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Product Name:

Free Vibrations Of A Beam And Spring

Product Code: LBNY-0005-1400004



Description:

Free Vibrations Of A Beam And Spring is part of a range that explores free vibrations in simple one degree of freedom systems.

It introduces students to key scientific terms such as:

Simple harmonic motion and frequency of oscillation

Spring constant and Hookes Law

Phase difference between displacement and its derivatives

Moment of inertia

Oscillation damping.

Free Vibrations Of A Beam And Spring fits to the sturdy Test Frame for study or demonstration.

This common system appears in machines and vehicle suspensions. You can compare this with the mass-spring system, except the mass moment inertia of the beam replaces the simple mass. This product includes a beam pivoted at one end, with the other end suspended by a coiled spring.

Technical Specification:

Experiments:

Spring extension and force, and Hookes law

Frequency of oscillation and spring constant

Frequency of oscillation and varying mass moment of inertia by varying mass position

Frequency of oscillation and varying mass moment of inertia by varying mass value

Oscillation damping and coefficient

Phase difference between displacement and its derivatives.



Laboratory Instrument India