



SEISMIC TESTING

AN IN-HOUSE SEISMIC LAB TO SUPPORT HARSH AND MILD
THIRD-PARTY EQUIPMENT QUALIFICATION.

OVERVIEW

Nutherm has built a state-of-the-art seismic facility at the main manufacturing and testing facility located in Mt. Vernon, IL. The facility employs a digitally controlled triaxial seismic table with the capacity to test full-size assemblies as well as small components and sub-assemblies. All tests are conducted under Nutherm's 10 CFR 50 Appendix B and NQA-1 quality program and will be documented in detailed test reports in accordance with IEEE 344 and customer's specifications.

WHY NUTHERM?

Our in-house seismic lab supports our third-party qualification and commercial-grade dedication activities. Our experienced staff can implement unique mounting options and make recommendations for seismic integrity, bracing and electrical performance. All of this under one roof means the highest level of test success in the quickest amount of time. Also, witness your test virtually with high definition video.

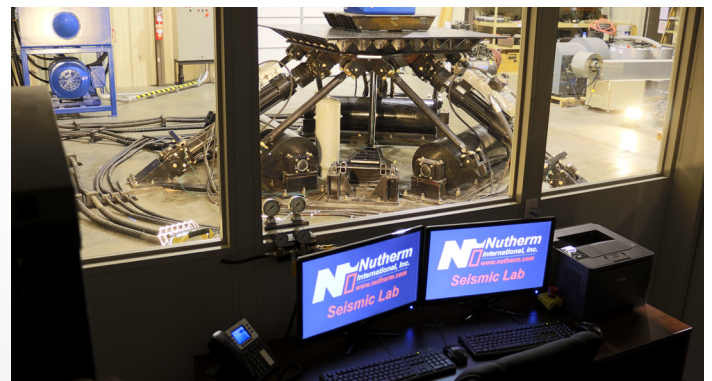
SEISMIC TABLE FEATURES

We built a table to provide flexibility of testing and rapid

response. The table is capable of simulating spectral input at high frequencies. These frequencies are often required by new plant designs and exceed the capability of other seismic facilities.

HIGH-ACCELERATION TRI-AXIAL TABLE

The tri-axial table is designed for testing assemblies, components and parts that typically require high acceleration. High acceleration testing is often necessary due to in-equipment amplification or when Required-Input-Motion (RIM) testing for pipe mounted components.



Class 1E Systems & Components Since 1979



TABLE SPECIFICATIONS

Table Size:

6.5 ft x 6.5 ft

Maximum Test Object Weight:

4400 lbs

Maximum Displacement:

± 4.75"

Maximum Frequency Range:

100hz

Maximum Acceleration (ZPA):

>6.5g up to 1500 lbs payload

3g up to 4400 lbs payload

Input Velocity:

60 inches/second

Monitoring Channels:

53 (electrical or accelerometer)

Electrical:

Low/Medium Voltage with Loading

Mode of Operation:

Triaxial

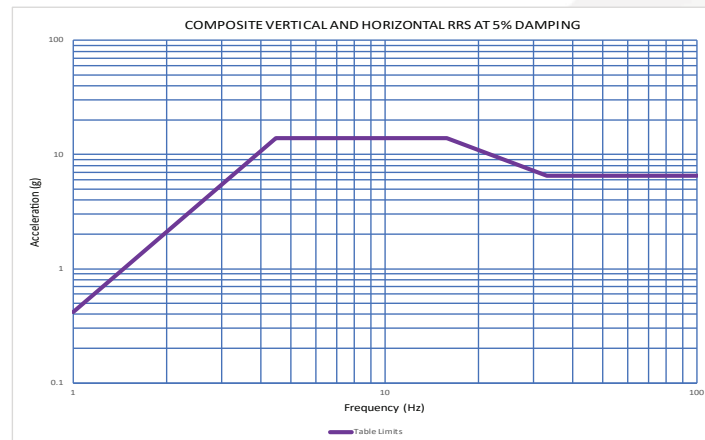
Test Modes:

Random, SRS, Sine Sweep

FREQUENCY VS. ACCELERATION

Frequency	Acceleration (g)
1	.42
4.47	14
15.85	14
33	6.5
100	6.5

SEISMIC TABLE LIMITS CURVE



SEISMIC VIDEO

Scan QR code to view video or visit Nutherm's YouTube Channel
https://www.youtube.com/channel/UC2uS2Sm_J7vmSbn1xB8rm8g



Triaxial Seismic Table
Build Timelapse



VFD Successful Seismic Test