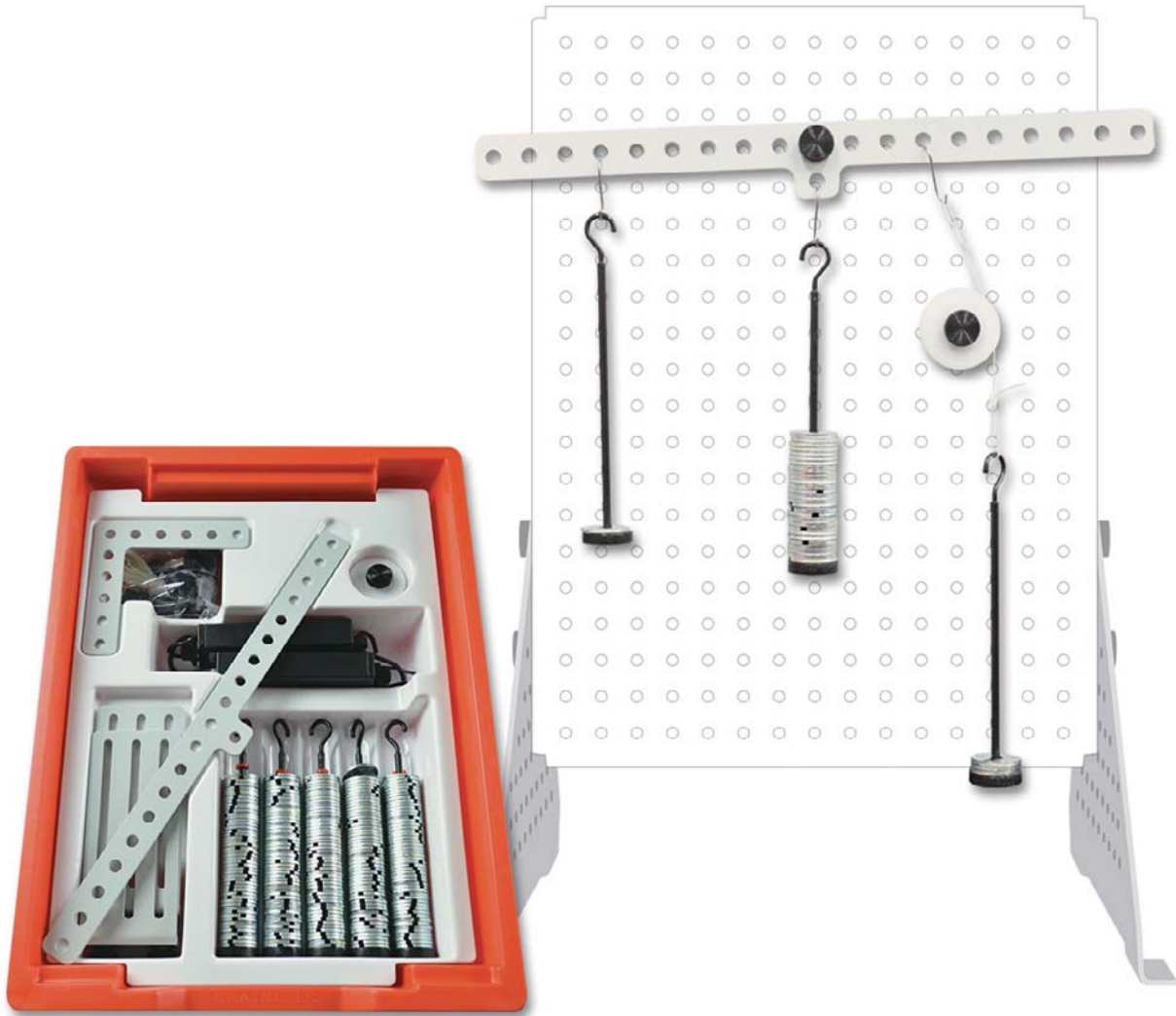




ES3

MOMENTS KIT

Demonstrates the relationship between distances and forces in rigid beams and levers demonstrating the first, second and third order levers.



KEY FEATURES

- One of a series of 18 kits for experiments in fundamental engineering science topics
- For use on any engineering course from foundation to postgraduate
- Flexible and modular with sensible size parts – each kit fits onto the work panel (ES1) for experiments and simple classroom demonstrations
- Supplied in a hard-wearing storage tray with moulded insert to hold parts securely and a graphical list to help check the kit contents
- Rugged and durable parts for safe 'hands-on' experiments – allowing better understanding
- Provides experiment capabilities into the principles of moments, beam reactions, beam balances and levers

MOMENTS KIT

DESCRIPTION

This versatile kit is part of a series that allows many experiments using different arrangements of their parts. Students, teachers or lecturers fit the parts of the kit to the work panel (ES1) (supplied separately) to study or show an engineering science topic.

This kit includes a rigid beam for experiments in the principle of moments, extending to levers and beams. It shows the three main lever types (1st, 2nd and 3rd order) and includes an 'L' shape plate for experiments in bell crank levers. A pulley allows extra experiments with moments caused by oblique forces.



The rigid beam allows experiments that show the use of moments to find unknown weights, creating simple beam balances. It also works with spring balances to show reaction forces on beams with point loads and uniformly distributed loads (UDLs).

TecEquipment supply a CD-ROM with the work panel (ES1). It includes all the worksheets, guidance notes and lecturer notes (with answers) needed for typical experiments with each kit. The selection of parts in the kits and the choice of fixing points on the work panel means that teachers or lecturers may extend the experiments to an even greater range.

NOTE: The kit is for use with the ES1 work panel (supplied separately).

STANDARD FEATURES

- Five-year warranty
- Manufactured in accordance with the latest European Union directives
- ISO9001 certified manufacturer

LEARNING OUTCOMES

- Principle of moments
- Beam balances
- 1st, 2nd and 3rd order levers
- Bell crank lever
- Beam reactions

OPERATING CONDITIONS

FOR USE IN:

Well lit classroom or 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

ESSENTIAL SERVICES

A level bench or desktop of at least 500 mm wide x 500 mm front to back.

ESSENTIAL BASE UNIT

Work Panel (ES1)

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.

STORAGE TRAY (WITH CLIP-ON LID):

450 mm x 320 mm x 85 mm

NETT WEIGHT:

4.5 kg

PACKED VOLUME AND WEIGHT:

Approximately 0.015 m³ and 5 kg

MAIN PARTS:

- Rigid beam with hook points
- Bell crank lever with hook points
- Spring balances
- Pulley
- Weight hangers and weights
- Cord and hooks