

Instant, Portable 3D Surface Analysis

Pipes / Tubes

Rods

Plugs

Enclosures

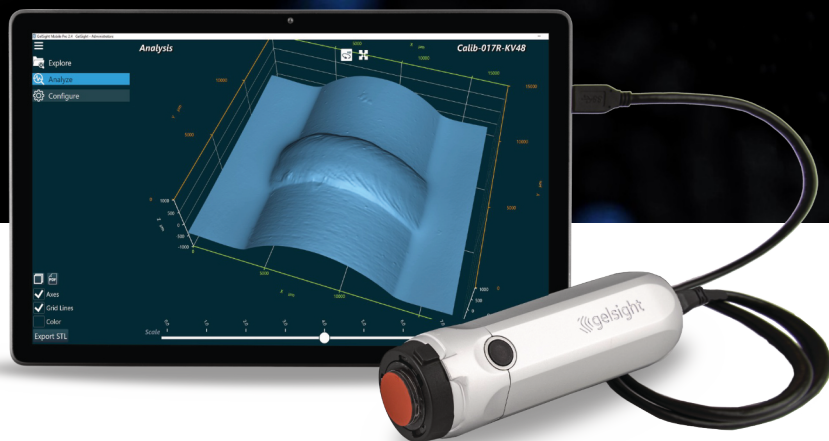
Geological Samples

Immediate, in-situ testing saves thousands of dollars and man-hours/year — ROI within days or weeks

Precise, repeatable measurements improve yields up to 40% vs. manual inspections

Quantitative, accurate information on critical components increases installation safety

Test any surface, regardless of material, reflectivity, transparency, or ambient lighting



Improve Profitability and Productivity of Manufacturing and Maintenance Operations

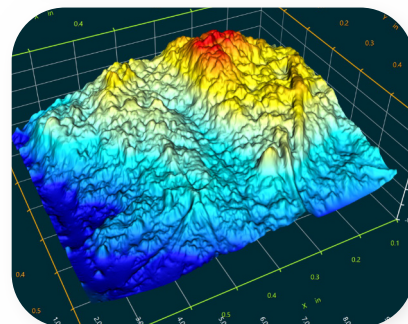
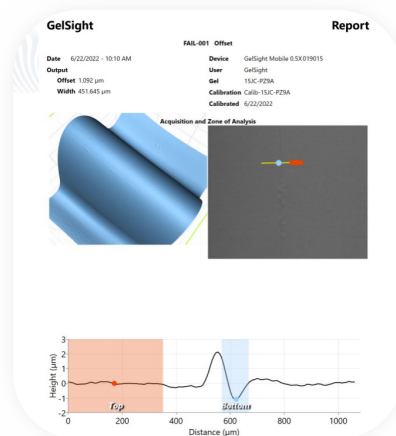
Improve yields in Production Line QC inspection operations by instantly quantifying that visually-observed defects are in or out of spec. Eliminate unnecessary scrap, down-time, and/or poor quality due to human subjectivity.

Improve turn-around-time in off-line inspection workflows by immediately and precisely measuring and documenting surface defects for disposition rather than performing teardowns and waiting for lab results.

Lower field sustainment and maintenance costs by testing in-situ to eliminate unnecessary disassembly / reassembly, transportation, lab analysis, down-time, and inventory carrying costs.

Establish and monitor quantifiable, repeatable pass/fail criteria across workflows to reduce unnecessary scrap, rework, and other non-quality costs.

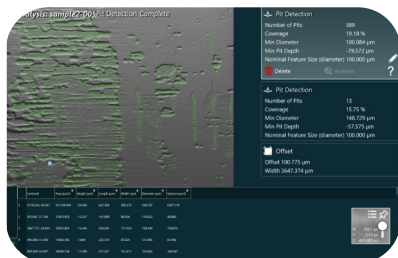
Speed time-to-market in R&D and Materials Development applications by bringing lab-grade, non-destructive measurements directly to the engineering bench or field locations.



Application Examples

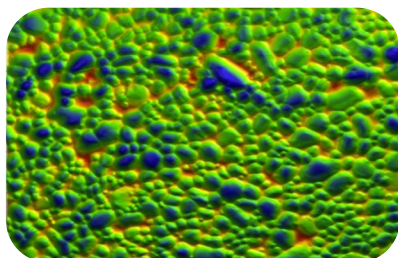
Below are examples of in-situ, non-destructive test applications for the GelSight Mobile. In all cases, micron-level defects can be detected, and pass/fail testing immediately performed by the user, with a more detailed analysis achieved in seconds, including 3D rendering. All results can be immediately documented in a pdf report, then archived for long-term trend analysis activities. Testing can be performed on any surface, including metallic, coated, 3D printed, and more, under any lighting conditions.

Pitting and Corrosion of Sealing Surfaces

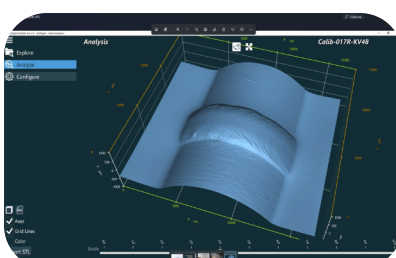


Corrosion coverage & analysis on a plug

Detect, measure, and report the area, height, and centroid of any pits with sub-micron depth sensitivity.



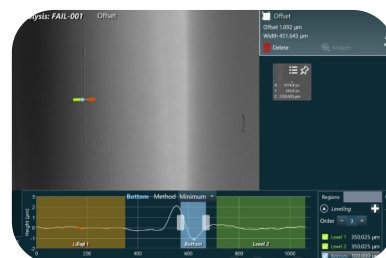
Weld Bead Analysis



Weld analysis on a pipe

Immediately quantify that re-work and/or initial builds meet established criteria.

Scratches and Dents on Pipes and Rods



Depth profile of scratch on a rod

Directly and repeatably perform high accuracy measurements on highly reflective, curved surfaces, including depth profiles and 3D rendering, in seconds.

Additional Applications

- Surface roughness and smoothness (Ra, Sa)
- Porosity
- Coatings / paint profiling
- Radius of curvature
- Direct, non-destructive measurement of replica material for immediate analysis of defects in hard-to-reach locations

Condensed Specifications

	Series 1	Series 2
	Model 1.0x	Model 0.5x
Dimensions	6cm x 6cm x 22cm	5cm x 5cm x 15.5cm
Weight	600g	400g
Field of View	8.5mm x 7.1mm	17.0mm x 14.2mm
x-y Resolution	3.5um	6.9um
z Sensitivity	<1 um	<1 um
Capture Speed	100mS	100mS
Optional Computer	Microsoft Surface Pro, 12.3"	Microsoft Surface Pro, 12.3"
Operating System	Windows 10	Windows 10
Interface / Power Source	USB 3.0	USB-C
Data Export Format	tmd, csv, stl, pdf	tmd, csv, stl, pdf

Specifications are subject to change without notice