

Optical High Speed Measuring System for Production
CORE M



CORE M

Innovation for Production Control

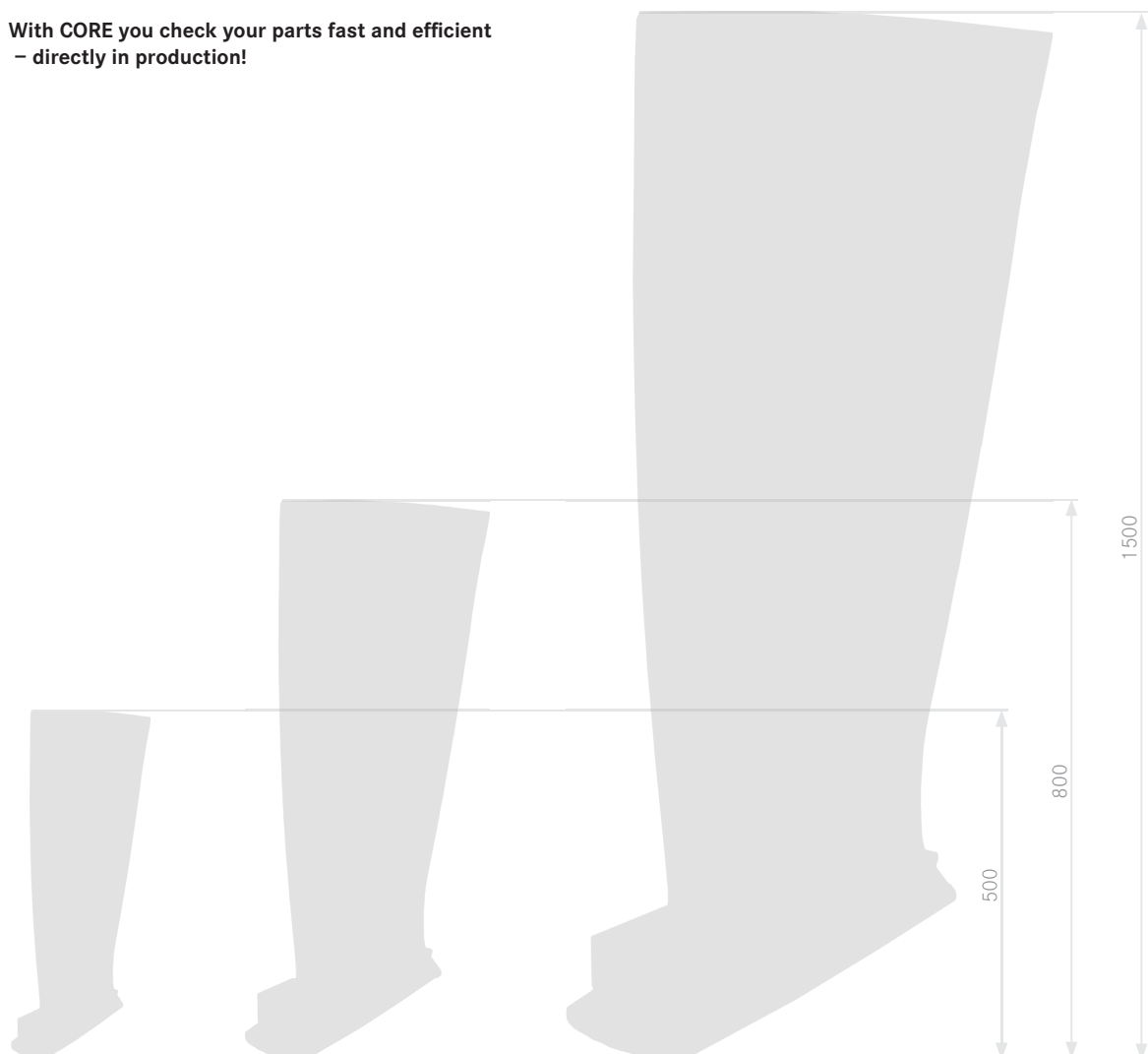
CORE M is a measuring system developed to fulfill the increasing demand for 100% testing. Fast and efficiently it can be used right where manufacturing takes place – in production.

