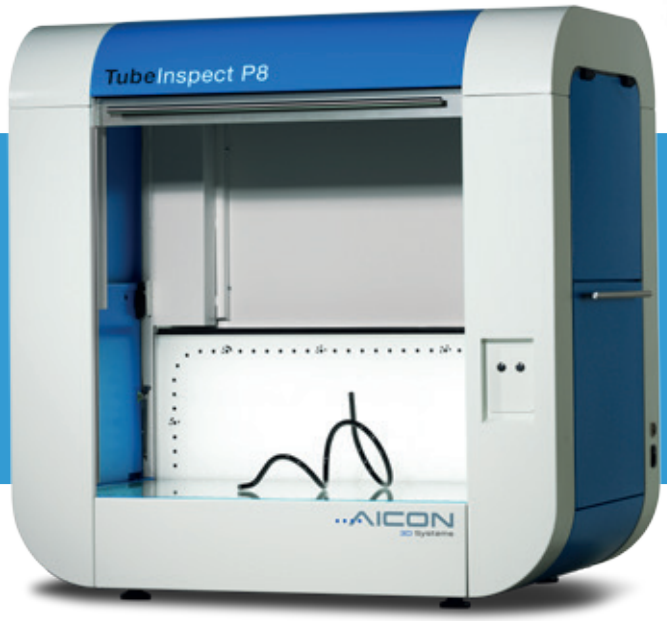
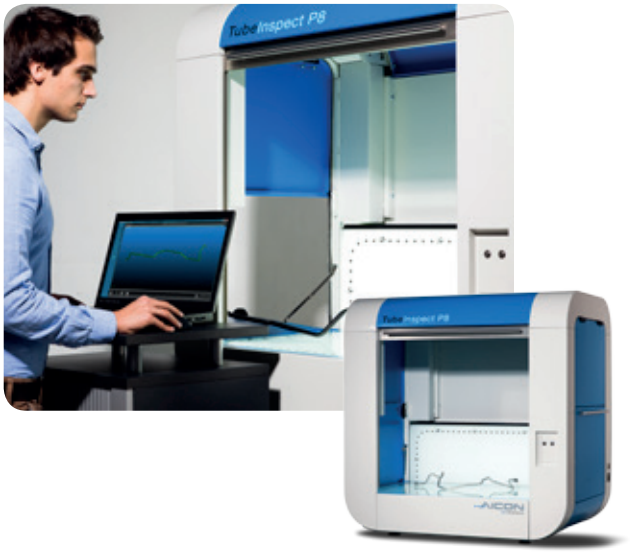


TubeInspect P8

The **new benchmark** in 3D **tube and wire** measurement

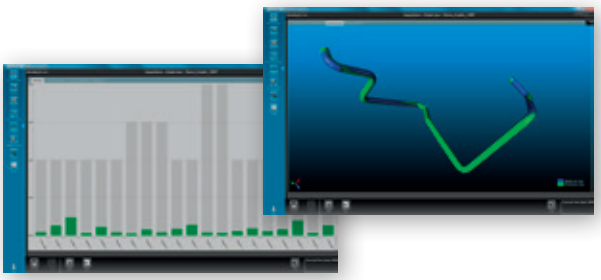
For 20 years, AICON's optical tube measurement systems have been standing for efficient quality control of bent tubes and wires. Highly precise and fast measurement, programmable optical gauge, automated setup and correction of bending machines, reverse engineering of sample tubes, initial sample testing, automatic 100 % inspection – these are only some of the various applications of this renowned technology.

The new TubeInspect P is the consistent further development of this successful concept. It is the answer to the constantly rising demand for tube measurement technology in manufacturing and to higher customer requirements regarding inspection of increasingly tighter tolerances.



The new TubeInspect P8 **Highly precise and versatile**

Most of all bent tubes and wires are less than 1,000 mm long from end to end and have a maximum diameter of 100 mm. The first model of the new TubeInspect generation, the TubeInspect P8, was especially developed for the efficient quality control of this kind of component.



