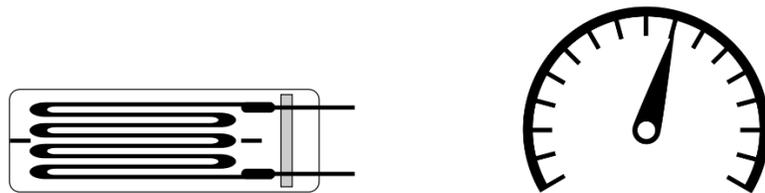


EDU Program Promoting DIC to Educational Institutions

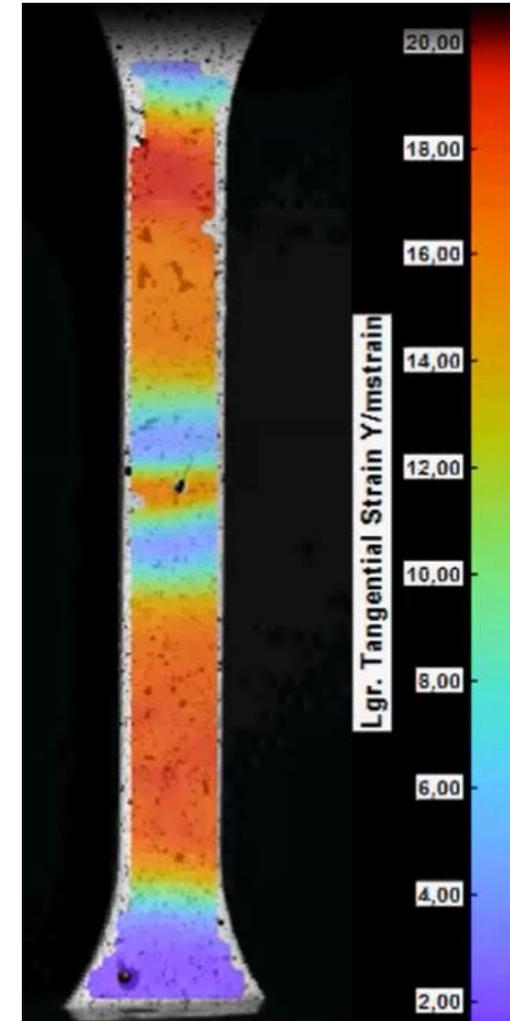
This is a Program to Help and Promote DIC Technology to Universities and Educational Institutions.



Advance your knowledge and training using strain gauges instead of delivering just average value from unpredictable areas

