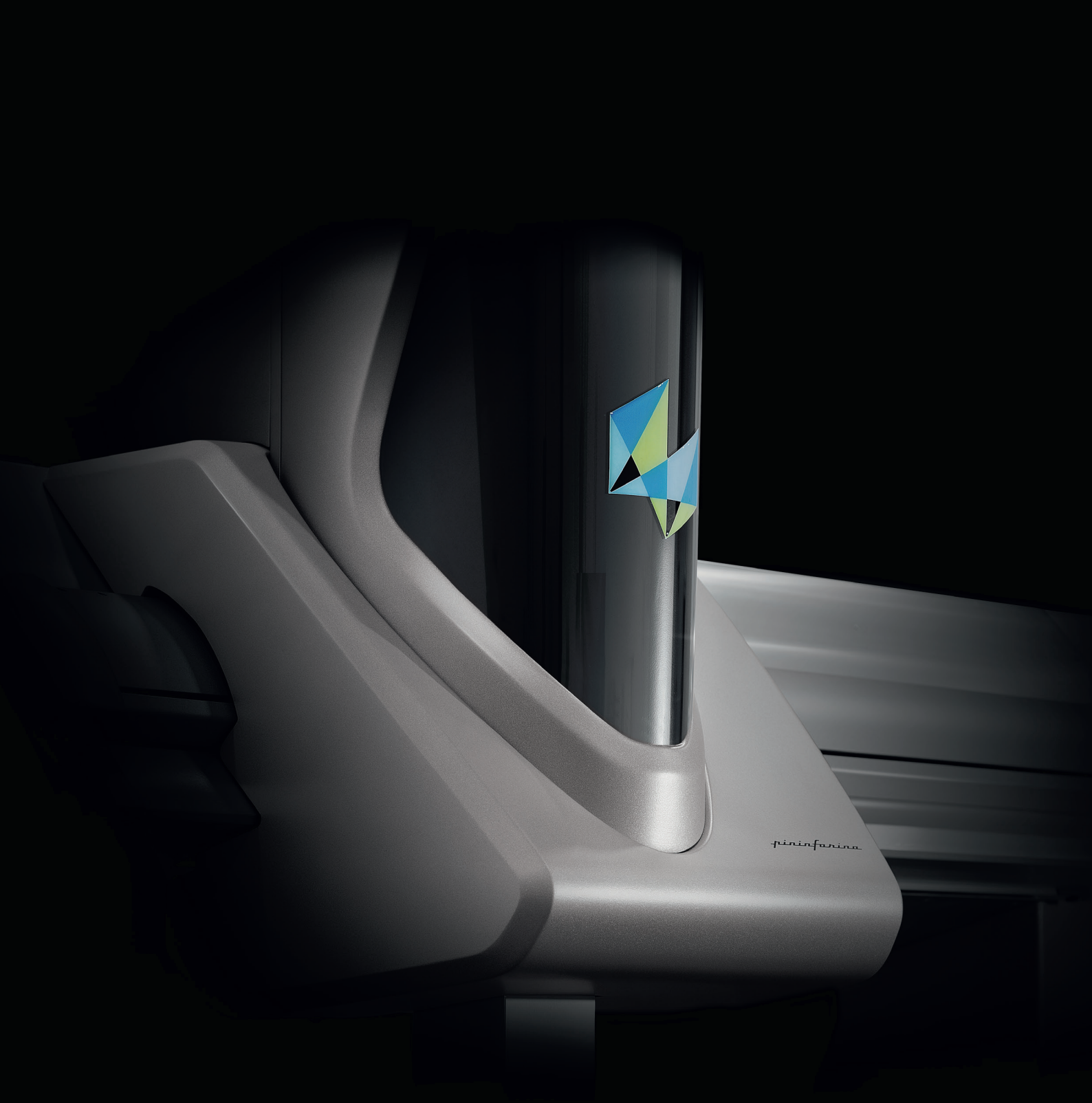


# GLOBAL EVO

The all-round CMM designed for speed and driven by technology





Design and performance are inherently linked. When you can see attention to detail on the outside, you know that the technology within is designed with the same levels of care.”

