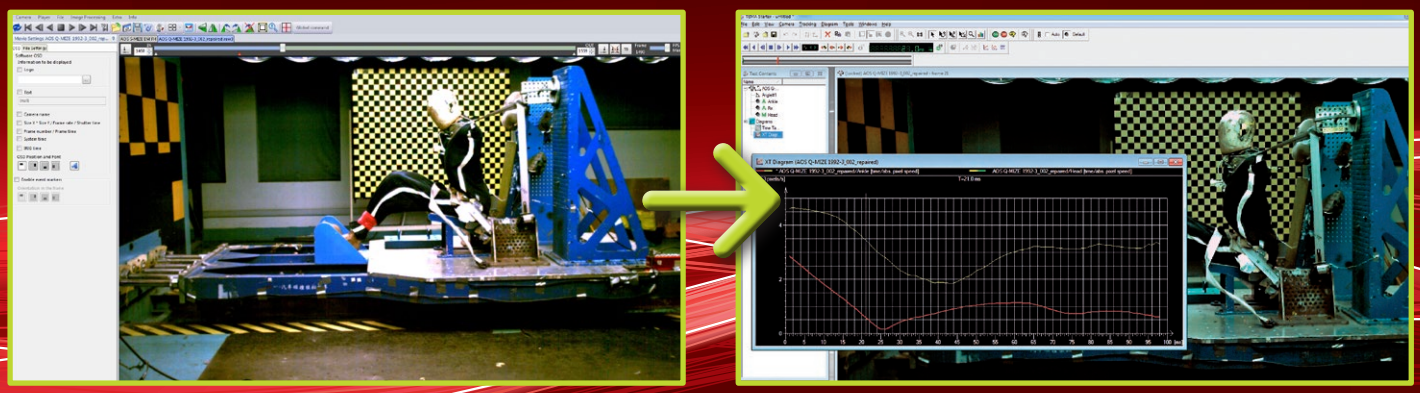
AOS Technologies AG

Motion Analysis Studio

powered by TEMA engine



Motion Analysis Toolbox for AOS Camera Users

AOS Imaging Studio is now also available with the renowned TEMA Motion Analysis engine. After filming a sequence in Imaging Studio, AOS camera users can seamlessly import it and start performing motion analysis. Thanks to proprietary tracking algorithms, the TEMA STARTER package allows automated tracking of selected objects. Results are presented in predefined formats such as tables and graphs, reflecting quantifiable values. Graphs showing position, speed and acceleration over time are readily available for further use.

Easily Control your Image Data Acquisition

AOS Imaging Studio allows control of high-speed cameras in a user-friendly, intuitive way. Setting parameters, defining trigger positions, and managing multiple buffers before recording is highly straightforward. Once recorded, sequences can be played back immediately from camera memory, edited, saved on local storage media, and modified by image treatment operations. While some software features require connection to camera, AOS Imaging Studio can be installed on as many computers as needed to facilitate offline playback and editing.

Powerful Toolbox

The software's modularity translates to an almost unlimited amount of application areas. To permit fast testing sessions, AOS Motion Analysis Studio can compute a large number of tracked points and data at high speeds.

Ease of Use

AOS Motion Analysis Studio offers many straightforward workflows, be it for loading image sequences, executing tracking algorithms, applying chosen analytics and logic, or presenting derived data.

Menu and toolbars, as well as key bindings provide easy access to features and functions. The user interface is fully synchronized. Any changes to parameters or set-up directly affect all parts of the tracking session, thereby updating results, graphs, and tables.

Advanced Functionality

The operator controls and tracks the system, and can tailor AOS Motion Analysis Studio to specific applications and needs. New features and functionalities are added on an ongoing basis.

