



The Complete Solution for
Advance Wafer Metrology

MP2100 Non-Contact Automatic Measurement System

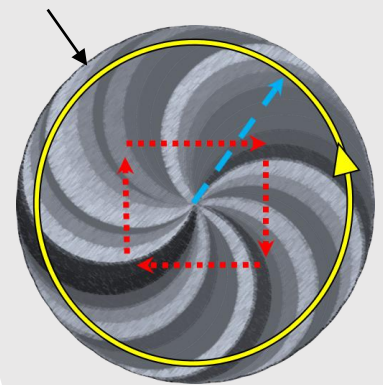
- Chapman's latest high resolution profiler
- Non-contact measurement technology
- Measures roughness with customizable filters
- For inline quality inspection and R&D tool
- Software can be programmed for executing series of routines and reports data offline for further analysis



MACHINE Features

- Non-contact scanning
- **Fast, complete linear and 360° circular scans (backgrind wafer etc.)**
- Nomarski Viewing System for high definition visual inspection
- Scan lengths ranging from μm to complete circumferences (200 or 300 mm wafer)
- **Roughness and waviness data from a single scan**
- Programmable and Automated sample positioning (X, Y, theta)
- Customized measurement sequences with multiple scans implemented with a single keystroke
- **Autofocus & closed loop auto-focus system** allows focus to be maintained while scanning over samples with varying topography
- SECS/GEM (Optional)
- Robotic handling (Optional)

360° circular scan





Chapman Instruments

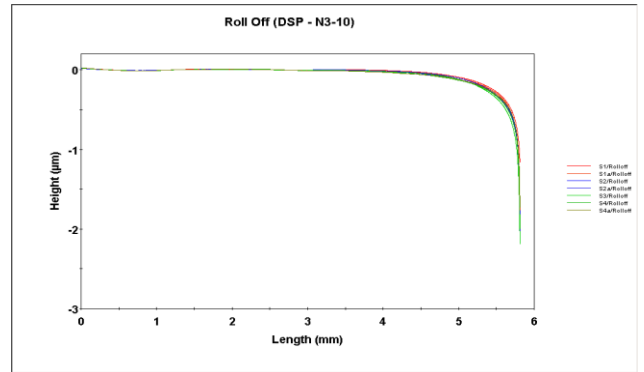
Performance Specifications

Vertical Resolution:	Better than 0.1 nm
Horizontal Resolution:	0.5 μ m
Linear Scan Length:	Up to 100 mm
Circular Scan Length:	Complete circumference of wafer
X and Y Stage Resolution:	1 μ m
Theta Stage Resolution:	0.001 Degree
Data Sampling	50 nm (minimum)

Software

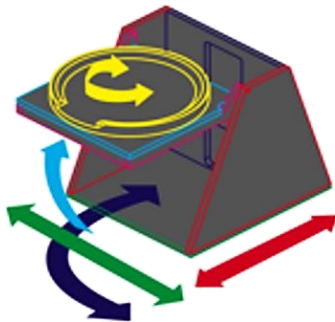
Roughness Parameter	Ra, Rq, Rp, Rv, Rpm, Rvm, Rt, Rz, Rsk, Rku, and more
Waviness Parameter	Wa, Wq, Wp, Wv, Wt
Other Parameters	Histogram, cumulative distribution, power, spectrum, slope etc.
Programmable cut-off filter	SEMI, ANSI B46.1 and ISO standards

Image shows 6 overlapping roll off points of wafer



MPS 5-axis surface profiler

- Ultimate upgrade from MP2100 which enables complete bevel and apex measurement – along and across.
- Wafer handling robot
- Automated multiple scan routines of entire wafer surface area:
Edge bevel, edge apex, notch (or flat)



The solution to Bevel and Apex measurement



For more info, visit www.qesnet.com or email us at vmx-marketing@qesnet.com