**Fabio Calorio**

Sales and Marketing Manager, Pininfarina Extra Srl

# DESIGNED FOR SPEED

The GLOBAL EVO coordinate measuring machine (CMM) is the next evolution of the versatile and scalable GLOBAL range from Hexagon Metrology. Created in collaboration with the internationally-renowned industrial design house Pininfarina, GLOBAL EVO combines a proven machine structure with new technologies to push the boundaries of performance.

With elegant, performance-inspired exterior features that reflect the advanced technology and systems within, the essence of the machine is about uniting speed and accuracy. GLOBAL EVO is the right choice for manufacturers who require high levels of throughput, fast feedback and excellent precision. Featuring patent-pending Compass technology that helps it provide the fastest scanning performance for a CMM in its class, GLOBAL EVO is designed for speed and driven by technology.



# A TECHNOLOGY EVOLUTION

Based on the proven GLOBAL CMM platform and augmented by new technology, GLOBAL EVO retains all the advanced technical characteristics expected of this hugely-successful and reliable line while marking a step change in measurement efficiency. The machine features several new technologies as standard, all supporting manufacturers in significantly improving productivity.

## Keeping users in mind

All the system features of GLOBAL EVO have been developed with a focus on user experience, offering performance gains without placing additional burden on operators. Hexagon Metrology's commitment to research in this field has resulted in better operating interfaces and machine ergonomics, making interaction with GLOBAL EVO easier and more enjoyable for users.

### compass

#### Compass – Gaining speed without compromise

The patent-pending Compass technology is the foundation of GLOBAL EVO's performance. Compass is an innovative system which uses physical hardware components alongside enhanced firmware algorithms to reduce and compensate for vibrations generated by the machine itself, in particular when measuring at high speed. This new technology was designed specifically to ensure that GLOBAL EVO maintains its performance accuracy, even at the highest scanning speeds.

As the machine speed increases, its own motion creates vibrations. This is why scanning accuracy is typically reduced at higher speeds. But by using the same principles as a car suspension, Compass works like a shock absorber for the CMM. Elastic joints between the drive system and the frame prevent the transmission of vibrations, while innovative firmware algorithms mitigate against any residual effects from the machine motion. Users can therefore achieve optimum throughput during scanning measurements, without compromising on accuracy.





### Messaging lights

The GLOBAL EVO messaging light option kit adds stylish multi-coloured LED alert lights to the CMM, giving operators visibility into the machine's status even from a distance. This enables users to better manage their time and resources around the measuring area.

### scan PILOT.>

#### Scan Pilot – Guiding the CMM through the unknown

Scanning without a predefined measurement path can be challenging and time-consuming. The advanced firmware algorithms of Scan Pilot offer greater motion control capabilities that ensure robust scanning performance even when the path is unknown. Thanks to Scan Pilot, GLOBAL EVO can rapidly scan unknown profiles, however complex the geometry or abrupt the surface changes. Even the trickiest of workpieces can be scanned quickly and accurately with the minimum of setup.

### fly2 MODE

#### Fly2 Mode – Gliding smoothly through the measurements

GLOBAL EVO features an enhanced next-generation version of Hexagon Metrology's trajectory-controlling Fly Mode feature. Fly2 Mode further optimises probe movements, automatically calculating the most efficient route between measurement points and generating the trajectory so the machine glides smoothly through its movements. As a result, program execution times are decreased considerably, and machine stress through the motors and moving parts is reduced for lower maintenance and downtime.

