

Make Smarter Decisions Faster with MSI Viking/ZEISS Technical Cleanliness



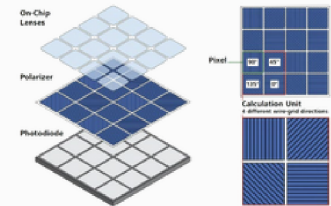
- ✓ Faster standard analyses: Detect shiny metallic particles with only ONE filter scan.
- ✓ Faster particle classification: Combine light microscopy & electron in a seamless, correlative workflow.
- ✓ Faster decision making: Analyze the chemical composition of critical particles to identify the source of contamination.
- ✓ Faster documentation: create cleanliness reports that meet all current industry standards in one work step.
- ✓ Faster particle inspection: Verification with integrated machine learning algorithms.



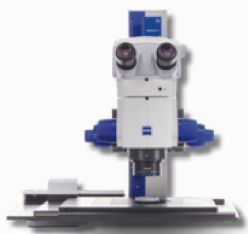
Exclusive Features from Zeiss Microscopy for Technical Cleanliness

Axiocam 705 Polarized Camera:

High resolution 5 mp camera with a polarization filter mask enhanced sensor means faster acquisition with no moving parts – One Scan Technology



Four Configurations of Microscopes depending on application and need:



ZEISS SteREO Discovery.V8
For particle size $\geq 15 \mu\text{m}$
Standard analyses



ZEISS AxioScope 7
For particle size $\geq 50 \mu\text{m}$
Recommended for standard analyses

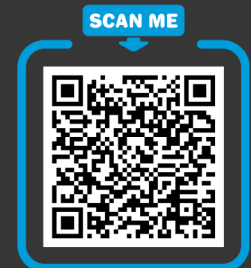


ZEISS Axio Zoom.V16
For particle size $\geq 5 \mu\text{m}$
Recommended for extended analyses



ZEISS Axio Imager 2
For particle size $\geq 1 \mu\text{m}$
Recommended for advanced analyses

Uncover the Microscopic World
Scan QR for more on our products!

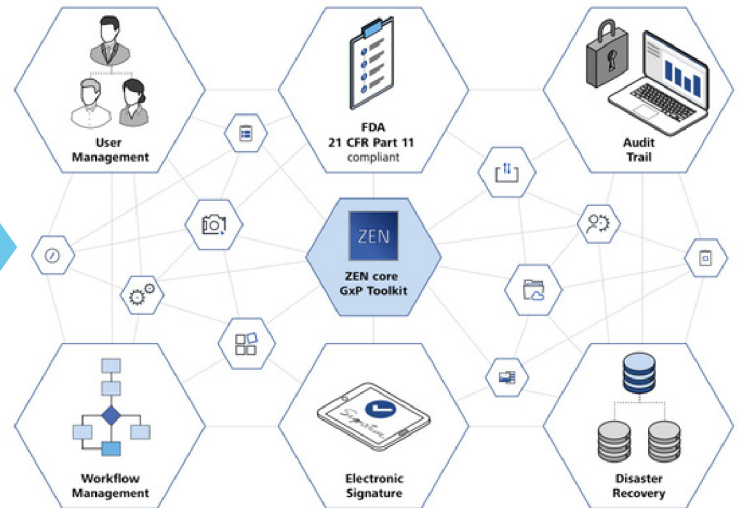


GxP Toolkit Module Exclusive from Zeiss:

Zeiss exclusively provides GxP Toolkit Module for industries who practice GMP procedures to stay in compliance with changing regulations and industry best practices according to regulatory compliances, documentation management, and process validations.

