

# **PRECISION METROLOGY SYSTEMS**

# FOR INDUSTRIAL QUALITY CONTROL

Precision metrology systems play a critical role in empowering manufacturers to enhance productivity and maintain exceptional quality standards. These advanced solutions leverage data-driven insights and cutting-edge technologies to streamline processes across the entire manufacturing workflow—from design and engineering to production and quality assurance.

MSI Viking has a comprehensive portfolio of metrology hardware, software, and services. These systems enable accurate measurement and control, driving smarter and more efficient manufacturing practices. As trusted partners in industrial quality control, these solutions support industries in optimizing operations and achieving superior performance in an increasingly competitive landscape.



Hexagon's Global and Leitz CMM models offer advanced measurement solutions tailored to varying inspection needs, from general purpose to ultrahigh accuracy applications. Designed for adaptability and future scalability, these systems support a range of sensor, software, and accessory options for optimal inspection performance.

### **SALES LINE CARD HIGHLIGHTS:**

- Global Series: Highspeed, high throughput scanning for production environments.
- Leitz Series: Ultraprecision measurements for the tightest tolerances.
- AutomationReady: Seamlessly integrates with robotic automation.
- Modular Upgrades: Flexible options to meet evolving inspection needs.





The Hexagon Optiv M series offers multisensory CMM solutions designed for general purpose precision measurement of complex components across various materials and finishes. Equipped with optical, tactile, and rotary capabilities, the Optiv M series provides a versatile and scalable platform that supports seamless automation integration, ideal for smart manufacturing environments.

#### SALES LINE CARD HIGHLIGHTS:

- Multisensory Measurement: Combines camera, touch, and rotary sensors for versatile inspections.
- Modular & Upgradeable: Futureproof with infield upgrade options.
- Automation Ready: Integrates easily with IoT and automation solutions.

# Laser Tracker Systems



Hexagon's Laser Tracker Systems, including the Leica Absolute Tracker series, are designed for precision, speed, and flexibility in large-scale metrology. With advanced features like long-range 3D scanning, high-speed dynamic measurement, and robust automation capabilities, these trackers enable seamless, high-accuracy measurement for complex applications across industries.

#### FEATURED HIGHLIGHTS:

- Long-Range Scanning: Supports ultra-long-distance, contactless 3D measurement.
- Dynamic Tracking: Capable of real-time, high-speed measurements
- Portable & Durable: Built to withstand challenging environments.









Hexagon's ATLASCAN Max and MARVELSCAN handheld 3D scanners are tailored for versatility and ease in precision measurement. ATLASCAN Max offers wireless functionality, freedom from fixturing, and three distinct scan modes, ideal for flexible, high-accuracy scanning across complex geometries. MARVELSCAN enhances scanning with photogrammetry, providing augmented accuracy without targets or restrictions, perfect for large parts or environments with limited accessibility.

#### **FEATURED HIGHLIGHTS:**

- ATLASCAN Max: Dynamic, wireless scanning with multi-mode adaptability.
- MARVELSCAN: Photogrammetry-enabled, targetless for broad area coverage.





ViciVision high-speed optical measuring systems deliver best in class speed, accuracy, and reliability for shop floor measurement of shafts, cylinders, and other turned, ground, or extruded parts. ViciVision systems can accommodate parts from 8mm to 180mm in diameter and from 100mm to 1250mm in length. ViciVision advanced software enables measurement of lengths, diameters, distances, angles, radii, form, position, runout, and profile tolerances. Add CAD comparison and other specialized software to measure threads, camshafts, and crankshafts. Optional touch and confocal probe systems to detect features such as keyways, shafts with splines, gear teeth, and more.

#### **APPLICATIONS**

- Crankshafts
- Camshafts
- Turning
- Operations
- Screw Machine
- Operations
- Turbines
- Dental Implants
- ·Valves & more



## **METRIOS LARGE FOV OPTICAL SYSTEMS**

Metrios is an automated optical measuring system with large field of view (FOV) for fast, accurate, and easy to achieve measurement results. Simply "place and press" for instantaneous measurements! The most complete lighting systems in its category, Metrios performs the measurement through a non-contact system, consisting of a high-resolution camera and three different lighting systems. Through a motorized ring light illuminator, Metrios can change the angle of incidence of the lights on the part and provide different angles of the light source within the same measurement cycle.

Precision Machined Part

## **APPLICATIONS**

- •Punched Parts
- •Flat Gears
- Fasteners

- Molded Plastic Parts
- Sealings



