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

Enquiry: MSE/KM/2018-2019/01 Dated 11-04-2018

Closing Date: 01-05-2018(before 12:00Noon)

We need a robust, reliable, digital and motorised Rockwell hardness cum Rockwell Superficial tester:

## **Basic Needs:**

- 1. Instrument is for research and teaching purpose and it should have suitable safe precaution.
- 2. Set position with LCD indicator and Parallel port for printer connection.
- 3. Machine should be designed for measuring hardness of metals & alloys of all kinds (hard or soft).
- 4. Nose mounted indenter with data logging software. Digital microprocessor based panel where we can get hardness in digital mode.
- 5. Three modes of operation viz. Motorized automatic mode, Motorized mode & Manual mode.
- 6. It is preferred to have the system (Rockwell hardness and Rockwell Superficial tester) in an integrated one. If not, please give two separate quotes for both the systems. Committee have right to purchase both the system or any one system.
- 7. Committee can reject the tender without giving any justification.

| <b>Technical Specification</b> | Values   |
|--------------------------------|--|
| Test Loads(kgf)                | 60, 100, 150(Rockwell) & 15, 30, 45(Rockwell Superficial)  |
| Initial Loads (kgf)            | 10(Rockwell) & 3( Rockwell Superficial)  |
| Max.Test Height(mm)            | around 400 mm  |
| Depth of Throat(mm)            | around 190 mm  |
| Scales                         | Rockwell A,B,C,D,E,F,G.H,K,M,P,R,S,L,V,15N,30N,45N,15T,30T,45T in Nos. 1 to 21 resp  |
| Least Count                    | 0.01-0.1 For Rockwell & 0.02 to 0.2 For Rockwell Superficial   |
| Load Control                   | Automatic(Loading, Dwell, Unloading for major load)  |
| Dwell Time                     | 1 to 99 seconds selectable   |
| Power Supply                   | 220V, Single Phase, 50Hz ,AC,(3 Wire System)   |
| Standard Accessories           | Diamond Indenter Rockwell (4) Steel Ball Indenter(4 with 10 spare balls)   |
|                                | Superficial Rockwell Diamond indenter(4)   |
|                                | Testing Table and V groove arrangement   |
|                                | Jominy test fixture for end quench test  |
|                                | Calibration Test Blocks (Standards for different scales) 2 sets of each scale, Cover(2), Allen Spanner, Clamping Device Rubber bellow (five set) |

You are requested to send quotation (sealed and in two bid system) for the above mentioned equipment with all details. All cost, terms and condition should be clearly mentioned in the quotation. If you are the only authorized company to provide the services then please enclose proper authorization with the quotation in this regard. Proprietary certificate should be enclosed with the quotation in case of proprietary item. Minimum warranty will be two year. Prior experience of supply in IIT system and Local (Kanpur/Lucknow) authorised person /authorised service centre is essential. Rebate/discount for educational and research institute must be shown clearly. Delivery Period (maximum one month). Rates quoted must be for MSE IIT Kanpur including packing forwarding and freight.

The quotation should reach us by 01/05/2018 (before 12:00 Noon) to following address:

Incharge
Physical Metallurgy Lab
Department of Material Science & Engineering
Indian Institute of Technology Kanpur
Kanpur 208016