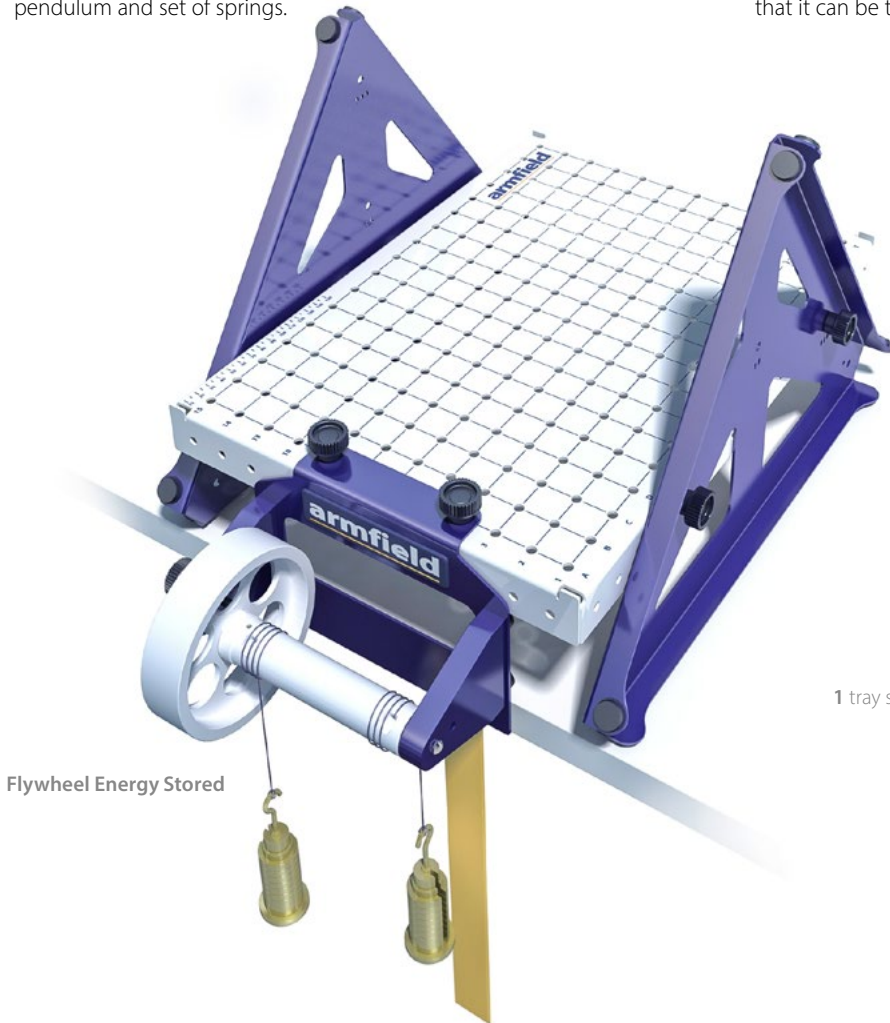


The Engineering Fundamentals range enables students to gain an understanding of the principles of engineering by the process of learning via experimentation.

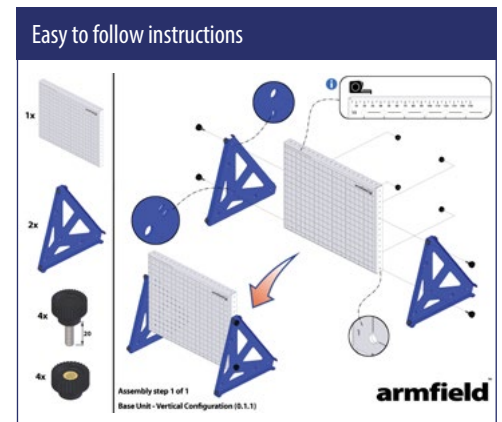
The EF-2.4 - Potential and Kinetic Energy experiments kit enables students to understand the difference between potential and kinetic energy and how it can transform from one to the other. The kit contains a flywheel, a pendulum and set of springs.

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

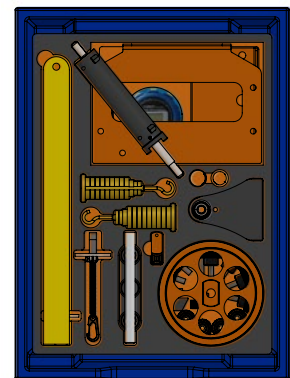
The kit will allow students to verify Hooke's law, teach them about energy transfer from potential to kinetic energy using a simple pendulum as well as using a flywheel to show the energy transfer from potential to kinetic and that it can be transferred back again via storage and release.



