



MicroDynamics LLC

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About MicroDynamics

Founded in 2001, MicroDynamics LLC was built with a passion for engineering and quality control. Manufacturer and innovator of the original 3DQC interferometric microscope for anilox cell and roll quality control, MicroDynamics 3DQC Classic™ became the standard tool for true, accurate quality measurements for roll OEMs worldwide.

Our newest system, 3DQC Veritas™, has been engineered to bring the power of true anilox measurements to the shop floor, economically. What was previously only used by top roll manufacturers and large enterprise converters is now accessible to print manufacturers, both integrated and independent.

With a deep commitment to quality, MicroDynamics is proud to be the standard in true, accurate anilox measurement, not only for roll manufacturers, but now for printers and converters globally. When other anilox cameras and measurement methods fail to deliver accurate, repeatable results, companies look to MicroDynamics for the ultimate in anilox measurement performance.

Available Training & Service Programs



QC Inspection Training

Roll preparation, handling, calibration, control variables and key points of inspection



Software & Data Training

Interface navigation, user access, database management, audit storage and data analysis



Flexo & Anilox Training

Roll cleaning & storage, production optimization, audit reviews, maintenance and troubleshooting



SOLUTIONS CATALOG

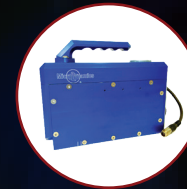
Inspection Instruments, Accessories & Software



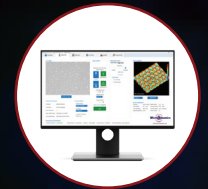
VERITAS™



3DQC CLASSIC™



LASERQC™



MICROSCAN3™

Leader in Accurate Anilox QC
Inspection Solutions & Service

www.microdynamics.net



Contact our team for assistance at 770-924-2770 or visit www.microdynamics.net



**2023 FTA
Technical Innovation
Award Winner!**



VERITAS
noun, Latin
TRUTH

3DQC
VERITAS™

Introducing the **NEW** anilox microscope
Engineered for printers & converters



WATCH NOW

WEIGHT
6.4 lbs
2.9 kg

DIMENSIONS
9.8" x 4.5" x 6.0"
250mm x 115mm x 153mm

POWER
100 VAC 240 VAC
50-60 Hz
< 6 Watts



SPECIFICATIONS

Parameter	10x Interferometer	20x Interferometer
Numerical aperture	0.3	0.4
Working distance (mm)	7.4	4.7
Horizontal resolution (Low Mag, microns)	0.92	0.46
Horizontal resolution (High Mag, microns)	0.46	0.23
Vertical resolution (microns)	0.01	0.01
Field of view at 1x (mm)	0.59 X 0.44	0.29 x 0.22
Field of view at 2x (mm)	0.29 X 0.22	0.15 x 0.11
Field of view in wide field mode (mm)	1.18 X 0.88	0.58 x 0.44
Screen count range (lpi)(lpcm)	60-1000 (25-400)	120-2000 (50-800)

● **UNMATCHED ACCURACY**

White light interferometry for extreme accuracy with +/- 1% measurement repeatability and no damage to the roll.

● **INTUITIVE DESIGN**

Stunning graphics and a modern interface favoring simplicity and ease of use. A status LED on the rear indicates the device is ready, while locking USB and power connectors offer secure, reliable data transfer at super-fast USB 3.0 speeds.

● **SCANS IN < 8 SECONDS**

Manual and automated features capture images and generates reports in less than 8 seconds!

● **ROBUST & DURABLE**

The rugged pressure-formed housing features an ergonomic integrated handle, and the extended machined aluminum base plate keeps the optics protected. Internal optics are designed for increased dust resistance in production environments.

● **FULL INVENTORY AUDITS**

A wide range of line screens and engravings can be measured, allowing you to audit your whole inventory with one precision instrument.

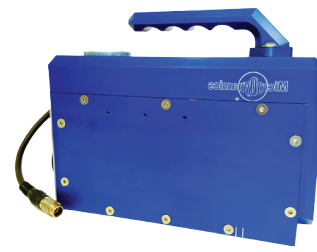


Learn more and request a quote online at
www.microdynamics.net/VERITAS

3DQC

Classic™

The **Original** Pioneer of
Precision Anilox Roll Measurement
Engineered for roll manufacturer QC



LaserQC™

Accurate QC Inspection
*Engineered for Coarse Cylinders &
Specialty Surfaces Under 150lpi*

● UNMATCHED ACCURACY

White light interferometry for extreme accuracy with +/- 1% measurement repeatability and no damage to the roll.

● INTUITIVE DESIGN

User-friendly interface provides a status LED light with locked USB and power connectors for reliable data transfer at fast USB 3.0 speeds.

● ROBUST & DURABLE

Rugged, portable and dust resistant optics, designed for manufacturing environments.