### eco MODE

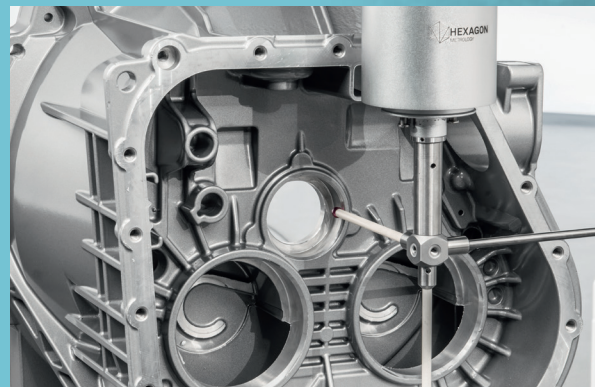
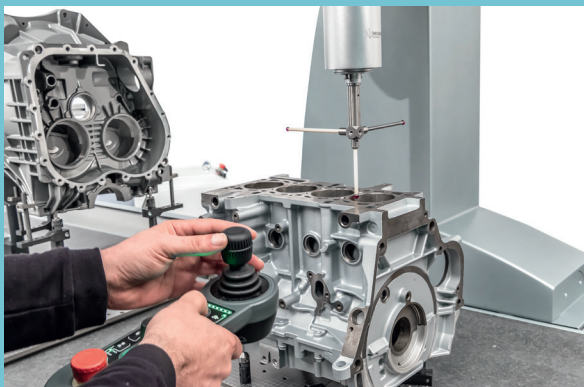
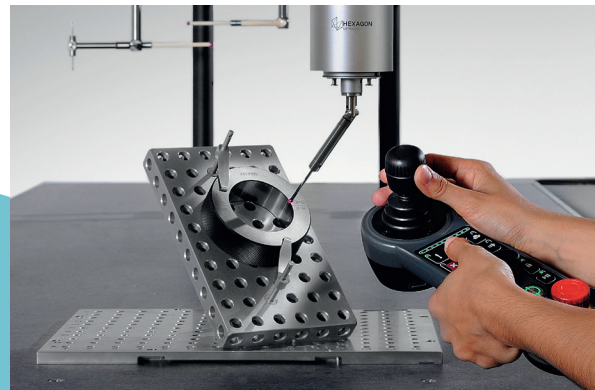
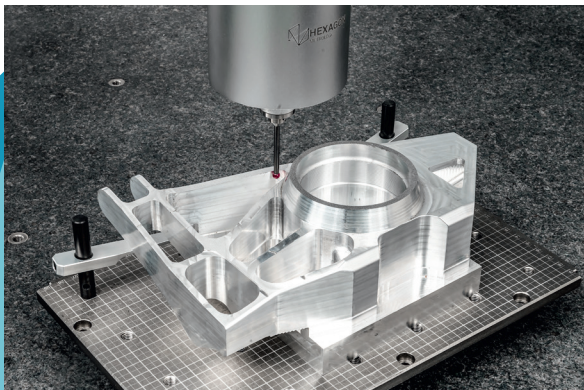
#### Eco Mode – Giving metrology the green light

Providing both economic and ecological benefits, Eco Mode is a future-oriented feature which reduces the operating cost of GLOBAL EVO while also supporting environmental sustainability. Eco Mode automatically powers down the CMM to save electrical power when it stands idle, improving energy efficiency but keeping the machine ready to go. With Eco Mode, operating costs are reduced with no impact on throughput or performance.

# GIVING MANUFACTURERS WHAT THEY NEED

Time has always been considered a valuable resource. But with demand-driven economies placing greater pressure on manufacturers to deliver new products more quickly, now more than ever, time marks every moment. To remain competitive, manufacturers are expected to make more of their product in less time while also maintaining or improving its quality. Productivity is the key, and the metrology department's throughput is essential to maintaining these time-to-market goals.

Designed for speed and offering best-in-class throughput, GLOBAL EVO is the ideal solution for all operations requiring higher productivity in dimensional inspection, like the automotive, aerospace, general mechanics and precision mechanics industries. For example, in the powertrain field, GLOBAL EVO supports the inspection of parts including engine blocks, engine block housings, differential housings, cylinder heads, master cylinders, knuckles, oil or water pumps, turbines and valves.