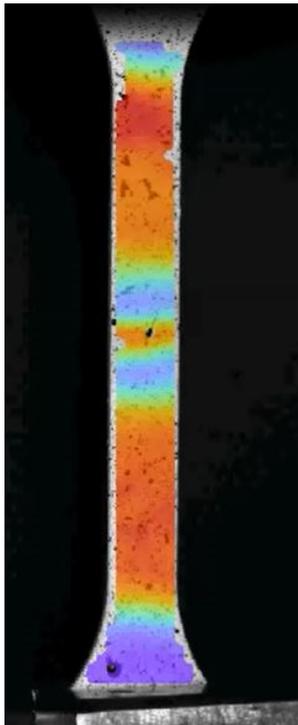


Turn measurements into knowledge

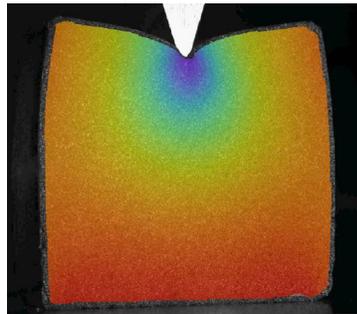


Replace Variety of Extensometers and Strain Gauges with Single DIC System

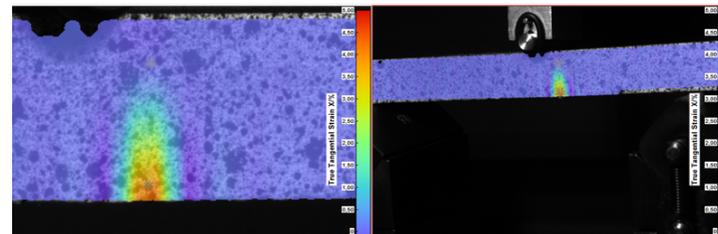
Tensile test



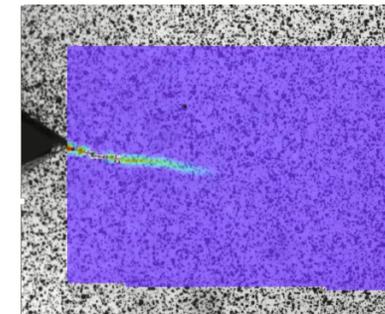
Compression test



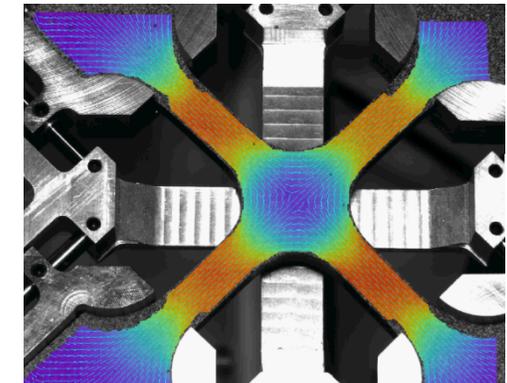
3 and 4 point bend test



Crack propagation



Multiaxial tests



And many other test: shear, high temperature, torque, peel, LCF, puncture...

The Initial Investment is Small

Step Out of Limitations and Scrap Costs of Mechanical Strain Gauges

- › Find the real issue identified in a full field image
- › Measure multiple points contact free and at the correct hot spots
- › Analyze and have the chance to revisit and post process based on captured data
- › Recognize and avoid alignment problems in your test set up
- › Gain a much better understanding of material behavior
- › Visualize and see what is happening



Cost Effective Entry Into Modern Measurement Platforms

DIC ready to go Starter Package for 9.950 €* (Part No.: Special-ED01) including :

- › Camera 2 Mpx, 165 Hz + lens with 25mm focal length
- › LED Illumination
- › Dell laptop
- › ISTR4 4D Software DIC 2D Platform
- › Calibration target for 80mm object size
- › Tripod + camera mounting
- › DIC / ISTR4 4D introduction webinar (4 hours)

* available to educational Institutions only and limited offer for orders until 31.12.2018

Contains the following functions (1/2):

