



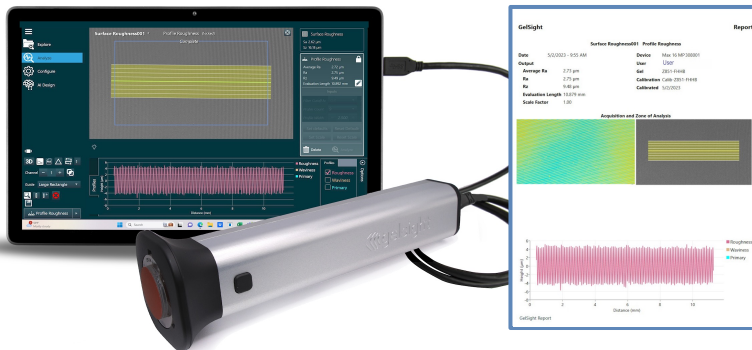
GelSight Max

Ultra-high-resolution, non-destructive 3D surface analysis

The GelSight Max is our highest resolution handheld surface analysis solution and designed for the most demanding applications, including surface and profile roughness from 0.2 to 20 μm . The GelSight Max immediately quantifies the surface characteristics of any material at any workflow location, regardless of composition, reflectivity, transparency, or ambient lighting conditions. Its precise, repeatable, in-situ measurement capability can save tens of thousands of dollars and/or man-hours per year in unnecessary scrap, re-work, down-time, or poor yields by eliminating false failures and boosting productivity.

Industry 4.0 ready including an AI Toolbox

Automated process workflows, including robotic operation, are enabled by external triggering, mounting holes, custom pass/fail test routines, batch-mode analysis, STL and CSV outputs, and immediate PDF report generation. In addition, users can create AI models to apply touch sensing to many tasks that had no simple path to digitization.



Precise & Repeatable

Provides extremely detailed, highly accurate, repeatable, sub micron-level measurements to eliminate human error and subjectivity



Fast

Real-time 2D and 3D surface inspection with operator-specific UI workflows enables rapid decision making and productivity improvements



Portable & Versatile

Inspect and measure any material— metal, glass, 3D printed, composite, plastic, painted, coated, organic and more — including highly reflective, transparent and translucent surfaces under any lighting conditions in any location to boost productivity



Traceable

Provides objective evidence, full documentation, and a digital audit trail



The GelSight Max 3D surface analysis system transforms workflows by putting lab-grade dimensional measurements in the palm of your hand, with fully traceable, digital results in under a minute.

For use in hard-to-reach areas, the Replica Transformation feature enables direct, in-situ measurements of replica materials.

Improve productivity across a wide range of workflows

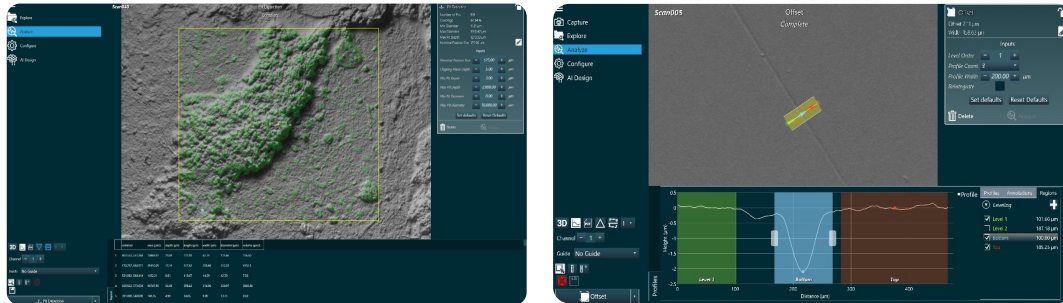
- Incoming Inspection and Vendor Qualification
- Production Quality Control
- Field Installation and Flight Line
- MRO (Maintenance & Repair Operations), and Sustainment
- Research & Development
- Academia

Measurement and Analysis Applications

Unlike manual, mechanical, or optical measurement technologies, GelSight's patented elastomeric sensor enables high-resolution measurements on any surface material regardless of reflectivity, transparency, or ambient lighting conditions. Ultra-high resolution 2D surface detail is displayed in real time, and sub micron-level 3D measurement and analysis of surface topologies, features, and defects are computed and displayed in seconds.

GS Max is optimized for high-resolution Surface and Profile Roughness measurement applications, with a range of 0.2 to 20 μm . Parameters include Sa, Sq, Sp, Sv, Ssk, Sku, and Sz, as well as Ra, Rq, Rp, Rv, Rz, Rt, Rsk, and Rku.

Applications Include



- Profile Roughness
- Surface Roughness
- Pitting / Porosity
- Texture / Profile
- Shot Peen Finish
- Scratches / Cracks / Nicks / Dents
- Fastener Flushness
- Hole Diameter
- Fillet Relief
- Radius of Curvature
- 3D Geometry / Topology (X-Y-Z)
- Weld Bead
- Direct Replica Measurement with image inversion



GS Max Condensed Specifications

Dimensions: Grip	45 x 45 x 245 mm	1.7 x 1.7"
Dimensions: Tip	67 x 67 mm	2.6 x 2.6 x 9.6"
Weight	727 g	1.6 lbs
Field of View	14.6 x 8.3 mm	0.6 x 0.3"
Roughness Range	0.2 - 20 μm	7.9 – 790 μin
x-y Accuracy	3 μm + 0.2%	0.1 thou + 0.2%
z Accuracy	0.3 μm + 4%	0.01 thou + 4%
Triggering	Manual, Software, External	
Capture Speed	500 mS	
Data Export Format	PDF, STL, CSV, TMD	
Operating System	Windows 10 and above	
Interface / Power	USB-C	
Optional Computer	Microsoft Surface Pro 8	



Aerospace
& Military



Automotive



Forensics



Additive
Manufacturing



Research
& Academia



Chemical



Oil & Gas