



NanoSpec® II

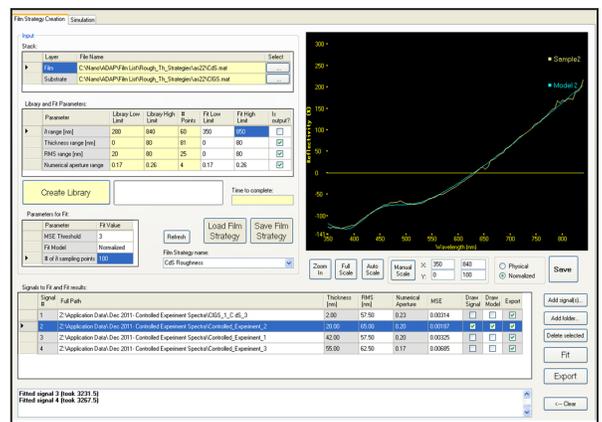
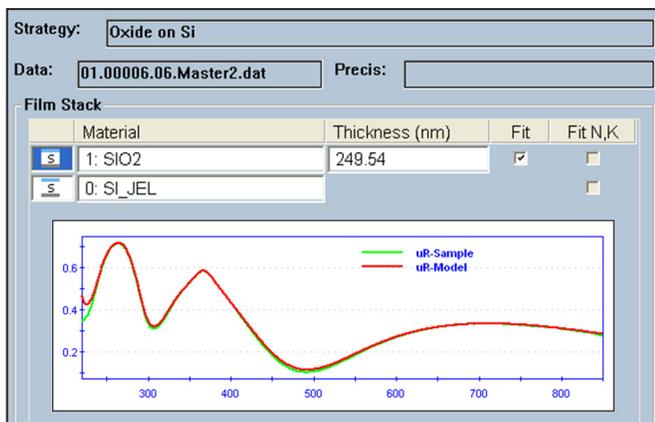


Advanced Film Analysis System

nanometrics

Extending the range and performance of the industry proven NanoSpec 6100, the NanoSpec II introduces a new design with automated sample alignment, fast autofocus, sub 1-second per site measurement time and measurement repeatability better than 1Å. For existing 6100 customers, the NanoSpec II will offer an intuitive recipe transfer system, offering full backward compatibility of all measurement recipes.

The system can be incorporated with Nanometrics' powerful NanoDiffract® spectroscopic reflectivity analysis software, image processing for automated pattern alignment and an optional robotic 200mm wafer handling system, making the NanoSpec II the most powerful thin film system in its class.



Wavelength Range	
Standard	400 - 850 nm
Optional UV	240 - 850 nm
Film Thickness Range^{1,2,3}	30Å - 15µm (with optional UV) 200Å - 30µm (standard visible) up to 120µm (thick film option)
Reproducibility	
Visible	2Å
UV	<1Å
Measurement Time	typically <1 sec/site
Stage Control	multiple mouse click options
Data Management	Optional SECS GEM
Wafer Sizes	50 - 200 mm
Spot Sizes	
Vis	5X lens: 40µm (optional 20µm spot available)
UV-Vis	15X lens: 14µm (optional 7µm spot available)

Standard Features

- Industrial PC ; Windows 7 OS
- 17" flat panel display
- Operations manual (CD)

Optional Features

- UV wavelength range option with 15X lens
- 30nm - 120µm Thick Film Option – includes high resolution 430-730 nm spectrometer with 15X lens & 20µm spot
- NanoDiffract SR analysis with full stack multiple layers and optical constants variation monitoring
- Matrox-based image processing for automated pattern wafer alignment
- Cleanroom operations manual (hard copy)
- NanoStandard® film thickness standard wafer (6- or 8-inch)³

¹ Film thickness to be verified using a NanoStandard wafer. Thickness range assumes oxide on silicon. Ranges for other films may vary. Please contact Nanometrics Applications Engineering for additional information.

² Absolute accuracy within 1% of certified range of NIST-traceable oxide standards.

³ All Repeatability specifications to be verified on 500nm Oxide layer.

Specifications subject to change without notice. NanoStandard wafers are NIST-traceable film thickness standards consisting of six pads of different oxide thicknesses on silicon. Nanometrics, NanoSpec, NanoDiffract and NanoStandard are registered trademarks of Nanometrics, Inc.