

DEKTAK³ TECHNICAL SPECIFICATIONS

Performance Specifications

Sample Stage Diameter	127mm (5")
Sample Thickness	19mm (0.75") maximum
X-Y Translation Range	20mm x 80mm (0.8" x 3.2") Manual stage positioning
Vertical Data Resolution	5Å maximum
Measurement Range	65.5µm (655 KÅ) maximum
Scan Length Range	50µm to 30mm
Data Points Per Scan	2,000 maximum
Stylus Tip Radius	12.5µm standard
Stylus Force Range	10 mg. to 50 mg. (manual adjustment)
Sample Viewing	90X color video (60-420X zoom optional)

Standard Analytical Software

Roughness Parameters	Ra, Rq, Rp, Rv, Rt, Rz, Max. Ra, Max. Dev., Skew
Waviness Parameters	Wa, Wq, Wp, Wv, Wt, Max. Dev.
Step height Parameters	Avg. Step Ht., Avg. Ht., Max. Peak, Max. Valley, Max. Ht., Peak to Valley
Geometry Parameters	Area, Slope, Volume, Radius, Perimeter
Programmable Cutoff Filter	Enables roughness, waviness, and raw profile data to be displayed separately. (Conforms to ANSI B46.1 specification.)

Applications

- Semiconductor step heights.
- Micro-roughness on magnetic disks.
- Ceramic hybrid circuits and PC boards.
- Long scans for measuring substrate bow.
- High precision industrial applications.

System Configuration

Computer	486 with 4MB RAM						
Software Environment	Microsoft® Windows 3.1						
Interface Method	Mouse/Keyboard						
Monitor	14" Super VGA						
Power Requirements	100/115V @ 6 amps or 220V @ 4 amps, ±10%						
Dimensions (w/Computer & Monitor)	<table><tr><td>Depth</td><td>Width</td><td>Height</td></tr><tr><td>61.9 cm (24")</td><td>66 cm (26")</td><td>53.3 cm (21")</td></tr></table>	Depth	Width	Height	61.9 cm (24")	66 cm (26")	53.3 cm (21")
Depth	Width	Height					
61.9 cm (24")	66 cm (26")	53.3 cm (21")					
Shipping Weight	57 kg. (125 lbs.)						

Optional Features

Thermal Printer	Prints Profile and Scan Data
Stress Software	Calculates wafer stress
Vibration Isolation Table	Isolates scan head from external noise
Calibration Standards	NIST traceable step height standards (200Å to 100KÅ)
VLSI Roughness Standards	NIST traceable calibration standards (90Å to 9400Å)
Styli	Sub-micron to 25µm radius
Zoom Optics	60-420X zoom magnification
Extended Optics	120-790X magnification

NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



We Make The Process More Productive