

Surface Profilometer

Tender is invited for the procurement of Surface profiler according to the specifications below Requirements.

Measurement Type	Stylus profilometry (contact measurement)
Measurement Capability	Two-dimensional Surface profile measurements, 3D Measurement, stitching and Analysis
Sample Viewing	Digital Magnification using high resolution camera with high Field of view
Stylus Sensor	Low Inertia Sensor
Stylus Force	1 to 15 mg with LIS 3 sensor
Low Force Option	Low Force with 0.03 to 15 mg
Stylus Options	Stylus radius options from 50 nm to 25 μ m
Aspect Ratio of stylus	More than 1:10
Sample Stage	Manual or Motorized (preferable)
Sample stage Dimensions	> 4in
Sample R-Theta Stage	Manual or Motorized (Preferable)
Vibration Isolation	Vibration solutions should be available
Max Sample thickness	50mm
Maximum a sample size	200mm
Scan Length Range	2-6 in
Step Height Repeatability	4A ^o , 1 sigma on steps less than 1 μ m
Vertical range	1-3mm
Vertical Resolution	1A ^o
Lateral Resolution	20nm to 65 μ m
Temperature Range	20-30 ^o C
Humidity Range	\leq 80%
Computer System	64-bit Multicore processor (>4) for parallel processing, Windows 10 Operating System, Monitor (22" or higher)
Input Power	110-240V AC, 50-60Hz
Software Requirements	Stitching, 3D Mapping, Stress Management, Microform, pattern recognition, Measurement of various parameters like Surface Roughness (Ra, RMS / Rq, Rz etc), Spacing, Waviness, Flatness, step height, Thickness, Slope, Skewness etc
Warranty	Minimum of 2 Years

General Terms & Conditions:

1. Vendors should provide continuous technical support and maintenance of equipment during warranty period.
2. List of reputed end users (at least 3) to whom supplies made should be furnished.
3. Vendors must provide detailed documentation for the equipment.
4. Vendors must provide training to our technical staff for using the equipment.
5. Vendors should install this in IIT Madras.

Warranty:

1. Warranty service must be provided onsite at IIT, Madras for a minimum duration of two years
2. Quote for AMC upto 3 years after warranty, year-wise.

Support and Service:

1. Technical support should be available preferably through Indian counterparts.

Training:

1. Training (online or onsite) on this system should be provided free of any additional Cost

Shipping and Handling:

- i. FOB prices should be quoted with
- ii. Insurance
- iii. Delivery time. etc.

General Terms & Conditions

- The vendor should have supplied a system of a similar or a higher specification to Indian institutes like IITs, etc. or, to a reputed foreign institute in the last 5 years. The vendor should provide the contact details of the user of such a system. The vendor should provide proof of installation and maintenance of such systems. Proof can be provided as reference letters from the users of the systems.
- The above may be provided for at least 3 end users.