

The Engineering Fundamentals range is designed to enable students to gain an understanding of the fundamentals of engineering by the process of learning via hands-on experimentation.

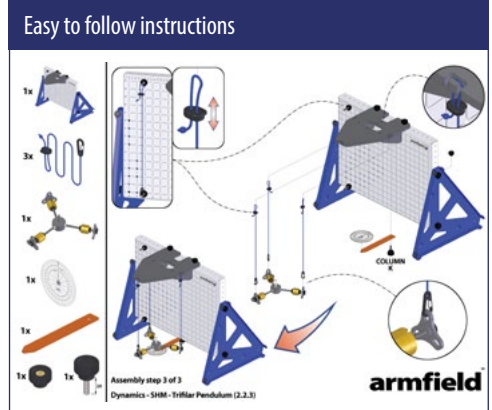
The modular hands-on tray based system is supplied in conjunction with a multifunctional Base Unit enabling the student to conduct their own experiments in subjects such as Statics, Dynamics and Kinematics.

Each kit is supplied with a highly visual user friendly operational guide, enabling the student to understand the theory of the subject by the application of practical experimentation.

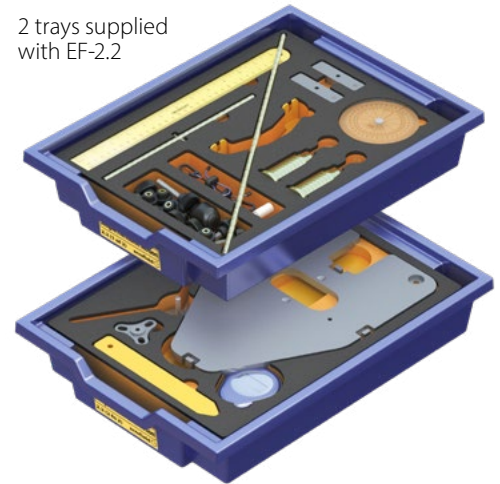
AN INNOVATIVE, HANDS ON MODULAR SYSTEM DESIGNED TO ENABLE INVESTIGATION AND THE UNDERSTANDING OF ENGINEERING PRINCIPLES.

Description

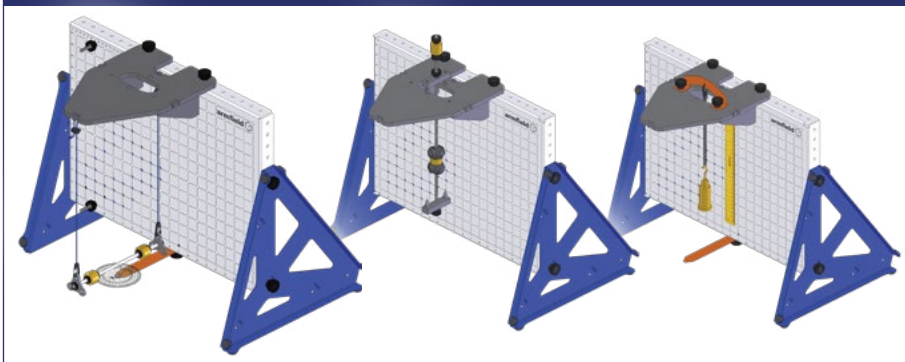
The EF-2.2 - Simple Harmonic Motion experiments kit enables students to understand the effect of mass and length of pendulum on SHM and the period of oscillation. The relationship between SHM and gravity is evaluated using the Kater's pendulum, as well as understanding SHM in a mass spring system.



2 trays supplied with EF-2.2



Katers & Simple pendulum, Spring mass system shown, full experiments list on reverse



High quality materials



Features / benefits

- ▶ Applied student learning via building and experimentation
- ▶ Supplied with a detailed instruction manual, covering the theory of Simple Harmonic Motion including multiple practical experiments designed to further develop the students' understanding in this field
- ▶ Hands-on learning
- ▶ Clear and concise pictorial assembly instructions enhance the learning experience
- ▶ Multiple experimental capability per self-contained kit
- ▶ Tool-less assembly

Requirements

Scale

EF-BU

Experiment tray scale  EF-BU scale  EF-WS scale 

- ▶ EF-BU on which to build the experiment from the tray components
- ▶ Level and stable work surface to mount the EF-BU upon. The optional EF-WS is ideal for this if no suitable desk or bench is available

Demonstration / Instructional Capabilities

Effect of length and mass on period of oscillation of a simple pendulum
 Effect of length and mass on period of oscillation bifilar pendulum
 Effect of length and mass on period of oscillation trifilar pendulum
 Effect of length and mass on period of oscillation compound pendulum
 Measuring gravity using kater's pendulum
 Shm of a spring-mass system



Workstation EF-WS
 (Trays and Base Units sold separately)

Overall dimensions

Tray	
Length	0.430m
Width	0.312m
Height	0.080m
Packed and crated shipping specifications	
Volume	0.2m ³
Gross weight	5Kg

Essential accessories / equipment

- ▶ Base Unit EF-BU

Optional accessories

- ▶ Workstation EF-WS

The workstation can be used as a demonstration platform at the front of the classroom, but also doubles up as a storage unit for the experiment trays and EF-BU Base Units.

Castors allow the entire Workstation and its contents to easily be wheeled between classrooms.

The workstation can be configured to store:

- Up to 12 Base Units and a maximum of 18 trays (2 Base Units occupy the space of 1 Tray).
- 12 Base Units and 12 trays.
- 18 trays if storing no Base Units.

- ▶ EF1-SPARES (recommended)

A selection of the most commonly used parts in the EF kits, provided in a durable storage tray which can easily be stored along with the rest of the EF kits. By having a spares kit in the classroom, experiments can be varied. In addition misplaced or damaged items can be replaced quickly without any downtime.

Related products

- ▶ EF-BU - Base Unit

Statics topic / experiment trays

- ▶ EF-1.1 - Forces
- ▶ EF-1.2 - Moments
- ▶ EF-1.3 - Beams
- ▶ EF-1.4 - Spring
- ▶ EF-1.5 - Torsion

Kinematics topic / experiment tray

- ▶ EF-3.2 - Simple Mechanisms

Options

- ▶ EF-WS - Workstation
- ▶ EF1-Spares - Spares

Ordering specification

- ▶ For more detail please contact our sales team

Ordering codes

- ▶ EF-2.2 - Simple Harmonic Motion Experiments
- ▶ EF-BU - Base Unit
- ▶ EF-WS - Workstation (optional)

Warranty

Armfield standard warranty applies with this product

Knowledge base

- > 28 years' expertise in research & development technology
- > 50 years' providing engaging engineering teaching equipment

Benefit from our experience, just call or email to discuss your laboratory needs, latest project or application.

An ISO 9001:2015 Company



armfield.co.uk

Aftercare

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 Commissioning
 Training
 Service and maintenance
 Support: armfieldassist.com