

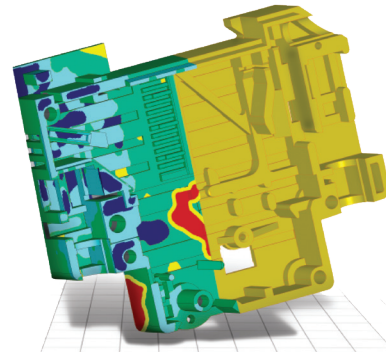
Big or Small, Inside or Out, We Can Measure It for You

3D Measurement for Inspection & Reverse Engineering



3D SCANNING

3D Scanning is a **non-contact** technology that measures fine details & captures complex geometries to generate a **highly accurate digital model**.



We can scan, model, and inspect your parts of all sizes and complexity, inside and out, from tiny components to vehicles and even entire buildings.

- Accuracy to 0.0005"
- Reverse engineering & inspection
- Non-destructive CT scanning of internal geometries
- Part-to-CAD inspection

DIMENSIONAL INSPECTION

GKS's Plymouth, Michigan lab is **ITAR compliant** and **A2LA accredited** for mechanical testing and calibration, guaranteeing that we meet or exceed **ISO/IEC 17025:2005**.

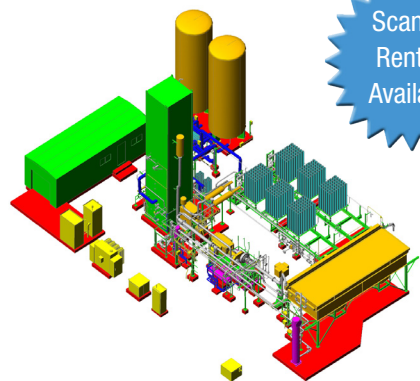


Dimensional Inspection Services:

- GD&T training
- First article inspection
- Touch-probe contact measurement for parts that need to be dimensionally inspected to a tight tolerance
- Gage R & R studies
- Gage calibration
- Process capability studies and production part approval process (PPAP)

ON-SITE SCANNING

Quickly scan complex or large shapes and delicate or hard-to-move objects of any size on-site for inspection, documentation, or reverse engineering applications.



On-Site Scanning Applications:

- Verify that as-built part matches CAD
- Validate tooling, even if no current CAD exists
- FEA testing reveals inaccuracies before production
- As-built documentation
- Historical preservation & location digitization
- Roadway or bridge analysis & testing

MORE SERVICES

PROTOTYPING AND MANUFACTURING

Rapid prototyping via 3D scanning to create CAD models for digital analysis and modification.

- Full services including molding, fixtures, tooling, and accessories
- Consulting to determine the best manufacturing method



LASER TRACKING

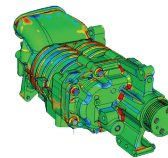
For large-volume, high-speed, high-accuracy 3D spatial measurements with the ability to capture and interpret 3D shapes. Use to set milling machines, align machine tools, and check parts on machine beds.



INSPECTION REPORTS

Color-coded error map inspection reports from 3D scan data show:

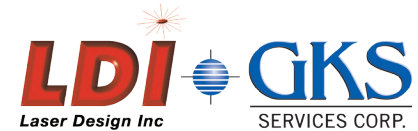
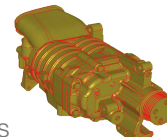
- deviation from the 3D design model
- acceptance requirements & QC standards



CAD MODELS

Specialized modeling software creates mathematical wireframe representations which are:

- 3D renderings from 2D images
- surface-model or solid-model based
- used in computer simulations (for FEA) & 3D printing devices



For three decades GKS Services and Laser Design have been the standard of excellence for ultra-precise, 3D measurement used for reverse engineering and inspection. We have multiple labs and mobile offices to serve you.



Watch a 3D Scanning video on your smartphone (download a scan app to view).