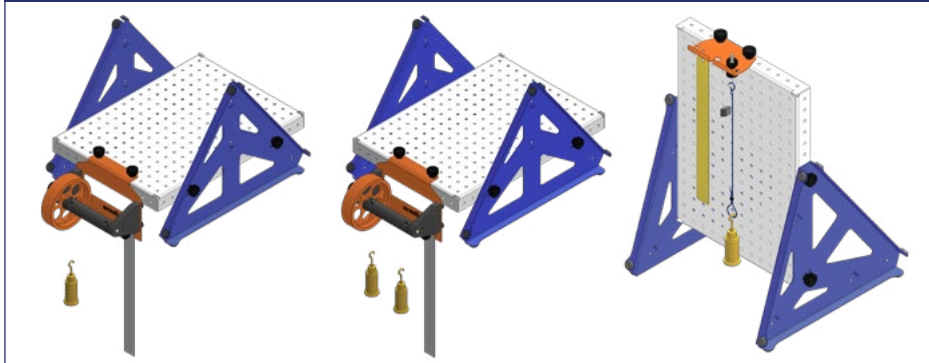
Flywheel Energy Stored



1 tray supplied with EF-2.4



Experiments shown below, flywheel - potential and kinetic energy, flywheel - energy stored, pendulum



High quality materials



Engineering fundamentals system

The modular tray-based system is supplied in conjunction with a multifunctional work panel enabling the student to conduct their own experiments in subjects such as statics, dynamics, mechanisms and kinematics.

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

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.

Essential accessories / equipment

- ▶ EF-BU Base Unit

Experimental content

Kinetic and potential energy in a pendulum
Elastic (potential) energy in a spring
Kinetic energy in a flywheel
Energy transfers
Overcoming losses



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	5.0Kg

Features / benefits

Features

- ▶ Neatly presented in an easily identifiable and durable storage tray
- ▶ Trays have clear lids making it easy to see their contents
- ▶ Pictorial tray contents list to identify missing components easily
- ▶ Accompanied by a detailed manual with various practical exercises
- ▶ Clear and concise assembly instructions for each experiment
- ▶ Multiple experiments per kit
- ▶ Toolless assembly

Benefits

- ▶ Hands-on understanding from lessons
- ▶ Improve the student's dexterity by self-assembly with the instructions provided

Related products

- ▶ EF-BU Base Unit

Statics Experiments

- ▶ EF-1.1 Engineering Fundamentals Forces
- ▶ EF-1.2 Engineering Fundamentals Moments
- ▶ EF-1.3a Engineering Fundamentals Beams
- ▶ EF-1.3b Engineering Fundamentals Trusses
- ▶ EF-1.4 Engineering Fundamentals Springs
- ▶ EF-1.5 Engineering Fundamentals Torsion

Dynamics Experiments

- ▶ EF-2.1 Engineering Fundamentals Friction
- ▶ EF-2.2 Engineering Fundamentals Simple Harmonic Motion
- ▶ EF-2.3 Engineering Fundamentals Rotational Friction
- ▶ EF-2.4 Engineering Fundamentals Potential and Kinetic Energy
- ▶ EF-2.5 Engineering Fundamentals Centrifugal & Centripetal Force

Mechanisms Experiments

- ▶ EF-3.1 Engineering Fundamentals Cam, Crank and Toggle
- ▶ EF-3.2 Engineering Fundamentals Mechanisms
- ▶ EF-3.3 Engineering Fundamentals Additional Mechanisms
- ▶ EF-3.4 Engineering Fundamentals Bar Linkages

Kinematics

- ▶ EF-4.1 Engineering Fundamentals Pulleys
- ▶ EF-4.2 Engineering Fundamentals Gears
- ▶ EF-4.3 Engineering Fundamentals Drive Systems

Options

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

Ordering specification

- ▶ Flywheel
- ▶ 500mm cord T-end
- ▶ 1000mm cord T-end
- ▶ 300mm cord w/o carabiner
- ▶ 250g weights set on hanger
- ▶ Magnetic ruler 300mm/12"
- ▶ Magnetic indicator
- ▶ Stopwatch
- ▶ Compression spring 0.05n/mm
- ▶ Compression spring 0.07n/mm
- ▶ Stainless steel ruler 300mm/12"

Ordering codes

- ▶ EF-2.4 - Potential and Kinetic Energy
- ▶ EF-BU - Base Unit
- ▶ EF-WS - Workstation (optional)

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



Products CE certified

armfield.co.uk

Aftercare

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Commissioning
Training
Service and maintenance
Support: armfieldassist.com