



CRASH DYNAMICS LAB

The Crash Dynamics Lab provides research, testing and certification for transportation seats and restraints systems under dynamic impact conditions.

CAPABILITIES

- FMVSS 208
- FMVSS 213
- CMVSS 208
- ECE R94
- Euro NCAP
- IIHS
- OSA

CODE OF FEDERAL REGULATIONS

- Title 14 Part 23.562
- Title 14 Part 25.562
- Title 14 Part 27.562
- Title 14 Part 29.562

ANTHROPOMORPHIC TEST DUMMY CALIBRATION

- On-site calibration capability for Hybrid II and Hybrid III ATDs
- On-site calibration for accelerometers

PROJECTS

- Certification by Analysis - Seat Modeling Techniques
- Evaluation HIII 95th & 5th
- Percentile ATD for Automotive Applications
- Certification by Analysis - Sled Testing for ATD Validation
Mass Transit Bus Crashworthiness I and II

AREAS OF RESEARCH

- Aircraft occupant protection
- Implementation of child restraints in aerospace applications
- Mass transit occupant safety
Aircraft component certification

EQUIPMENT

MTS Model 888.20 servo-hydraulic crash simulator

- Nominal force: 2,000 kN (450 kips)
- Max velocity w/ 1,500 kg; 81 km/h (50 mph)
- Dynamic response: >150 Hz
Acceleration w/ 1,500 kg: 65g
Acceleration w/ 1,000 kg: 75g

PHOTOMETRICS

- AOS Technologies S-VIT Imagers
- High-resolution color (800x600) 1,000 frames per second
(10,000 fps at reduced resolution)
- Immediate availability of videos in .avi format

CLIENTS

- Aircraft, Automotive and Military Vehicle Seat Manufacturers
- Internally Funded Research Centers
- Crash Research Centers

CONTACTS

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