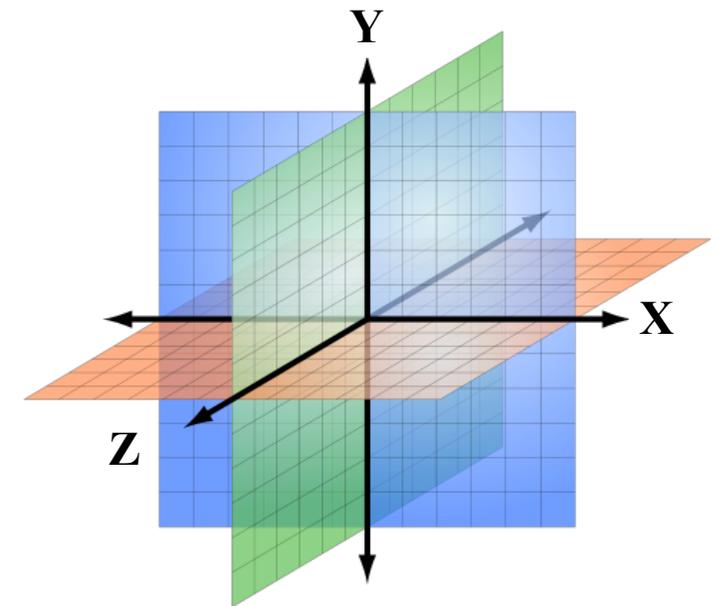
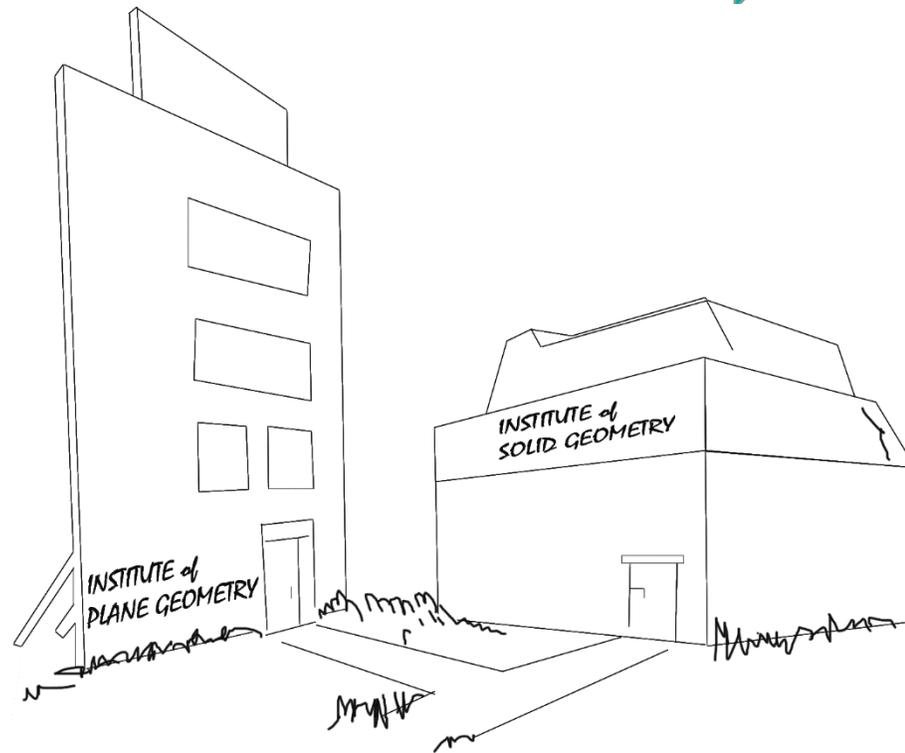
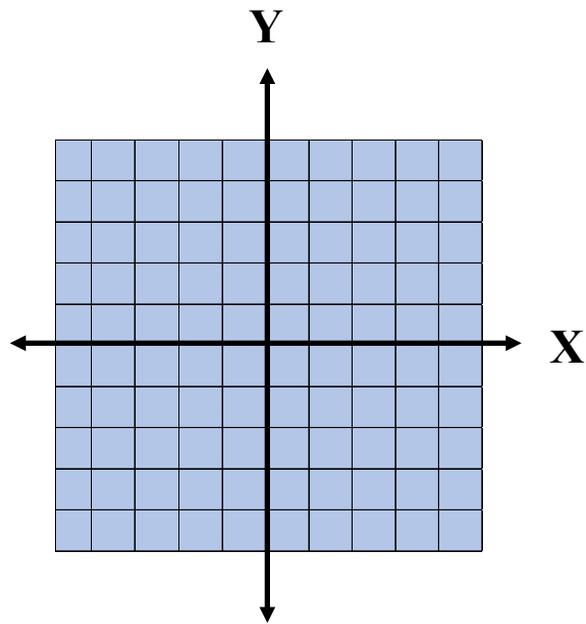
- › Evaluation two-dimensional deformation for plane object the image of one camera
- › Interactive definition of the evaluation areas (masking function)
- › Automatic search of start points for the correlation algorithm
- › Determination of intrinsic camera parameters and orientation of object plane during a calibration process or by using generic parameters.
- › Evaluation parameters adjustable
- › Combination of images from individual series in one evaluation

Contains the following functions (2/2):

- › Flexible correlation sequence configuration functionality supports evaluations even if the applied stochastic pattern gets defects during the measurement
- › Calculation of the strains from the distortions of the correlation window, the surface displacements or a combination of both
- › Up to 254 separated evaluation areas are supported in order to get sound results on specimens with separated areas of interest
- › One click evaluation
- › Standard deviation for pixel correlation is estimated in order to provide information on the measurement accuracy **in each specific** measurement point
- › Real-time visualization of correlation accuracy and residuum during correlation evaluation

