



imageTEMA AUTOMOTIVE

LEADING MOTION ANALYSIS SOFTWARE FOR THE AUTOMOTIVE INDUSTRY

TEMA Automotive (TEMA) is the market-leading software suite for advanced Motion Analysis tests in the automotive industry. Thanks to its high accuracy, modular structure, calculation speed and intuitive user interface - TEMA is used by professionals across the globe in a wide range of Automotive Testing applications.

Operators are able to import image sequences and automatically track any given object throughout the sequence via a set of proprietary tracking algorithms. The result is presented in predefined formats such as tables and graphs showing quantifiable values for example position, speed and acceleration over time.

ACCURATE RESULTS

The tracking algorithms used in TEMA have been developed and refined for close to 30 years. Today, TEMA is the most accurate and feature-rich Motion Analysis software currently available.

POWERFUL TOOLBOX

The modularity of the software gives the user an almost unlimited number of application areas. To facilitate time efficient testing sessions - TEMA is able to compute a large number of tracked points and data at high speeds.

EASE OF USE

The TEMA user interface is designed to be flexible and intuitive to any person who is familiar with basic Windows functionality and workflow.

WIDE COMPATIBILITY

TEMA is compatible with all major camera brands on the market. Moreover, the software suite is capable of capturing and controlling image sequences from multiple camera makes - all in one single system.

USING TEMA

From loading an image sequence, to executing the tracking algorithms, to applying the chosen analytics and logic, to presenting the derived data - TEMA offers a straightforward workflow. Menu bars, tool bars and key bindings all provide a easy access to features and functions.

The user interface is fully synchronized: any change of parameters or set-up will directly effect all parts of the tracking session, updating results, graphs and tables.

ADVANCED FUNCTIONALITY

The operator has full control of the tracking in TEMA with many options and possibilities to tailor TEMA to specific applications and needs. New features and functionality is added continuously.

TEMA has a very powerful set of different tracking algorithms available such as Correlation, Quad, Circular, Center of Gravity etc. By using the integrated lens calibration tool, data accuracy can be kept at a maximum and the results are traceable.

Tracking can be analyzed in multiple dimensions (2D, 3D and 6D). TEMA 3D technology allows for unparalleled rapid calibration of cameras for 3D-Motion Analysis tests. Our proprietary TEMA Static survey technology allows for 6D Motion Analysis of a rigid body using a single camera.

PRESENTATION OF RESULTS

TEMA is able to present the results from the analysis in a variety of customized graphs and tables. It is easy to add comments and add custom graphics to customize the appearance of a certain view or plot. Data can also be exported to applications such as Excel, Matlab and/or a selection of databases.

APPLICATION EXAMPLES

- Automotive industry
- Crash and sled tests
- Air bag deployment tests
- Seat belt tests
- Whiplash analysis
- Component R&D
- Pedestrian impact tests
- Deformation analysis
- Tire friction and pressure analysis

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