SUSPENDED CENTRE SPAN BRIDGE

HST18



Year 3
study

Features

- Visual reality of centre span bridge.
- 2 x Point load or 1 x rolling load.
- Six Reaction load cells
- Customer specific loading can be applied.
- Dedicated e-book supplied

Description

The model three span bridge has a flat deck and solid spandrels to the three spans. The bridge is supported on the two inner piers and is anchored to the two outer piers to provide a pair of cantilevers on which the suspended centre span is carried. The four piers and the centre span supports incorporate reaction measuring load cells that connect directly to the HDA200 Interface (sold separately) to give readings in Newton's. The bridge is loaded using either point loads (25 or 10N) or through a tandem rolling load of 25 + 10N value. The tandem loads are linked thus simulating a vehicle passing over the bridge deck. The tandem load can be arranged such that the 10N load is leading or trailing. By separating the tandem loads it is possible to obtain the influence lines for the bridge.

Related Laws/Applications

- Reaction Influence Lines.
- Reactions.
- Rolling Loads.

Learning capabilities

- Production of influence lines for all six reactions
- Use of the influence lines for a tandem rolling load

Technical Specification

- Bridge total length: 1226mm
- Centre span length: 270mm
- Side Bridge Section length: 478
- Load cell: 0...500N

Essential Ancillaries

- HST1 (or HST100)
- HDA200

What's in the Box?

- 1 x Left hand bridge section
- 1 x right hand bridge section
- 1 x centre span
- 6 x load Cell
- 1 x 25N load
- 1 x 10N load
- 1 x joining link
- 1 x Tape measure
- Accessories container
- 2 x Hex wrench
- Instruction manual
- E-book
- Packing list
- Test sheet

You might also like

- HST2
- HST4
- HST5

Weights & Dimensions

- Weight: 20 kg
- Length: 1300mm
- Width: 150mm
- Height: 400mm

Essential Services

- 110/120V, 60Hz or 220/240V, 50Hz, single phase, live neutral and earth for optional HDA200

Operational Conditions

- Storage temperature: -10°C to +70°C
- Operating temperature range: +10°C to +50°C
- Operating relative humidity range: 0 to 95%, non condensing

Ordering information

To order this product, please call PA Hilton quoting the following code: HST18

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