

Your partner for measuring solutions

The Light & Production Division of Jenoptik is a global specialist in the optimization of manufacturing processes.

Our many years of experience and know-how in the field of industrial measurement technology and optical inspection, modern laser-based material processing and highly flexible robot-based automation enable us to develop tailor-made manufacturing solutions for our customers in automotive, aerospace, healthcare and other manufacturing industries.

As an experienced and reliable partner for high-precision, tactile and non-tactile production metrology, we support you with our global sales and services network.

Depending on the requirements, our tactile, pneumatic and optical measuring systems take on a wide range of tasks for the inspection of surface and form as well as the determination of dimensions, throughout every phase of the production process including final inspection or in the metrology lab. Our systems provide you with precise measured data within the shortest time frames.



Our Opticline measuring solutions present a wide range of evaluation options and numerous areas of application for measuring shaft-type workpieces. Thanks to the fast, optical non-contact measuring principle, measurements are performed with an extremely high level of flexibility, repeatability and accuracy.

Successfully implemented solutions worldwide

- Turned and precision turned parts
- Components used in the automotive industry such as electric motors, drive trains, steering parts and turbochargers
- Blanks and pressed parts for metal processing
- High-precision workpieces used in medical technology such as implants, bone screws and tools
- Jets and injection technology
- Components used in the bearings industry
- Turbines and emergency power units
- Parts used in the textile and printing industries
- Applications in the aerospace industry
- Pneumatic and hydraulic parts, such as pumps
- Various electric motors, e.g. for fans, household appliances, positioning and drive systems

Dimensional measurement

- Length
- Diameter
- Radius
- Angle

Thread measurement

- Dimension
- Form

Form measurement

- Straightness
- Roundness
- Cylinder form
- Conicity
- Flatness

Profile forms

- Free form
- Tolerance range

Position measurement

- Radial run-out/total radial run-out
- Axial run-out/total axial run-out
- Straightness
- Symmetry
- Parallelism
- Concentricity
- Coaxiality
- Perpendicularity

Please scan for detailed Opticline information



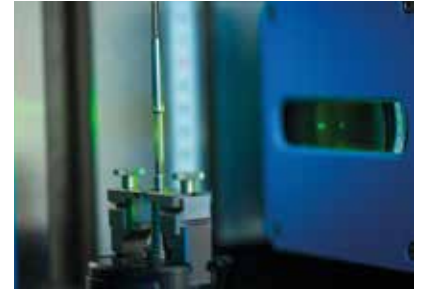
Opticline C. Compact and robust systems for long-term gauge repeatability and reproducibility



Opticline C914 with optional, mobile gauge enclosure for flexible use in production



Simple, convenient starting of measurements for fast and reproducible measuring results



Workpiece-specific clamping devices for measuring small and very small parts



Integrated light barrier to protect operators in accordance with international safety standards



Simple operation of the measuring machine thanks to fast tailstock adjustment

Opticline C series shaft measuring systems offer maximum gauge repeatability and reproducibility from 1 μm . With different configurations, such as a high-precision C-axis or multi-sensor system, the performance capability can be customized to suit your requirements. The instruments thus offer the highest level of flexibility, accuracy and stability.

System features

- Optimum precision properties in μm delivering measurements within seconds
- An individual camera offers bidirectional measurement for workpiece diameters of up to 80 mm
- Scaling of the optical system for measuring diameters of up to 140 mm without loss of resolution or quality
- Special tailstock and headstock design for rapid workpiece changes and maximum precision
- Simple and automatic workpiece alignment
- Real-time processing and fastest possible data transfer
- Self-monitoring functions for reliable use in production
- Low-maintenance, robust measuring system including camera with IP52 protection

Product variants and options

- Tactile probing system T3D or TSP for measuring additional lengths and form test characteristics
- High-precision headstock for higher form gauge repeatability and reproducibility and improved rotational measurements
- Integrated measuring and evaluation computer
- Roller shutter to protect against negative environmental influences
- Pneumatic clamping solutions for greater flexibility and workpiece variety
- Table racks for practical loading at working height and additional storage space

Measuring capacity	C203	C305	C308	C314	C605	C608	C614	C908	C914	C1214
Max. diameter [mm]	30	50	80	140	50	80	140	80	140	140
Length [mm]	250	300	300	300	600	600	600	900	900	1200