

AICON MoveInspect XR8

PORTABLE. ROBUST. ACCURATE.



THE NEW BENCHMARK FOR INSPECTION, TRACKING AND POSITIONING



Today, every company has to meet the challenge to develop products within shorter periods, and to manufacture them at lower costs. Being competitive in a worldwide market is a main goal. Efficient and high-precise production monitoring, quality control, and inspection are playing key roles.

AICON MoveInspect XR8 from Hexagon Manufacturing Intelligence has been developed to support highly precise inspection, tracking and positioning applications in industrial and shop-floor environments. The new camera-based portable coordinate measuring machine (CMM) detects geometric conditions and changes three-dimensionally.

THE PERFECT SYSTEM FOR INDUSTRIAL AND SHOP FLOOR USE

The AICON MoveInspect XR8 consists of a camera beam with two high-resolution eight-megapixel digital cameras. Its calibrated cameras are equipped with invisible flashes that eliminate dependence from environmental lighting, and capture any type of target, either on the component to be measured or on the hand-held probing device AICON MI.Probe.

The generated images are processed automatically; 3D data are calculated in real time. Based on the renowned AICON MoveInspect Technology, the XR8 is the only technology able to simultaneously capture multiple points. This makes the system significantly faster in many applications, and therefore capable of offering important time and cost savings. The MoveInspect software determines the 3D coordinates of object points or the 6-DOF (Degree of Freedom) data of solid bodies at any time.

The system's ruggedised housing makes it suited to almost any industrial environment.



KEY BENEFITS

HIGHEST STABILITY FOR ACCURATE RESULTS

The AICON MoveInspect XR8 is constructed highly stable in a ruggedised housing. Shop-floor recalibrations are reduced to a minimum, unnecessary delays are eliminated from the measuring process. This saves time and always ensures high accuracy.



EFFORTLESSLY PROBING WITH HAND-HELD PROBE

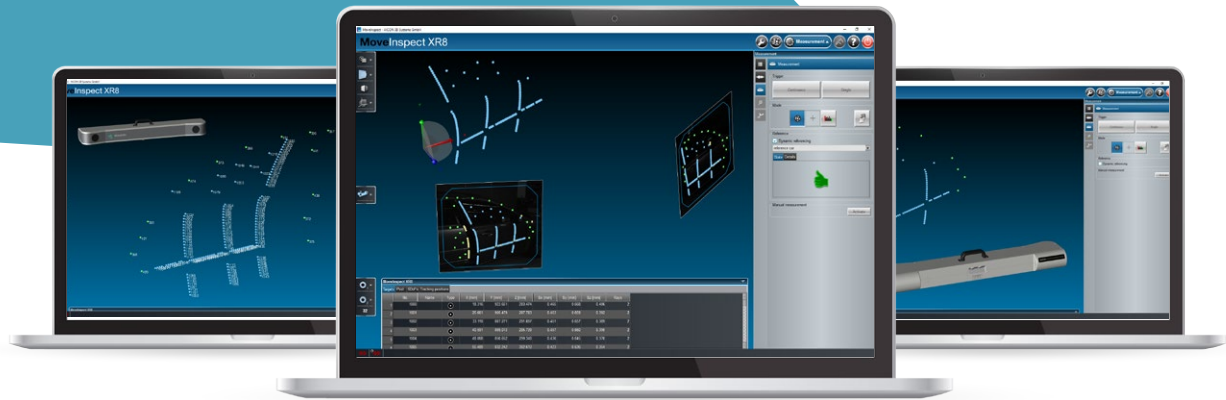
The AICON MI.Probe offers total freedom of movement during the measurement process, without cumbersome cable or other mechanical connection to the measuring device. This allows an easy and ergonomic use also in narrow environment as e.g. complex fixtures. A repositioning of the sensor to reach every item to be measured is not necessary because only a temporary line of sight is required.



'DYNAMIC REFERENCING' FOR EASY MEASUREMENT IN UNSTABLE ENVIRONMENT

The AICON MoveInspect XR8 ensures reliable results in even unstable shop-floor environments. Problems typically presented by vibrations, noise, and position changes are solved by the 'Dynamic Referencing' function. The system automatically detects and compensates disturbances by optical tracking.





SUPPORT OF COMPLEX ASSEMBLY AND POSITIONING APPLICATIONS

AICON MoveInspect XR8 simplifies and accelerates assembly processes, and can replace costly assembly gauges. The system monitors the process, guiding the operator positioning the part. An immediate feedback serves as final inspection of the positioning and assembly process.

REAL-TIME TRACKING OF OBJECTS

AICON MoveInspect XR8 is able to track in real-time moving objects during production or testing processes. The 3D movement of a theoretically unlimited number of points can be collected. An additional benefit to the customer, as this enlarges the field of applications.

‘MULTIPLE POINTS’ MEASUREMENT IN 3D AND 6D

MoveInspect XR8 is able to simultaneously capture multiple points and objects, both in 3D and 6D. This makes the system significantly faster in many applications, and therefore capable of offering clear time and cost saving benefits.



ONE SYSTEM – MANY APPLICATIONS:

The MoveInspect XR8 offers a wide range of options in inspection, tracking and positioning tasks. It captures ideally objects from a few millimeters up to several meters in size. The system is easy to handle, in both static and dynamic measurements, and applicable in shop floor and industrial environments.

- Measurement of GD&T features
- Positioning and alignment of components
- Deformation analysis
- Load tests
- Comparison against CAD data
- First part inspection
- Determination of geometric characteristics
- Process analysis in the production line
- Analysis of assembly processes





Your advantages at a glance:

- Probing with total freedom of movement through optical tracking
- Precise measurements in unstable environments through “Dynamic Referencing”
- Real-time tracking of moving objects
- Easy measurement even in narrow spaces
- No moving mechanical components
- Static and dynamic measurements
- 3D and 6D measurements of multiple points, also in dynamic applications
- Significant time savings due to highly stable system calibration
- Hidden-point measurements





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 centres, 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 GAUGES



AICON 3D Systems is one of the world's leading providers of optical camera-based 3D measuring systems. The company, founded in 1990, develops and distributes portable coordinate measuring machines for the fields of inspection and testing including car safety and tube and wire inspection, as well as optical 3D scanners for the measurement of complex surface structures.

Efficient and high-precision production monitoring, quality control, inspection and reliable reverse engineering are essential to be competitive in a global market. Renowned automotive manufacturers and their suppliers, companies from the aerospace industry and from the areas of shipbuilding and renewable energies rely on the performance of our innovative optical systems.

AICON offers optimized solutions for inspection and digitisation tasks to keep product quality at the maximum level. For more information, please visit aicon3D.com.