



50,000g

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High-G Shock Table

A cost-effective solution to evaluate hardware survivability

Mechanical Shock Test System

Orbital Test Services, LLC (OTS) utilizes a customized high-g shock tower (top left image) equipped with a Dual Mass Shock Amplifier (middle left image) that can accelerate test articles up to 120 ft/sec (36.6 m/sec) before impact. This test equipment allows for a variety of programs for half-sine shock pulses (bottom left image) up to **100,000g** on components of multiple sizes, weights and geometries.

Our specialized shock system enables project managers, engineers and scientists to perform comprehensive testing and demonstrate survivability of prototype devices and components in relevant high-g environments at a fraction of the cost of actual field-demonstrations. OTS supports both government and industry partners to reduce the risk of prototype development before investing the time and resources for live field testing.

System Features

- Multiple size and weight samples
- Accelerated or free fall
- Target acceleration
- Target drop height
- 12in specimen height
- 9in x 9in specimen mounting area
- Velocity change of up to 120 ft/sec
- Higher acceleration shock pulses
- Shorter duration half-sine shock pulses

Accelerated (High Speed) Testing Options					
Test Area (in ²)	Max. Specimen Height (in)	Max. Specimen Weight (lbs)	Maximum Shock (g)	Shock Duration* (ms)	
9 x 9	12	250	10,000	0.2/0.3/0.5/1.0	
4.5 x 6	10	5	100,000	0.1/0.2	
Thermal Conditioning			Lower Temp	Upper Temp	
			-94°F / -70°C	392°F / 200°C	

*Shock Duration is programmable to customer specifications.

Customer Benefits

Our expert staff works closely with customers to devise a custom test plan which includes:

- Secure mounting of specimens in existing or customized testing fixtures.
- Accurate high-g shocks (in a single axis) for a controlled, custom shock profile.
- Programmable shock durations to meet testing parameters and product specifications.

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Industry and Military Standards				
ANSI/EIA	MIL-STD 202	JESD22		
364-32G	Method 107	A104D		
MIL-STD 770	MIL-STD 810	MIL-STD 883		
Method 1051	Methods 501-3	Method 1010		

- Confidential and secure testing environment to protect customer's proprietary information.
- Quick and affordable test results in a timely manner to meet any R&D schedule and budget.

