



3DSYSTEMS®



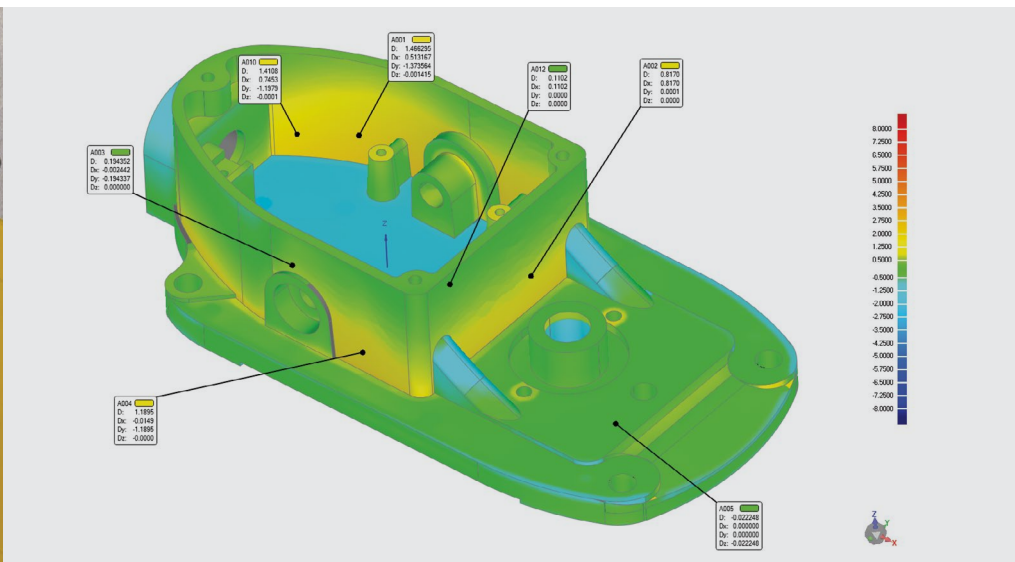
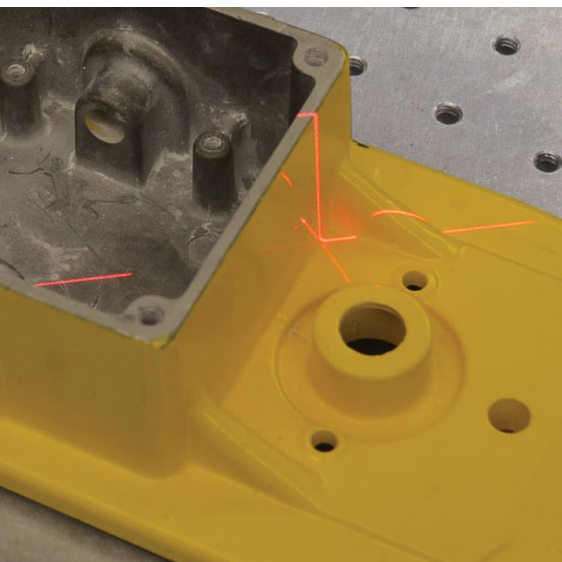
Geomagic®

Control™

3D Metrology and Automation Platform

3D Metrology and Automation Platform

Geomagic® Control™ is the industry's most comprehensive, robust and accurate 3D metrology solution and automation platform.