Upgrade and Get the Third Dimension

Choose the Upgrade Option



**Option DIC shape and 3D displacement and strain measurements
for 4.900 € add.** (Part No.: Special-ED02) Including:**

- › ISTR4 4D Software plug in DIC 3D Platform
- + Software trigger module
- + Second USB3.0 Camera 2 Mpx, 165 Hz
- + Second lens with 25mm focal length

** available to educational Institutions only and limited offer for orders till 30.06.2019

Three Dimensions and Therefore Many Additional Features and Benefits

- › Smart-to-use and state-of-the art user interface (following User Experience Guidelines UX Guide)
- › Enhanced systematic handling of measurement data, settings and results
- › Easy and flexible assignment of notes and information to the measurements using the properties and description utility

- › Assignment of short cut keys to various functions
- › Open data format: HDF5 files for direct external data access. This function allows well known external standard Software packages like MATLAB, Mathematica or Tecplot to directly access and further process evaluated ISTRAN 4D data.
- › Export functions in ASCII, TIF, AVI, clipboard, etc.
- › ANSYS Plug in

Three Dimensions and Therefore Many Additional Features and Benefits

- › Display of acquired images
- › Replay options (movie view) of acquired images enables easy review of recorded events before evaluation
- › Color coded full-field display of: Displacements (X,Y,Z and std. deviations)
- › **Tangential strains (X, Y, Shear and std. deviations)**
- › Principle strains (with directions)
- › Distances to primitives (best-fit plane, sphere)
- › Error approximation
- › Deformed wire-frame display for visualization of displacements, for quick and easy analysis of events.
- › **Fast and easy selection of reference step for displacement and strain calculation without recalculation**
- › 3D Contour display
- › Measured 3D contour display overlaid with Colour coded results
- › Displacement grid
- › Extended Graphical Analysis Tools
- › Multiple Selection of points, lines, circles, and polygons

Tools for statistical analysis of points, lines, areas etc.

2D spatial and temporal plots of statistical results from points lines, and areas

- › Subtraction of rigid body movement
- › Movie view of evaluated data
- › Filtering tools for contour and displacement data
- › Individual filter algorithm optimized for the visualization of local or global effects
- › Automatic and user defined axis systems for results display
- › Extended data export functionality
- › Export of the contour information in STL format
- › Export of data in ASCII format
- › Export of graphic display as TIFF files
- › FEM Package free of charge for additional benefit
- › Application Based Modules for SciLab

Save Time / Money

- › Full-field, 3D quantitative analysis on displacements and stress
- › Unlimited data points
- › Non-contact measurement
- › Quick and easy setup and calibration
- › Effective tensile testing with DIC hot spot detection
- › Eliminate the limits of point and two dimensional measurements
- › Don't care about sample alignment and rigid body movements
- › Easy to use tools available for test object marking
- › Make your tensile / material testing products unique

Explore Innovative Measurement Techniques

- › Measurement of any material / component with smooth or uneven surfaces
- › Investigate anisotropic material behavior
- › Explore advanced materials and structural testing areas with DIC, such as:
 - Displacement / Strain measurement
 - Fatigue Testing
 - FEM validation
 - Vibration / Impact / FFT Analysis
- › Stress determination by measurement of sample necking
- › Measure over welded spots or entire welded seams.
- › High temperature measurements
- › Flexible measurement areas: from mm² to m² dimensions
- › Indication of measurement precision always available
- › Accuracies down to sub- μ m displacement
- › Measure beyond the capabilities of DIC with Dantec's proven ESPI technology

Easy To Use – Turn Measurements into Knowledge

- › Deformation, Displacements (x, y, z), Strains (ϵ_{xx} , ϵ_{yy} , ϵ_{xy} , e_1 , e_2), etc.
- › Material parameters: Poisson ratio, Strain/Force, Young's Modulus etc.
- › Vibration analysis and modal shape analysis modules are available
- › Various export formats to support post processing for country and company specific procedures and standards are provided
- › End user customizable procedures for complex calculations are supported and can be initiated with a single keystroke

Choose to start with **Dantec Dynamics Istra4D!**