The optical high speed scanning system is ideally adapted to the rough conditions of a direct production environment. CORE M is characterized by temperature stability, dirt and vibration resistance. High dynamic linear drives and the robust base machine of the 6-axis-measuring-system allows measurements at high speed.

Quick point acquisition is ensured by the innovative optical high intensity light sensor made by WENZEL ScanTec; on components difficult to access as well as on highly reflective surfaces; without time intensive repositioning of the part or pretreatment of surfaces.

CORE M has a measurement volume of 500 mm x 500 mm x 1500 mm and is therefore ideal for the measurement of large components. The comprehensive software package from WENZEL enables easy and fast evaluations even of complex parts like blades and blisk.

**With CORE you check your parts fast and efficient
– directly in production!**





Product Advantage

CORE M – The Highlights at a Glance

CORE was developed to increase speed in production processes and offers a flexible 3D inspection solution for challenging measurement requirements of today's manufacturing industries worldwide.

Fast and Efficient

- High dynamic linear drives
- Acceleration up to 4300 mm/s
- Movement speed up to 800 mm/s
- Fast point acquisition

Surface independent

- Innovative optical sensor based on high intensity light technology
- Measurement of highly reflective and mirror-like surfaces
- No probe-radius-correction necessary

Optimal accessibility on the part

- 6-axis-measurement-system
- 3 linear and 3 rotary axis
- Continuous swivel head
- Sensor with angle acceptance of $90^\circ \pm 85^\circ$ to surface normal

Easy Integration

- Standard 230V electrical connection needed
- No compressed air





Automatable

- Automatic call up and start of measuring programs
- Integration of robots for automatic loading via TCP/IP interface
- Automatic compilation of correction parameter file for production

Temperature Stable

- Stable for an enhanced temperature range (18°C – 30°C)
- Precision scales on carbon fibre mounts
- Constant temperature housing
- Laser based CAA for movement and temperature dependent machine compensation in real

Dirt Resistant

- Protected guides
- Filters for ventilation

Vibration Resistant

- Earthquake protected up to 6,5 on the Richter scale

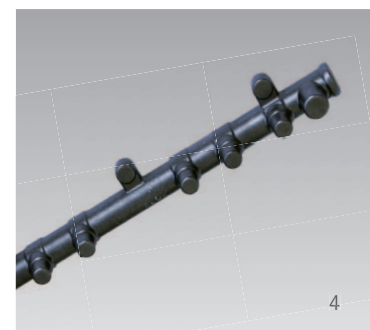
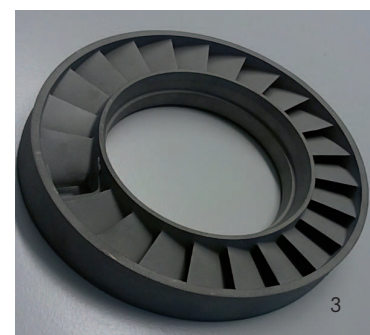
Large Measurement Volume in Compact Design

- Measuring volume 500 mm x 500 mm x 1500 mm
- Small footprint of 1,3 m x 3,5 m
- Measuring system height 2,5 m

Application

Measurement of complex components with High Speed

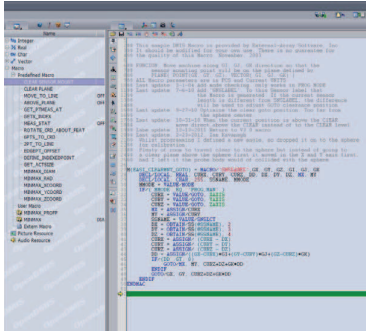
The success of CORE lies within the analysis of important components of engine and turbine manufacturing such as turbine blades and blisks. CORE can also be used for fast and accurate measurement of any part in direct production surroundings. Furthermore CORE is especially suitable for measurement of sensitive or flexible material as well as highly reflective surfaces.



