Our Expertise, Our Services, Your Success

Focus FE - VII

For Rudolph refurbished equipment:
info@entrepix.com

For Rudolph spare parts and upgrades:
parts@entrepix.com

For Rudolph equipment service or maintenance:
service@entrepix.com

Or Call:
602-426-8677 (Sales)

The Rudolph FE VII Focus Ellipsometer is designed to provide precision film thickness measurements with simplicity of use. The system's long-life HeNe laser provides high signal to noise ratio for repeatability and the wavelength accuracy of an atomic transition. Using the same first principle measurement technique used by NIST to calibrate thickness reference standards, Rudolph Technology's FE VII provides accurate and repeatable results on applications throughout the fab.

The FE VII-D's advanced Focused Beam™ system uses dual wavelength technology to directly measure the sample with a small spot at multiple angles of incidence and at multiple wavelengths. This allows the system to define more variables, increasing the certainty of the results on complex multi-layer films. The FE VII provides fast reliable data across a wide range of applications. Typical applications include measuring sub 30 Angstrom gates, thick polyimide, ILD on ARC, or small-spot multi-parameter processes. The multi-parameter power of the FE VII also allows calculation of up to six unknowns on complex multi-layer film stacks, such as OPO and ONO, resulting in both film thickness as well as film composition.

Options:

- Robot Exchange
- Stage Exchange
- Measurement Standards

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Focus FE VII Series Features:

- A mature, advanced - technology metrology system
- Inherent accuracy for easy system matching
- Available dual wavelength for absolute order resolution
- High throughput wafer transport for up to 67 wafers per hour
- Robust, Cognex ConLPas™ pattern recognition
- Dependable pattern and recipe transportability
- Queued loading for simultaneous measurement, set-up and data review
- Fast, accurate flat/notch wafer aligner
- Powerful, intuitive, easy to use software
- GEM/ SECS II compliant software

Preventative Maintenance Program

Overview

- Baseline evaluation to determine configuration and software revision
- Back up recipes and configuration data files
- Review error logs and address accordingly
- Verify vacuum levels with and without wafers
- Handling test with wafers and cassettes
- Clean and lubricate both the stage and robot lead screws
- Check “stage center offset,” “orthogonality,” and “eccentricity”
- Check flat/notch findler lamp, replace if necessary
- Test intensity motors (for belt slip), replace belts if necessary
- Test HeNe laser intensity and IR laser intensity
- Clean dust and particles from the lenses
- Check microscope lamp uniformity, replace if necessary
- System to system matching (if applicable)
- Calibrate all wavelengths to a traceable standards