

HIGH SPEED SCANNING FOR LARGE COMPONENTS

# WENZEL CORE M

Measuring at the speed of light



FAST OPTICAL MEASUREMENT  
**AT PRODUCTION CYCLE SPEED**

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## OPTICAL MEASUREMENT AT PRODUCTION CYCLE SPEED

The CORE M High Speed Optical Scanning System is a device that was developed to meet the increasing demand for 100 % inspections. It works quickly and efficiently directly in production. Designed to increase the speed of the production process, the CORE M offers a highly flexible 3D optical inspection solution for large components

and demanding measurement requirements in global manufacturing. The CORE is based on a proven mechanical structure, developed and manufactured in WENZEL's renowned production facility in Germany. This forms the cornerstone for its accuracy, reliability and quality.

## FEATURES

- **High-speed measuring operation** using dynamic linear motors in a 6-axis measuring system
- **Fully integrated optical sensors** measure complex workpiece geometries in a reasonable time
- The CORE M offers the optimal solution for **the measurement of components in-line or at-line with** its sensors
- **Large measuring volume** (up to 500 mm x 500 mm x 2500 mm) for measuring large components
- **Small footprint** and compact design in relation to measuring volume

## FIELDS OF APPLICATION

The CORE M is the optimal solution for the measurement of turbine blades, shafts, various vehicle parts and much more. The optical high-speed measuring system is used in a wide variety of industries, such as tool and mold making, prototype construction, the automotive industry, reverse engineering and aviation.

Vane blade segment

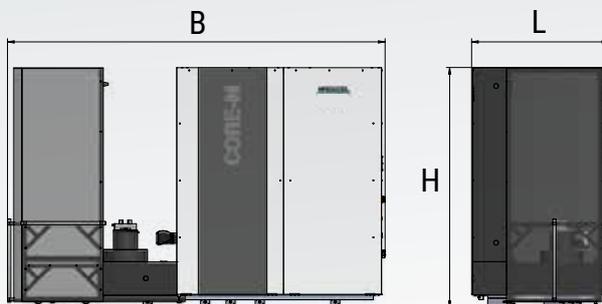


Turbine blade



Common Rail





## MACHINE PROFILE

Space Requirements (L x B x H)	1440 x 3970 x 2530 mm
Machine weight	6300 kg
Acceleration	10.000 mm/s
Measurement system resolution	0,1 $\mu\text{m}$

## YOUR ADVANTAGES AT A GLANCE

### ■ Dynamic and effective

Acceleration up to 10,000 mm/s | Travel speed of 800 mm/s | Minimization of machine movement | Repositioning during measurement

### ■ Compact design

Small footprint with large measuring volume | Working range accessible from 3 sides | Integration of controller and PC in the device | Protective hood for unfavorable lighting conditions | No compressed air required

### ■ Unique sensors

Simple measurement of critical areas | Direct measurement of polished and highly reflective surfaces | Large working distance and measuring range

### ■ State-of-the-art technology

Can be automated | Robotic integration capability | Temperature stable in a range from 18°C - 30°C | Dirt resistant due to protected guides | Earthquake proof up to 6.5 on the Richter scale | Use of precision scales | 6-axis measuring system | Angle acceptance of the sensors of 90°  $\pm$ 85°

## INNOVATION MEETS TRADITION

The WENZEL Group is a market leader in innovative Metrology. WENZEL offers a comprehensive product portfolio in the fields of Coordinate Metrology, Computed Tomography and Optical High Speed Scanning. The technology of WENZEL is used in all industries, including the automotive sector, aeronautics, power generation and

medicine. WENZEL looks at today on an installed base of more than 10,000 machines worldwide. Subsidiaries and agencies in more than 50 countries support sales and provide after-sales service for our customers. The WENZEL Group today employs more than 600 people.



## YOUR LOCAL CONTACT PERSON

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