



Powertech Expands Seismic Testing Capabilities

Powertech has expanded its seismic testing capabilities from small to large, heavy test articles through partner labs.

These capabilities allow users to investigate and quantify the effects on structures and equipment of the forces associated with seismic events—and thereby better understand product reliability and have increased confidence of survival should such an event occur. Test objects include electric utility, industrial, and commercial structures and equipment.

Seismic shake tables include a linear axis (or single-axis) shake table that can be moved in one direction, and a multiple-axis shake table that can be moved in up to six degrees of motion. Tests can be conducted to a wide range of current test standards or customized to meet client needs.

Standards

- IEEE 693
- NEBS GR-63-CORE
- ICC ES AC156
- Plus many others and custom profiles

Seismic Analysis

Through utilization of its Mechanical laboratory, High Voltage Laboratory and High Power Laboratory, Powertech offers a wide range of services to evaluate the seismic withstand capability of electrical equipment and its post-seismic electrical functionality.

CAPABILITIES

Single-Axis

- Table 1.2 m x 1.2 m (48 in x 48 in) mounting surface for horizontal and vertical axes
- Sine, swept sine, random, and transient time history control capability
- Payload of approximately 1.6 tonnes (3,500 lbs)
- Displacement of 266 mm (10.5 in)

Multiple-Axis

- Table 4 m x 4 m (157 in x 157 in)
- Six degrees of motion by use of seven independently-controlled actuators
- Sine, swept sine, random, and transient time history control capability
- Payload of approximately 10 tonnes (22,000 lbs)
- Displacement of 500 mm (20 in)

Numerical Analysis using Finite Element Analysis:

- Determination of natural frequencies and mode shapes
- Time history response analysis
- Response spectrum analysis
- IEC 60068-2-6
- Plus many others and custom profiles

ABOUT POWERTECH LABS:

Powertech Labs Inc. is one of the largest testing and research laboratories in North America, situated in beautiful British Columbia, Canada. Our 11-acre facility offers 15 different testing labs for a one-stop-shop approach to managing utility generation, transmission and distribution power systems.

Outside of the utilities industry, Powertech provides routine testing capabilities, product development, research and consulting services to support an array of industrial-type operations, electrical equipment manufacturers and automotive original equipment manufacturers.

www.powertechlabs.com

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