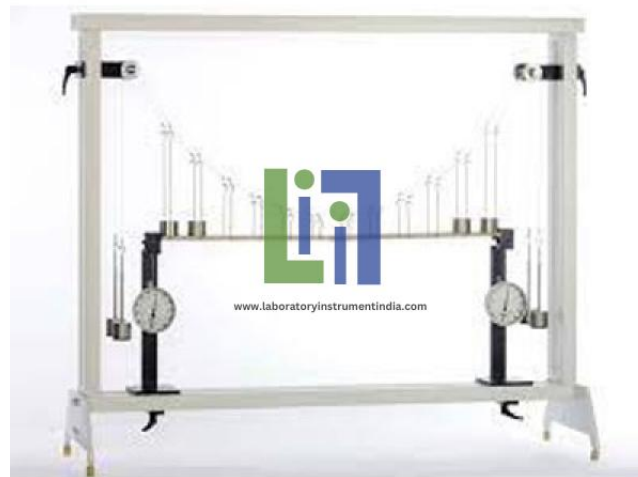




Email : sales@laboratoryinstrumentindia.com

Product Name :
Forces On A Suspension Bridge

Product Code :
LBNY-0005-10100088



Description :

Learning Objectives / Experiments:

Comparison between calculated and measured values of the supporting cable force
Observation of the effect of internal moments in the roadway under uneven load
Load distribution between roadway support and supporting cable
Familiarisation with a suspension bridge
Under dead-weight
Under unevenly distributed point loads
Under additional load
Under evenly distributed load
Calculation of the supporting cable force.

Technical Specification :

Investigation of a suspension bridge in various load cases
4 graduated weight sets to measure the cable force in both supporting cables
2 supports with force gauge for the roadway
Hangers (vertical supporting cables) in the form of U-shaped shackles in graduated lengths
Two-section roadway with central hinge
Roadway can be loaded by additional weights
Suspension bridge with 2 supporting cables and roadway
Supporting cables with parabolic sag
Hinge in roadway indicates internal moments of roadway under uneven loading
Storage system to house the components.

Technical Data:

Suspension bridge

Supporting cable sag: approx. 325mm

Span: approx. 1050mm

Number of supporting cables: 2

Shackles: 12, graduated lengths

Support force measuring range: -50...+50N

Dead-weight of roadway: 6N

Weight set

4x 1N (hangers), 16x 1N

16x 5N.



Laboratory Instrument India