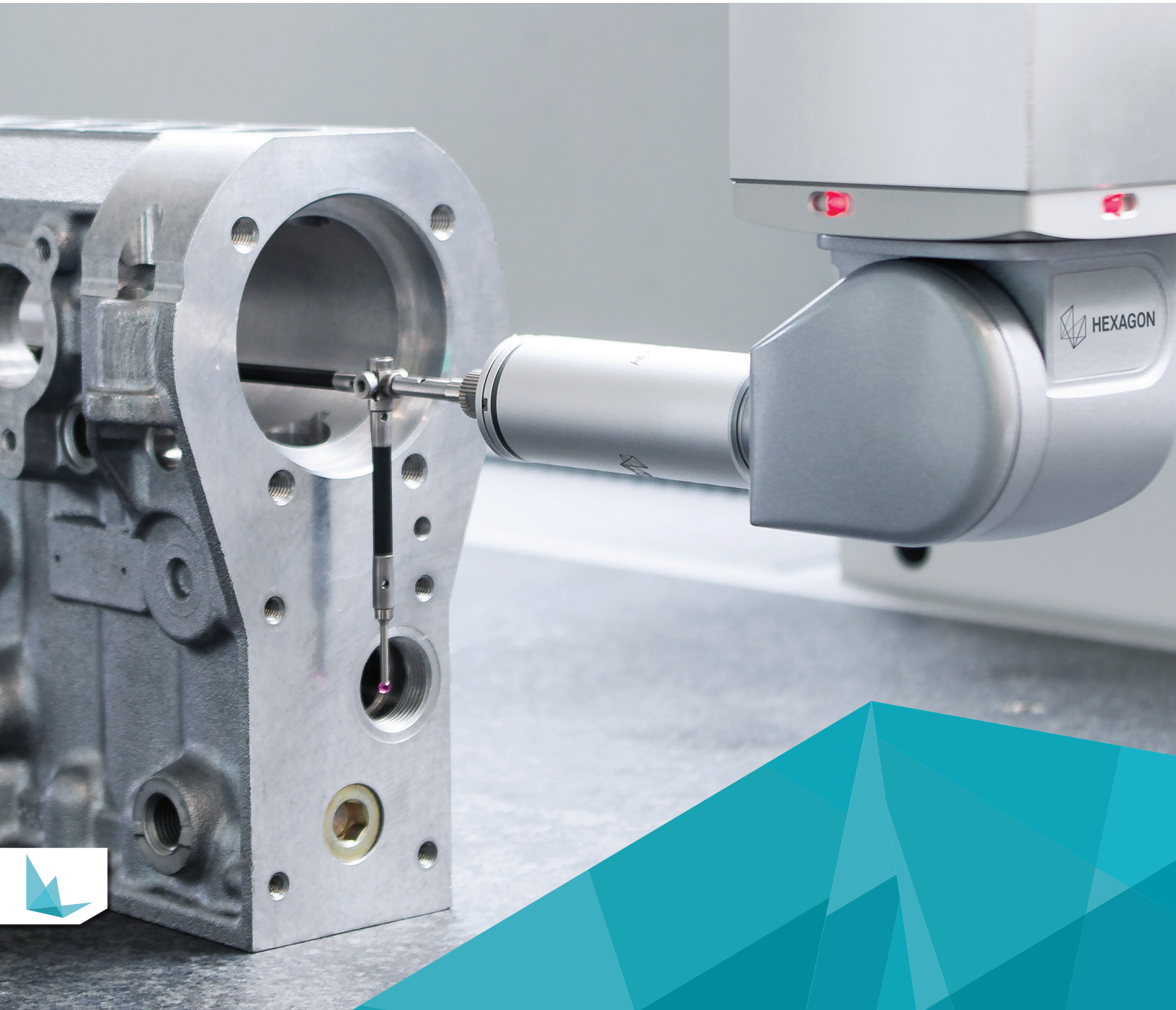


GLOBAL

COORDINATE MEASURING MACHINES







TAILORED FOR MAXIMUM PRODUCTIVITY

Scalability and scope are the hallmarks of the GLOBAL coordinate measuring machine range. Offering optimal measurement performance across a wide range of models to fit any type of job, they enable companies of all sizes to select the perfect fit to improve production quality.