Equipped with 8 high-resolution cameras, TubeInspect P8 is suitable for tubes and wires with diameters from 1 mm to 125 mm and allows for optimum 3D inspection of objects of up to 1 m length. However, even longer objects can be measured with TubeInspect P8. The lateral doors allow for an overlapping repositioning section by section.

Sheath tolerance can be determined to an accuracy of up to 0.035 mm. Measuring results are provided within 2 to 5 seconds. Considerably optimized production processes, e.g. the setup of bending machines, save time and costs. Combined with the software platform BendingStudio, the system offers various application-oriented functionalities.

HEXAGON
MANUFACTURING INTELLIGENCE

AICON
3D Systems

Latest technology for highest requirements

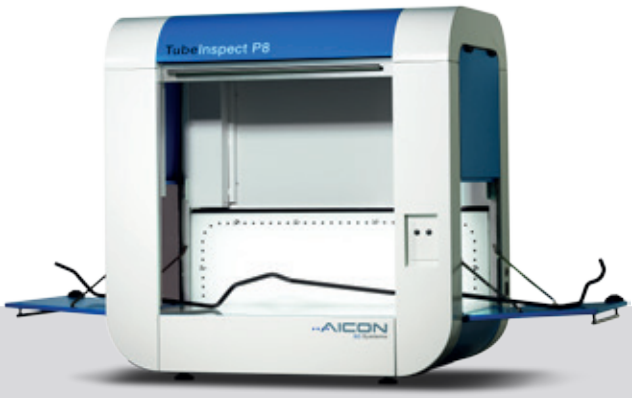
Thanks to state-of-the-art technology, TubeInspect P8 fulfills highest requirements regarding accuracy and speed. The long-life and low-maintenance LED illumination technology guarantees a particularly smooth illumination of the measuring field.

High-resolution cameras with latest GigE technology ensure an almost synchronic capture of the measuring object within milliseconds. The innovative three-dimensional glass reference is highly precise and long-term stable.

Innovative design meets solid construction

TubeInspect P8 fits onto a euro-pallet. The result: reduced transport costs and floor space in operation. TubeInspect P8 is applicable for mobile use in production environment. The system is insensitive to vibrations; after change of location, TubeInspect P8 is immediately usable, without new calibration.

TubeInspect P8

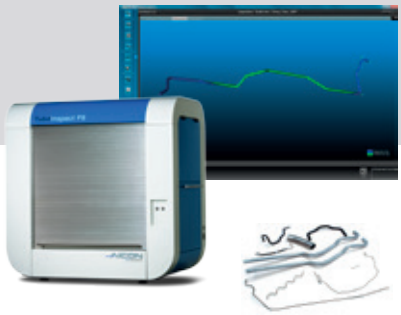


YOUR ADVANTAGES AT A GLANCE:

- High-resolution digital cameras with latest GigE technology
- Resistant, long-life and low-maintenance LED illumination technology
- Highly precise and long-term stable glass reference
- Measuring system analysis with DKD-calibrated master tube
- Applicable as optical gauge – saves costs for mechanical gauges
- Mobile use in production environment
- Lateral doors for measurement of larger bent parts
- Fits onto a euro-pallet – reduces transport costs and floor space
- Suitable for all materials

Technical specifications

Measurement area	1,000 mm x 580 mm x 400 mm
Cameras	8 high-resolution digital cameras with GigE-technology
Tube diameter	1 mm -125 mm
Bending angle	1° - 340°
Minimum push between two bends	Bend in bend and free-form possible
Software	BendingStudio
Reference field	Three-dimensional glass reference
Dimensions	1,140 mm x 746 mm x 1,140 mm
Weight	240 kg
Accuracy	0.035 mm sheath tolerance



AREAS OF APPLICATION

- Setup and correction of bending programs
- Control of serial production
- Production of free-form geometries
- Reverse engineering
- Replacement of gauges

HEXAGON MANUFACTURING INTELLIGENCE | AICON 3D Systems

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