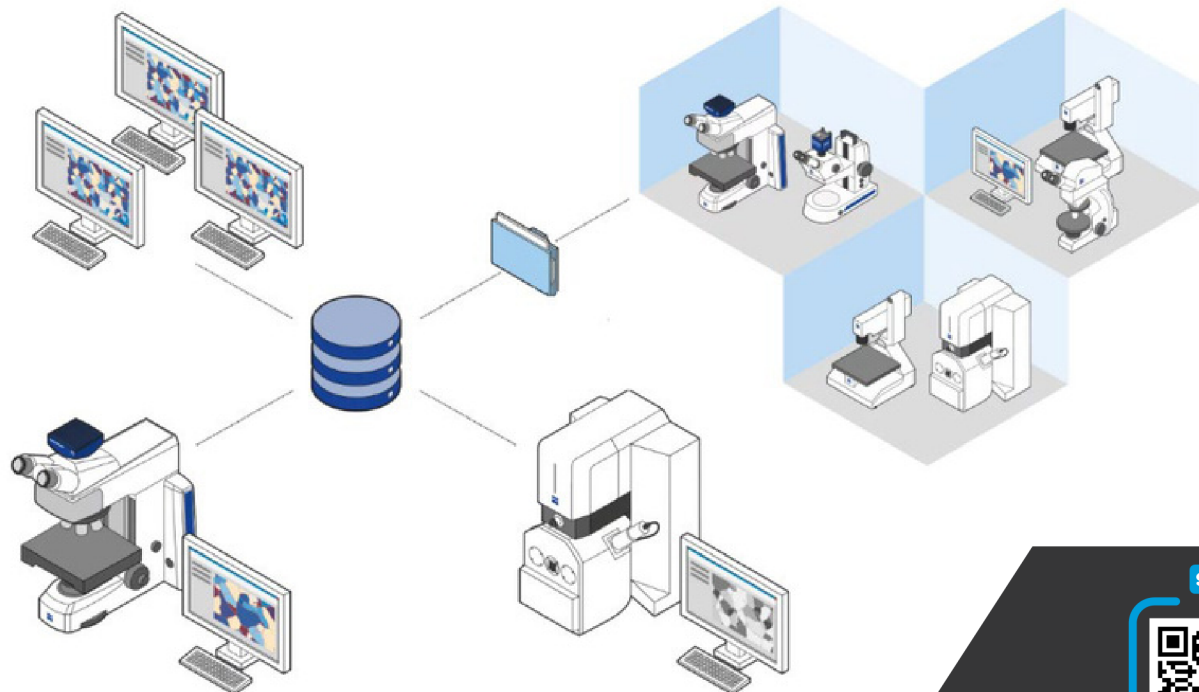


- ✓ Configurable user management
- ✓ Guided workflows
- ✓ Digital signatures for validation
- ✓ A complete audit trail
- ✓ Checksum protection of your data
- ✓ Workflows guide your operators through a defined flow of consecutive tasks ensuring data repeatability.



Central Data Management in Connected Laboratories: ZEISS ZEN Data Storage

ZEN Data Storage enables centralized management of microscope presets, workflows, data and reports—from different systems and locations. Separate microscopy imaging from post-acquisition processing to allow everyone in the lab to work more efficiently.



SCAN ME



Scan QR for Exclusive GxP Toolkit Module Details



Expanding Horizons:

MSI Viking's Collaboration with Glaeser Opens New Avenues in Aerospace, Automotive, and Medical Industries!

Multiple size and configurations of extraction cabinets are available

ACM 17



ACM 17 Extraction Cabinet for Small Components

- Analysis is (500mm) with half round basin (Ø 300mm) with polished stainless steel
- For components weighing up to 3 kg
- Extraction area ISO 5-class like due to supplying of filtered air over the flow cap top.
- 12" Basic touch screen with intuitively operable software
- Lifting and tilting membrane holder with three individual cascade rings; fitting up to three membrane filters.
- Extensive concept of explosion protection
- Exhaustion Opening: Exhaustion of up to 90% of arising emission of aerosol.

