (interchangeable on same machine)
3. **Maximum thickness strip (input):**  
10 mm for cold rolling (in 4 Hi arrangement)  
50 mm for hot rolling (in 2 Hi arrangement)
4. **Maximum width of strip :**  
200 mm for cold rolling  
200 mm for SS(18/8)Hot/Cold Rolling  
200 mm for MS hot rollin  
50 mm for Ti alloy cold rolling  
100 mm for Ti alloy hot rolling
5. **Minimum finish thickness:**  
0.5 mm for cold rolling (in multiple passes)  
2.0 mm for hot rolling (in multiple passes)
6. **High temperature requirements for hot rolling:** Above 1000°C
7. **Roll separating Force surface:** 75 T(max) for 4 high rolling
8. **Strength of material:** 2000MPa at ambient temperature
9. **Load cells:** One each for drive/operating sides
10. **Screw down type:** Electromechanical (Preferable)
11. **Work roll separation:** Through hydraulic cylinders (Preferable)
12. **Roll Gap controls:** Through position transducer (Preferable)
13. **Drive arrangement:** DC motor with variable speed controller with gear box system
14. **Motor:** Good branded product - Make and rating to be provided
15. **Controls:** Digital controls for speed, with auto protection to motor drive, and operations should be through remote desk. (details be provided)
16. **Bearings and gear couplings:** Good branded product - Make details be provided.
17. **Mill compatibility for Materials:** SS (18/8), MS, Al, Cu, Brass, Ti alloys etc;

The quotation should provide the following details explicitly:

- Complete details of manufactures and rating if components/sub-assemblies are procured from other sources to assemble the system.
- Diameters of the work rolls and the back up rolls
- Roll material and hardness details
- Number of spare rolls to be provided

- Speed of mill
- Drive type make and rating
- Roll changing mechanism
- Type of Load Cells
- Automatic control details
- List of all operational spares to be provided (for at least 5 years)
- Warranty period
- Operator train policy
- Maintenance policy
- List of clients in India with address and phone numbers.

Prospective suppliers may submit **Competitive quotation** for the **Rolling Mill** in sealed envelope latest by **27<sup>th</sup> January, 2012** to the following address:

Prof. Anish Upadhyaya  
 Department of Materials Science and Engineering,  
 Indian Institute of Technology,  
 Kanpur, 208 016.

Please send all technical specifications of the product being quoted and applications details about the system along with the quotation.

Please list and quote for any optional accessories and spares/consumables for 5 years separately.

#### **Terms & conditions for supply of above mentioned articles**

- In the case of proprietary please enclosed proper proprietary certificate from the manufacturer.
- In the case of agent/dealer, please enclose the proper authorization/dealership document from the manufacturer.
- Quotation will be sent by post/by hand to the above mentioned address; IIT Kanpur will not be liable for any kind of postal irregularity/delay.
- The quotation in duplicate should be enclosed in a properly sealed envelope. Enquiry no and due date of opening should be mentioned at the envelope.
- The Rate offered should be free delivery of IIT Kanpur or ex-godown in case of firms situated outside Kanpur. If items are imported then the firms should quote the price on F.D.B basis.
- In case of Ex-godown terms the amount of packaging, forwarding freight etc. should clearly be mentioned by percentage or lump sum amount. Current rate of sales tax must be mentioned.
- The rates offered should be exclusive or inclusive sales tax. The rates applicable should clearly be specified.
- The delivery period/Warranty should be specifically stated.
- The firms are requested to give detailed description and specification together with detailed drawings and printed leaflets and literature of the articles quoted. The name of manufacturers and country of manufacture should also be invariably being stated. In the absence of these particulars the quotation is liable for rejection.
- Quotation should have validity of 60 days from the date of opening.
- The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.
- Institute is exempted for payment of E.Duty under notification No. 10/97.

Sd/-  
 HEAD,  
 Department of Materials Science and Engineering,  
 Indian Institute of Technology,  
 Kanpur, 208 016.