“ The precision and quality of the gearboxes we manufacture are not negotiable. The GLOBAL Advantage CMM has increased our ability to maintain high quality standards without causing longer lead times.”

**Tim Cook, Quality Technician,
Bonfiglioli**



ACCELERATE YOUR PRODUCTIVITY

With accuracy starting at 1.3µm, GLOBAL CMMs combine precision with speed ensuring high productivity while maintaining the degree of precision you expect from the leader in metrology. From accurately measuring parts with tight tolerances to increasing your inspection throughput, GLOBAL machines are equipped to meet your unique production requirements.

In addition to the standard size offerings, Hexagon Manufacturing Intelligence is equipped to build GLOBAL frames to custom ranges and specifications upon request.



GLOBAL Performance

Offering better results for more sophisticated measurement tasks and high-tolerance parts, GLOBAL Performance machines provide a wide range of inspection methods including outstanding scanning operations. Easily upgraded to accommodate a variety of contact and non-contact scanning sensors, it is a versatile multi-purpose machine which will exceed expectations for manufacturers in diverse industry sectors.

GLOBAL Advantage

An advanced package that combines accuracy and speed to maximize throughput, GLOBAL Advantage machines feature a high performance analog scanning probe, thermal compensation and advanced software as standard. Perfect for inspecting complex geometries or free-form surfaces efficiently, optimized motion dynamics and state-of-the-art electronics ensure excellent productivity while maintaining the characteristic flexibility of the GLOBAL range.

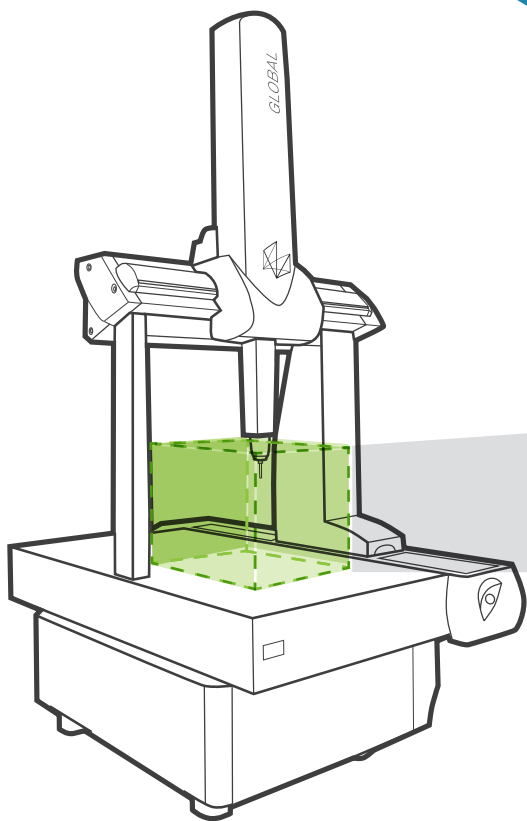
GLOBAL EVO

Optimized for high performance tactile scanning and offering best-in-class throughput, GLOBAL EVO is the ideal solution for manufacturers who require higher productivity in dimensional inspection. Scan at high speeds without compromising accuracy and performance via patent-pending Compass Technology. Overall performance is further improved by Scan Pilot (for undefined path scanning measurements) and Fly2 Mode (second generation motion trajectory optimization). In addition, the new Eco Mode energy saving function will contribute to a reduction of machine operating costs.

