armfield

SOFTWARE INCLUDED WITH ALL F1-10 BENCH'S AS STANDARD

F SERIES: BASIC FLUID MECHANICS Complete Fluid Mechanics Laboratory – F1

F SERIES

This equipment enables a thorough investigation of the factors affecting the stability of a floating body.

fecting the stability of a floating body.

Metacentric Height - F1-14



F1-14 Calibrated scale

Experimental content

- ▶ Determining the centre of gravity of the pontoon
- ▶ Determining the metacentric height and from this the position of the metacentre for the pontoon
- ► Varying the metacentric height with angle of heel

Description

The position of the metacentre can be varied to produce stable and unstable equilibrium.

The equipment consists of a plastic rectangular floating pontoon where the centre of gravity can be varied by an adjustable weight which slides and can be clamped in any position on a vertical mast.

A single plumb bob is suspended from the mast which indicates the angle of heel on a calibrated scale.

A weight with lateral adjustment enables the degree of heel to be varied and hence the stability of the pontoon determined.

The equipment does not require a separate water tank as it may be used on the hydraulics bench by filling the volumetric tank.

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Technical specifications	
Overall dimensions:	
Length	0.35m
Width	0.20m
Height	0.475m
Max angle of heel	±13°
Corresponding linear dimension	±90mm

Ordering codes

► F1-14

Issue: 2	Applications			
URL: http://www.armfield.co.uk/f1	ChE	ME	CE	IP