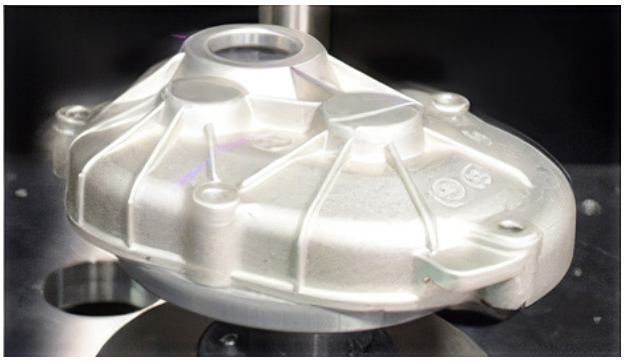
DIE-CASTING AND DIE-CAST PARTS

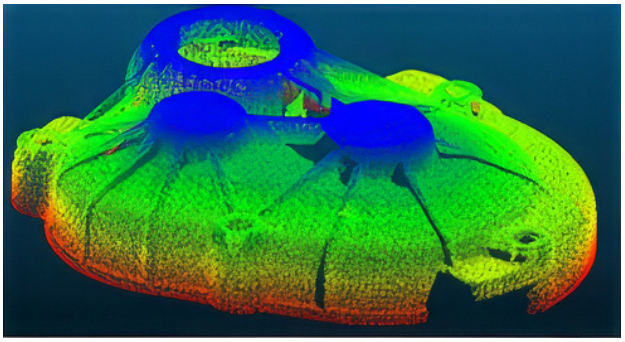
OPTOCLOUD S

APPLICATION NOTE

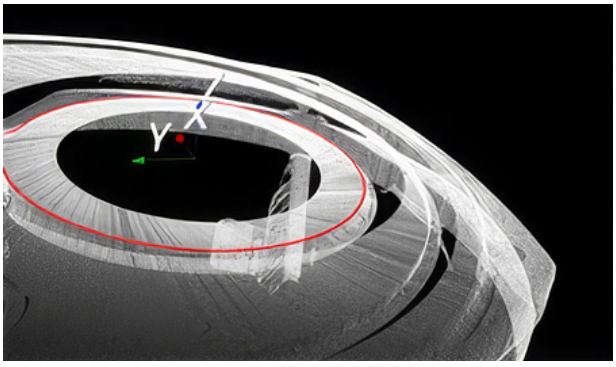
ACQUISITION



3D RECOSTRUCTION



MEASUREMENT



The Optocloud 3D technology validates the geometrical characteristics of your die-cast parts, directly in the production line.

BOOST TROUGHPUT

Increase the inspection rate up to the 100% of the batch, qualifying the parts in less than thirty seconds.

STREAMLINE PROCESS

Cut the workload on slower gauges by using one system that performs dozens of measurements simultaneously.

ENHANCE CONTROLS

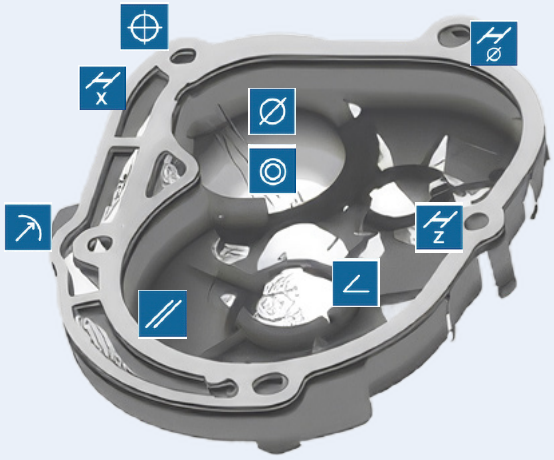
Check multiple part variants, with intricated geometries and made by different alloys, using a measuring bench optimized for your parts.