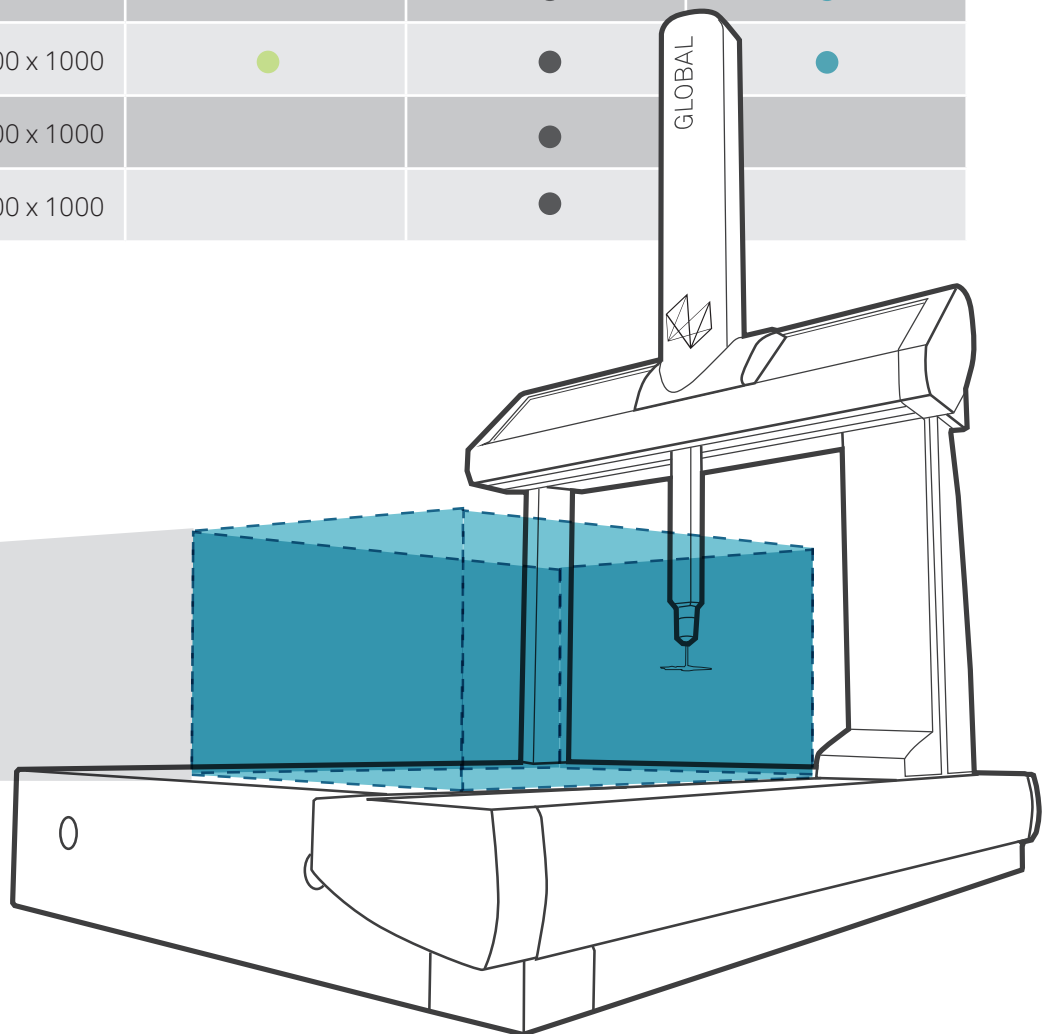
ACCESS YOUR AXIS

GLOBAL CMMs are offered in a wide range of workspace capacities to accurately measure virtually any size and shape work piece. From printed circuit boards to large complex geometries with hard to reach features, GLOBAL has a CMM frame to fit the job.

As a guideline to properly size your CMM, consider choosing a machine whose X, Y, and Z measuring ranges are twice the width, length, and height of the largest part you need to measure.



CAPACITY		GLOBAL PERFORMANCE	GLOBAL ADVANTAGE	GLOBAL EVO
SIZE	STROKES (mm)			
5.5.5	500 x 500 x 500	●	●	
5.7.5	500 x 700 x 500	●	●	
7.10.7	700 x 1000 x 660	●	●	●
9.12.8	900 x 1200 x 800	●	●	●
9.15.8	900 x 1500 x 800	●	●	●
9.20.8	900 x 2000 x 800	●	●	●
12.15.10	1200 x 1500 x 1000	●	●	●
12.22.10	1200 x 2200 x 1000	●	●	●
12.30.10	1200 x 3000 x 1000	●	●	●
15.22.10	1500 x 2200 x 1000		●	
15.30.10	1500 x 3000 x 1000		●	



EQUIPPED TO BE EFFECTIVE

Configuring a GLOBAL CMM to accomplish your measurement goals has never been easier. With an extensive offering of probes, probe heads and styli available on the GLOBAL CMM line, Hexagon can tailor a solution to meet your specific needs. With this type of flexibility, a GLOBAL solution can be configured to handle any measurement demand and can adapt if needs change down the road.