ACM 18



ACM 18 Extraction Cabinet for Midsized Components

- Analysis area (600 x 750 mm) with polished stainless steel
- For components weighing up to 15 kg
- Extraction area ISO 5-class like due to supplying of filtered air over the flow cap top.
- 12" Basic touch screen with intuitively operable software
- Optional available: Comfort touch panel with keyboard with glass surface and separate pen
- Lifting and tilting membrane holder with three individual cascade rings; fitting up to three membrane filters.
- Optional internal flush: for testing of interior geometries and surfaces
- Extensive concept of explosion protection

RIUS SINGLE



RIUS Single Extraction Cabinet for Large Components

- Analysis area (1190 x 820 x 780mm) with polished stainless steel
- For components weighing up to 100 kg
- Optional available Manipulator for very heavy components
- Wall flushing: automatic cleaning of all four walls
- Slantwise mounted openings, optional available fixed gloves interventions
- Extraction area ISO 5-class like due to supplying of filtered air over the flow cap top
- 12" Basic touch screen with intuitively operable software
- Optional available: Comfort touch panel with keyboard with glass surface and separate pen
- Lifting and tilting membrane holder with three individual cascade rings; fitting up to three membrane filters
- Extensive concept of explosion protection
- Many other available options for customization

RIUS DOUBLE



RIUS Double Extraction Cabinet - Two workplaces but only one machine

- Two workplaces: Two analysis areas (800 x 800 x 800 mm/ 300 mm half round basin with polished stainless steel)
- For components weighing up to 100 kg
- Extraction area ISO 5-class like due to supplying of filtered air over the flow cap top
- Wall flushing: automatic cleaning of all four walls
- 12" Basic touch screen with intuitively operable software
- Optional available: Comfort touch panel with keyboard with glass surface and separate pen
- Lifting and tilting membrane holder with three individual cascade rings; fitting up to three membrane filters
- Extensive concept of explosion protection
- Many other available options for customization

Quality Meets Affordability:

MSI Viking Unveils Metkon's Premium Metallographic Solutions!



Precision and Abrasive Cutting Products

Servocut Abrasive Series



- Extraordinary access for easy handling
- X-Y-Z three axes cutting capability
- Programmable with colored HMI touch screen controls
- Ergonomic Joystick control offers excellent application versatility
- Most versatile metallographic cutting machine in its class – Up to 600mm blades

Micracut Precision Series



- **MICRACUT 200-S** is a high-speed automatic precision cutting machine that used for precise and deformation-free cutting of Metals, Ceramics, Electronic Components, Crystals, Composites, Biomaterials, Sintered Carbides, Minerals, etc.

Metallographic Programmable Automatic Mounting Press with Dual Cylinders

ECOPRESS 202



- Wide selection of mould assemblies from 25 to 50 mm in diameter are available.
- Two mounts can be produced simultaneously with the use of an intermediate ram.
- ECOPRESS 202, available with dual cylinder can produce four mounts at a time offering perfect solution for labs with high specimen throughput.

Metallographic Grinding and Polishing Products

FORCIPOL 202

Series of instruments are available as Single wheel (FORCIPOL 102) and Dual wheel (FORCIPOL 202) Units.



- FORCIPOL instruments are designed to modular configuration for manual, semi-automatic and programmable automatic equipment.
- When only manual preparation is required, FORCIPOL Control Unit can be fitted on the FORCIPOL grinder / polisher.
- If automatic operation is required in the future, one of the FORCIMAT automatic heads can be installed at any time.
- Optional DOSIMAT peristaltic fluid dispensers are available to increase automation capability.

Comprehensive Range of Consumable Products to Suit Your Needs



Automatic Programmable Grinding and Polishing System

VELOX 102 Fully Automatic Programmable Grinding/Polishing System is developed for operator free sample preparation for high volume sample throughput starting from Planar Grinding to Fine Grinding/Polishing/Fine Polishing/Cleaning and Drying.

