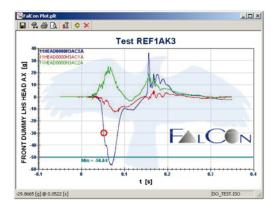


# FalCon extra

## **High-Speed Video Software**





#### **Target group:**

Technical users of high-speed imaging and digital video technique.

Typical types of problem are the qualitative check and the quantitative analysis of time and motion:

- · Visual assessment, quality control, presentation
- Analysis of component tests, spot checks (measuring in single frames)
- Analysis of high-g tests, motion studies (tracking of markers)

#### Main features:

The system FalCon eXtra offers the following functions especially adapted to the requirements in the crash area of the automotive industry:

- Set up and control high-speed cameras and download images
- Preprocess images adaptively and create AVI sequences
- · Show AVIs and measurement graphs synchronously with respect to time
- · Track markers in sequences applying precise automatic measuring methods
- · Merging and Comparing multiple image sequences
- · Measure geometric features with graphical tools
- · Measure automatically airbag outlines
- Calibrate measurement data (2D and 3D)
- · 3D analysis of dynamic motions
- · Dynamic analysis of 6D motions of rigid objects
- · Apply quality assurance by camera calibration
- · Acceleration of Calculation Time

### **Program modules:**

**FalCon eXtra** contains modules for image acquisition, video processing, visualization of multi-media test data as well as for analysis of image sequences.

FalCon eXtra covers the complete range of tasks in impact testing and supports all available standards.

The following program packages may be combined individually and can be licensed separately. They are integrated within a uniform MS-Windows compliant user interface:

ImagerControl Camera control and download of cameras in mixed-mode operations with

AVI creation, QuickLook AVIs and ISO-MME support, raw data viewer, imager templates, support as online-histogram and online-sharp tool, Load-Balancing of multiple processing clients, remote control options

Quick View Camera control (ImagerControl Basic),

AVI creation & compression, picture optimization

AVI and measurements viewer (incl. editable attributes and curves parameters,

Standard file formats (MME, ISO, DIAdem, ASCII-tables)

FrameMerge Overlay and merging of AVIs

**GPU Speed** Acceleration of Calculation Time

TrackingPlugIn Reduction of Jitter

MovXact Analysis of image sequences:

2D measurements and tracking,

Marker types: MXT, DOT, QUAD, COR, PIX, CODE

Space and time calibration,

Output of results into overlay or diagram

Mov3D Extension for 3D analysis:

Photogrammetric triangulation by multi-camera views

Mov6D Extension for 6D analysis:

Motion of rigid objects by means of one camera

MovBag Analysis of airbag image sequences:

Automatic measurement of contour graphs, Evaluation of specific measurement values

CamFolder Image analysis software:

Calibrate cameras and measure distortions (ISO),

Folder file with camera/lens combinations

#### Technical Framework:

- Program system for computer platforms under WIN Server 2008 / 2012 / 2016 / 2019, WIN 7 / 8 / 10
- · User interface compliant to MS-Windows.
- · Languages: English and German.
- Demo version available!
- · Technical specifications are subject to change.

#### Co-operation:

- · MovXact and MovBag developed in co-operation with Ingenieurbuero Dr. Gerhard
- Mov3D, Mov6D and CamFolder developed in co-operation with AICON 3D Systems GmbH and Ingenieurbuero Dr. Gerhard
- MovXact developed in co-operation with Fraunhofer IITB