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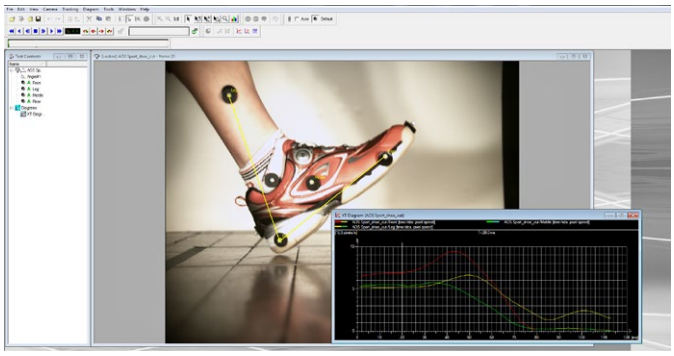
In partnership with Image Systems

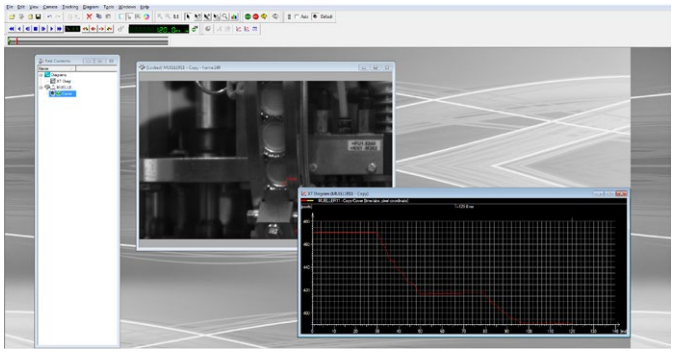
image SYSTEMS MOTION ANALYSIS

AOS Motion Analysis Studio – *powered by TEMA engine*

Features of TEMA STARTER

Tracking algorithms	(● = included, O = upgrade to next version required)
2D Tracking	●
Correlation	●
Tracking features	
Max. number of points for tracking	5
Tracking in 16bit/BW/color/R/G/B and automatic/manual	●
Interpolation of hidden points	●
Virtual points	●
Import / Export	
Export of diagrams and images to Word and Excel	●
Import of images (AVI, TIFF, MPEG, JPEG and others)	●
Export of data files such as Diadem, ISO, ASCII	●
Export of images (AVI, TIFF and others)	●
Import of data files such as Diadem, ISO, ASCII	●
Motion planes and scaling	
Manual scaling	●
Dynamic scaling	●
Static scaling	●
Multiple planes (i.e. depth scaling)	O
Angled planes	O
2D coordinate systems	
User defined coordinate systems	O
Translation of origin	O
Rotation (axes definition)	O
Rotation (offset angle)	O
Visualization of coordinate systems	O
Diagrams and tables	
Timetable	●
X / T diagram	●
Copy to timetable	●
X / Y diagram	●
Multiple axes (4 axes) X / T diagram	O
Advanced X / Y diagram	O
Image diagram	O
Frequency Analysis	O
Point table	O
3D diagram	O
Diagram Features	
Individual setting of horizontal and vertical axis	●
Legends	●
Copy to timetable	●
Printing of diagrams to printer	via copy / paste to Word document
Extended diagram features	O
Analysis and Calculations	
Filtering of data CFC / FIR / Spline	●
Velocity and acceleration	●
Angles between points	●
Distances between points	●
Lens calibration	
Lens calibration	O





Presentation of Results

TEMA STARTER presents analyzed results in customized graphs and tables. Comments and custom graphics can be easily added, and the appearance of a certain view or plot customized to choice. Data can also be exported to applications such as Excel, MAT- LAB, and various databases.

Flexible Upgrade Options

TEMA STARTER can be upgraded to accommodate different testing scenarios and customer needs. Three pre-configured packages are currently available, while customized solutions can be delivered by request.

TEMA STARTER – Comes bundled with AOS Imaging Studio, suitable for 2D motion analysis and tests.

EXTENDED – Same as TEMA STARTER, but with additional tracking algorithms, reporting options, as well as ability to track unlimited amount of number of points in one image sequence.

COMPLETE – The most comprehensive package. Same as TEMA STARTER and EXTENDED, but with additional tracking algorithms, and reporting options. The COMPLETE package also adds powerful 3D and 6D analysis functionality.

PROMON Users

Since PROMON supports the AOS Imaging Studio file format, PROMON users can perform motion analysis, provided a valid AOS Imaging Studio license has been purchased. This is possible by importing files into Imaging Studio. A versatile, superlative tool to meet your needs in acquiring quantitative data from high speed sequences.

Your local AOS partner:

AOS Technologies AG