VELOX 102



- Planar grinding station
- Fine grinding/polishing station
- Fully automatic sample cleaning and drying station
- Fast automatic grinding/polishing disc replacement system
- Automatic sample holder replacement & feeding system
- Automatic peristaltic dosing unit.

ACCURA 102 is an advanced high-end grinding and polishing system, which has robust construction on dual columns for applications requiring extremely flat specimen surfaces.

ACCURA 102



- Suitable for both Ø250 and Ø300 mm applications.
- Motorized positioning of the Head in vertical (Z) and horizontal (X) axes with memory function.
- Precise control of the force applied.
- Combined with optional grinding depth measurement system.
- Ability to store and recall preparation programs on the LCD screen. Peristaltic Dispensing Unit.

Comprehensive Range of Consumable Products to Suit Your Needs



UNITRON and MSI Viking Join Forces: Affordable Excellence in Routine Microscopy!

MSI
VIKING

UNITRON



Stereo microscopes for Magnification Ranging from 5x – 160x with Wide Ranges of Illumination Options

Z645 Stereo Microscope



- Routine microscope for inspection
- High resolution at an affordable price
- Engagable click stops at magnification that ensure calibration
- Variety of stands available such as base lighting, and boom style

Z10 Zoom Stereo Microscope



- Higher magnification stereo up to 160x (using 10x23 eyepieces)
- More flexibility and options for illumination
- Tilting and extending eyepieces for ergonomics
- Variety of stands available such as base lighting, and boom style

Upright microscopes for magnifications ranging from 50x – 1000x

EXAMET-5 Microscope



- 50x up to 1000x optical magnification
- Mechanical Stage: 175mm x 145mm with a 76mm (X) x 42mm (Y) movement range
- Digital cameras up to 20mp
- Transmitted and reflected light polarization available

Inverted Metallurgical Microscopes for Magnifications Ranging from 50x-1000x

Versamet 4 Microscope



- With brightfield, darkfield, DIC, and Polarized light with magnification range from 50x-1000x
- Outstanding image resolution and clarity
- 50x up to 1000x optical magnification
- Mechanical Stage: 240 x 250mm integrated three-layer mechanical stage; movement range: 50 x 50mm; X-Y
- Supports a variety of observation methods including brightfield, darkfield, polarized light, DIC
- Digital cameras up to 20mp
- Compatible software available for metallurgical applications such as grain analysis, INCLUSION, SPHERODIZATION, COATING THICKNESS, porosity

UNITRON and MSI Viking Join Forces: Affordable Excellence in Routine Microscopy!

MSI
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ASH

Digital microscopes for visual inspection and calibrated image measurements

AshCal™ Omni 3 is factory calibrated to ISO 17025 before shipping.

OMNI 3 DIGITAL MICROSCOPE SYSTEM



- **RTLDC™ Real-Time Lens Distortion Correction** Lens distortion is inherent in all microscopes. Image distortion at the outer edges of large samples is automatically corrected by the Omni 3.
- **Digital microscopes for visual inspection and calibrated image measurements**
- **Repeatable Measurements** Automatic edge detection for repeatable and reproducible patented measurements that reduce variability between users.
- **Customizable Workflows** Create custom workflows to standardize and control inspection processes from user to user.
- **User Privileges** User privilege settings enable operational control and traceability. Assign multiple users with access to different settings and features improving security and streamlining the inspection process.
- **Interchangeable Lighting** Multiple types of interchangeable lighting are available, including Ring Light, Dome Light, Polarized Light and UV Light to address any inspection application.
- **Image Stamping** Image Stamping with time, date, user, and magnification level. Easy documentation & traceability for accurate quality control records using image capture to USB key.
- **Save to Network** Networking enables direct saving to the server or cloud for increased workflow efficiency.
- **Email Save** time by emailing directly from Omni 3
- **Internal & External Storage** USB and internal storage of images or graticule files for off network saving.

Most units are IN STOCK for prompt delivery.

