



Digital Image Correlation in Video Gauge™



The Digital Image Correlation (DIC) option in Imetrum's Video Gauge™ Software uses the same proprietary algorithms that give Imetrum systems their cutting edge resolution.

Key features

- ✓ Highest resolution DIC software money can buy
- ✓ Operates in both real-time and post-process analysis
- ✓ Uses videos rather than stills – simplifies the process of collecting images and allows an easier understanding of how objects under test change with time
- ✓ Extend what you can measure by importing videos from ultra-high speed cameras, imaging microscopes and other camera systems
- ✓ Emphasis on time saving and ease-of-use means quick and efficient testing
- ✓ Straightforward import of data into other analysis software via CSV text files
- ✓ Easy interpretation of measurements – toggle between all measurement options for strain and displacement maps without reprocessing a test
- ✓ Analysis of multiple regions of an object by using up to 8 synchronised video channels:
 - Raw displacement (u_x and u_y)
 - Filtered displacement (U_x and U_y)
 - Strain (ϵ_{xx} and ϵ_{yy})
 - Shear Strain (ϵ_{xy})
 - Position co-ordinates of each node
- ✓ Powerful visualisation and sharing of your results by exporting full-field maps (overlaid on the original video) as standard Windows .avi files
- ✓ Further details analysis in Video Gauge™ software via a toolbox of virtual measurements

“Wow”

*Technical Director,
Global Structural Investigation Company*

DIC enables the Video Gauge™ algorithms to be used to create full-field colour maps of strain and displacement. This technique, widely used within research establishments, offers users a convenient visual tool for scanning an area under load to identify areas of high stress, crack opening or other discontinuities.

