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Product Name :Free And Forced Vibrations

Product Code:



Description:

Experiments:

Using Rayleighs approximation to predict vibration frequenc

Frequency of oscillation and varying mass

Free and forced vibrations of a rigid beam and spring

Free and forced vibrations of a flexible pinnedpinned simply supported) beam

Phase relationship between the applied force and beam position for different damping values

Demonstration of a 2 degree of freedom (2DOF) system

Finding the beam only frequency using Dunkerleys Method

Demonstration of an undamped vibration absorber

Phase difference between displacement, its derivatives and measured acceleration

Damped free and forced oscillations and damping coefficient.

Operating Conditions:

Operating environment: Laboratory environment Operating temperature range: +5C to +40C

Operating relative humidity range: 80% at temperatures Storage temperature range: 25C to +55C (when packed

for transport)

Technical Specification:

Nett dimensions and weight: 1280 wide x 450 mm front to back x 800 mm high(assembled) and 80 kg

Other parts 4 kg

Packed dimensions and weight: 1 m 3 and 120 kg

Other Parts Included:

Spring for beam and spring tests
Storage tray and tools
Vibration absorber
5 x 400 g masses
Dashpot damper
500 mL of non-toxic fluid (for dashpot damper).



Laboratory Instrument India