# <u>armfield</u>

## **Engineering Fundamentals - EF series**

Base unit – EF-BU



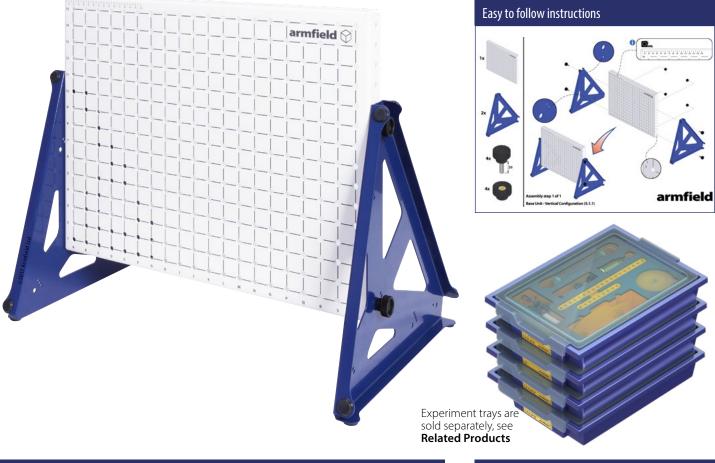
The Engineering Fundamentals range is designed to enable students to gain an understanding of the fundamentals of engineering by the process of learning via hands-on experimentation.

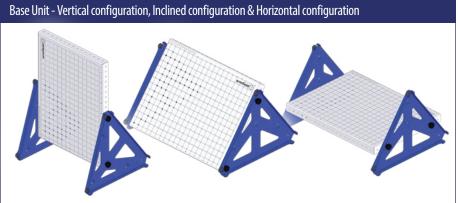
The unique multifunctional base unit (EF-BU) allows the student to carry out a variety of experiments covering Statics, Dynamics, Mechanisms and Kinematics in 4 different configurations.

# MULTIFUNCTIONAL AND CONFIGURABLE BASE UNIT TO SUPPORT THE INNOVATIVE ARMFIELD ENGINEERING FUNDAMENTALS RANGE

#### Description

The base unit is easy to set up with no assembly tools needed. The screen-printed design includes a measuring scale to ensure repeatable exercises. The base unit can be set up horizontally, vertically and in inclined positions to suit experiment.





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Issue: 2 Application:				
URL: http://www.armfield.co.uk/ef	ME	ChE	CE	IP

High quality materials

## armfield.co.uk

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#### Features / Benefits

- Can be assembled in vertical (landscape and portrait), inclined and horizontal configurations (clear assembly instructions provided for each)
- ► Toolless assembly
- ► Base Unit backboard has a screen-printed grid reference which all assembly instructions refer to for the location of parts
- Screen-printed design also includes a measuring scale to help identify correct length thumb screws etc.
- Sturdy common base for all EF experiments to be assembled on
- Improve the students dexterity by self-assembly with graphical instructions provided
- ▶ Simple grid reference system to assist with assembly of experiments
- Measuring scale included on backboard
- Flat-pack for easy storage

# Requirements Scale EF Experiment tray scale EF-BU scale EF-WS scale

- EF- experiment tray/s to build experiments. See selection under related products
- 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

#### **Experimental content**

## The entire EF range designed to work with the Base Unit. See EF experiment data sheets for specific demonstration / instructional capabilities relating to the topic / experiment tray

#### **Related products**

▶ EF-BU Base Unit

#### **Statics Experiments**

- **EF-1.1** Engineering Fundamentals Forces
- **EF-1.2** Engineering Fundamentals Moments
- **EF-1.3** Engineering Fundamentals Beams
- **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

#### Essential accessories / equipment

Topic experiment tray (see related products for available trays)

#### **Ordering specification**

- ▶ 1 x Back board
- ► 2 x Leg
- ▶ 4 x 20mm thumbscrew
- ▶ 4 x thumb-nut

#### Ordering codes

- EF-BU Base Unit
- ► EF-WS Workstation (optional)
- ► EF Topic experiment trays (see related products for ordering codes)

#### Armfield standard warranty applies with this product



Aftercare

Installation Commissioning Training Service and maintenance Support: armfieldassist.com

#### Workstation EF-WS

(Trays and base units sold separately)

### Overall dimensions

Length	0.515m		
Width	0.390m		
Height	0.035m		
Packed and crated shipping specifications			
Volume	0.1m <sup>3</sup>		
Gross weight	10Kg		

Note: The dimensions given are for the Base Unit in its flat (stored) form (legs inside the backboard)

# 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.