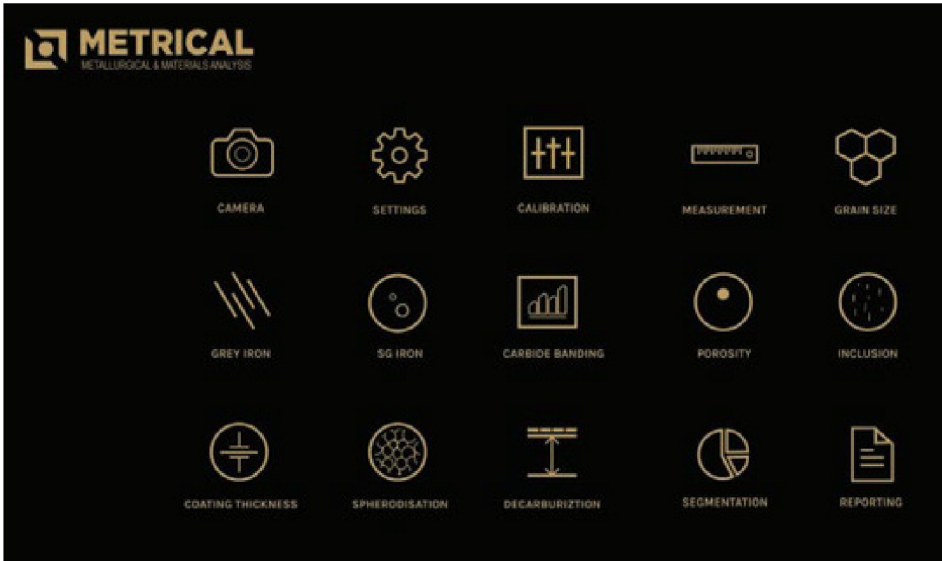
Scan QR for a complete selection of Digital microscopes



Metrical: The Tailored Metallurgical Software Revolutionizing Metal Industries!

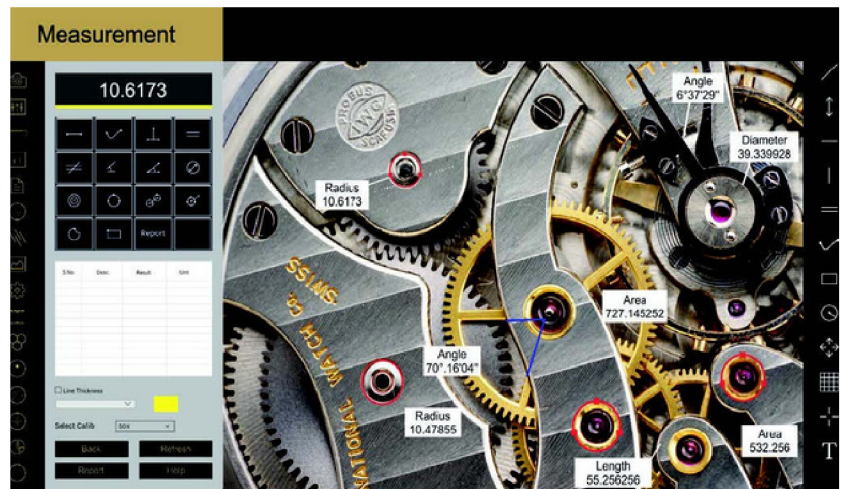
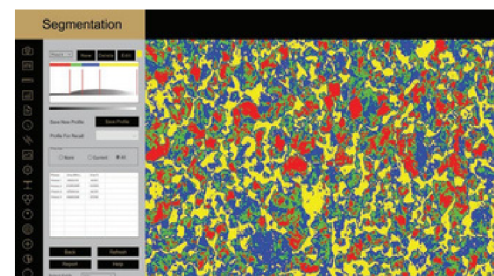
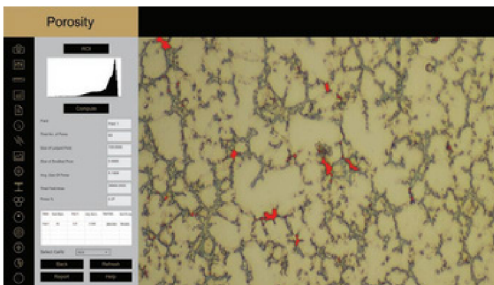
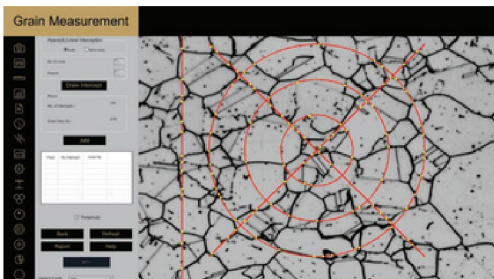