PROBE HEADS

The probe head forms the heart of every coordinate measuring machine. Combined with a probe, it generates the measurement data during inspection cycles. Manual heads for touch trigger probes provide excellent basic capabilities. Automatic probe heads extend that capability with a kinematic joint for the coupling of scanning probes and laser scanners.



TOUCH TRIGGER PROBES

Touch trigger probes offer fast and repeatable 3D measurements. Offering a precise and high throughput inspection method for maximum productivity, our range of touch probes ensures excellent accessibility for virtually any part measured on a GLOBAL CMM. An optional tool changer also allows multiple probe types to be used automatically within a single program to maintain accuracy and operational efficiency.



SCANNING PROBES

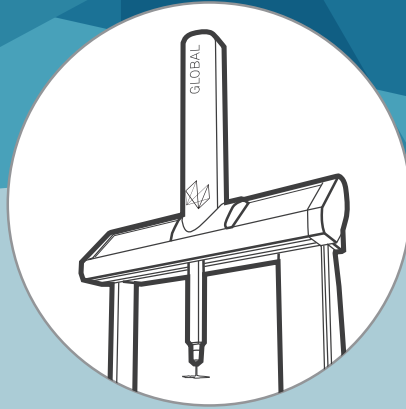
When large amounts of data are required, scanning will yield higher quality results in less time than the touch-trigger method. With more data, measurement uncertainty is decreased and the repeatability of the measuring process is increased, ensuring greater confidence in the results. Hexagon offers scanning probes ranging from heavy duty fixed probes capable of reaching deep part features to lightweight scanning probes attached to articulating heads for quick feature measurement changes.



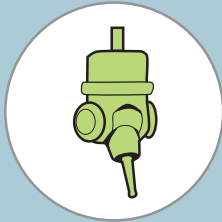
NON-CONTACT SENSORS

Ideal for small and flexible parts, non-contact vision or laser-scanning sensors enable GLOBAL CMMs to measure either a complete field of view or a smaller region of interest such as a hole or edge. Specialist software options allow the machine to utilize these sensors effectively without changing setups or compromising on efficiency. Using point clouds generated from scanning, GLOBAL CMMs can provide the data necessary for reverse engineering and prototype modelling.

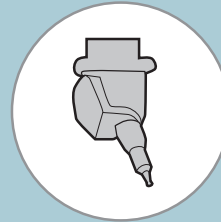
PATHWAY TO PRODUCTIVITY



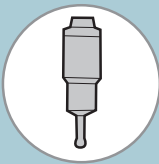
Manual Probe Heads
HH-T • HH-MI



Automatic Probe Heads
HH-A • HH-AS



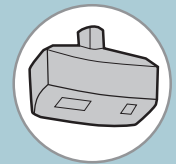
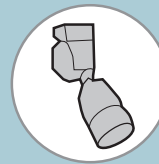
Touch Trigger Probes
HP-T • HP-TM • HP-T-RP



Scanning Probes
HP-S-X1 • HP-S-X3 • HP-S-X5



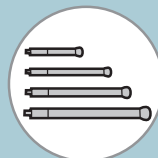
Non-Contact Vision & Laser
HP-C-VE • HP-L



Styli Kits



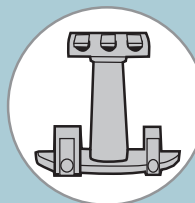
Specialized Styli



Adapters & Accessories



Probe Changing Racks
HR-R

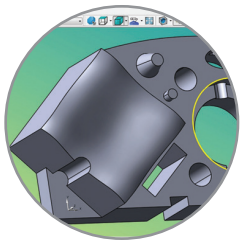


Styli Changing Racks
HR-XS-900



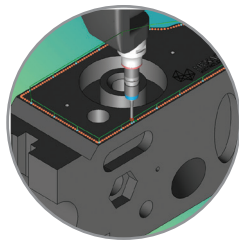
THE RIGHT TOOL FOR THE JOB

Software is the essential keystone between user and machine. We believe creating, editing and executing part programs should be intuitive, fast and adaptable. While ensuring parts meet quality standards is critical, not all parts have the same measurement requirements. To meet these quality standards, you have multiple software configuration options ranging from novice to expert to ensure that efficient part programming and accurate actionable results are possible.



