

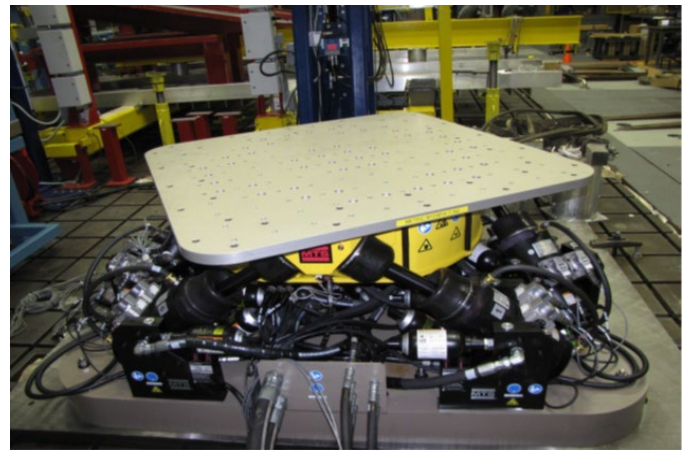


LIGHT VIBRATION (6DOF) – MULTI-AXIAL SIMULATION TABLE (MAST)

Combat Capabilities Development Command (CCDC) Ground Vehicle Systems Center's (GVSC) Physical Simulation Team (PST) operates a Six Degree of Freedom vibration table that allows us to input road loads (Measured or MIL-STD-810G) into integrated components and subsystems. Through in-house designed fixtures, PST's engineers are able to replicate vehicle mount points and vibration profiles from Army test sites to validate the performance of your design over the intended use throughout it's lifecycle.

Benefits

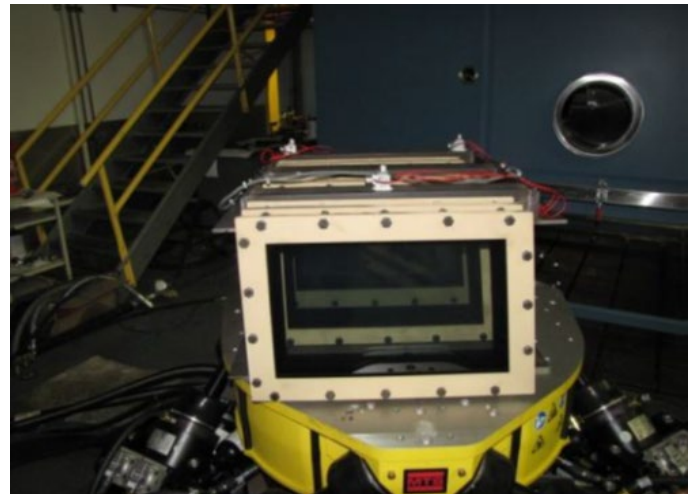
- Repeatable, real-life test profiles for vendor qualification.
- Reduced cost and schedule from traditional track testing.
- Thermal Chamber able to reach -60F to 185F and induce Temperature Shock.
- MIL-STD-810G Vibration and Environmental Testing.



Multi-Axial Simulation Table

Components Tested

- Transparent Armor
- Energy Attenuating Seats
- Radio / Antenna Mounts
- Floor Panels
- Various Integrated Small Components



Transparent Armor



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Energy Attenuating Seat

Vibration Table Motion Limits

- Displacement
 - Vertical = ± 37 mm
 - Longitudinal, Lateral = ± 35 mm
- Rotational
 - Roll = ± 4.7 degrees
 - Pitch = ± 4.2 degrees
 - Yaw = ± 3.5 degrees
- Velocity
 - Vertical = 0.8 m/s
 - Longitudinal, Lateral = 0.6 m/s
- Acceleration (bare table)
 - Vertical = 20.6 g
 - Longitudinal = 14.8 g
 - Lateral = 12.8g
- System Bandwidth (bare table) = 500 Hz @ 1,080 lbs
- Maximum Payload = 500 kg (1080 lbs)

Mounting Surface

- Table with Octagon shape: diameter of 1m
- Octagon grid spaced 100mm x 100mm mounting holes

FOR FURTHER INFORMATION:

U.S. ARMY COMBAT CAPABILITIES
DEVELOPMENT COMMAND — GROUND
VEHICLE SYSTEMS CENTER:
<https://tardec.army.mil/>

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