

Virtual Design

Motion capture systems from Motion Analysis allow our Virtual Industrial Design customers to create immersive, interactive spaces for industrial applications such as workplace design, automotive testing, and aerospace design. Our systems work with popular programs such as Dassault Systemes' CATIA V5 and Siemens' JACK Software to increase productivity and reduce costs in the manufacturing environment.

Typical System Configuration

VIRTUAL DESIGN SYSTEM

- 12-16 Eagle-4, Eagle or hawk-i cameras
- Cortex
- Calcium
- Animation Plug-ins

Choosing the correct camera and number of cameras for your motion capture system is dependent on various factors including:

- Size of capture area
- Size of physical room
- Complexity of movement
- Speed of movement
- Current and future needs

Your Motion Analysis account representative will work with you to determine the best system configuration. Our systems integrate fully with HMD, JACK software, CATIA V5 software, Eye Mark Recorder and other hardwares and softwares. Customers have full access to an SDK in order to develop their own software interfaces.

Recommended Cameras

Eagle-4 Digital Camera

- Resolution of 4 million pixels
- 1-200 Hz selectable frame rates
- Up to 10,000 frames per second at reduced resolution
- High quality 35mm lenses for low optical distortion
- 237 LED's for brighter and better light uniformity
- Built-in zoom provides more visual options
- Four body mount points for variable positioning
- Software controlled adjustable light output
- Separate zoom, iris and focus settings independent of ringlight

Eagle Digital Camera

- Resolution of 1.3 million pixels
- 1-500 Hz selectable frame rates
- Up to 2,000 frames per second at reduced resolution
- High quality 35mm lenses for low optical distortion
- Built-in zoom provides more visual options
- 237 LED's for brighter and better light uniformity
- Four body mount points for variable positioning
- Software controlled electronic shutter
- Software controlled adjustable light output
- Separate zoom, iris and focus settings independent of ringlight

hawk-i Digital Camera

- Resolution of .3 million pixels
- 1- 200 Hz selectable frame rates
- CS-Mount lens, several sizes available
- 52 LED's for brighter and better light uniformity
- Software controlled electronic shutter
- Software controlled adjustable light output
- Separate zoom, iris and focus settings independent of ringlight

Recommended Software

Cortex - our core motion capture software comprises tracking, editing, scripting and modeling functions in a *single integrated package*.

Calcium- a powerful skeletal creation, setup, and motion solving solution. It is an easy to use tool to solve captured marker data onto a skeleton.

Animation Plug-ins -post process data into Maya, 3ds Max, MotionBuilder, and Softimage XSI.