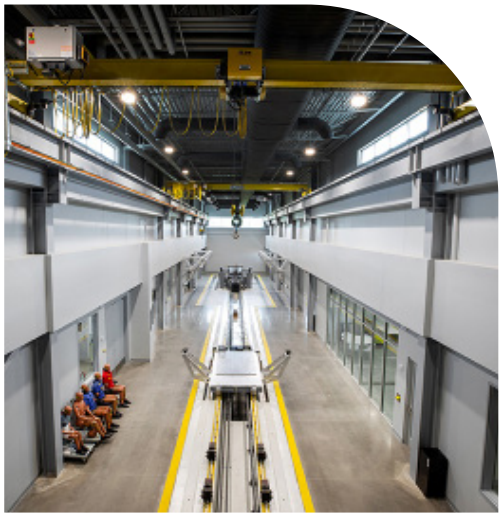
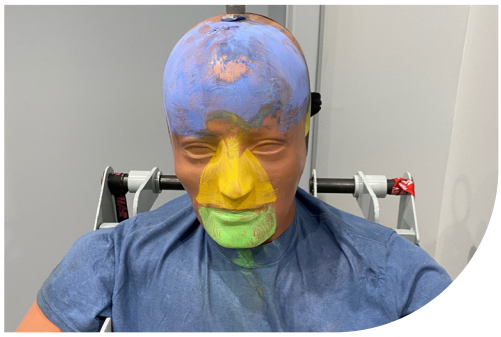
ABOUT US

The Crash Dynamics Lab is a premier dynamic testing facility for the nation's aircraft and aircraft component manufacturers and provides research, testing and certification for transportation seats and restraints systems under dynamic impact conditions.

CRASH DYNAMICS LAB





PHYSICAL TESTING CAPABILITIES

- Hybrid Testing Capabilities/Test Planning
- Dynamic Sled Testing Crashworthiness Applications
  - Aerospace
  - Automotive
  - Military
  - Space
  - Child Safety
- Full-Scale Crash Facility
  - Aerospace Airframe Crashworthiness
  - EVTOL Crashworthiness
- High Speed Photogrammetry
- Test Article Scanning

HYDROPULS® CSA ADVANCED CRASH SIMULATOR

Performance Data *Basic System CSAadvanced*	**Frontal Sled** *(1-piece design)* *Dimensions: 1.8 m x 4.1 m* *Weight: 920 kg*
Peak Accel with 500 kg on top of sled	90 g
Peak Accel with 1000 kg on top of sled	80 g
Peak Accel with 1500 kg on top of sled	75 g
Peak Accel with 2000 kg on top of sled	60 g
Peak Accel with 3000 kg on top of sled	49 g
Maximum Velocity	90 km/h up to 1500 kg on top of sled
Max Accel Gradient (Jerk)	14 g/ms (up to 20 g/ms under certain conditions)
Frequency Response	150 Hz
Reproduction Accuracy - Acceleration (predicted to achieved)	1 g RMS (CFC 60) 2 g RMS (>CFC60)
Reproduction Accuracy - Velocity (predicted to achieved)	+/- 0.5 km/h

ANTHROPOMORPHIC TEST DUMMIES (ATD)/IN-HOUSE CALIBRATION

- 7 HII 50th Percentile ATDs
- 4 HIII FAA 50th Percentile ATDs
- 2 HIII 50th Percentile ATDs
- 1 HIII 95th Percentile ATD
- 1 HIII 5th Percentile ATD
- 3 ES-2 re Side Impact ATDs
- 1 DOT SID Side Impact ATD
- 3-yr-old child ATD
- 6-yr-old child ATD
- 12-month-old child ATD

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