



THE NATIONAL INSTITUTE OF ENGINEERING

(An Autonomous Institution)

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME PHASE-III

Manandavadi Road, Mysuru – 570 008.

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Date: 21-04-2018

Invitation for Quotations

Quotations are invited for the procurement of the following equipments under TEQIP– III

Equipment: Four Ball Tester- Qty-1

Sl. No	Item Name	Specifications
1	Four Ball Tester	Conforms to : ASTM D2266, D2596, D2783, D4172, D5183 & IP 239 Speed : 100 to 2000 rpm continuously variable Normal Load : 13 to 1000 kg Leverage ratio : 1:15 Test ball diameter : 12.7mm Drive motor : 1.5 kW AC induction motor Power supply : 440V, 3Phase, 16Amp, 50 Hz Temperature : Up to 750C maximum Test Duration : 99hrs 59min 59sec Data Acquisition Software - On line Data Acquisition of Frictional Torque, Temperature, Normal load and Co-efficient of friction. ACCESSORIES Set of Weights - 70 kgs Steel Balls - 200 Nos 12.7mm Ball Chucks - 2 Nos Ball Pot with Heater - 2 Nos Anti Friction Disc - 1 No Ball er/Extractor Fixture - 1 No Ball Chuck Remover - 1 No Torque Wrench - 1 No Set of Hand Tools - 1 No Cartridge Heater - 2 Nos Temperature Sensor PT 100 - 1 No Connecting Cables - 1 Set Data Acquisition Card - 1 No Data Acquisition Software (Magview 2017) - 1 No Operating & Maintenance Manual - 1 Set Calibration & Test Reports of Sensors - 1 Set Digital Microscope – capable of measuring diameters of the scar produced on the 3 balls to an accuracy 0.01mm without removal from the ball test cup. MICROSCOPE FEATURES Objective 4x Plan Achromatic Objective Movement X/Y axis 25mm each Coarse Focus 25mm approx. Fine Focus 2mm approx. (lever Type) Movement Manual/Digital Micrometer Specimen Stage Suitable for standard Ball Holder Specimen Stage tilting $\pm 5^\circ$ Specimen Stage Rotation 270° approx. Illumination White LED Camera Features Sensor CMOS Size 1/2" Type Colour Resolution 3 Megapixel ; 2048 x 1536 Live & Capture Pixel Size $3.2\mu \times 3.2\mu$ Scan Mode Progressive Colour Depth 24Bit A/D 8 Bit Connectivity USB 2.0 Software Compatibility Windows XP/2000/7/8/8.1/10 & MAC Software Features Image Acquisition Capture Still Image, Capture Videos, Define Image path Image controls: Auto Exposure, manual Exposure, White Balance, Flat fielding, Gain, color control Image Processing Calibration, Calibration list, Line Measurement, Scale Line, Parallel line, Perpendicular Line, Rectangle(height, width, Area & perimeter), 2 point circle, 3point circle, diameter circle, concentric circles, Poly Line, Polygon, Arc, Angle, Annotate, Cross Hairline

Delivery Period: 60 Days from the date of issue of purchase order. Warranty Period: 36 Months

Terms and Conditions

- i. Quotation should be invariably in the prescribed **format enclosed**; otherwise it is **liable to be rejected**.
- ii. Quotation should be sent in a **sealed cover superscribed as “Quotation for the supply of Four Ball Tester under TEQIP III”** to the office of the Principal (TEQIP- III), The National Institute of Engineering, Manandavadi Road, Mysore 570 008.
- iii. Last date and time for submission of quotation **05-May-2018, 14:00 hours**
- iv. Installation and demonstration shall be at **Department of Mechanical Engineering, NIE, Mysuru.**
- v. Quotation should be valid for **45 days** from the last date of submission of quotation.

vi. Equipment should be delivered at **Department of Mechanical Engineering, The National Institute of Engineering, Manandavadi Road, Mysore - 570008.**

vii. **100% payment on installation, demonstration, successful completion in all respects and final acceptance by the Purchaser.**

viii. **Authorized Dealer/ Channel Partner Certificate from the company** should be enclosed along with the quotation.

ix. The Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

Date: _____

To:

Sl. No.	Description of goods (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (B)
Total Cost							

Gross Total Cost (A+B): Rs. _____

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. _____ (Amount in figures) (Rupees _____ amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of _____ months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: _____

Address: _____

Contact No: _____