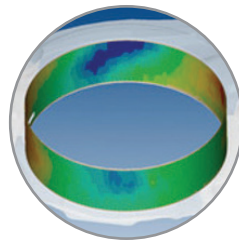
PC-DMIS CAD

CAD is ideal for makers of prismatic parts that want to integrate CAD into their inspection operations. It allows users to program and inspect parts using CAD models ranging from simple 2D blue prints through full 3D solid models. While guiding users through the programming process, CAD offers the user an interface that allows them to finalize their programs more quickly, improving productivity.



PC-DMIS CAD++

CAD++ lets users measure complex parts. It includes all the capabilities of CAD and adds the ability to measure complex, contoured surfaces including thin-walled sheet metal, plastic, blades, dies and molds. CAD++ supports numerous scanning devices and applications and includes algorithms for managing large amounts of data. It links to CAD, allowing users to compare measurement results directly against models for unsurpassed speed and accuracy. It is feature rich, yet easy to use. PC-DMIS is the most used measurement software in the world.



QUINDOS

QUINDOS is ideal for the most complex measurement tasks and special analyses. Allowing users to measure at a sub-micron level, QUINDOS is perfect for special part geometries and other functional extensions. From R&D and part prototyping to production, QUINDOS is the ultimate developer tool for users looking to take a deeper dive into metrology.



