

STRUCTURAL MODELS

Equipment for experiments on STRUCTURES consists of two main parts, accessories for specific experiment and ST300 Universal Structural Frame or ST305 Universal Base Frame for attachment of the accessories. Many accessories common for various experiment.

ST 352 SUSPENSION BRIDGE

DESCRIPTION :

This equipment is used for studying the inter-action between suspension cables and load measuring supports with uniformly distributed and point load on the rigid deck. It is to be used with ST300 Universal Structural Frame (separately supplied).

A light metal alloy with stiffening ribs is carried by two rows of nine equally spaced hangers, one on each side. Each row of hangers has a flexible steel cable support whose length simulates a parabolic curve. One end of the cable is fixed. The other end cable passes over a pulley to a load hanger. Special load are provided to simulate uniform distribution load and movable point load. The bridge deck rests on two vertical force supports with height compensation mechanism. Support settlements are measured by dial gauges.



TECHNICAL DATA :

- Bridge : Aluminum 660 long x 75 mm. wide.
- Arch : 600 mm. span, 150 mm. and 100 mm. dip.
- ST 124 Vertical Force Supports : 2 ea.
- Load hanger : 1 ea.
- Point load and weights : 1 lot.
- Pulleys : 2 ea.