



Video Gauge™ software - Benefits



Video Gauge™ is an advanced software tool that delivers fast, ultra-high resolution measurement of displacement, rotation, strain and extension on any material or structure.

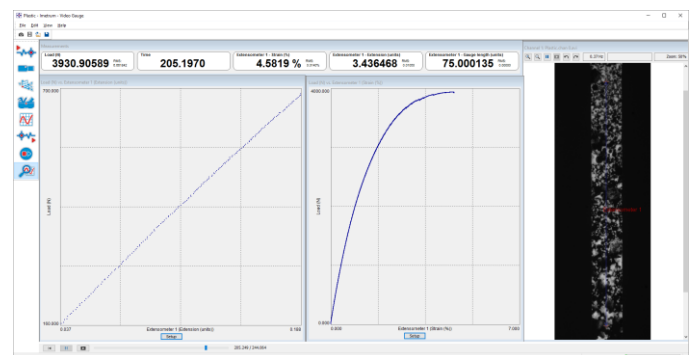
Video Gauge™ manages the control, capture, processing, and analysis functions for all Imetrum's non-contact precision measurement systems. It is built on top of Imetrum's patented sub-pixel pattern recognition technology.

Key benefits

- ✓ Measure anything anywhere – the most robust pattern tracking algorithms available
- ✓ Measure what others can't see – the highest resolution image processing algorithms (up to 1/500th pixel)
- ✓ Simple to learn, use and calibrate – half a day's training will get you up and running
- ✓ The ultimate in flexibility – a toolbox full of virtual measurement tools: LVDTs, strain gauges, extensometers and tilt meters at orientation
- ✓ Real-time measurement of 100s of points
- ✓ In-depth analysis via multiple camera support
- ✓ Further post-process analysis of video archives including high speed cameras and microscopes.
- ✓ Record and analyse data - precisely synchronised external analogue and digital data streams.
- ✓ Understand your results easily with intuitive graphical data displays
- ✓ Easy export to other applications with on-board data and video management tools

Imetrum were the pioneers of point to point precision measurement using video. Our roots go back to the 1980s, with University of Bristol research on outdoor structures and composite materials.

The fundamental principles behind Imetrum's software are often referred to as Digital Image Correlation (DIC), although Video Gauge™ has been independently benchmarked to be an order of magnitude more accurate than other DIC software.



There are two ways this measurement capability can be delivered: a) a point-point approach to mimic traditional gauges and b) create colour maps of strain and displacement. Video Gauge™ offers both in one package.

Point-point virtual measurement gauges are equivalent to traditional devices - simple to use with real-time outputs (up to 1kHz), but there is no extra cost to adding gauges – just click in the image. Simple calibration tools mean 2D measurement is possible in minutes, with 3D measurements available straight out-of-the-box.

Maps can identify stress concentrations and cracks, and run simultaneously with gauges. For more information, contact your local Imetrum representative or look at our product information sheets.

“ Nothing else comes close ”

Head of Calibration Services at
global test frame manufacturer