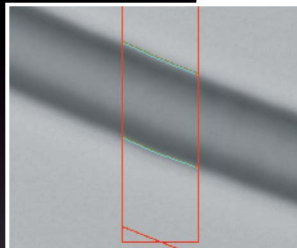
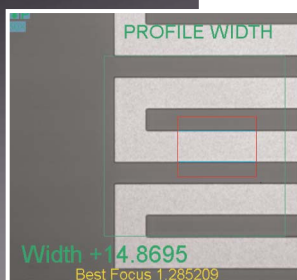


MicroLine 300

Automated Optical CD Metrology System



Measure pitch, width, and spacing of features on a MEMS device.



Measure linewidth on a semiconductor photomask.

The MicroLine™ 300 is a high-performance critical dimension measurement system for wafers, masks, MEMS, and other micro-fabricated devices. This capable instrument provides precise automated field-of-view measurement of features ranging in size from 0.5 μm to 400 μm on wafers up to 200 mm.

- 200 X 200 mm Precision X-Y Stage
- Vision-based Autofocus for Optimum Image Quality
- Autoillumination Programmable Light Intensity
- Robust Capabilities for Measuring Transparent Layers, Lines with Irregular Edges, Thick Films, and More
- Fully Programmable Sequences Including Autofocus and CD Measurement
- Motorized 6-Objective Nosepiece with Software Control
- Optional Transmitted Illumination

Typical applications for MicroLine 300 include:

- Wafers
- Photomasks
- MEMS
- Micro-scale components

Measurement types:

- Critical Dimensions
 - Linewidth
 - Pitch
 - Spacing
- Overlay
 - Multi-layer registration
 - Box in box
 - Circle
 - Edge roughness
 - Butting error



**Global.
Agile.
Expert.**

*Photo Description: VIEW Micro-Metrology MicroLine 300
High performance CD metrology system with standard options.
Additional options are listed in the technical specifications and are not included in this photo.*

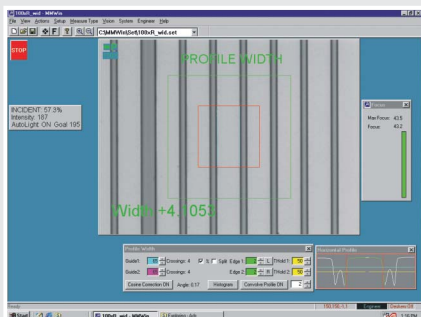


MicroLine 300

VIEW Micro-Metrology MMWin™ is powerful, interactive metrology software for wafer measurements. MMWin allows easy creation of recipe set-ups to fully automate measurements for a wide variety of features, including linewidth, pitch, spacing, arcs, circles, ellipses, and overlay registration targets.

MCL™ Measurement Control Language is an additional feature of MMWin that structures automated measurement routines. The open-source MCL programming language enables the creation of customized measurement types, user interface functions, and data output formats. Measurement data may be:

- Displayed on screen
- Printed as reports
- Saved to a file
- Transferred directly to a spreadsheet or a statistical database



Powerful MMWin metrology software.

Technical Specifications

	X	Y	Z	
Stage Travel	200 x 200 x 25 mm			<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Optional
Stage Type	Crossed-roller with manual co-axial positioning and quick-release			
Measurement Accuracy in the Field of View	0.010 µm (with 100x objective lens)			
Feature Size	0.5 µm — 400 µm within the field of view			
FOV Measurement Repeatability	< 0.010 µm (1σ) on wafers (with 100x objective lens) < 0.005 µm (1σ) on photomasks (with 100x objective lens)			

Optics* — Typical Set-Up

Objective Lens	5x	10x	20x	50x	100x
Pixel Size (mm)	0.00298	0.00142	0.00072	0.000296	0.000143
Working Distance (mm)	23.5	17.5	4.5	1	1
Field of View (mm)	X	1.92	0.958	0.48	0.193
	Y	1.29	0.644	0.318	0.131

* Other optical configurations available

Illumination	<input type="checkbox"/> Quartz-halogen, reflected light
	<input checked="" type="checkbox"/> Transmitted illumination and color filters
	<input type="checkbox"/> Autoillumination

Facilities Requirements	110V, 1Φ, 60 Hz or 220V, 1Φ, 50 Hz
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Features and Accessories

Software	<input type="checkbox"/> MMWin™ and Measurement Control Language (MCL) included
Operating System	<input type="checkbox"/> Microsoft® Windows™ XP
Autofocus	<input type="checkbox"/> Vision-based
Accessories	<input type="checkbox"/> Low-noise CCD VGA format camera
	<input type="checkbox"/> Image processing at 60 frames per second
	<input checked="" type="checkbox"/> Vibration isolation table