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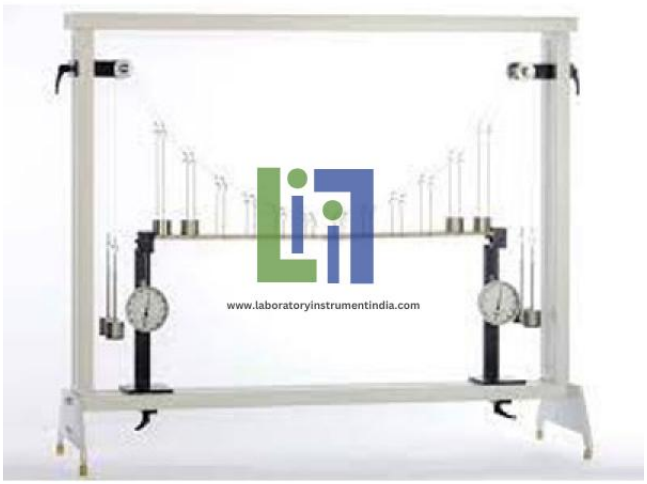
| **Product Name :** Forces On A Suspension Bridge | **Product Code :** LBNY-0005-10100088 |
|---|---|




**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
Uder dead-weight
Uder unevenly distributed point loads
Uder additional load
Uder 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.