

Mechanical



Mechanical test facilities

Electro-Dynamic Shaker

The Electro-Dynamic Shaker is used for vibration and shock tests on very small (e.g. IC) components but also for units up to 500 kg. Shock and vibration tests are conducted for defence, automotive, space, aircraft and similar industries.

Technical specifications:

Manufacturer	: LING V 894T-440 HBT 1050-6B SPA-K (55kN)
Dimensions	: Ø 850 mm with a 50x50 M8 hole pattern
<i>Vertical direction (Head expander)</i>	
Sine force peak	: 53379 N (12000 lbf).
Random force peak	: 55603 N (rms) (12500 lbf (rms))
Displacement (pk-pk)	: 38,1 mm (1,5 inch)
Velocity sine peak	: 1.6 m/s
Acceleration sine peak	: 100g
Acceleration random	: 15g rms
Frequency	: 3 Hz to 2100 Hz

Horizontal direction (Slip table)

Slip table dimensions	: 1050 mm x 1050 mm
Acceleration sine peak	: 25g
Acceleration random	: 15g rms
Frequency	: 3 Hz to 2100 Hz

Data acquisition.

The vibration control system is a digital stand-alone closed-loop system, it is able to control the displacement, the velocity, or the acceleration. The system has the ability to perform sine, random and shock tests.

Mounting planes.

The mounting plane of the vibration table is provided with a 50mm x 50mm pattern of M8 holes.

If you need specific information on measurement accuracy, number of measurement channels or likewise, please contact us:

E-Mail: ecc@nl.thalesgroup.com

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Sine Vibration Facility

Sine Vibration Facility

The Sine Vibration Facility is used to apply sine vibration tests up to 50 Hz, and is able to test large equipment (up to masses of 1500 kg) in three main directions.

Technical specifications:

Frequency range	: 2 Hz up to 50 Hz
Max. Amplitude	: 2000kg x 1,8 mm 2000 kg +mass of test object
Vibration frame dimensions:	: 2100 mm x 2000 mm x 1500 mm.



Data acquisition:

The data acquisition system is able to record on 16 measurement locations. Accelerations, displacements, velocities and a transfer functions are displayed as a function of the frequency.

Mounting plane:

The equipment to be tested can be easily mounted to the vibration facility by means of adjustable T-beams and T-bolts.

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Large Shock Test Simulator

Large Shock Test Simulator

The large shock test simulator is used to apply half sine and damped sine acceleration loads. It is used for larger equipment.

Technical specifications:

Pulse shape	: Half sine, damped sine
Pulse duration	: From 11 ms up to 50 ms
Maximum g- level	: 80 g (damped sine)
Table dimensions	: 1000 mm x 1000mm, height 2200 mm.

Data acquisition:

The data acquisition system is able to record 16 measurement locations. The shock severity can be calculated by means of a shock response spectrum, the measured shock response spectrum can be compared to several standard shock response spectra requirements.

Mounting plane:

The mounting plane is provided with a 50 mm x 50 mm pattern of M8 holes.

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Shock Test Simulator

Shock Test Simulator

The shock test simulator is used to apply half sine and damped sine acceleration loads.

Technical specifications:

Manufacturer and type	: BARRY - Varipuls - type 15575
Pulse shape	: Half sine
Pulse duration	: 6 ms from 11g up to 225g : 11ms from 19g up to 140g
Maximum load	: 45kg
Table dimensions	: 430 mm x 400mm

Data acquisition:

The data acquisition system is able to record 16 measurement locations.

If you need specific information on measurement accuracy, number of measurement channels or likewise, please contact us:

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