

Lo.F.Hi.S.

Low Frequency High Stroke

Not just an earthquake simulator...

The Lo.F.Hi.S. is a machine combining unique performance

LONG DURATION SHOCKS: 20g / 100ms

Typical MIL-STD shock parameters

LOW FREQUENCY VIBRATIONS: 0 - 600 Hz

Parameters suitable for seismic and naval testing

SEISMIC ACCELEROMETERS CALIBRATION

A Lo.F.Hi.S. machine Model 02 is in our <u>lab for calibrations</u>

Lo.F.Hi.S. is available in three strongly distinctive versions



Model 01

Mostly used to produce shocks with a particularly long stroke.

It is well suited for performing 20g/100ms shock profiles typical of MIL-STD standards.

Model 02

Primarily intended for the study on scale models of the structural effects of seismic shaking.

It is best suited for calibration of seismic accelerometers.

Model 03

Developed at the specific request of the University of Catania to be used in teaching rooms.

It is very compact and easy to transport thanks to its modular construction.

Lo.F.Hi.S. has a unique technology in the world of shakers

It uses linear motor technology, never applied to a shaker before, to move a table holding samples for testing or accelerometers for calibration.

Linear motors ideally give the machine unlimited travel, high speed and very accurate low-frequency control (the system allows distortion-free frequencies even from 0.1Hz).

Such unusual performance characteristics allow Lo.F.Hi.S. to meet specific test requirements unachievable for a traditional electrodynamic shaker.

The Lo.F.Hi.S. comes with a control PC and can be installed very easily: it only requires a standard electrical plug.



The Lo.F.Hi.S. features and performance table

| | Units | MODEL 01 | MODEL 02 | MODEL 03 |
|---------------------------------------|------------------|------------|-----------|-----------|
| Maximum stroke * | mm | 875 | 286 | 574 |
| Maximum speed | m/s | 6,6 | 2,5 | 2,5 |
| Maximum peak force | kN | 12 | 2 | 0,6 |
| Maximum continuous force | kN | 2,2 | 0,9 | 0,3 |
| Usable frequency range | Hz | 0,4 - 500 | 0,1 - 500 | 0,1 - 600 |
| Maximum acceleration sine (unloaded) | m/s ² | 200 | 25 | 38 |
| Maximum acceleration shock (unloaded) | m/s² | 350 | 57 | 76 |
| Usable area for setup | mm | 850 x 1000 | 600 x 800 | 300 x 300 |

^{*} Value widely customisable according to the customer's needs.



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