Qualisys 3D Baseball Analysis

Combine our motion capture technology with a unique baseball analysis package to assess pitching and hitting in 3D without simplifications.

Our Baseball Analysis Module guides you through the data collection process and connects QTM directly with the analysis software, Visual3D, to immediately produce a report analyzing the player's form in 3D. The processing pipeline focuses on both the pitching and hitting movements and has been developed in cooperation with leading baseball experts.
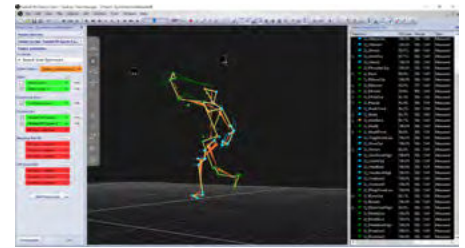
The analysis is executed automatically, providing the end user with a full report including measurements of angles and rotations performed during the capture– full documentation is included. Our hardware provides configurable sync in and out ports for syncing with external hardware, such as force plates.

FEATURES

- All relevant biomechanical variables
- Full body marker set for accurate tracking of 15 body segments
- Easy data management
- External synchronization
- Suitable for left-handed and right-handed pitchers
- Interactive Web Report
- 3D Video Overlay
- Capture outdoors
- Markerless capabilities

PROCESS

During data collection, you can focus on your client instead of technical details. The module offers a list of pre-defined measurements when creating a session in a guided panel within the QTM software, making data collection quick and easy. With the click of a button, events are identified, biomechanical calculations performed, and a report populated with results.

REPORT

Generate an online report with all relevant measurement results and space for your logo. Using a full body marker set, the package automatically generates a report that includes variables such as stride length, shoulder rotation on various planes, angular velocities of the shoulder, and others.

GO MARKERLESS!

Calibrate and capture in Qualisys Track Manager (QTM) using Miqus Video or Miqus Hybrid cameras, while the Theia Markerless software tracks and post-processes the data.

The end result is exported to Visual 3D for further analysis and reporting, including online web reports and PDF reports. Theia has intelligent joint detection and labeling, multi-subject tracking and identification, and automatic model creation.

ANALYSIS OPTIONS AND REQUIREMENTS

Analysis type	Movement type	Cameras (min)	Room size (min)	Processing engine
Baseball - Marker-based	Pitching and Hitting	8-10 Marker-based or Hybrid	4 x 6 m (12ft x 18ft)	V3D
Baseball - Markerless	Pitching	8-10 Video or Hybrid	4 x 6 m (12ft x 18ft)	V3D THEIA