

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.



