UNIVERSITY OF Southampton

Vibration test facilities of the Human Factors Research Unit

Low frequency translation and tilting: 12-m stroke and ±8 degrees

Description

Facility used to provide simultaneous lateral and roll, or fore-and-aft and pitch, oscillation. Suitable for testing human subjects.

Used for production of sinusoidal, random or recorded vibration time-histories.

Applications

Applied research in areas concerned with motion sickness, ride comfort, seat testing, postural stability, activity disturbance and fundamental studies of the effect of low-frequency motions on people.

Testing to specific requirements of the customer.

Outline specification

Displacement:	12 m horizontal
	±8-degrees roll or pitch
Acceleration:	±10 ms^{-2} peak
Frequency range:	0 to 1 Hz
Cabin:	2 m by 1.2 m by 1.7 m

Studies of discomfort and motion sickness caused by low-frequency motion

Simulation of lateral and roll, or fore-and-aft and pitch, oscillation in transport environments.

Human Factors Research Unit , Institute of Sound and Vibration Research
University of Southampton, Southampton SO17 1BJ, UK
hfru@southampton.ac.uk +44 (0)23 8059 2277 **www.southampton.ac.uk/hfru**