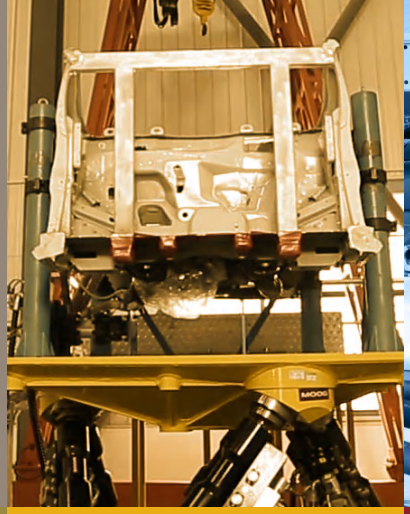
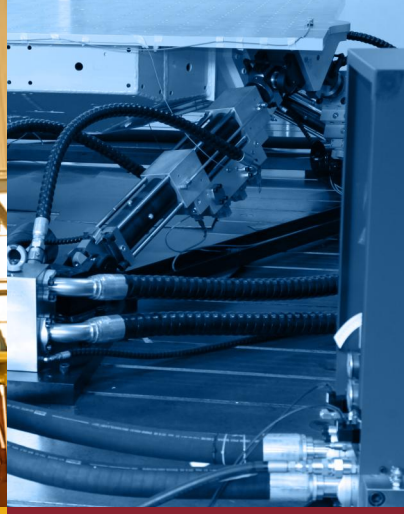
HEAVY PAYLOAD HYDRAULIC SIMULATION TABLE

A table designed to simulate dynamic scenarios for testing and analyzing large-scale items





Moog Hydraulic Simulation Table (HST) is a dynamic system, designed to perform research and development tests. The hexapod configuration used by Moog HST is the optimum design to achieve simulation and test capability using acceleration, force, and displacement inputs, and to reproduce data collected on proving grounds regardless of your test type, method, or specimen.

The Heavy Payload Hydraulic Simulation Table can accommodate loads up to 2,000 kg and frequencies up to 100 Hz. It can handle and replicate scenarios with substantial weight and force, for testing large-scale machinery and examining structural durability.

The Heavy Payload HST is a high-performance test system. It accurately replicates dynamic motion, making it ideal for large-scale article testing applications. The payload capacity can meet the test of commercial vehicle components and subsystems, such as heavy truck cab test, urea tank test, exhaust gas piping test with beam. It is also suitable for electrical vehicle battery pack testing, where the combined mass of battery pack with vehicle body can reach 1,500 kg.

ADVANTAGES

- Six degrees of freedom (6-DOF) motion system
- Six identical actuators working in synchronization
- Zero backlash swivels eliminate vibration
- High payload up to 2,000 kg
- Wide control band up to 100 Hz
- Larger table for various specimen

APPLICATIONS

- Commercial vehicle component and subsystem
- Construction
- Heavy-duty durability
- Seismic applications
- Battery pack test

SPECIFICATIONS

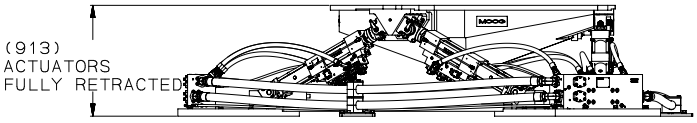
TECHNICAL DATA

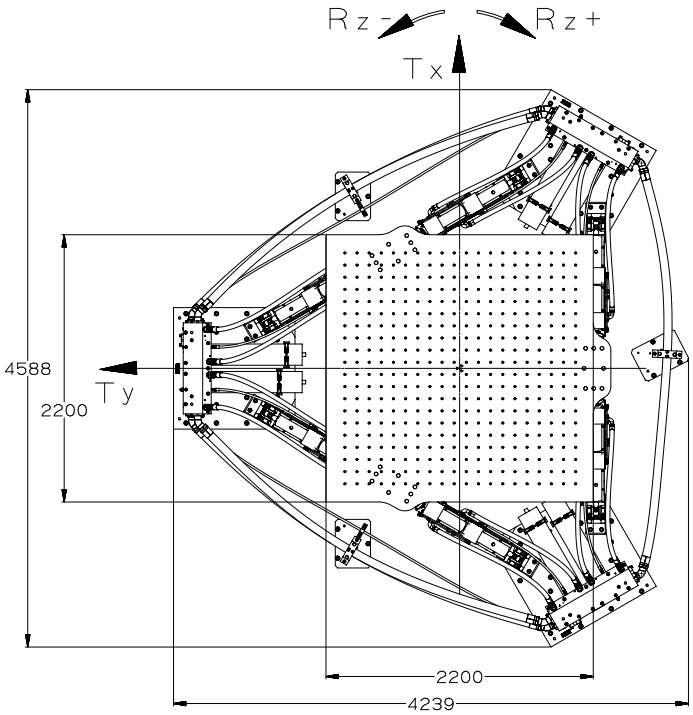
System Payload	2,000 kg			
Table Mass	1,000 kg (approx.)			
Table Size (L×W)	2,200 × 2,200 mm			
Table Mounting Pattern	100 × 100 mm			
Table Mounting Hole Size	M12			
Operating Pressure	210 bar			
Actuator Peak Force	80 kN			
Frequency	100 Hz			
	Excursion [1]	**Velocity**	**Acceleration**	
			(bare table)	**(2,000 kg payload)**
(X) Surge	±135 mm	±1.35 m/s	±11.5 g	±5.8 g
(Y) Sway	±120 mm	±1.30 m/s	±11.0 g	±5.5 g
(Z) Heave	±150 mm	±1.70 m/s	±15.0 g	±7.0 g
Roll	±8.3 °	±80 °/s	-	-
Pitch	+9/-8 °	±75 °/s	-	-
Yaw	±6.2 °	±60 °/s	-	-

[1] Calculated values based on operation range of the actuator

INSTALLATION DRAWINGS

(Dimensions in mm)





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Heavy Payload Hydraulic Simulation Table
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