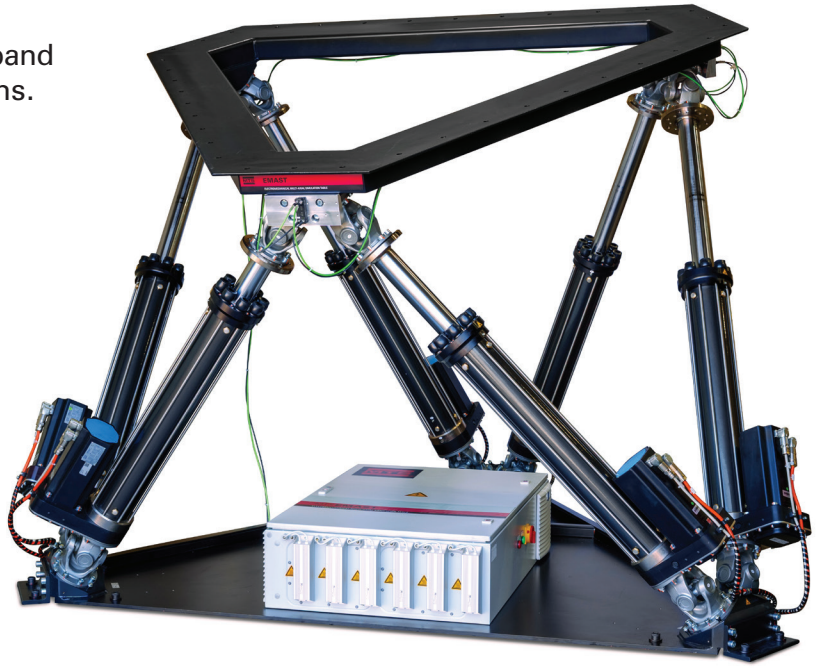
MTS eMAST (Electromechanical Multi-Axial Simulation Table)

6DOF System
Ideal for programs seeking to expand curriculum and research horizons.

Fit-for-Seismic
Subject scaled structures to real-world earthquake motions.

MTS Controls & Software
Runs next-generation 469D controller software and StexPro analysis toolkit.

All-Electric
Simple to install and maintain; safe for independent operation with minimal supervision.



6DOF Seismic Simulation for Growing Civil Engineering Programs

The MTS® eMAST is an all-electric shake table engineered to bring six-degree-of-freedom (6DOF) seismic simulation capabilities to university programs, established laboratories, and contract research and test labs — at a fraction of the complexity and infrastructure footprint required for full-scale hydraulic systems.

The 6DOF eMAST features six electromechanical linear actuators arrayed in a hexapod configuration. Capable of 1,500 kg payload and 25 Hz simulation frequency, it delivers the displacement, velocity, and acceleration needed to subject scaled structures, building components and non-structural systems and equipment to the full complexity of real earthquake motions — including torsional/rotational effects and vertical-horizontal coupling.

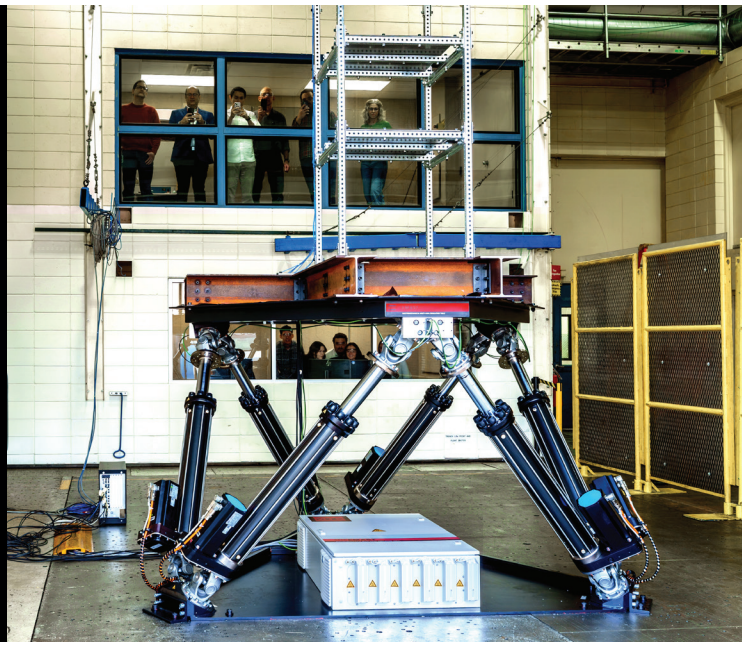
eMAST runs the next-generation of MTS 469D controller software and StexPro analysis toolkit – the same state-of-the-art platform driving MTS' full portfolio of seismic simulators at the world's most prestigious research laboratories.

And because eMAST is all-electric, it requires no hydraulic power unit or fluid infrastructure — installing on standard electrical service, running efficiently, and operating safely without constant supervision, making 6DOF seismic simulation practical for any lab.

MTS eMAST (Electromechanical Multi-Axial Simulation Table)

Growing University Programs

For growing civil engineering departments, eMAST offers real 6DOF simulation capability — without the level of capital funding full-scale hydraulic systems demand. Lower acquisition and operating costs fit standard institutional grant budgets, strengthening research infrastructure proposals and broader impacts cases. All-electric operation lets students work independently, expanding hands-on learning while requiring less supervisory staffing — on the same industry standard controls and software used across MTS' worldwide install base.



Established Civil/Seismic Labs

Established laboratories can deploy eMAST as an energy- and staff-efficient platform for developing and refining test concepts and methods — validating approaches on scaled specimens before committing time and resources to playout on full-scale hydraulic simulators, extending the useful research life of shared-use facilities.

Expanding Contract Labs

eMAST provides contract test and research labs a cost-effective platform for extending their services to seismic testing of non-structural building components and systems — including HVAC systems, suspended ceilings and lighting systems, sensitive hospital monitoring equipment, and instrumentation and controls for critical civil infrastructure.

Performance Specifications

Max Payload	1,500 kg w/1 m CG			
Simulation Frequency	25 Hz			
Useable Test Area	1.5 m x 1.5 m			
		Longitudinal (X)	*Lateral (Y)*	*Vertical (Z)*
Linear Displacement*	± mm	480	480	400
Linear Velocity*	± m/s	0.60	0.60	0.50
Linear Acceleration*	± g	1	1	1

**Max Payload*

Facilities Requirements

Hexapod Platform Mass	< 400 kg

Reaction Mass (concrete or steel)

Mass *(approx.)*	40,000 kg
Min Footprint	4 m x 4 m
Min Thickness	270 mm

Electrical Power

Supply Voltage	380-480 VAC (3 Phase) 50/60 Hz ± 10%
Max Power Consumption	22 kVA (CE) / 15 kW (UL)
Facility Circuit Breaker	32A type C (CE) / 25A class J (UL)

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