

Notice Inviting Quotation (NIQ)

Name of the Equipment: Stylus Type Surface Profiler

Quotations are invited from reputed manufacturer / their Indian representative for the **Stylus Type Profiler** for the measurement of film thickness having a “step” etched in it.

Specifications

S No.	Feature	Specification	Compliance / Comments
1	General Description	The primary purpose of the equipment is to measure film thickness having a “step”. The measurement is to be obtained by “ physical contact ” method using a pointed stylus tip which scans the surface having a step etched into it. The step height provides the thickness of the deposited films. The range of thickness which is to be examined is from nanometer to millimeter. Additionally, the system may incorporate capability for 2-dimensional measurements also. Displays of surface topography, calculation of average / mean surface roughness are desirable additional features. Line scan for step-height measurement is the essential feature of the equipment.	
2	Scan Method	Tip scanning is required as compared to movement of stage for the purpose of taking line scan.	
3	Scan Length	1 mm to 10 mm or more.	
4	Step-Height	10 nm to 1mm	
5	Scan Speed	100 $\mu\text{m/s}$ (Nominal value). Should meet the requirement of minimum step height measurement of 10 nm	
6	Stylus Force	10 mg to 80 mg or better	
7	Stylus Options	Tip radius: 0.5 μm to 2 μm Stylus arm length: please specify	
8	Sampling Rate	50 to 1000 Hz	

9	Measurement	Height, thickness and surface roughness should be displayed on the computer screen having built-in software. The step-height measurement for measuring film thickness from 10 nm to 1 mm should be included. Please	
10	Sample stage	Circular or square shaped stage. Should be able to accommodate silicon wafers of 4-inch diameter or more.	
11	Vibration isolation Table	Should be quoted separately, if required	
12	Sample Viewing	Optical microscope to view the tip and sample to be scanned should be provided. Additionally, the image may be captured and displayed on screen.	
13	Software	Basic processing software which comes with the system to measure the thickness of thin film is to be included. Additionally, the average roughness should also be calculated and displayed.	
14	Input Power	220 V, single phase AC, 50 Hz	
15	Operating Temperature Range	Essentially room temperature operation (20 to 35 °C).	
16	User List	User list in India and abroad with contact person's name, phone No. and e-mail ID must be provided. Supplier may be asked to arrange for demonstration of identical or similar equipment already installed in India	
17	Spare parts	Should be quoted separately for 5 year operation. The supply of spare parts must be guaranteed for 10 years.	
18	Warranty	<ol style="list-style-type: none"> 1. Minimum 1 year warranty must be included in the price quoted. 2. Additionally warranty for 3years onsite or/and extended 5 years should be quoted as option. 3. Additional years of AMC should be quoted separately. 	

TERMS AND CONDITIONS COVERING SUBMISSION OF QUOTATIONS, IIT DELHI

1. Method of Submission of Quotations	<p>1. Quotations should be sent in a sealed cover and marked at the top “our NIQ reference, due date for opening, the name of the item etc.” The quotation must be in 2 separate sealed cover marked: “Technical Bid” and “Price Bid”</p> <p>2. The quotations should reach Prof. Sudhir Chandra, Room No. III-214 Centre for Applied Research in Electronics, IIT Delhi, Hauz Khas, New Delhi 110016 latest by 5 PM, Wednesday 30 November 2011</p>
2. Local Offices	Please provide local office address.
3. Taxes	No Sales tax concession under Form “C” and “D” is admissible to this Institute.
4. Validity of Quotation	The validity of the quotations must be for three months or more
5. Delivery and rate	The rates quoted must be both FOB and CIF (inclusive of freight, insurance), taxes, duty etc. as applicable.
6. Institute Rights	The Institute reserves the right to accept or reject any or all quotations without assigning any reason. The discretion of increasing or decreasing of the quantity demanded or selecting only one items out of all quoted also vests with the Institute.
7. Terms of Payment	<p>Our normal term of Payment is by (i) Letter of Credit for Foreign Suppliers (ii) for Indian Suppliers, by cheque within 30 days after receipt of goods/material in sound condition. Please note that advance payment will not be made.</p> <p>State clearly the Name and address of the Supplier to whom the order will be placed. Also mention the “Cheque/Draft to be made in favour of and payable at ...(City/Country).”</p>
8. Rejection	Late receipt of quotation and the same not conforming to the set procedures as above will be rejected
9. Discount / Rebate	Special discount/rebate wherever admissible keeping in view that the supplies are being made for educational purpose in respect of Public Institution of National importance may please also be indicated.
10. Warranty /Compliance/ Certificate of meeting specifications	To be clearly mentioned / provided by the Supplier.
11. Manufacturer’s name and full address and country of manufacturing	Must be provided
12. Certification of registration for sales agent	Must be provided