

## **CMM Verification & Calibration Services**

## Precision solutions to ensure your CMMs deliver reliable results, every time.

#### Verification:

- An "as-found, as-left" process verifying the performance accuracy of a CMM.
- · Compares CMM accuracy to certified calibration standards.
- · No adjustments are performed during verification.

#### Calibration:

- · Restores your CMM to original OEM accuracy with precise adjustments and error mapping to correct deviations.
- · Includes measuring a verified artifact and comparing results to its established dimensions.
- · Adjustments ensure the CMM as accurate as when it left the factory.

### **Key Takeaways**

Verification ensures your CMM meets operational standards, while calibration restores it to optimal accuracy. Both processes are essential for maintaining measurement integrity and meeting quality requirements.









#### Checklist of items Performed During Calibration Service:

- · Visual inspection of bearings, belts, and scales.
- · Cleaning of machine components and workspace.
- · Proper air pressure and air quality at the regulator is checked.
- · Environmental assessment for temperature and humidity.
- · Verification of machine repeatability and accuracy.
- Adjustments to error map and alignment corrections as needed.
- · Comprehensive reporting of 'as-found' and 'as-left' data.
- Certification with traceable artifacts to ISO 10360-2 and ASME B89.4.22 standards.

#### Levels of CMM Calibration Available:

- 1. Level I: Includes CMM verification only.
- 2. Level II: Includes A2LA-accredited calibration with before and after readings.
- 3. Level III: Includes all the above with Laser Interferometer measurement for CMMs over 1 meter.

#### Preventative Maintenance:

- Enhance CMM longevity with routine preventative maintenance services.
- Includes through inspections, component cleaning, and adjustments to optimize performance and minimize future downtime.

#### Accreditation and Standards:

All calibration services provided by MSI Viking are accredited by A2LA to ISO/IEC 17025-2017. This accreditation ensures our services meet the highest standards of quality and competence.

#### Multi-Brand Expertise:

We calibrate all leading CMM brands, including Hexagon, Zeiss, Mitutoyo, Wenzel, LK Metrology, and others.















# **Complete CMM Support & Training Solutions**

## Comprehensive Support for Your Precision Measurement Needs

From retrofits to training, we're here to optimize your equipment and empower your team.



### 1. CMM Retrofits & Upgrades

- · Upgrade hardware and software to boost performance.
- Compatible with popular software like PC-DMIS, Calypso, PolyWorks, MCOSMOS, CMM-Manager, Metrologic, and more.



## 2. Dimensional Inspection Services

- · High-precision inspection for complex geometries and tight tolerances.
- · Advanced software expertise, including PC-DMIS, Calypso, MCOSMOS, and PolyWorks.



## 3. Customizable Training Programs

- Popular Courses: Quality 101, Print Reading, GD&T Fundamentals, Basic Dimensional Measurement Tools, Gage Calibration Methods, and more.
- . Join us at an MSI Viking facility or opt for custom on-site training tailored to your needs.



#### 4. CMM Relocation Services

- Secure decommissioning, transport, and recommissioning.
- · Environmental assessments to ensure optimal conditions.

## Other High-Precision Metrology Instruments Calibrated:

- · Optical Comparators
- · Vision Measurement Systems
- · Optical Shaft Measurement Systems
- Surface, Form & Geometry (SF&G) Measurement Systems
- Universal Measurement Machines
- And more.



Partner with MSI Viking for End-to-End CMM and METROLOGY SOLUTIONS!

From calibration to upgrades and retrofits to advanced training, our experts are ready to support your measurement goals.



