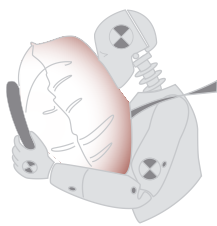


**image**  
SYSTEMS  
**TEMA**  
AUTOMOTIVE

## The ultimate motion analysis tool for highest possible accuracy in automotive crash testing



TEMA Automotive is the world leading system for advanced motion analysis in the automotive industry. TEMA covers the complete process from

bringing the image into the program via automated tracking and analysis to a result presentation in predefined tables and graphs.

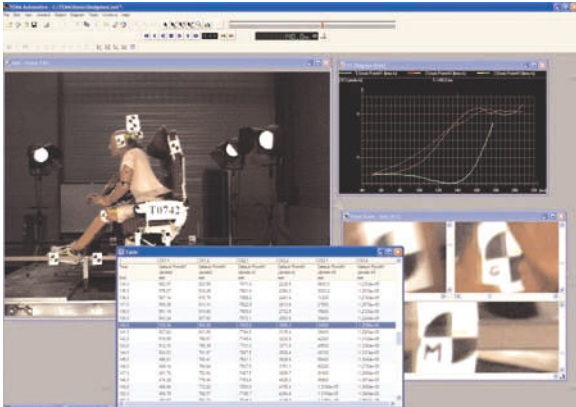
Measurements of deformations, airbag volume, dummy head accelerations and steering column penetration are just a few of many application in the automotive industry

**FLEXIBLE** - The flexible windows based user interface makes it fast and easy to find the best setup for your application. Key-bindings to the menu system make the operation very fast.

**POWERFUL** - Handles and analyses at rapid speed large quantities of data from high speed cameras and other sensors. The operator can choose between a large number of tracking algorithms and track an unlimited number of points throughout the image sequence.

**SYNCHRONIZED** - 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.

**COMPATIBLE** - The system handles all major image formats on the market and has options to control most of the available high speed cameras on the market such as Phantom, Photron, Redlake and others.



#### User interface

The windows based user interface of TEMA provides a very flexible way of setting up a test. The operator can easily load one or multiple camera views and define the points he wants to track in the image sequence. The Menu bar, Tool bar or Key bindings will all give quick access to the wanted feature or function.

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.

#### Tracking and analysing

The operator has full control of the tracking in TEMA with many possibilities to adjust for different applications. The tracking can be made Manual, Semi Automatic or Automatic.

TEMA has a very powerful set of different tracking algorithms available such as Correlation, Quad, MXT, Circular, Centre of gravity etc.

#### Options

There is a large set of different options available to TEMA.

A subset of these are:

##### TEMA 3D

- Calculates X,Y,Z position from two or more camera views

##### TEMA 6D

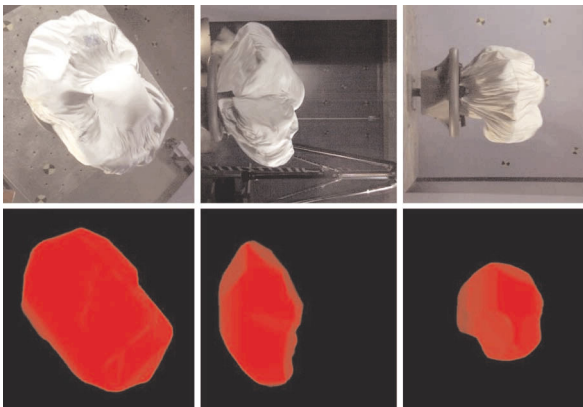
- Calculates X,Y,Z as well as Pitch, Roll and Yaw of a rigid body from a single camera view.

##### TEMA Airbag volume

- Calculates the size, position and volume of an airbag during the inflation process.

##### TEMA Viewer

- The results of a tracking session can be exported to a self- running CD that allows the recipient to rerun the tracking with the images, graphs and spreadsheet data synchronized



*Image Systems AB is a leader in motion analysis and supplies both standard products and customized projects. The standard products handles all steps in the process of digitising cine film, controlling multiple cameras, tracking and analysing image sequences and present result. The company has long experience of customized projects. A typical project includes software development, integration into current systems, installation, acceptance testing, training and maintenance.*