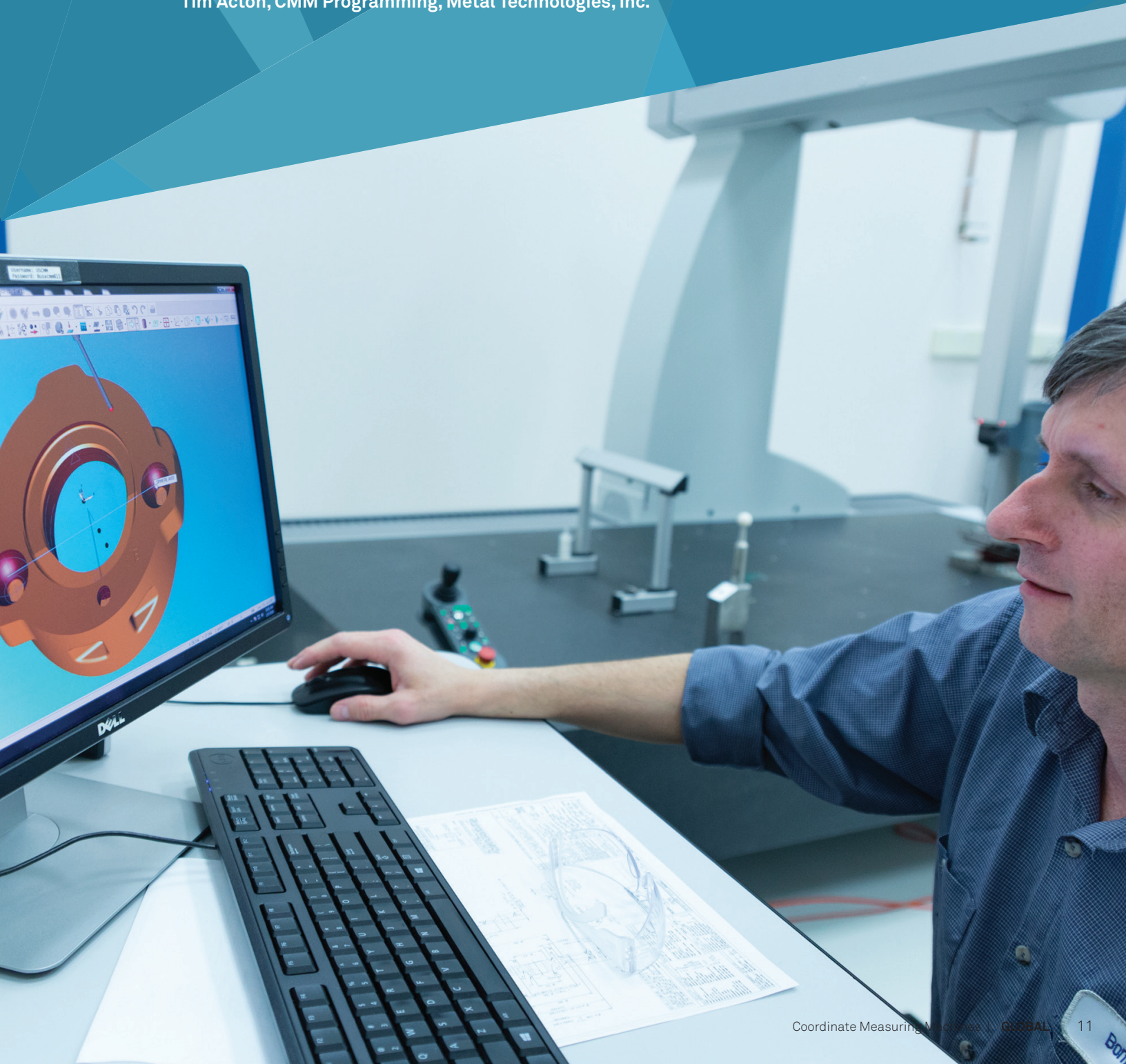
MMS PULSE

MMS PULSE uses a network of sensors to record variations in temperature, vibration and humidity in the vicinity of your CMM. Also offering equipment status alerts and crash notifications, MMS PULSE creates a central dashboard of information for operators to access at any time. It provides a comprehensive picture of your inspection activities, suggests optimal measurement efficiencies and provides actionable information for your quality environment. Available on select models.



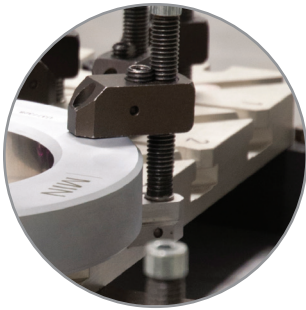
“Hexagon provided the desired software features and packaged it (through menu driven icons) into a product that was very easy to learn. The point and click icon menus make it simple to teach the operators how to run a program for production measuring requirements. The online training and trouble ticket system has made it very easy for me to find the answers I need that might have taken me a few days to resolve in the past.”

Tim Acton, CMM Programming, Metal Technologies, Inc.



TAILOR YOUR PROCESS

Take your measurements further with options and accessories that will enhance your metrology experience.



PROPERLY PLACED PARTS MEAN ACCURATE RESULTS

When parts are not properly fixed to the CMM, a carefully developed part program may generate useless results; let our experts help you devise the best method to hold your part on your CMM. We can assist customers in designing custom fixtures that will not only save inspection time but money as well. In addition, we can help set up a calibration routine that will ensure your fixtures are properly holding your parts for the inspection process.



ACCELERATE YOUR THROUGHPUT

Manual, automatic and semi-automatic workpiece feeding systems increase throughput and allow your measuring operations to continue unattended, while existing part transportation systems can also be adapted to deliver parts via a CMM.



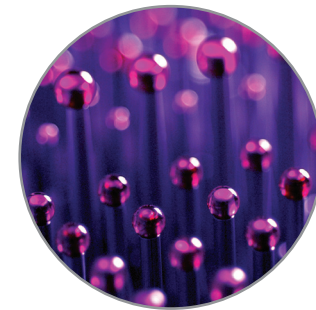
PROTECT YOUR INVESTMENT

Optional bellows covers protect the bearing way surfaces from airborne contaminants. In addition to the protection provided by the standard bellows for the Y drive leg, this option provides bellows for the X beam and non-drive leg. Available on select models.



