



**Sujeet K Sinha (Dr.)**  
Associate Professor

Enquiry no.: ME/TRL/2013/09/10 (Revised)  
Enquiry date: September 10<sup>th</sup>, 2013  
Last Date: September 20<sup>th</sup>, 2013

### Enquiry for Optical Profilometer

We are interested to purchase the 3D-Profilometer which is a measuring instrument used to measure a surface's profile, in order to quantify its roughness. The main features of 3D Profilometer are provided below:

**System Includes:**

- Profiler
- Illuminator control unit
- PC
- Analysis Software
- Processor: Multi Core Window<sup>®</sup>7.0
- Monitor
- Keyboard and mouse
- All necessary cables

**Profiler Includes:**

Vertical Resolution	0.1nm - 0.02nm (or Better)
Turret upto	4 objective turret [or Better (manual or automatic)]
Scan Range Upto	150mm x 150mm (Optional 200mm or more)
Objectives	0.5x to 100x
Z focusing range	0.1 nm to 10mm (or Better)
Tilt	+/- 5 degree (or Better)
Rotation (theta)	360 Degree
Pixel Standard	1024 x 1024, Optional 1536 x 1536 or 1920 x 1920
XY Sample Stage	150mm (6in) manual, $\pm 6^\circ$ tip-tilt in system base
Z Focusing stage	100mm manual or automatic Z axis
Objective	Standard [or Better (2.5X, 5X, 10X, 20X, 50X)]
Long working distance	2X, 5X, 10X (or Better)
Maximum Scan speed	28.1 $\mu$ m/sec (or Better)

**Software Package:**

- 3d Virtualization software
- Movie and time series analysis
- An extensive list of roughness, flatness, waviness and other surface parameters
- Particle and pore analysis
- Force curve analysis
- Extended Fourier analysis
- Image editing features - light, color, contrast etc.

- Advanced Statistical analysis
- Ability to export raw data, images, and entire reports

**Any other necessary components must be include in the quotation**

Please provide the information regarding the safety feature in the quoted model.

The quoted system should be certified as complete for carrying out the experiment “Surface Texture, Precision step height, Surface form, thin film stress, Biological, MEMS, 3D surface profile imaging & Material Characterization.”

**Terms & Conditions:**

- ❖ Provide “Authorization certificate” from the manufacturer, in case the quotation is submitted by an Indian Agent.
- ❖ Prices should be FOB/ CIF up to IITK.
- ❖ Validity of quotation should be at least for 90 days.
- ❖ Warranty: One Year or more from the date of Installation and Commissioning.

*Kindly send your best offer (Technical and Commercial offers separately) so as to reach us on or before September 20, 2013 to the following address:*

Dr. Sujeet K Sinha  
Department of Mechanical Engineering  
IIT Kanpur  
Kanpur – 208016, India

In case of any queries/ clarifications related to this tender, you may contact Mr. Jitendra Kr Katiyar (+91 8090113301, 9336839742 & [jkatiyar@iitk.ac.in](mailto:jkatiyar@iitk.ac.in) ).