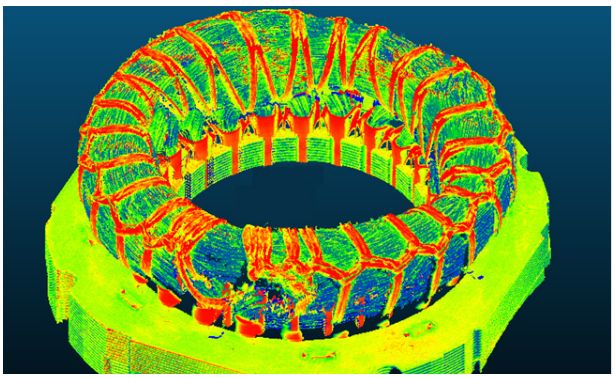
COMPACT STATORS AND ROTORS

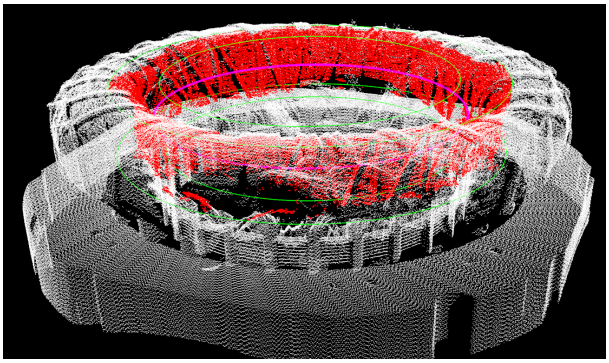
OPTOCLOUD S

APPLICATION NOTE

3D RECOSTRUCTION



MEASUREMENT



The Optocloud 3D technology validates the geometrical characteristics of **wound stators** and rotors, directly in the production line.

UNLEASH PRODUCTIVITY

3D part validation with dozen of measurements performed simultaneously at the maximum speed, enabling qualification of the entire production batch, instead of just a sample part.

SHIELD PROCESS

Easy operability, operator-independent, manually or robot-driven process and comprehensive data monitoring of all parts.

OPTIMIZE CONTROLS

Measure without contact on both soft and rigid surfaces, across multiple part variants, using a single system engineered to adapt to your entire range of parts.

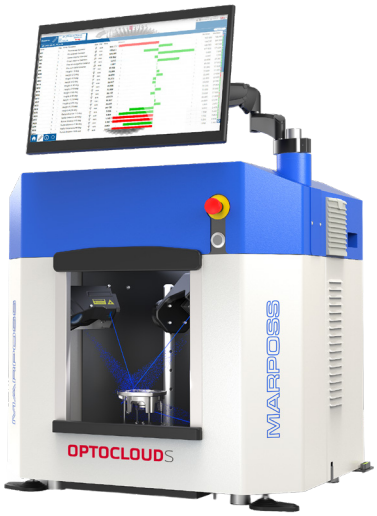
EVOLVE WORFLOW

Eliminate the risk of producing scrap caused by contact-based gauging systems by evolving the process with optical sensors. evolving the sample check into a more efficient process control.

APPLICATIONS

- Automotive stators, alternators, auxiliary motors
- Electromobility traction stators and rotors
- Stators for industrial applications and automation
- Electric pumps, refrigerators, fans, compressor (HVAC)
- White goods, robotics and drones
- Compact size stators, wound or hairpin type
- Coils, papers, laminated stack, plastic supports, terminals all together
- Different coil materials such as PAI-Enamel or PEEK

OPTOCLOUD S

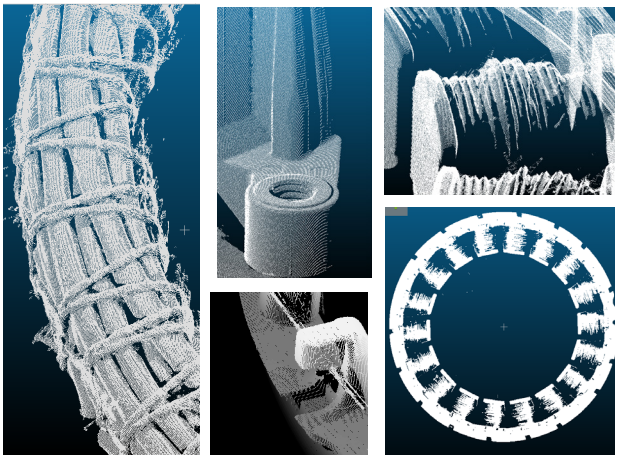


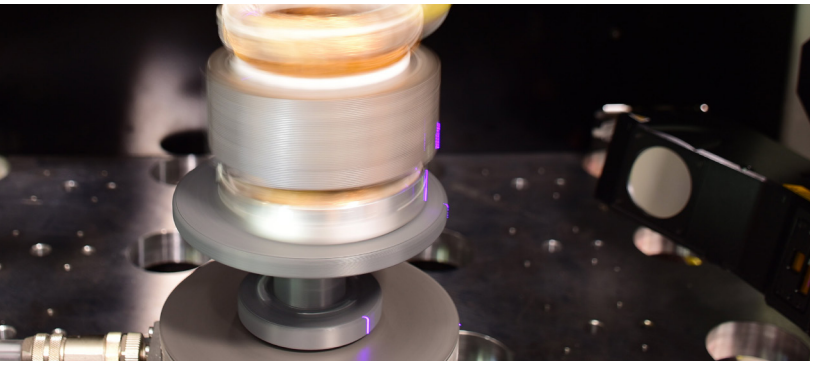
FEATURES

- **SPEED:** superior cycle speed, fast retooling times and ease-of-use without waiting times
- **PRECISION:** fine 3D measurements of multiple characteristics on different surfaces, high repeatability and independence from operator skills
- **ADAPTABILITY:** validation of multiple part types, part families with similar shapes and various material
- **AUTOMATIZATION:** industrial robustness, manual or automatic part loading, 3D data reporting & storage, MES connectivity

MEASURING LIST

Windings & Copper	Outer and inner diameters, height, terminal position,
Plastic support & Connector	Teeth length, planes height, parallelisms, connector height, screw holes position
Papers	Paper protrusion, distance, overlaps
Laminated stack	Inner and outer diameters, Height, flatness, parallelism, Angles and position of holes or notches





APPLICATION EXAMPLE

Part Type	Wound stator for electromobility
Part Dimensions	ø150 x 90 mm
Measuring specification	6 measurements (4 diameters, 2 distances)
System specification	Optocloud S with 3 sensors
Cycle time	35 s - single step
System dimensions	All-in-one 86 x 80 x 66 cm

discover more