Case Studies

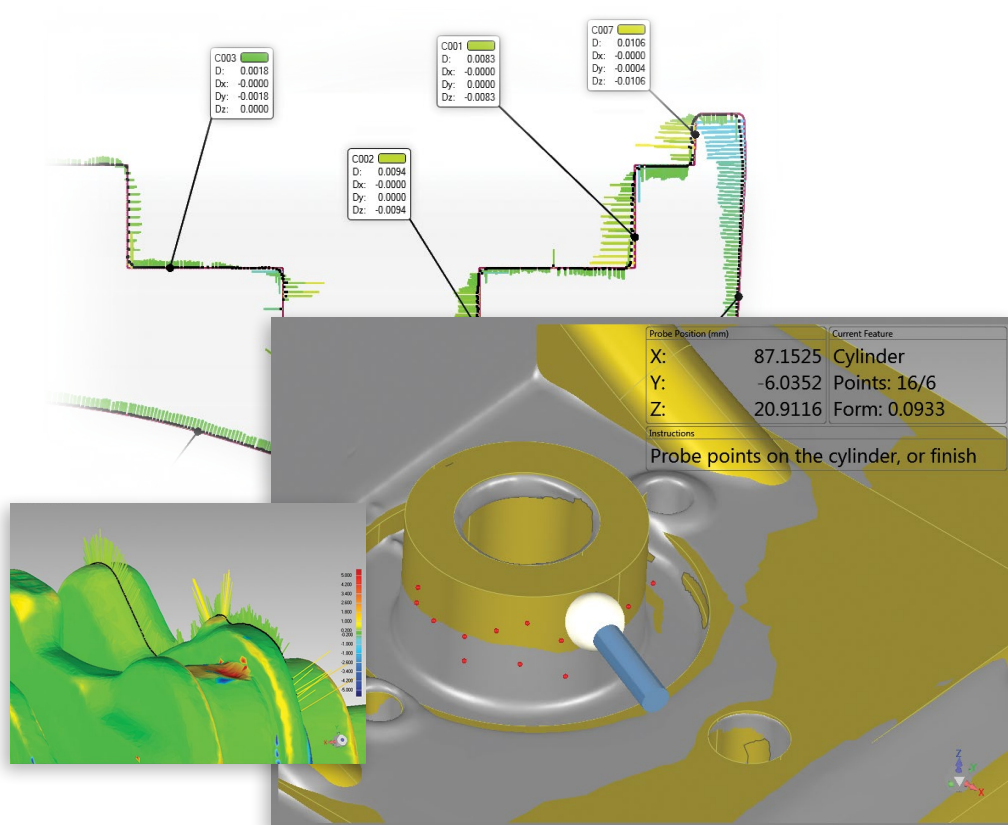
Automation in Turbine Inspection

A turbine repair company reduced the inspection time for a turbine diaphragm by more than 90% as a result of the accurate blade measurements created by contact and non-contact scanning in conjunction with the Geomagic Control Automation Platform. The implemented system simultaneously increased measurement accuracy (through elimination of verbal and handwritten data deliveries); delivered on-screen triage data, visualization and electronic data for process control and business IT systems; and improved repeatability and reproducibility variances by as much as 50% over the manual process.

Nondestructive Testing of Assemblies

A manufacturer of electrical distribution products used CT scanning and Geomagic Control to identify manufacturing and assembly issues without destroying parts. This process has been so successful that the production line downtime required to identify a critical issue has decreased from an average of 28 days to a single day.

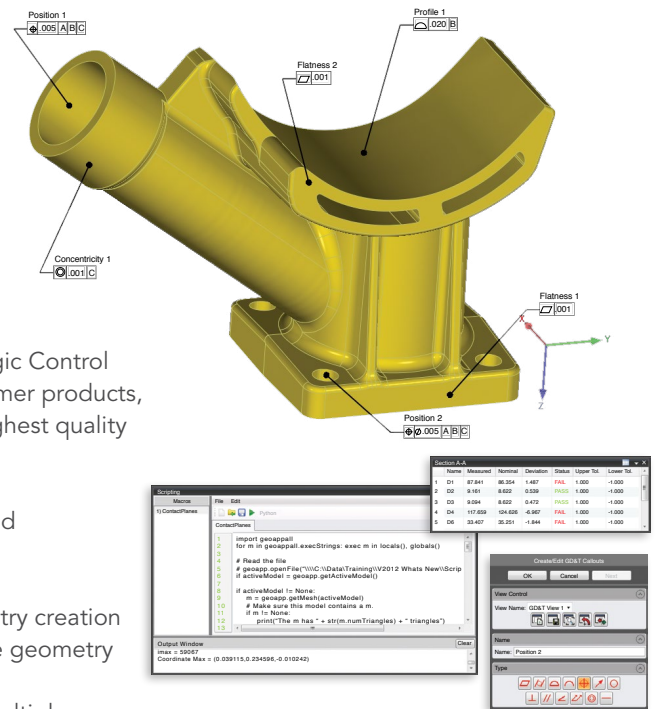
For inspection, measurement, quality checking and assurance processes, Geomagic Control enables manufacturers to save time and significantly increase accuracy by using probe and non-contact scanning data with a wide set of metrology tools, plus it includes the ability to easily automate complex tasks using Python scripting. Advanced GD&T, probing and dimensional inspection functions enable fast and precise measurement of parts in addition to intelligent creation of reports in 3D PDF.



Key Features of Geomagic Control

Geomagic Control gives customers access to the best features and tools for their metrology requirements in a single, stable, customizable platform. In addition, Geomagic Control includes integrated CAD importers and advanced blade analysis at no additional cost. Geomagic Control enables thousands of customers in automotive, aerospace, defense, consumer products, metal working, medical and other manufacturing industries to attain the highest quality in production every day.