Metrical is a modular quantitative image analysis software Specific to Metal Industries.



Modules include:

- **GRAIN SIZE**
- **POROSITY**
- **SEGMENTATION**
- **DECARBURIZATION**
- **SG IRON**
- **GRAY IRON**
- **CARBIDE**
- **COATING THICKNESS**
- **SPHERODIZATION**
- **INCLUSION**
- **REPORTS**



Scan QR for more information



Enhancing Precision: Measuring Microscopes by MSI Viking with Mitutoyo and Metlogix Metallurgical Software.

MSI
VIKING

Mitutoyo

Measuring Microscopes MF/MF-U Series



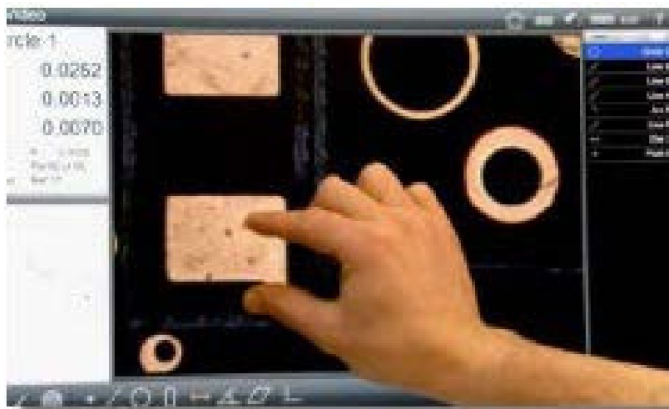
High-accuracy Measurement: X/Y Axis: $(2.2+0.02L)$ μm

- Dark field
- Bright field
- Polarized
- Differential interference contrast
- A Wide Choice of Stage Size: 100×100 mm to maximum-inclass 400×200 mm.
- Motorized Z available
- Uses class leading Metlogix software

Paired with Metrology Software from Metlogix with auto edge detection

MetLogix

Robust and reliable machine/camera calibration can be achieved using popular machine and video correction methods. Linear Error Correction (LEC), Segmented Linear Correction (SLEC), Non-Linear Error Correction (NLEC), Orthogonality, Pixel Size, Camera Skew, Parcentricity, and Field of View.



