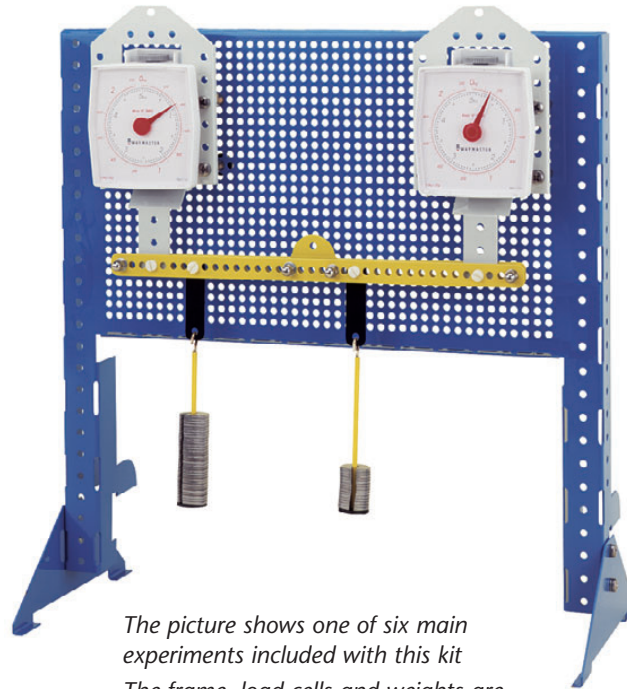


Allows students to investigate moments and forces from first principles, to resolution of forces and force polygons



*The picture shows one of six main experiments included with this kit
The frame, load cells and weights are available separately*

- Ideal for classroom demonstrations and for use by small groups of students
- Fits onto one of the optional TASK Frames and shows moments and forces
- Builds into six main experiments, including a simply supported beam, a simple crane, a bell crank lever and equilibrium of forces
- Colour-coded parts to help students understand what each part does
- Supports all teaching levels up to and including first year university courses
- Hands-on equipment - easy-to-assemble parts allow students to build the experiments for improved understanding of the experiment

- **TecEquipment** products are designed and manufactured by TQ Education and Training Ltd
- TQ Education and Training Ltd, Bonsall Street, Long Eaton, Nottingham NG10 2AN, UK
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- TQ is an ISO 9001 certified company

Description

This kit builds into six separate experiments. Each experiment studies one or more principles of moments and forces.

Students work individually or in groups of up to three. The colour of parts indicates their function. For example, yellow parts are mainly stationary or passive, and white parts are instrumentation. Red parts may move or contain energy.

The kit comes with Assembly Instructions. A Teacher Guide provides experiment methods, information, references and tips. A Student Workbook guides students through experiments.

Standard Features

- Supplied with comprehensive User Guides (Assembly Instructions, Student Workbook and Teacher Guide)
- Two-year warranty
- Manufactured in accordance with the latest European Union directives

Essential Ancillaries

- Upright Frame (UF)
- Weight Set (WT)
- Two Load Cells (LC)

Experiments

- Determination of the centre of gravity of a variety of plain shapes
- Centre of gravity of compound shapes using the theory of moments
- Illustration of the principle of moments (moment of a force)
- Reactions of a simply supported beam
- Equilibrium of forces
- Levers (straight and cranked)
- Triangle of forces
- Bow's notation
- Struts and ties (the simple crane)
- Forces applied at angles
- Use of force diagrams
- Resolution of forces

Operating Conditions

Operating environment:
Laboratory environment

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

Specifications

Packed Dimensions and Weight: 0.005 m³ and 1.98 kg

Main Parts:

- All necessary pivots, pulleys, bearings, hinges, weight hangers, nuts and bolts, spacers, cord and retainers
- Beam pieces
- Large and small bell crank levers
- Set of clear plastic shapes
- Compression cell, plumb bob, suction cup

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