

NATIONAL INSTITUTE OF TECHNOLOGY  
KURUKSHETRA-136119

No. MED/NITK/17/ 06/ 757

Dated: 14/02/17

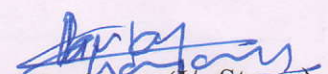
M/s INSTITUTE WEBSITE

**Sub: INVITATION OF QUOTATIONS FOR DIGITAL TOOLMAKERS MICROSCOPE**

1. You are invited to submit your most competitive quotation for the following goods:

Sr.No.	Brief Description & Specifications of Goods	Quantity
1.	Digital Toolmakers Microscope (Detailed Specifications are attached)	01 Nos.

2. Necessary literature of the goods may please be sent to facilitate to take decision.
3. All duties taxes and other levies payable by the Institute shall be included in the total price. This Institute does not issue Form C or D.
4. Payment will be made Online through RTGS/NEFT within 30 days after receipt of material in good condition and according to specifications. The Bank detail for making online payment may be indicated in the quotation.
5. The supplier shall deposit Earnest Money alongwith the Quotation amounting to Rs. 12000 /- in shape of Accounts Payee Demand Draft, Fixed Deposit Receipt, Bankers Cheque or Bank Guarantee from any commercial Bank in favour of the Director, National Institute of Technology, Kurukshetra. The Quotations without Earnest Money shall be rejected, the EMD will remain valid for a period of 45 days beyond the final validity period of quotation.
6. Performance Security @ 05% of the total value of the equipment may be furnished in shape of Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any Commercial Bank in favour of the Director, NIT Kurukshetra valid upto 60 days after the date of completion of warranty .
7. The items must be supplied within delivery period or delivery period extended by the Institute on the request of the supplier on genuine grounds otherwise the penalty for delayed period @ 0.5% of the amount shall be charged for every week or part thereof and the maximum 10%..
8. The goods are not required exclusively for Research Purpose. The Duties are payable by the Institute.
9. The quotation should remain valid for a period not less than 60 days from the date of submission.
10. The right of accepting or rejecting any quotation and to cancel the bidding process and reject all quotations without assigning any reason is reserved with the Institute.
11. The due date for receipt of quotation is 27.02.2017 and will be opened on next working day. Please quote on the top of the envelope our Ref. No. and due date of opening.



### Name of Equipment and Specifications

#### Digital Toolmakers Microscope

It is an ideal measuring instrument for simplifying inspection and precision measurement of tool wear, profile of external threads, forming tools, gauges, templates for checking of thread and angles. It is ideal for variety of linear, angular and 3D measurements.

**Justification:** This equipment is widely used in industries for quality and inspection of manufactured components. It will be utilized for the practical learning of B.Tech. students and for research work of M.Tech. and PhD scholars.

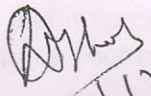
#### Technical Specifications and Features Required :

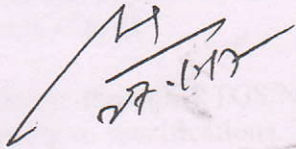
Work stage size and travel (X/Y/Z)	Min. 250x250 mm with travel of 150x100x100 (Manual/Motorized) mm assembled on ball bearing guide for smooth travel.
Resolution of Measurement system	D.R.O. with least count of 1 $\mu\text{m}$ with image display on LCD monitor
Platform load capacity	Minimum 15 kg
Base platform and column	Heavy Metal Base to provide rigidity to the equipment.
Optical Magnification	Min. Range for the Magnification limits 0.7X-4.5X
Magnification on Monitor	Min. Range for Magnification limits 35X-200X on LCD Monitor
Field of View (X-Axis)	Minimum 8mm
Maximum height of specimen	100mm
Standard Working Distance	92mm
Resolution of micrometre	0.5/1 $\mu\text{m}$
Linear Accuracy (X/Y)	3+L/200 $\mu\text{m}$
Repeatability	$\pm 2 \mu\text{m}$
Hardware for vision	Min 8 inch monitor
Measurement Method	With the help of cross-hair on screen
Illumination on surface	Fibreoptics/LED
Illumination on contour	Halogen/LED
Power source	220 V, 50 Hz
Camera	1/3" High resolution CCD camera
Software features required for Measuring-Recording-Analyzing-Reporting and Communicating the dimensional data.	<ul style="list-style-type: none"> <li>• One click measurement for Point, Line, Arc, Circle, Distance, Angle etc.</li> <li>• Inch / metric conversion.</li> <li>• Polar/Cartesian coordinate</li> <li>• 3D geometric measurement function</li> <li>• 2D &amp; 3D feature construction capability</li> <li>• Up to 1000 points allowed on each feature</li> <li>• Vision tool like burr trimming &amp; sharpening image</li> <li>• CAD / IGS Interface</li> <li>• Form indication (roundness, straightness etc.)</li> <li>• Min. 12 Types of tolerance settings</li> <li>• Auto Feature Detection</li> </ul>

**Additional Accessories required:**

- 01 No. Touch probe with 0.5 and 3 mm touch balls (preferable Renishaw make, for complex 3D geometries)
- 01 No. supplementary lenses set for 0.5X magnification.
- Centre holding device.
- V-block 02 Nos.
- Rotary stage.
- Magnetic V-Block.
- 01 no. Foot-switch for point recording.
- 01 no. Computer Desktop System with UPS (Configuration: i7 processor, 8 GB DDR3 ram, 500GB Hard disk, Optical mouse and keyboard, Monitor 20 inch, Latest Compatible Genuine Windows).

- **Warranty of minimum 3 year with annual calibration.**
- **Freight charges must be included in the equipment cost.**
- **Installation and training of equipment should be provided free of cost.**
- **Manufacturer must be in the business of manufacturing this equipment for atleast 5 year must have a history of selling this product in at-least 02 reputed/govt. organisations, their purchase orders must be provided with the offer.**

  
25/11/12

  
27-11-12