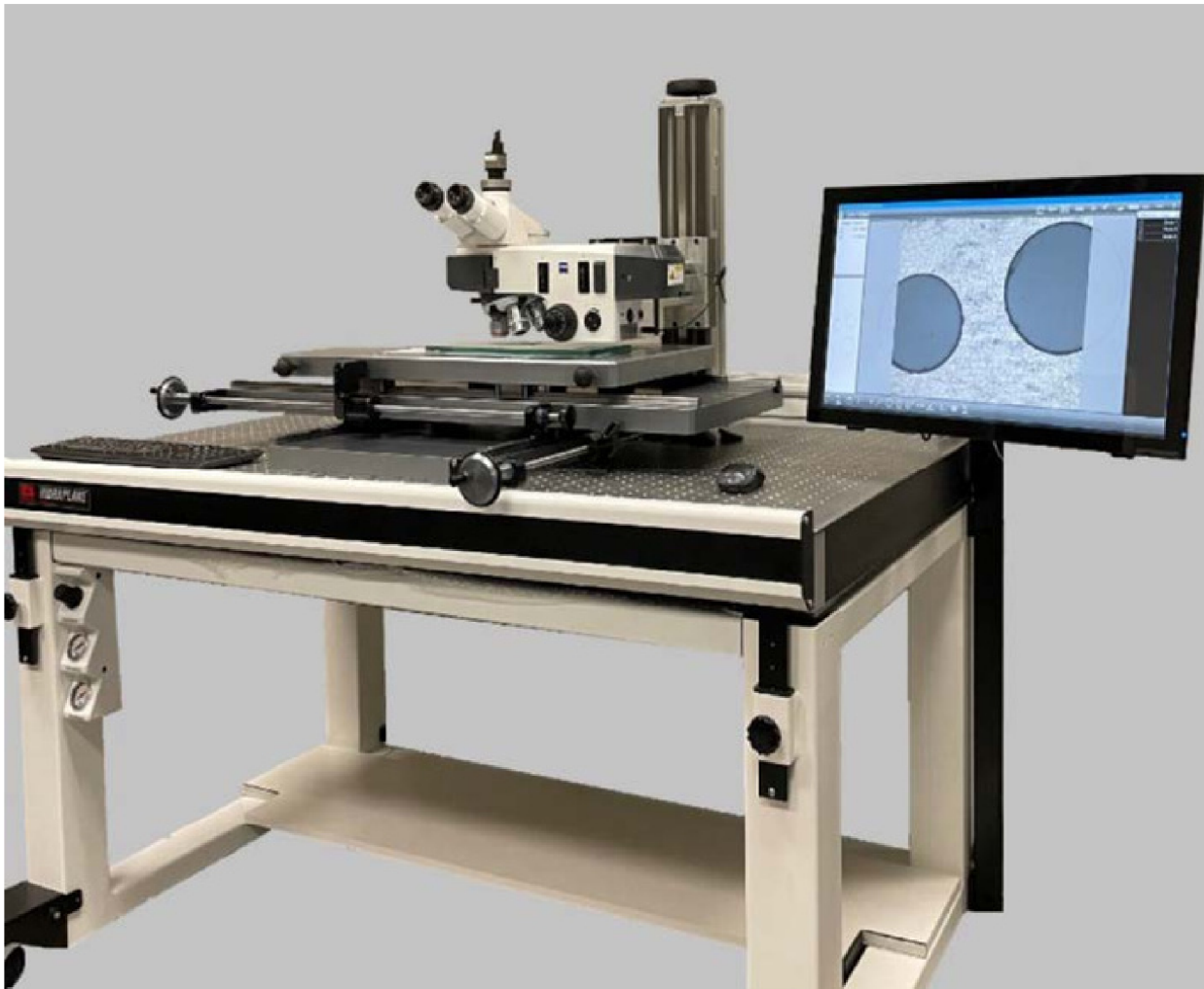
- Optical edge detection
- Geometric functions
- XY, XYZ or XYQ axis support
- Data Reporting/Export
- Partview Display
- Part programing and playback
- Tolerancing
- Feature annotation
- Video edge detection
- Video image archive
- Image markup

Scan QR for more information





Precision and Stability Redefined: MSI Viking's Custom Microscope Solutions.



- Custom Microscopes designed to inspect unique specimens that are not easily accommodated under traditional out-of-the-box microscopes. (Ex. battery cells and modules)
- High accuracy measuring stage up to 600mm x 300mm travel. Scale Resolution .1um
- World Renown Zeiss Optics for exceptional clarity.
- Stable anti vibration table for industrial environments.
- Metrology Software from Metlogix with auto edge detection
- ISO17025 Calibration included.

Scan QR for more information

