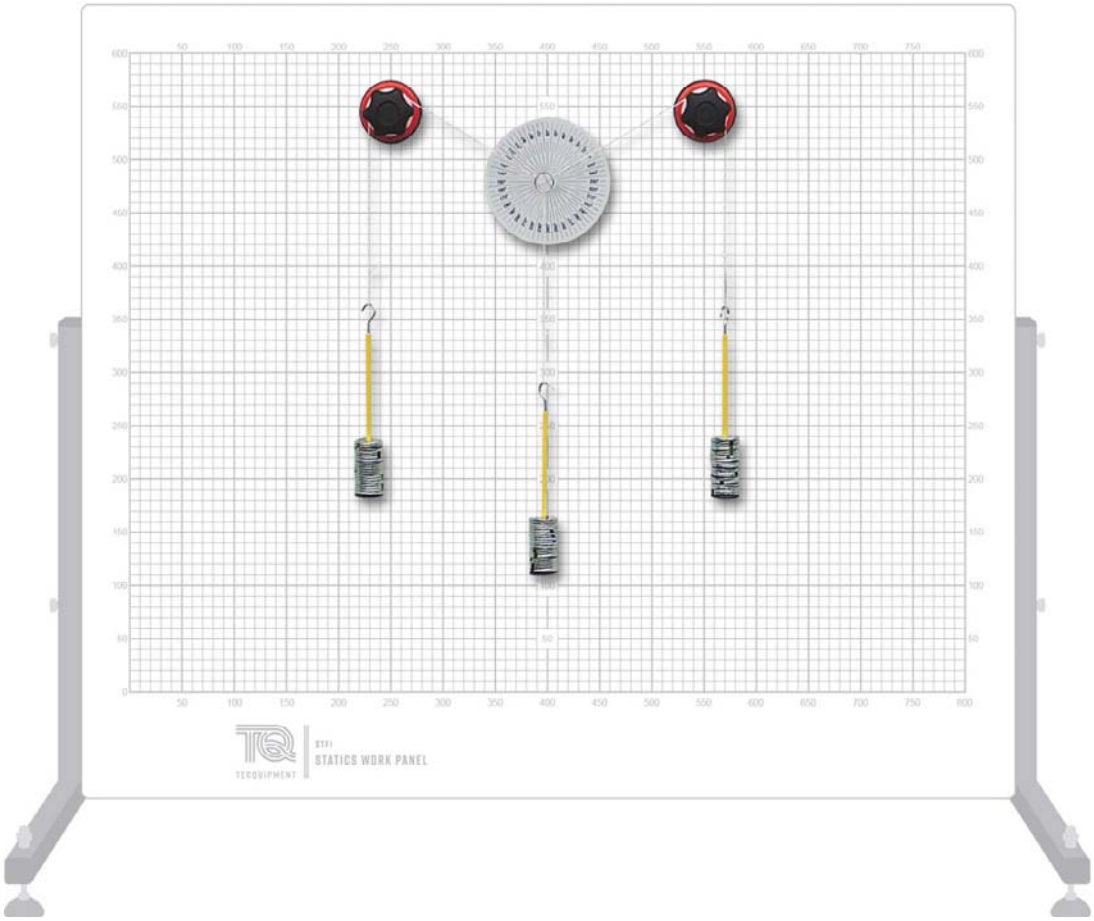
EQUILIBRIUM OF FORCES

STF4

A kit for use with the work panel for experiments with three or more coplanar forces at equilibrium and an introduction to Bow's notation.



KEY FEATURES

- One of a series of kits for experiments in statics fundamentals topics
- Fits to the Work Panel (STF1) for a complete range of experiments that explore three or more coplanar forces in equilibrium
- Hands-on approach for improved understanding
- Highly visual and robust, ideal for classroom demonstrations and for use by small groups of students
- Magnetic bases allow accurate and easy positioning of the experiment's parts
- Supplied in a hard-wearing storage tray
- Includes a fully illustrated user guide

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TECQUIPMENT

EQUILIBRIUM OF FORCES

STF4

DESCRIPTION

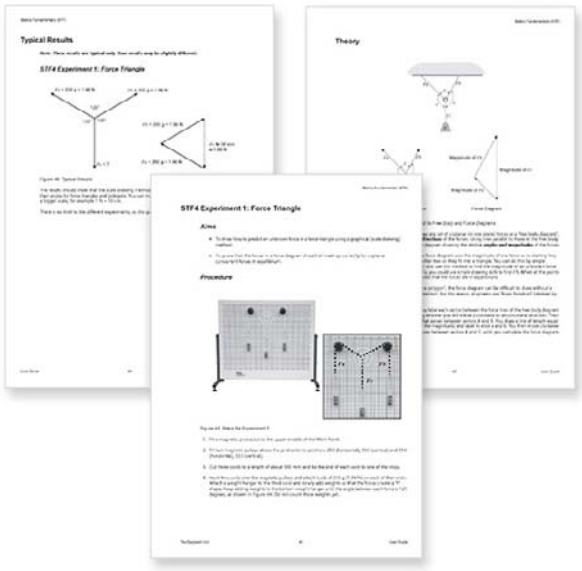
For use with the Work Panel (STF1), the kit allows several experiments with forces pulling on one or more points at different angles.

Students or teachers fit the magnetic parts of the kit to the Work Panel (STF1) to study or demonstrate three coplanar concurrent forces (triangle of forces) or more (force polygons).

The kit uses masses, hooks, pulleys and cords to apply forces on a single point (concurrent). Students may also set it to apply forces to two points (non-concurrent). Students measure the forces at equilibrium and compare with theoretical values. The kit introduces 'Bow's Notation' and the drawing method of finding the forces.

The versatility of the kit means that you can set up to five forces at any angles, using its cords, rings, magnetic mounts, magnetic protractors, pulleys, weights and a spring balance.

TecQuipment supplies each kit with a fully illustrated user guide containing theory, experiments and typical results.



STANDARD FEATURES

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

LEARNING OUTCOMES

- Concurrent and non–concurrent coplanar forces
- An introduction to Bow's notation and graphical analysis
- Force triangles, polygons and Link polygons

ESSENTIAL BASE UNIT

- Statics Work Panel (STF1)

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 strong, level bench or desktop of at least

1100 mm wide x 540 mm front to back (for the STF1).

SPECIFICATIONS

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

NETT WEIGHT:

3.7 kg + 1 kg storage tray

PACKED VOLUME AND WEIGHT:

Approximately 0.015 m^3 and 6 kg

PARTS:

- Magnetic protractors
- Magnetic pulleys
- Spring balances
- Cords with rings
- Magnetic hook points
- Lightweight hooks
- Weight hangers and weights

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