Software

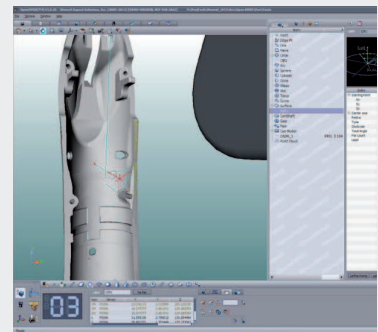
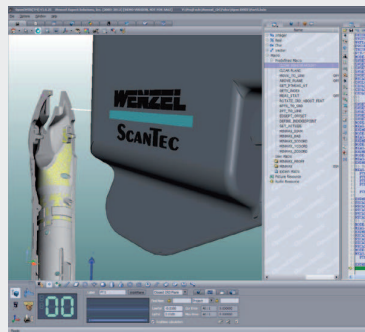
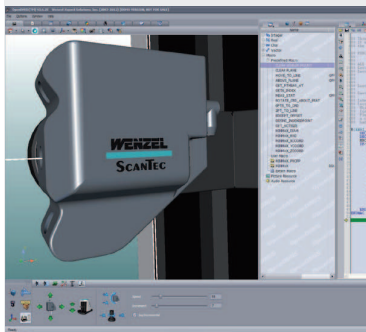
All Possibilities for Your Application

For your application the perfect software solution! Whether CORE M is integrated as fully automated system to production for measurement of serial parts, or partially automated for measurement of different components, the software always fits the measuring task optimally.



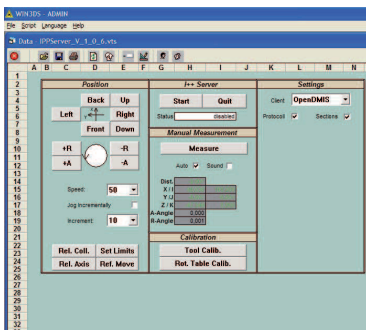
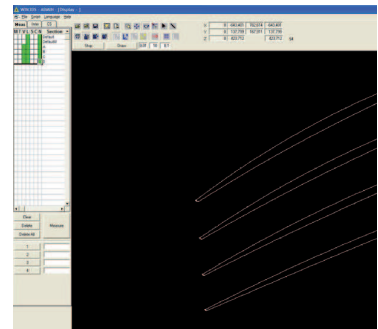
OpenDMIS®

For multiple parts; the approved measuring software OpenDMIS® is ideal. The intuitive user interface and seamless CAD integration enable the quick creation of measuring programs. OpenDMIS® supports DMIS standard as programming language and allows therefore easy exchange of measuring programs with other measuring systems.



Win3DS

Win3DS is the solution for fully automated system integration; ideal for the complete analysis of turbine blades. For measurements with Win3DS nominal and parameterized data can be used. A powerful library with more than 500 functions allows the easy evaluation of blade parameters to be completed, inclusive of different functions for alignment.



I++ DME Server

CORE is equipped with I++ DME Server. I++ DME is a multi-supplier interface between CMM and measuring software. This allows the independent purchase of CMM and measuring software. Standardized software within a company, even from different suppliers, can reduce the costs for training and increases the flexibility of the measuring system and user. Measuring programs can simply be exchanged between the different measuring systems.

We are there for you WENZEL worldwide

WENZEL ScanTec GmbH is located in Greding in Bavaria, Germany, and was founded in 1989 under the name of Steintek. Steintek was one of the first companies offering optical coordinate measuring machines. Since then WENZEL ScanTec has cooperated with many customers, especially in the aerospace and power generation sector, and has implemented optical technologies in the quality inspection departments.

The high level of specialized skills and extensive experience in the field of optical metrology led to the acquisition of Steintek GmbH by the WENZEL Group. The WENZEL Group GmbH & Co. KG is one of the leading manufacturers of metrology solutions. The wide range of WENZEL products includes solutions in the fields of coordinate measuring machines, gear metrology, computed tomography and high speed measuring

and digitizing systems. The company has customers in many industries such as automotive and aerospace, mechanical engineering, as well as subcontractors operating in these sectors. Subsidiaries as well as sales and service partners worldwide represent the company in more than 50 countries. WENZEL Group employs around 630 people.

CORE_M_GB_01_20AA03 | © WENZEL ScanTec GmbH
Subject to technical modification and to changes in scope and design.



WENZEL®

WENZEL Group GmbH & Co. KG
D-97859 Wiesthal
Phone: +49 6020 201-0
Fax: +49 6020 201-1999
info@wenzel-group.com
www.wenzel-group.com

WENZEL® ScanTec

WENZEL ScanTec GmbH
D-91171 Greding
Phone: +49 8463 61 99 900
Fax: +49 8463 60 61 65
info@wenzel-scantec.com
www.wenzel-scantec.com