REDUCE DOWNTIME

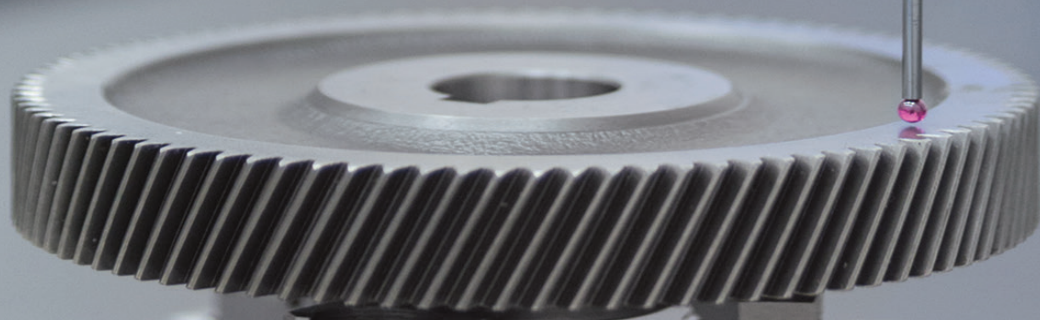
Air dryers and filters protect your CMM while reducing downtime and system repairs. The system works by drying the air and removing oil and other contaminants before entering CMM air lines and air bearings.



EXTEND YOUR REACH

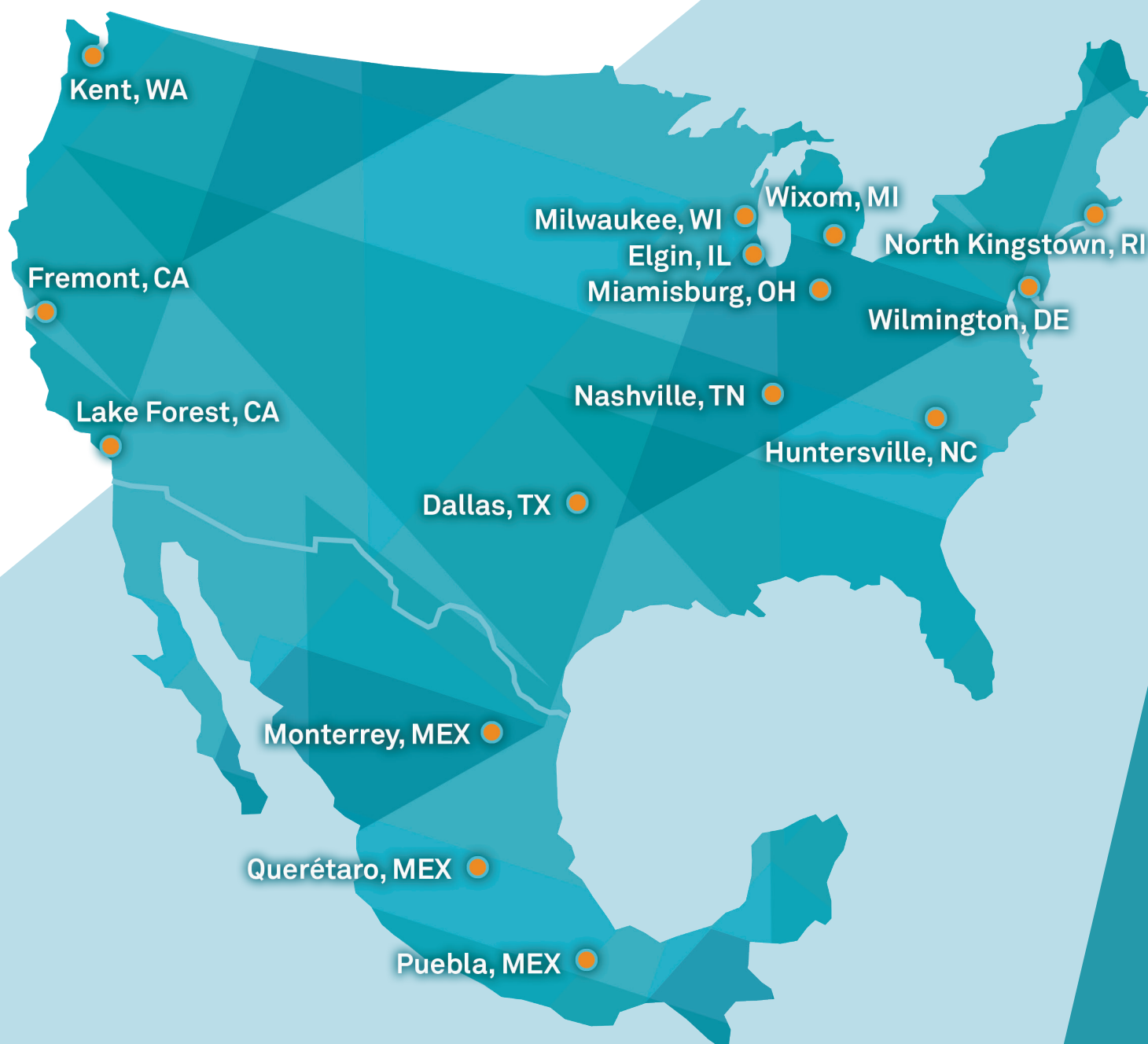
CMM measuring applications will normally require a variety of stylus tips to get the job done. If taking measurements in difficult to access locations, probe head extensions and customized styli accessories can provide assistance. Hexagon offers various CMM styli and probe extensions to increase part accessibility.

