



GROUND VEHICLE SURVIVABILITY & PROTECTION (GVSP)

SUB-SYSTEM DROP TOWER (SSDT)

The Sub-System Drop Tower (SSDT) is a device used to evaluate technologies that must endure dynamic impact testing. The drop tower consists of a 48" x 48" platform that has the capability to test a variety of system configurations such as floor, wall, or ceiling mounted energy absorbing (EA) seats, floor mat materials, EA floors, cargo retention devices, and data acquisition black boxes. The SSDT is capable of simulating a wide range of impulses and measuring the effects on the technology and/or occupant.

SSDT is located within the Occupant Protection Laboratory (OPL), a full service test facility with the resources, capabilities, equipment, and partnerships needed to perform dynamic impact/impulse testing on components, subsystems, or systems within six distinct testing

CAPABILITIES

Impulses up to 1,000g durations from 2-10 msec

- Platform size 48"x48"
- Payloads depending on test configurations
- 1,100 lbs to 7,400 lbs

AVAILABLE INSTRUMENTATION

- 5th, 50th, 95th Hybrid III ATD
- Accelerometers: 7264 style, 2K range or other upon request
- Load Cells: upon request
- High Speed Video: 5,000 fps



Ammo Rack Retention Test



SSDT with Stryker Battery Box



Seat with Hybrid II Anthropomorphic Test Device (ATD) test