



# **Geomagic**<sup>®</sup> Control<sup>™</sup>

**Geomagic Control** (formerly Geomagic Qualify) is a comprehensive inspection automation platform for streamlining in-line and repetitive inspection processes that use 3D scanners and other portable metrology devices. With this feature-rich software platform, you can easily program CAD comparisons, GD&T and go/no-go operations to be performed automatically on any type of part.

#### **Make Inspection Work for You**

Eliminate workarounds and don't miss a single detail. With Geomagic Control you can create and run purpose-built inspection processes that do exactly what you need.

#### **Inspect Anything More Efficiently**

If you're inspecting parts or components, Geomagic Control eliminates extraneous or wasteful processes. Reduce waste, avoid production errors down the line, free-up personnel, and have critical systems up and running faster with Geomagic Control's single, stable, fully customizable platform.

#### Speed Up Manufacturing and Assembly

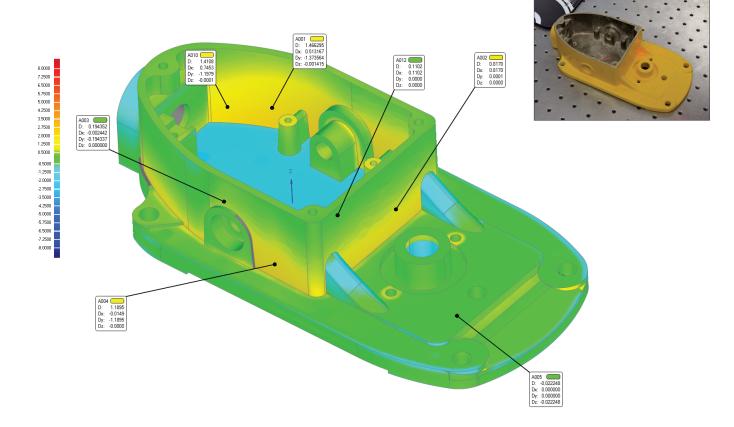
Geomagic Control's powerful scripting and customization capabilities let you move faster than one-size-fits-all inspection solutions or manual processes. Geomagic Control can handle the heavy lifting of point cloud processing and analysis, as well as run 3D scanners, robots and other components.

#### Harness the Power of 3D Scanning

Geomagic Control was built from the ground up to maximize the capabilities of popular contact and non-contact metrology devices, handling millions of measured points along with the unique alignment and measurement methods that point clouds require. So you can reliably have more complete part views and better control of complex shapes.

#### **Inspect with Confidence**

You rely on your inspection results. That is why Geomagic Control's geometry calculation algorithms have been tested by America's NIST, Britain's NPL and independently certified by Germany's PTB metrology authority as Class 1 accuracy. Top manufacturers around the world trust Geomagic Control to measure thousands of parts every day.



## Customized, Automated Inspection With Any 3D Scanner and Geomagic Control

#### **Built for Point Clouds and Probing**

Capable of handling millions of points from any 3D scanner, Geomagic Control takes advantage of that rich data to generate easy-to-read deviation color maps and perform detailed analysis of your parts automatically. It also supports many probe-based devices, so you can mix measurement techniques for optimal performance.

#### Works Seamlessly with Your CAD Files

Geomagic Control imports native files from popular CAD systems, including SolidWorks®, CATIA®, Siemens NX®, and Pro/ENGINEER®. With this native import capability, your GD&T callouts and reference geometry come in with the CAD geometry, making it easy to set up inspection routines. You can also seamlessly integrate and compare scan data from your production floor to the original design data in seconds, creating go/no-go reports to ensure the highest quality at every moment.

#### **Robust GD&T Functionality**

Geomagic Control comes with a full range of intuitive measurement, dimensioning, and tolerancing tools and settings. Whether you are looking for automatic detection of geometric features, real-time deviation tools, or iterative alignment, it can all be found in one comprehensive solution.

#### **Automation for Faster, More Reliable Inspection**

Use Python Scripting plus drag-and-drop automation to customize the environment and processes to your company's needs. By creating an open source environment, you can access a wide range of commands including CAD model access, constrained alignments, reporting, point processing and polygon processing.

#### **Maximize Your Hardware**

Whether you are using a tactile device or a non-contact scanner, the power to work directly within the application is at your disposal. You can also use the Python Scripting feature to fully automate scanning.

## Workflows

Automated inspection via Python scripting and macros

Robotic Scanning	Automated Inspection	Report	
Scripts allow automated and semi-automated scanning	Create comparison data with no human intervention	Deliver customized reports to all stakeholders	

### **Geomagic Quality Inspection Product Comparison**

Geomagic<sup>®</sup> Verify<sup>™</sup> is powerful, easy first article inspection software for both contact and non-contact 3D measurement devices, whereas Geomagic<sup>®</sup> Control<sup>™</sup> is a comprehensive inspection automation platform for streamlining in-line and repetitive inspection processes.

Functionality	Control <sup>∞</sup>	Verify <sup>™</sup>
Direct interfaces for many popular metrology devices	•	•
Intelligent reference geometry recognition	•	•
Point cloud and polygon mesh analysis	•	•
Comprehensive probing support		•
Airfoil analysis	•	
State-of-the-art GD&T functions	•	•
Platform automation and scripting	•	
Convenient reporting tools	•	•
Automatic alignment based on feature recognition	•	•
Inspection without a CAD nominal	•	•
Interactive guided inspections		•
2D and 3D dimensioning	•	•

### **Contact Information**

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About 3D Systems

3D Systems is a leading 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, 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 new products by printing real parts directly from digital input. These solutions are used to rapidly design, create, communicate, prototype or produce real parts, empowering customers to create and make with confidence.