REDUCE WASTE

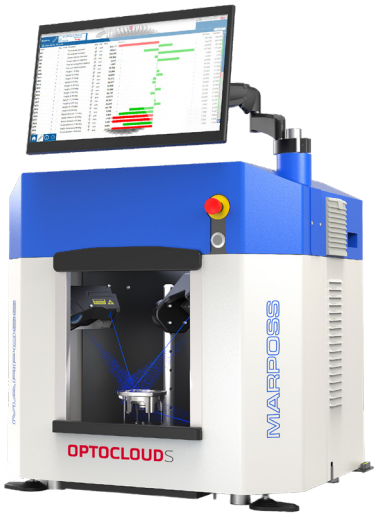
Reduce the risk of material returns and reworking costs for undetected scraps, evolving the sample check into a more efficient process control.

APPLICATIONS

- Motor covers, housings and enclosures
- Flanges, brackets, adapters and plates
- Fixing systems, junction boxes and hinges
- Pumps, valves, pipes, fittings, manifolds and compressor parts
- Transmission and gearbox parts
- Blades, joints and turbine components
- Robotic components
- LED/lighting parts
- Aluminum, Ductile or Cast Iron, Steel, Bronze, Brass, Zamak, Zinc, Lead, Magnesium and more



OPTOCLOUD S

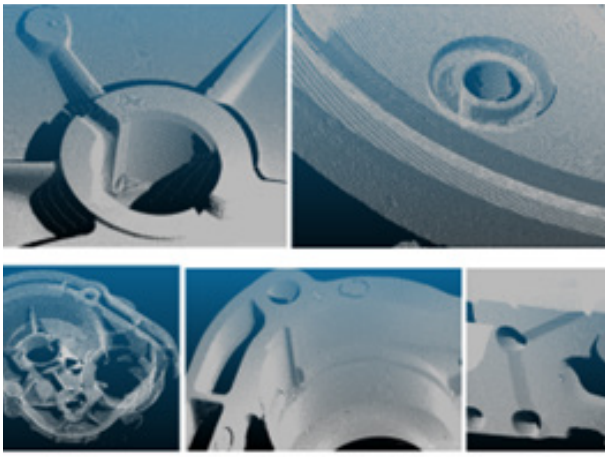


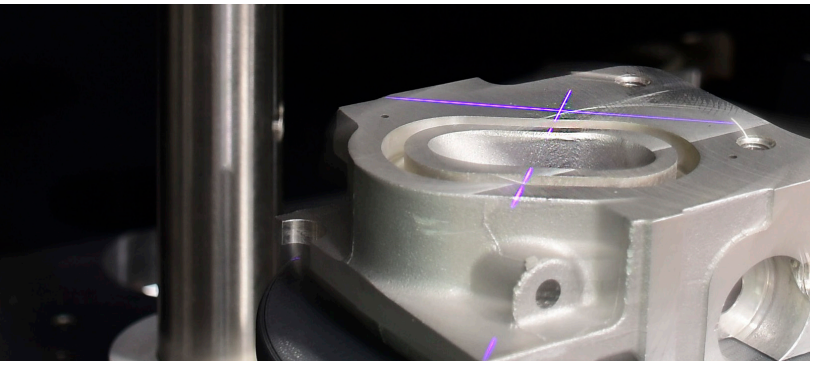
FEATURES

- **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 alloys
- **AUTOMATIZATION:** industrial robustness, manual or automatic part loading, 3D data reporting & storage, MES connectivity

MEASURING LIST

Diameters, Concentricity, Cylindricity	Outer and inner diameters of fixing holes, fluid channels, seats, legs
Heights, Lengths, Distances	Surfaces height, planes, cavities, length of keys, fluid channels, distances between holes
Flatness, Parallelism, Perpendicularity	Surfaces flatness, Parallelism between planes, Perpendicularity of surfaces
Angles, True position	Angles of notches, True position of holes or slotstones





APPLICATION EXAMPLE

Part Type	Die-cast bracket, Multiple part types, various alloys
Part Dimensions	ø120 x 55 mm
Measuring specification	28 measurements (12 diameters, 4 center distances, 4 plane distances, 3 concentricity requirements, 2 flatness tolerances, 2 radii, 1 parallelism tolerance)
System specification	Optocloud S with 2 sensors
Cycle time	30 s - single step
System dimensions	All-in-one 86 x 80 x 66 cm

discover more