



## STRUCTURES PLATFORM



A benchtop platform that holds the experiments of the Structures range.



### KEY FEATURES

- Supports any of the Structures experiment modules, providing a cost-effective platform
- Only four major parts and includes a hexagon tool for easy assembly
- Compact design with lifting handles for excellent mobility and sized to fit on any standard desk for ergonomic use and convenient storage
- Rigid design with adjustable feet and a low centre of gravity for stability and accurate results
- Includes measuring scales for easy and accurate positioning of parts, changing experiments is as quick and simple as possible
- Includes a USB interface hub (with VDAS® Onboard software) for connection to a suitable computer for display and data acquisition
- Supplied with user-friendly simulation, display and data acquisition software



## DESCRIPTION

The Structures platform supports any of the optional Structures experiment modules, available separately. Made from precision, slotted aluminium extrusions and steel end plates, this module forms a sturdy, rigid, stable and strong experiment platform. Designed for easy assembly and to fit on any standard desktop, it speeds up and simplifies setting up of experiments.

Adjustable feet ensure the platform is level before use. Easy-to-read scales on each side of the platform help students to position the parts of their experiment precisely, and removes the need for an additional rule.

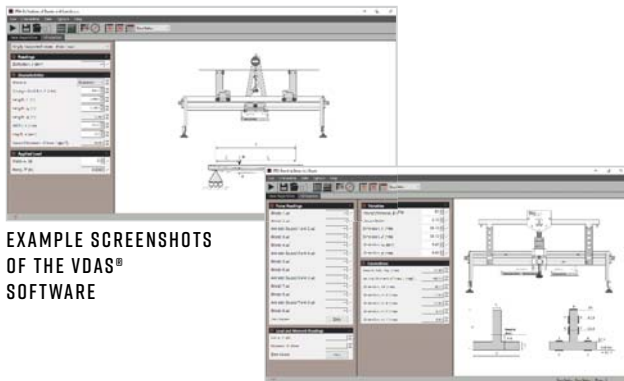
The compact size and low centre of gravity mean that students can use the equipment easily and at an ergonomic height, either sitting or standing (determined by the bench height).

The platform includes the USB interface plug-and-play hub (with VDAS<sup>®</sup> Onboard software) to simplify connections. The hub converts signals from the sensors on each experiment module to USB data format for computer display and data acquisition. TecQuipment has created user-friendly data acquisition software that works with each of the optional experiment modules.

The display and data acquisition software exports experiment data to the universal comma separated value format (CSV) for use in spreadsheet and many other software applications.

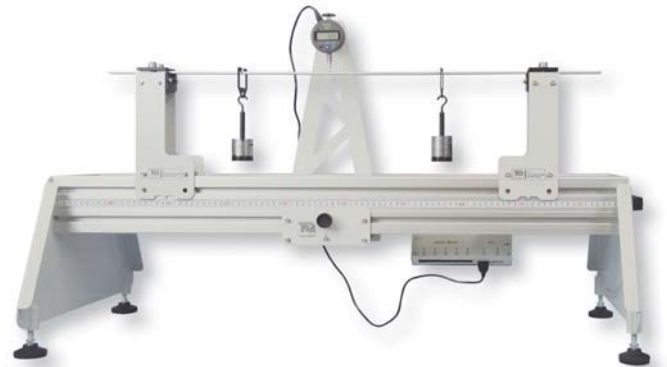
## STANDARD FEATURES

- Supplied with user guide
- Five-year warranty
- Made in accordance with the latest European Union directives
- ISO9001 certified manufacturer



## AVAILABLE EXPERIMENT MODULES

- Bending Moments in a Beam (STS2)
- Shear Force in a Beam (STS3)
- Deflections of Beams and Cantilevers (STS4)
- Bending Stress in a Beam (STS5)
- Torsion of Circular Sections (STS6)
- Unsymmetrical Bending and Shear Centre (STS7)
- Pin-Jointed Frameworks (STS8)
- Three-Pinned Arch (STS9)
- Two-Pinned Arch (STS10)
- Fixed Arch (STS11)
- Euler Buckling of Struts (STS12)
- Continuous and Indeterminate Beams (STS13)
- Curved Bars and Davits (STS14)
- Plastic Bending of Beams (STS15)
- Plastic Bending of Portal Frames (STS16)
- Redundant Truss (STS17)
- Frame Deflections and Reactions (STS18)
- Simple Suspension Bridge (STS19)
- Bending Moments in a Portal Frame (STS20)
- Suspended Beam Bridge (STS21)
- Equilibrium of a Simply Supported Beam (STS22)



SHOWN WITH THE DEFLECTION OF BEAMS AND CANTILEVERS EXPERIMENT MODULE (STS4)



## OPERATING CONDITIONS

### OPERATING ENVIRONMENT:

Laboratory

### STORAGE TEMPERATURE RANGE:

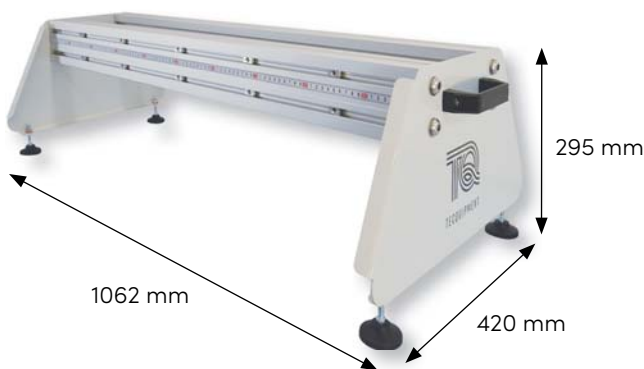
-25°C to +55°C (when packed for transport)

### OPERATING TEMPERATURE RANGE:

+5°C to +40°C

### OPERATING RELATIVE HUMIDITY RANGE:

80% at temperatures < 31°C decreasing linearly to 50% at 40°C



USB INTERFACE HUB (WITH VDAS® ONBOARD)

## DETAILED SPECIFICATIONS

TecEquipment is committed to a programme of continuous improvement; hence we reserve the right to alter the design and product specification without prior notice.

### DIMENSIONS AND WEIGHT:

- Nett (assembled): 1062 mm long x 420 mm wide x 295 mm high and 16 kg
- Approximate primary packed: 0.17 m<sup>3</sup> and 20 kg

### SERVICES REQUIRED:

- USB interface hub AC adapter needs a 100 to 250 VAC, single phase 50 or 60 Hz, 1A supply
- Suitable computer

### SPACE NEEDED:

- 1500 mm x 600 mm, level bench or desk

### ITEMS INCLUDED:

- Hexagon tool
- USB interface hub and fixings
- USB cable
- AC mains adapter
- User guide
- Software (VDAS®)

### COMPUTER NEEDED:

- Microsoft Windows 10/8.1/8 32 or 64 bit Operating System
- 5 GB disk space
- 1 GB RAM
- Minimum Pentium 4 M 32 bit processor
- Minimum 1440 x 900 screen resolution
- 15" (381 mm) or larger screen
- Spare USB 2.0 port

### DATA ACQUISITION EXPORT FILE FORMAT:

- Comma Separated Values (CSV)