DANTEC DYNAMICS

Turn Measurements into Knowledge

Still Teaching/Using only Strain Gauges?

Explore Innovative Optical Measurement Techniques

With **Dantec's** Digital Image Correlation (DIC) Starter Package

DIC Starter Package

(Part No.: Special-ED01)

for **9.950 €**

- ISTRA 4D Software DIC 2D platform
- Calibration target for 80mm object size
- USB 3.0 Camera 2 Mpx, 165 Hz + lens with 25mm focal length
- Tripod + Camera mounting
- Dell Laptop
- LED Illumination
- DIC / ISTRA 4D introduction webinar (4 hours)

Upgrade Option DIC shape and 3D displacement and strain Measurements

(Part No.: Special-ED02)

for **4.900 €** add.

- ISTRA 4D Software DIC 3D platform + software trigger module
- Second USB3.0 Camera 2 Mpx, 165 Hz
  + lens with 25mm focal length
  + two camera synchronization module

Features and Benefits

Dimensional Measurement

Dantec DIC provides a full-field view of the displacements and deformations of a component and shows its complex behavior. This easily allows the identification of potential hot spots, even in areas where strain gauges cannot be attached.
DIC is based on pattern recognition on the object to be measured, the so-called “speckles”. The speckles provide an optical “fingerprint” that is identifiable in 3D space and is tracked by the DIC system as long as the surface is in the view of the DIC camera(s).
DIC can be flexibly used for measurement areas from mm² to m² with strains from 0,01% up to several 100%.

Easy and quick calibration

Dantec’s user friendly and fast calibration procedure gives a calibration in typically 10 seconds for 3D measurements and even faster for one camera.

Overcome Strain Measurement Constraints[1]

With two cameras DIC goes beyond the application limits of strain gauges and allows to measure shape, deformation and strain in 3D. For example it is possible to measure on top of the welded areas in order to derive the exact strain measurement.

FEM comparison[1]

Simulation doesn’t always reflect reality. Sometime parts and components fail in areas where no difficulties had been predicted. Therefore a comparison between simulation and experimental results provided by Dantec DIC plugins and data export is vital for the improvement of R&D cycles and the prediction of the reliability of the material / component.but also indicates the calculation uncertainty for each value.

[1]with Option “DIC Shape and 3D displacement and strain measurement“

NOVA INSTRUMENTS