FalCon eXtra MovXact

## The Analysis System for Image Sequences

The FalCon **MovXact** module allows you to precisely analyze image sequences with the methods of 2D image measurement technology.

In addition to robust, automatic marker tracking, task-specific calibration and processing of measurement results is supported. Measurement graphs and individual measurement values are displayed to fit the image data precisely, are shown numerically, and are written to standardized file formats.

The program interface combines typical work steps in clearly designed dialogs so that the user can evaluate both series tests and special tests quickly, reproducibly and accurately.

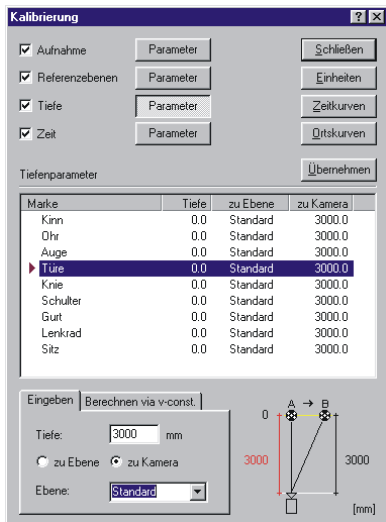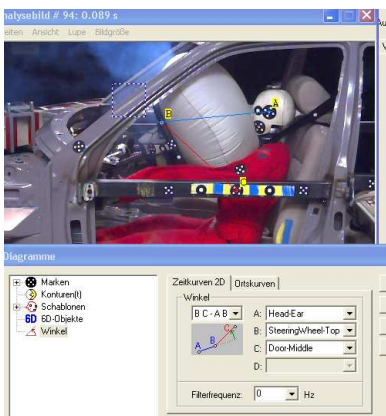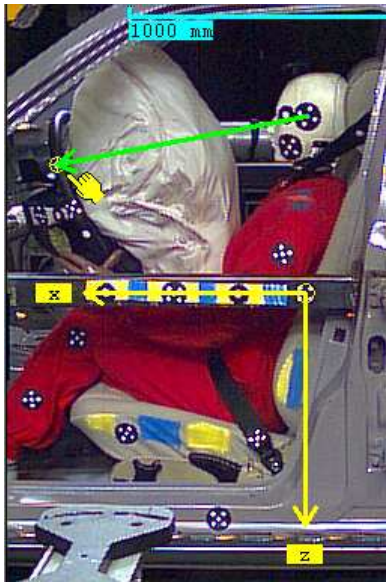Several aids for automation of image analysis allow a quick evaluation of test series.
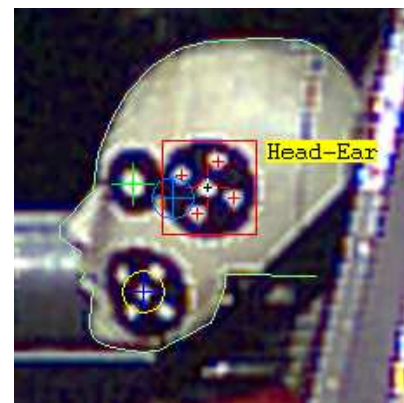
New: The document for ISO 8721 Inspection offers a quick overview of completeness of input data.
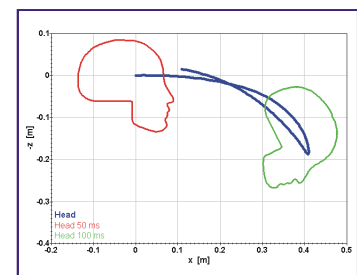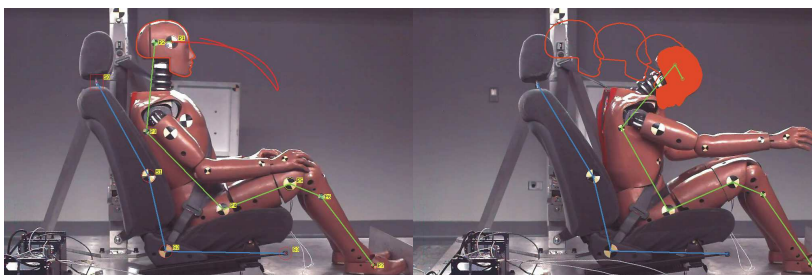
Never was geometric measuring and tracking so easy!

Components:

Data Management
- Several views of a test or several films of a test series within one analysis session
- Import/export of picture and measurement data (standardized file formats)
  Import of ISO MME data and movies
- Settings and layout from registry
- Individual defaults for markers and calibration
- Marker with defaults of the ISO-Basis-Codes
- Compact data saving and text log

Interactive measuring
- Point, distance, angle and area measurements
- Recording of outlines (contours = f(t))
- X Diagrams - Contour(t)-**Type Stick-Figure** = Polyline of Nodes
- Measuring by planar stencils
  X Diagrams – Stencils
  Post-processing of contour lines with interactive tools
  * "Erase" and "Extend/Add" of areas
  * Smoothing of interactively entered line chains
- Interactive measuring with new object type „Angle"
- marker tracking mode: **„Manual Prediction"**

Automatic measuring/marker tracking
- Supported marker types:
  MXT-5 MarkerXtrackT (5-point markers), MXT-6
  DOT (1-point markers), DOT-I (1-point markers inverse)
  QUAD (quadrant markers), BALL
  CODE (coded markers of type „AICON", license required)
  COR (any picture templates), PIX (coordinate measurements)
  Virtual marker
- Parallel procedure with sophisticated combination of the methods
- Easy setup of markers (auto-centering)
- Group model for dropout handling
- Measuring virtual points
- Overview about marker measurement data with the aid of a data bar

Calibration of measurement data
- Distortion correction according to camera and lens
- 2D reference planes: coordinate system and scale
- Depth correction
- Frame rate and T0

Processing of measurement data
- Extraction of additional variables, e.g. resultant, angle, and MXT angle
- Differences with respect to time or space
- Temporal ISO/SAE filtering and differentiation (a-v)
- Export of the data into ISO, DIAdem or ASCII file format

Representation of measurement data in a picture or diagram
- Overlay graphics from picture measurement data
- Analysis picture and movie representation
- Precise measurement zoom window with flexible configuration
- Quick Look spatial diagrams (x-y) and time functions (a-v-s)
- Easy export of images and diagrams into clipboard
  New: Export of diagram curves into Microsoft Excel Workbook
- Freezing of overlay-graphics for comparison of dynamic sequences with curves of comparison

Technical Framework:

- Program system for computer platforms under WINDOWS 2000 / XP / 2003 / Vista / Windows 7
- User interface compliant to MS-Windows.
- **Technical specifications are subject to change.**

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