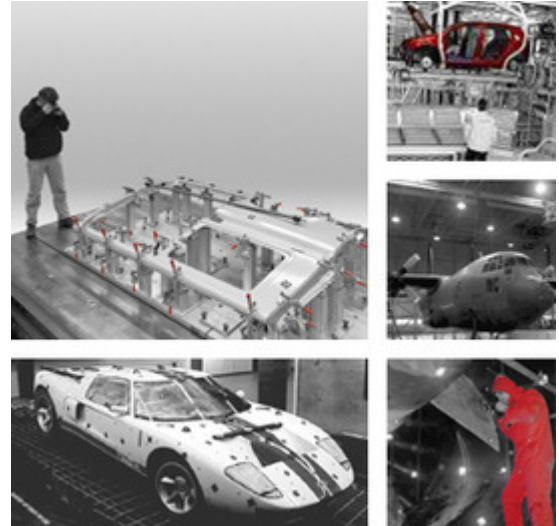


TRITOP Deformation Fact Sheet

TRITOP Deformation - Static deformation analysis

TRITOP Deformation is an optical, mobile, measurement system, which accurately defines the 3D coordinates of object points at quasi-static conditions. Based on this information TRITOP Deformation is capable of calculating 3D displacements and deformations of objects and components.

The non-contact TRITOP Deformation replaces conventional displacement measuring systems or LVDTs capturing displacements and deformations rapidly without cables or sensors on or around the object, and does therefore not interfere with the object.



Powerful Integrated Software

The TRITOP Deformation software automatically calculates the 3D coordinates of the measured points, their displacements and deformation and presents the results in an easy to understand and intuitive manner. Furthermore the free results viewer allows easy exchange of data between colleagues, customers and suppliers.

The powerful viewer even enables the development engineer to perform his own problem-oriented analysis and thus freeing up measuring capacities. TRITOP Deformation offers the complete solution, measurement, analysis, evaluation and reporting in one hard-/software package.

Application Areas

- Climate Chambers
- Environmental Simulation
- Misuse Tests
- Stiffness Testing
- Gap Size Change
- Flush
- Verification and optimization of simulations
- Component deformation and testing
- Relative motion
- Global Strain
- Load tests and ageing tests (force & temperature)

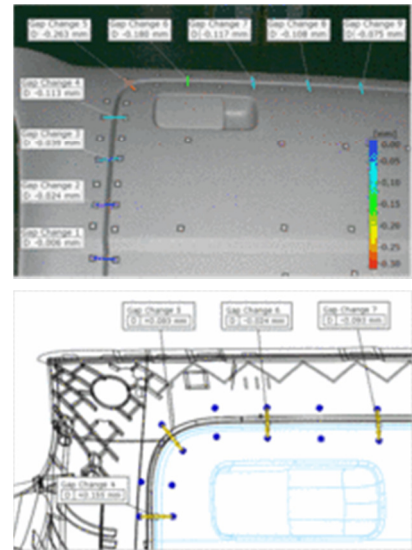


TRITOP Deformation Results

TRITOP Deformation provides for any number of measuring points information about:

- 3D Coordinates
- 3D Displacements
- Deformation
- Bending, Torsion, Deflection
- Rotation Angles
- 6 Degrees of Freedom (6DoF)
- Relative displacement (Point – Point, Point – Line, Point – Plane)

These results can be presented in diagrams, directly on CAD data or superimposed onto the recorded camera images providing an easy to understand and intuitive result presentation.



Technical Data

Using TRITOP, objects of up to some 20 m can be measured. Depending on the measuring task, different camera systems are available. All TRITOP systems are self-calibrating and self-checking.



System

Configurations

Camera
 Resolution
 Data Transfer
 Measuring Area
 Calibration
 Certification
 Operating Temperature

HR / Std

up to 21 million pixels
 wireless or flash card
 0.1 x 0.1 up to 10 x 10 m²
 4 x 4 up to 400 x 400 inch²
 self-calibrating
 according to VDI 2634/1
 -40 to 120°C
 -40 to 250°F