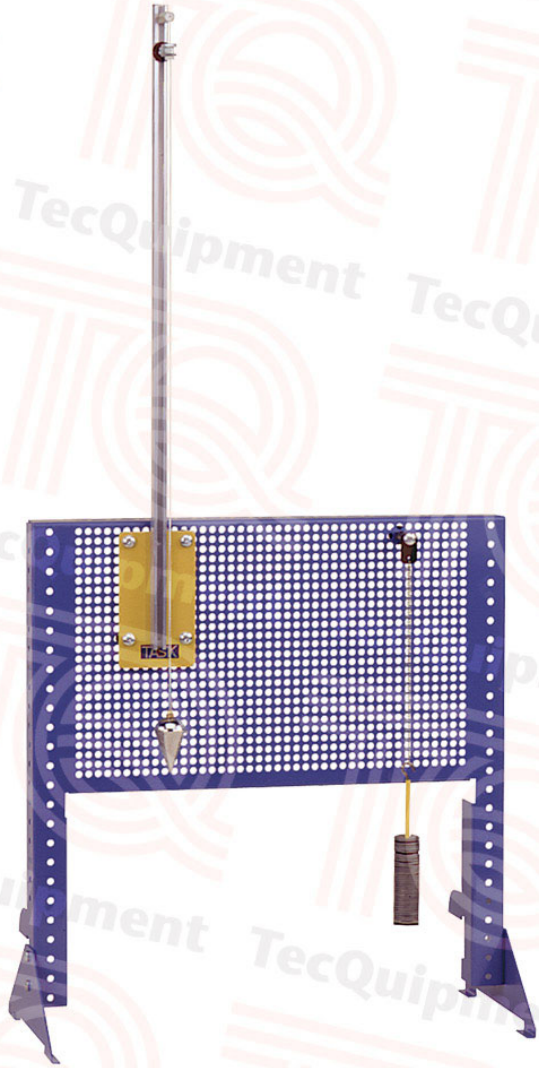
MM2

TASK Dynamics Kit

Uses a pendulum system and a spring system to show oscillatory motion



Shown fitted to a TASK frame

- Ideal for classroom demonstrations and for use by small groups of students
- Fits onto one of the optional TASK Frames and shows oscillations of a pendulum and a spring
- Includes spare springs and a stopwatch
- 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

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TASK Dynamics Kit

Description

A kit that builds into a pendulum experiment and an oscillating spring experiment.

Students assemble the experiments onto one of the TASK Frames (available separately).

The pendulum experiment is a plumb bob (heavy metal mass) on a cord, fixed to the top of a vertical rail. The cord passes through a collar. The collar is adjustable along the the rail. By moving the collar along the rail, students change the effective cord length. Students allow the pendulum to swing from a small angle, and use a stopwatch to time pendulum oscillations at various collar settings.

To perform experiments using the spring, students attach the spring assembly to the frame and add weights to the end of the spring. They then stretch the spring a set distance and release it, timing the oscillations. They then repeat the experiment using more weights.

The kit includes extra springs in case of damage.

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)

Experiments

Investigation of various dynamics concepts and applications, including:

- Simple harmonic motion
- Vibration and damping
- Oscillation
- Appreciation of friction
- Appreciation of kinetic and potential energy

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: 0.011 m^3 and 1.04 kg

Main components:

- Plumb bob assembly
- Tension springs
- Stopwatch
- Rail, support plate, hook plates
- All necessary fixings

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