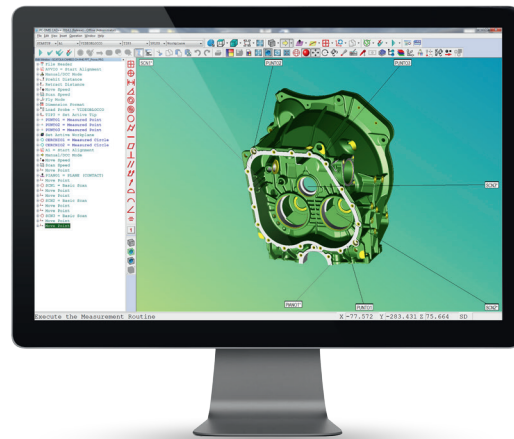
# THE RIGHT TOOLS FOR EVERY JOB



## Sensors

The exceptional measurement results offered by GLOBAL EVO rely on the performance of Hexagon Metrology sensors. Contact scanning measurement is most accurate method of acquiring large amounts of data, decreasing measurement uncertainty and increasing the repeatability of the measuring process for greater confidence in the results.

With options including the HP-S-X5 and HP-S-X3C fixed-scanning probing heads, and the HP-S-X1H scanning sensor mounted on an indexing head, versatility is guaranteed. A wide range of tool changers, stylus options and other accessories ensure the most suitable probing configuration for any application.

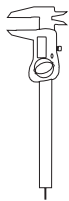


## Software

Hexagon Metrology is the largest software developer in the industry and offers several platforms to turn measurement data into actionable information. Developed in-house, these software packages ensure efficient part programming and accurate and interpretable outputs.

PC-DMIS has the largest installed base of metrology software worldwide. It offers a scalable suite of solutions to efficiently and effectively address measuring requirements ranging from the simplest to the most complex. Its flexibility and versatility make PC-DMIS the reference package for most GLOBAL EVO installations.

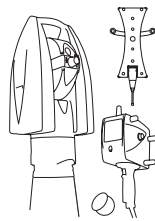
For more demanding applications such as the inspection of special or complex geometries or challenging data evaluation, the powerful QUINDOS software with its range of specialised modules is offered as an alternative.



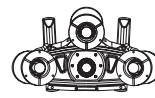
PRECISION MEASURING  
INSTRUMENTS



PORTABLE MEASURING ARMS



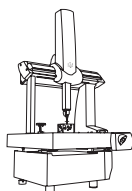
LASER TRACKERS  
& STATIONS



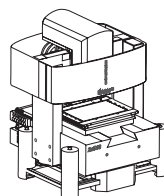
WHITE LIGHT SCANNERS



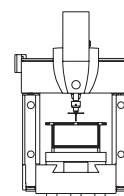
SENSORS



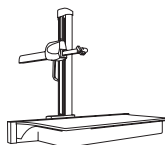
BRIDGE CMMS



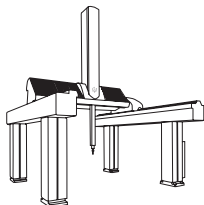
MULTISENSOR & OPTICAL SYSTEMS



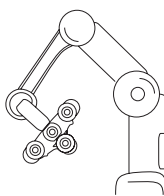
ULTRA HIGH ACCURACY CMMS



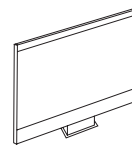
HORIZONTAL ARM CMMS



GANTRY CMMS



AUTOMATED APPLICATIONS



SOFTWARE SOLUTIONS



**HEXAGON**  
METROLOGY

Hexagon Metrology offers a comprehensive range of products and services for all industrial metrology applications in sectors such as automotive, aerospace, energy and medical. We support our customers with actionable measurement information along the complete life cycle of a product – from development and design to production, assembly and final inspection.

With more than 20 production facilities and 70 Precision Centres for service and demonstrations, and a network of over 100 distribution partners on five continents, we empower our customers to fully control their manufacturing processes, enhancing the quality of products and increasing efficiency in manufacturing plants around the world.

For more information, visit [www.hexagonmetrology.com](http://www.hexagonmetrology.com)

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Hexagon (Nasdaq Stockholm: HEXA B) has more than 15,000 employees in 46 countries and net sales of approximately 2.6bn EUR.

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