



MD-μQC

Inspection Microscope

TECHNICAL SPECIFICATIONS

SYSTEM

Technology	Non Contact White light Interferometry
Scanner	Closed Loop linear servo
Field of View	86x64μm to 1411x1058μm
Illuminator	Integrated long-life one watt white-light LED
Objective mounting	Threaded objective
Controls	Computer GUI
Part viewing	On-screen display standard
Fine focus travel	20mm of travel
Camera	Industrial VGA 24 bit color
Dimensions (HWD)	8.5" x 4.5" x 3.7"
Weight	215.9 x 114.3 x 94.0mm 2.1kg/4.8lbs
Input voltage	100/240 VAC, 50/60 Hz
Computer	High-performance Dual-core based CPU with LCD monitor (laptop available)
Software	MicroDynamics' μScan

ACCESSORIES

Objectives	Infinite Conjugate interferometric objectives; 2x, 4x, 10x, 20x, 40x, BoreScope
Part Stage	Tooling and fixturing engineered per application: adaptable to CMM and other robotically controlled machinery
Measurement	Lateral Calibration standard
Standards	Precision lateral calibration standard SIC reference flat

PERFORMANCE

Vertical Scan Range	≤ 500μm
Vertical Res.	≤ 10nm
Lateral Res.	0.13 to 2.21 μm, objective dependent
Data scan rate	≤ 20μm/sec
Maximum Data Points	307, 200
Step Height	Accuracy ≤ +/- 0.5% Repeatability ≤ .05% @ 1σ
Capabilities	Automatic Depth, Volume, Screen count, surface roughness (Sa, Sq, Sskew, Skurtosis, Ra, Rt, Rz, Yrms), wall widths, dot coverage
Presentation	2D and 3D graphics, Real time visualization, tabular data Manual feature measurement tools, semi-automated cross section With measurement tools, image capture, and composite Ancillary images

TEST PART CHARACTERISTICS

Material	Various surfaces: opaque, transparent. Coated Uncoated, specular and non specular
Applications	Surface Roughness of any substrate (including soft and fragile Materials); surface characterization; ceramic and metallic anilox; Mechanical, laser, and etched gravure, flexo and litho plate evaluation

ENVIRONMENTAL REQUIREMENTS

Temperature	15 to 30°C (59 to 86°F)
Rate of Temp Change	<1.0°C (1.8°) per 15 min
Humidity	5-95% relative, noncondensing
Vibration Isolation	Required for vibration frequencies in the Range of 1 Hz to 120 Hz



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