HEXAGON



YOUR LOCAL EXPERTS AND METROLOGY PARTNERS

With the largest network of solution centers and consultation engineers in North America, a team of metrology experts is right around the corner to help you achieve your quality goals. Each facility is equipped to provide product demonstrations, live part programming and extensive training options. From installation and start-up to ongoing support throughout the life of your GLOBAL CMM, Hexagon will be there with you every step of the way.



SUPPORT FOR SUCCESS



START-UP SUPPORT

Ensure trouble-free operations at installation and beyond with expert application engineers on hand to provide staff training, write initial part measurement programs and offer ongoing support.



TRAINING

An important factor for the use and maintenance of the machine is good knowledge of its operation. Thanks to both our introductory and advanced metrology courses you can optimize your CMM productivity. We offer a wide range of training and seminar courses for beginners and experienced machine users online, in our centers or at your facility.



MAINTENANCE PLANS

Preventative maintenance and scheduled services keep your hardware in optimal condition. When repairs are needed, service parts, labor and transportation are covered. You will also receive a dedicated customer representative, 24/7 access to Hexagon's online technical support center, and remote assistance for any networked machines.



CALIBRATION SERVICES

Maximize your investment by keeping your system precise throughout its life. Trust Hexagon Support Engineers with the experience, specialized tools, and accreditation with current global standards to properly calibrate and re-certify your system.



APPLICATIONS SUPPORT

Let the experts in metrology write your part inspection programs for you. Ideal for first time CMM users or for seasoned veterans dealing with new and complex geometry. Simply let us know the critical measurements and when you need the program, and we will see to it that your program is written and running to meet your deadlines.



PART INSPECTION SERVICES

When output requirements outpace production capabilities, Hexagon is available to take on your metrology needs in house. Whether it's part measurements, fit checks, SPC data collection, deformation/drift monitoring or in-process inspection, use Hexagon Manufacturing Intelligence Services to optimize inspection, maximize impact on your business and reduce overall inspection costs.



SITE ANALYSIS

When shop or lab conditions are less than ideal, a Hexagon engineer will come on site to determine the vibration levels of the shop floor or lab. The outcome of the survey will determine if a vibration dampening system is recommended to ensure part inspections remains accurate.



SYSTEM ENCLOSURES

For ultra-high accuracy measurement results, climate-controlled rooms with constant temperature provide the optimum conditions for complex part inspection with accurate results.



HEXAGON

MANUFACTURING INTELLIGENCE

Hexagon Manufacturing Intelligence helps industrial manufacturers develop the disruptive technologies of today and the life-changing products of tomorrow. As a leading metrology and manufacturing solution specialist, our expertise in sensing, thinking and acting – the collection, analysis and active use of measurement data – gives our customers the confidence to increase production speed and accelerate productivity while enhancing product quality.

Through a network of local service centers, production facilities and commercial operations across five continents, we are shaping smart change in manufacturing to build a world where quality drives productivity. For more information, visit HexagonMI.com.

Hexagon Manufacturing Intelligence is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technologies that drive quality and productivity across geospatial and industrial enterprise applications.



COORDINATE MEASURING MACHINES



3D LASER SCANNING



SENSORS



PORTABLE MEASURING ARMS



SERVICES



LASER TRACKERS & STATIONS



MULTISENSOR & OPTICAL SYSTEMS



WHITE LIGHT SCANNERS



METROLOGY SOFTWARE SOLUTIONS



CAD / CAM



STATISTICAL PROCESS & CONTROL



AUTOMATED APPLICATIONS



MICROMETERS, CALIPERS AND GAGES