- Free, integrated 3D CAD importers, including PMI data such as GD&T and reference geometry
- Advanced airfoil analysis included
- Robust GD&T functionality, standard dimensioning and reference geometry creation
- Unique QuickProbe™ and QuickFeature™ tools to rapidly create reference geometry with a mouse or probing device
- Best-in-class automation platform and Python scripting, which includes multiple inspection functionalities
- Extensive alignment tools, like QuickAlign™, for establishing reference systems
- Intuitive user interface and selection tools
- Simple, customizable reporting tools, which include embedded 3D PDF models
- Application is NIST- and PTB-certified for accuracy and repeatability
- Support for all industry-standard hardware devices in addition to extensive file format support
- Extensive in-person technical support, documentation, knowledge base, training and free trials of the Geomagic product lines



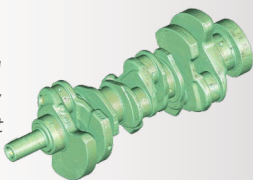
Primary Industries

- Automotive
- Aerospace
- Heavy Equipment
- Consumer Products
- Component Parts
- Tool and Mold
- Turbine Manufacturing
- Maintenance and Repair

Accurate CAD-based comparison and reporting

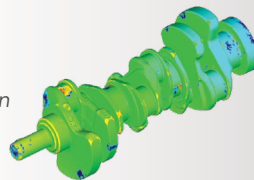
SCAN

Capture finished part or assembly with non-contact scanner



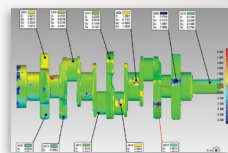
COMPARE TO CAD

Compare design intent versus output



REPORT

Automatically create accurate, custom reports



Automated inspection via Python scripting and macros

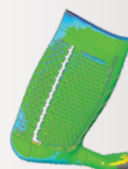
ROBOTIC SCANNING

Scripts allow automated and semi-automated scanning



AUTOMATED INSPECTION

Create comparison data with no human intervention



REPORT

Deliver customized reports to all stakeholders

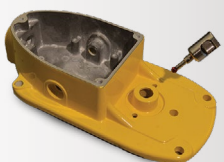
Credit: Level 3 Inspection



Probing, non-CAD measurement and reporting

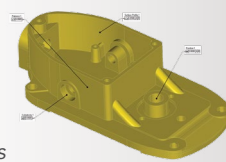
PROBE

Using probe and CMM devices, measure known points



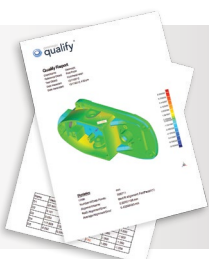
GD&T

Accurately measure features and reference points using the dimensioning tools



REPORT

Compare measurements to nominals and create reports



FUNCTIONALITY

3D CAD importers are standard	•
Comprehensive probing support	•
Support for wide range of probing devices	•
Intelligent reference geometry recognition	•
Platform automation and scripting	•
State-of-the-art GD&T functions	•
CAD-less inspection	•
2D and 3D graphical comparison	•
3D PDF reports	•
2D and 3D dimensioning	•
QuickProbe functionality	•
QuickAlign functionality	•
Airfoil analysis	•
Support for wide range of non-contact 3D scanners	•
Point cloud and polygon mesh analysis	•
Gap and flush detection	•
Wall thickness evaluation	•

Specifications subject to change. Complete specifications at www.geomagic.com.

ABOUT US

3D Systems is a leading global provider of 3D content-to-print solutions including 3D printers, print materials and on-demand custom parts services for professionals and consumers alike. The company also provides CAD modeling, reverse engineering and inspection software tools and consumer 3D printers, apps and services. Its expertly integrated solutions replace and complement traditional methods and reduce the time and cost of designing and manufacturing new products. 3D Systems products and services are used to rapidly design, communicate, prototype or produce real functional parts, empowering customers to create and make with confidence.

HIGH-QUALITY ENGINEERING

Geomagic's automated software functions allow users to quickly perform complex operations on point cloud and probe data. International bodies certify our software products for accuracy, and our products have been thoroughly tried, tested and proven by our partners, developers and customers across the years. We remain strongly committed to supporting customers' engineering, design and manufacturing workflows.

ESTABLISHED WORLDWIDE OPERATION

Geomagic has teams in 10 countries and key offices in USA, Europe and China. A worldwide network of Geomagic partners and resellers serves thousands of customers in 62 countries.

WORLD-CLASS SUPPORT

Geomagic offers comprehensive support for all our software and hardware customers. See www.geomagic.com for free technical support, multi-language Knowledge Base information, free tutorial videos, data, instructions and how-tos. Multi-language telephone technical support and full access to software updates, downloads and plug-ins are available for maintenance customers only.

WORLD-CLASS TRAINING ON GEOMAGIC PRODUCTS

Geomagic offers consulting as well as in-office and on-site training classes across the globe in multiple languages. Training classes are taught by world-class trainers with real-world engineering experience.

CONTACT US



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