

GSK-166 Uniaxial Linear Shaking Table

Features

- Precise motion repeatability and accuracy**
- Durable, compact and portable aluminum design**
- Easy swap from horizontal to vertical shaking**
- 780 N Peak Force; upto 50 kg Payload**
- Large Stroke up to 660 mm**
- 4.8 m/s Maximum Velocity**
- 3 g Maximum Acceleration**



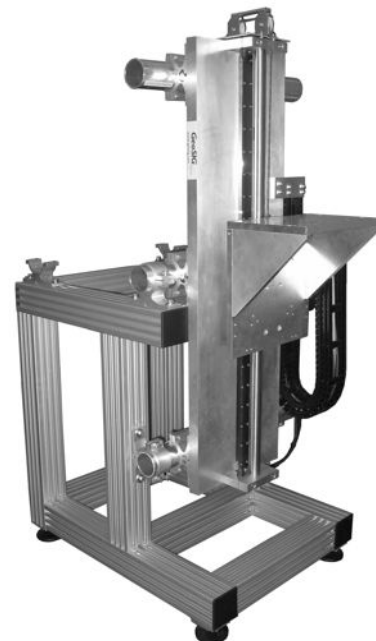
Outline

The GSK-166 is an innovative uniaxial linear shaking table, which is based on an industrial high accuracy linear displacement driver, providing a large force driving capacity over a large displacement.

Due to the strong axial magneto-guidance, even large or unbalanced loads can be tested. The ingenious design of the GSK-166 enables swapping the table from horizontal to vertical operation within minutes.

GeoDAS software controls the GSK-166 via its scripting capability, which provides full control over the generated motion while the shake table driver executes the required dynamic displacement within the table displacement limits.

Almost every imaginable waveform is possible, such as recorded earthquakes, sine-sweeps or synthetic signals. This allows a large variety of different applications. Field calibration of sensors or seismic qualification of stand-alone recorders can now be done in-house.



Specifications GSK-166 Uniaxial Linear Shaking Table

Mechanical

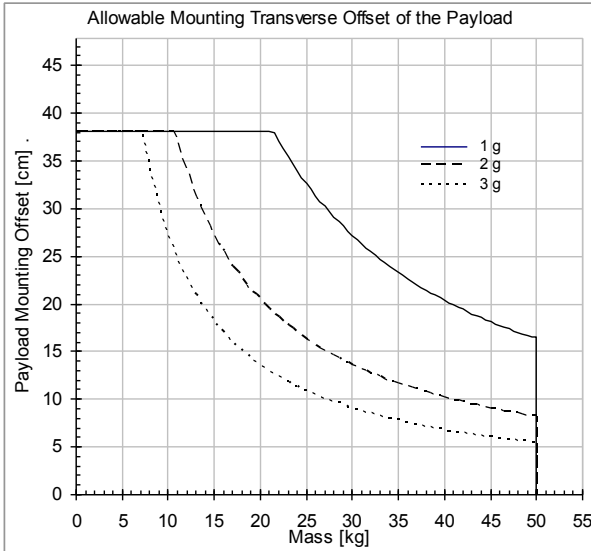
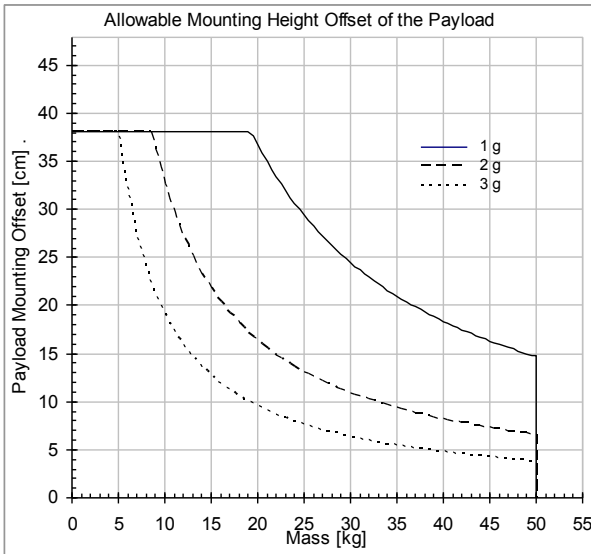
Table Dimensions:	Horizontal:	280 x 280
	Vertical:	280 x 200
Footprint:		600 x 1100
Height Clearance:	Horizontal:	1100
	Vertical:	1600
Mass:		85 kg

Capacity

Please note that below information is highly dependent on the frequency on which the shaker is operated. For further information relating to your specific needs, please contact us directly.

Maximum Stroke:	660 mm
Maximum Velocity:	4.8 m/s
Maximum Acceleration:	3 g
Payload and Mounting Offset*:	Refer to below graphs for horizontal operation

*: the linear distance between the center of gravity of the payload and the center of the mounting plate



Frequency Range:	DC to > 50 Hz
Peak Force for 1 sec:	780 N
Continuous Stall Force:	104 N

Electrical

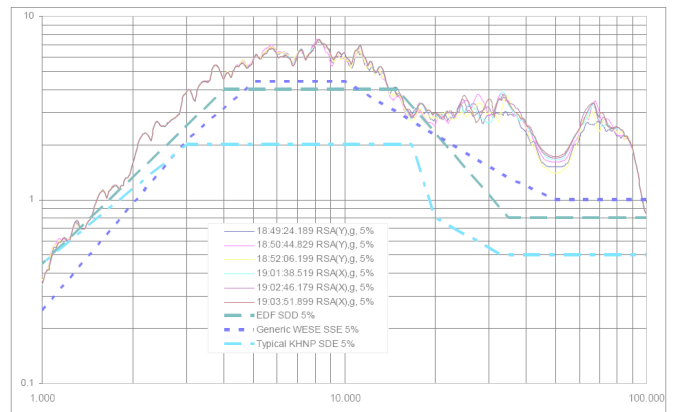
Main Voltage:	230 VAC
Auxiliary Supply:	24 VDC
Maximum current:	< 10 A @ 24 VDC

Control

Reference Sensor:	AC-43 optionally certified AC-43
Amplifier:	Xenus
Fieldbus:	CAN Open
Measuring System:	SinCos 20 μm 1 Vpp
Software:	GeoDAS Scripiter Edition

Repeatability and Accuracy

In the graph below, the results of a seismic qualification test is shown. The output responses of six different tests are almost identical. Also the envelope of the three target spectrums is met and exceeded. This outstanding level of repeatability and accuracy is the result of the superior drive capability of the shake table, and is a big advantage compared other products.



Acceleration in g vs. Frequency in Hz

Options

Load Attachment Points:	Please specify at order.
Enlarged Table Plate:	500 x 500, reduce payload by 10 kg, reduce offset with respect to mounting location.

All dimensions are in mm and are given in the order Width x Length x Height, except otherwise indicated.