



ZeroTouch[®]

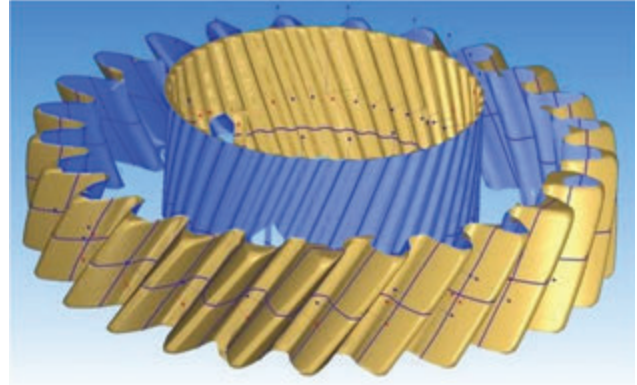
ZTG-2580

NON-CONTACT 3D GEAR INSPECTION SYSTEM

A high-speed, precision inspection machine for 100% near-line or inline gear inspections.

ZeroTouch[®] ZTG-2580 is a non-contact gear inspection system that generates a 3D point cloud, providing manufacturers with real-time metrology and inspection data to optimize production processes and improve ROI.

Measuring an Infinity of Involute



KEY BENEFITS

- 100% inspection of gears and teeth geometries with measurement cycle times of 10-30 seconds per part
- Installed in the immediate vicinity of the production line
- Faulty gears stopped before going to final assembly
- Simple interface with manufacturing process through integrated loading and unloading robot
- Fast identification of production defects, enabling adjustment of upstream processes to reduce waste
- 3D inspection of complex geometries using multiple sensors

KEY FEATURES

- Captures dense precision point cloud data with speed and accuracy
- Advanced analytics integration with application specific tools
- Profile, helix, pitch, and runout measurements
- Surface defect detection and characterization capabilities
- Multiple laser line triangulation metrology sensors
- Real-time data capture and storage for SPC analysis

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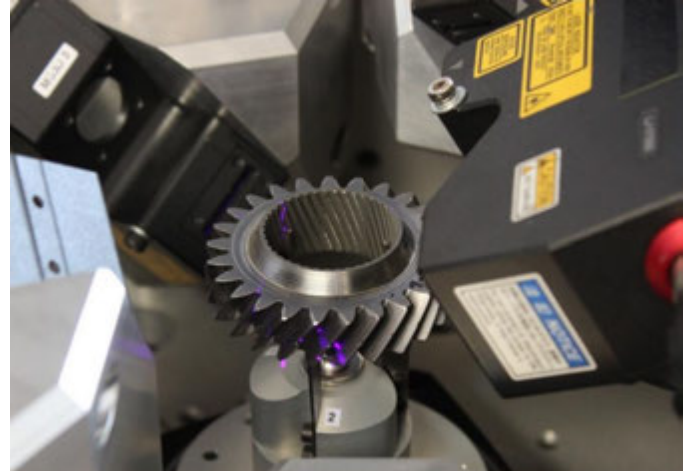
ZTG-2580

HIGH-SPEED PRECISION GEAR INSPECTION

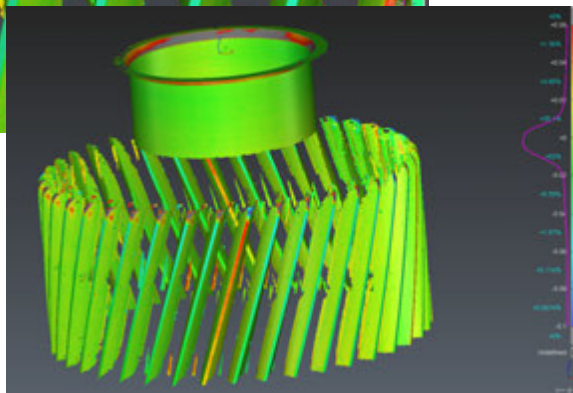
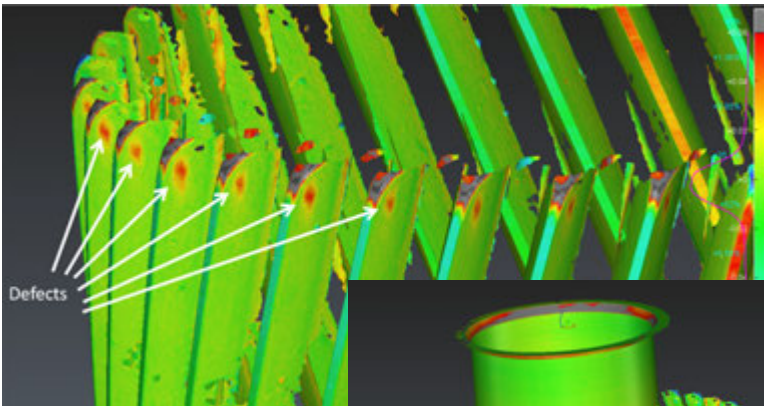
SPECIFICATIONS

Gear dimensions	
Internal ring	3 mm min. diameter
External ring	80 mm max. diameter
Part height	1-25 mm
Inspection speed	Typical cycle time < 30 seconds
Accuracy	1-5 μ m
Measurements	Profile evaluations ($F\alpha$ - $fH\alpha$ - $ff\alpha$) Helix evaluations ($F\beta$ - $fH\beta$ - $ff\beta$) Pitch and roundness evaluations (Fp - Fr)
System dimensions	2,000 x 1,000 x 2,000 mm (W x D x H)
System weight	1,500 kg (3,300 lbs)

Multiple Non-contact Sensors



Surface Defect Detection



KEY INDUSTRIES



Aerospace



Precision Manufacturing



Automotive

DWFRITZ[®]

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DWFritz Metrology is a global provider of high-speed, non-contact metrology and inspection platforms for advanced manufacturing. The company designs, builds and supports engineer-to-order automation systems, as well as providing world-class build-to-print manufacturing capabilities.