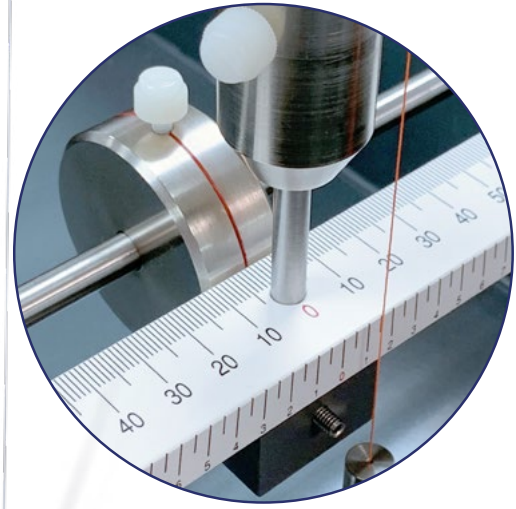


**Metacentric Height - F1-14**

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



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.

**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