



## 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

- 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 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

All brand and/or product names are trademarks of their respective owners. Specifications and external appearance are subject to change without notice. The colour of the actual product may vary from the colour shown in the brochure.

Copyright © 2018 P.A. Hilton Limited. All rights reserved. This technical leaflet, its contents and/or layout may not be modified and/or adapted, copied in part or in whole and/or incorporated into other works without the prior written permission of P. A. Hilton Limited. Hi-Tech Education is a registered trade mark of P. A. Hilton Limited.

COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 2 YEARS