

sUA IMPACT TESTING



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sUA IMPACT LAUNCHER

sUA Impact Launcher with Rigid Seat

- Adjustability to allow for vertical drops, horizontal impacts, and angled impacts
- Ability to adjust launch speeds to meet various velocity requirements
- Attachable sled permits a variety of fixtures to be mounted to accommodate the variation in sUA orientations
- Lift table with fixed mounting plate provides adjustability and stability
- Rigid Seat offers ability to restrain ATD to increase stability and repeatability of impacts





SUA IMPACT TESTING

PHOTOMETRIC INSTRUMENTATION

PHOTRON FASTCAM SA-Z Digital High Speed Cameras

Two (2) Digital High-Speed, High Resolution, Color Imagers (Off-board)

Two (2) Digital High-Speed, High Resolution, Monochrome Imagers (Off-board)

1024x1024 pixilation (at or below 20,000 frames/second)

Up to 480,000 frames/second (at lower resolution)

Various lens options



AOS S-VIT Digital High Speed Cameras

Six (6) Digital High-Speed, High Resolution, Color Imagers (Onboard/Off-board capable)

1000 frames/second at 800x600 pixilation

Onboard junction box and battery

Color correction

Improved light sensitivity

Onscreen display of test number, camera location, time, and frame number

Various lens options



TEMA Automotive Motion Analysis Photometric Software

2D and 3D trajectory plots from both left and right sides of sled

Simplified lens correction

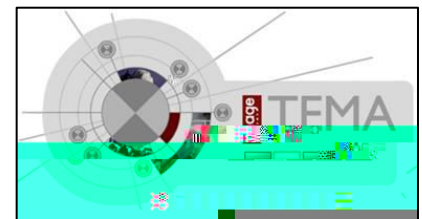
Built-in perspective and parallax compensation

Polynomial spline and other filtration

3D tracking with relative camera orientation

Automatic target tracking

Virtual point tracking



GOM/Trilion Digital Image Correlation (DIC) Software

Full-field and point based measurements

3D acceleration, velocity, and displacement plots

Simple system calibration procedure

Automatic target tracking

Compatible with industry used CAD and FE software packages