WEIGHT

14.5 lbs
6.6 kg

POWER

100 VAC 240 VAC
50-60 Hz
< 30 Watts

DIMENSIONS

7.3" x 8.4" x 3.5"
185mm x 213mm x 89mm

VOLUME ACCURACY

+/- 2%

MINIMUM ROLL DIAMETER

50mm

DEPTH RESOLUTION

0.1 microns

● PRECISION, HIGH SPEED LASER

Precision, high-speed laser scanner blazes along the roll, covering a huge area and delivering precision results in seconds.

● SCANS LARGE AREA IN < 10 SECONDS

Large scan area of 7 mm H x 5 mm V, with accurate measurement results in less than 10 seconds!

● ROBUST & DURABLE

Ruggedized for the printing plant environment with the same robust design principles used in the Veritas and Classic 3DQC inspection scopes.

Learn more and request a quote online at
www.microdynamics.net

SPECIFICATIONS

Parameter	4x Interferometer	10x Interferometer	20x Interferometer
Numerical aperture	0.1	0.25	0.4
Working distance (mm)	18.5	10.6	1.2
Horizontal resolution (Low Mag, microns)	2.22	0.89	0.46
Horizontal resolution (High Mag, microns)	1.33	0.53	0.27
Vertical resolution (microns)	0.01	0.01	0.01
Field of view at 1x (mm)	1.42 x 1.07	0.57 x 0.43	0.28 x 0.21
Field of view at 1.67x (mm)	0.85 x 0.64	0.34 x 0.26	0.17 x 0.13
Screen count range (lpi)(lpcm)	100-300 (40-120)	300-900 (120-350)	700-1400 (275-550)

Inspection Accessories for Ultimate Accuracy

Compatible with all 3DQC Instruments



Roll Holders

Stabilize and protect your anilox rolls and sleeves during QC measurements



Calibration Stands

Make calibrations faster than ever, while maintaining accuracy and positioning



Vibration Reduction Table

Greatly reduce the amount of vibration that reaches the microscope during scanning

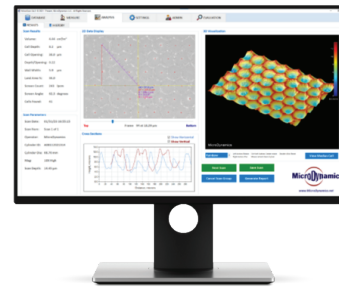


VISUALIZE & ANALYZE

Powerful Software for Actionable Roll Inspection and Analysis

MicroScan³™

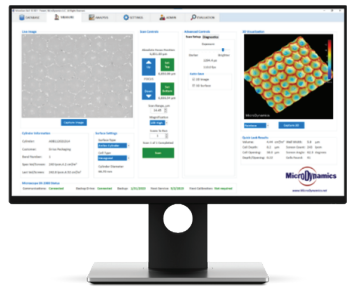
- Volume ●
- Depth ●
- Screen Angle ●
- Screen Count ●
- Roll Wear Over Time ●
- Cell Damage ●
- More! ●



ADVANCED DATA ANALYSIS

Average cell depth, screen count, volume, screen angle, and more are calculated in seconds for analysis.

Measure individual features and see cross sections of the surface along any line you can draw on the image.



MICROSCOPE CONTROL

Adjust focus, set exposure parameters, and snag a quick snapshot with full microscope control within MicroScan.

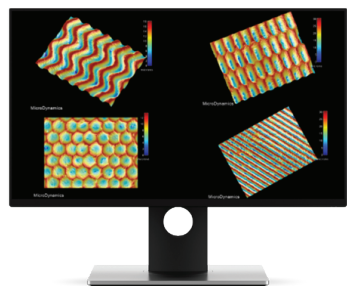
Quickly and smoothly scan the surface in steps as fine as a hundredth of a micron.



POWERFUL DATABASE STORAGE

Save all data from every scan directly in your customizable MicroScan database for instant access to measurement history.

Protect and easily share data using backup and export features.



3D DATA VISUALIZATION

Generate 3D maps of the roll surface with just one click. Roll it around, zoom in and out and view your assets in all angles.

3DQC scan speed makes it possible to scan all over to examine potential problems and check volume uniformity.



AUDIT HISTORY & TREND ANALYSIS

Monitor the volume of your roll as it wears down and predict future roll re-engraving needs and timelines.

Assess roll quality and ROI and weed out poor rolls impacting profitability.

OPERATING SYSTEM Windows 10 or 11

DISPLAY RESOLUTION 1920 x 1080 minimum

SPECIFICATIONS

PROCESSOR Core i7 Generation 10 or newer

COMMUNICATIONS INTERFACE USB 3.1

MEMORY 32 GB minimum

Learn more and request a quote online at

www.microdynamics.net/MICROSCAN