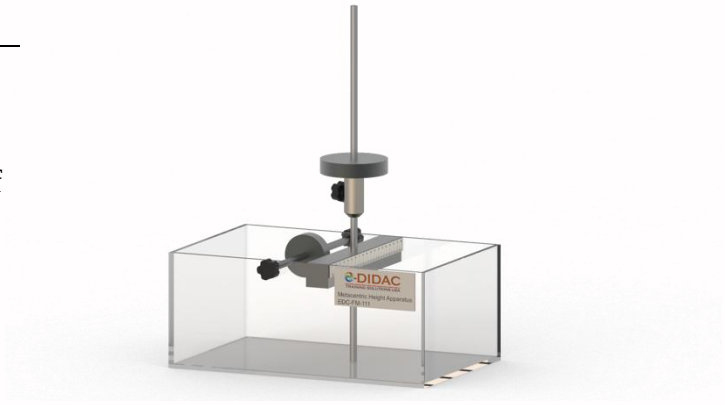
Stability of a Floating Body apparatus (EDC-FM-111)

EXPERIMENTAL DATA:

- Determination of the metacentric height.
- Study and determination of buoyancy, center of buoyancy, center of gravity, metacenter, stability and heel.



DESCRIPTION:

The unit can be used to study the stability of a floating body and to determine the metacenter graphically. In addition, the buoyancy of the floating body can also be determined. The experiment is conducted in a tank filled with water. A non-corrasion rectangular acrylic body is used as the floating body. Clamped weights that can be moved horizontally and vertically make it possible to adjust the center of gravity and the heel. A plumb bob, attached to the upper part of the mast, is used to measure the angle of heel of the floating base with the aid of a graduated scale.

The equipment requires a Hydraulics Bench (EDC-FM-100) as the source of water supply.

SCOPE OF DELIVERY:

- 1 experimental unit
- 1 set of instructional materials

DIMENSIONS AND WEIGHT:

- Minimum size: 660 x 450 x 220 mm (L x W x H)
- Approximate weight: 6 kg

TECHNICAL DATA:

Floating Body:

- Minimum size: 300 x 130 x 190 mm (L x W x H)
- Mast height: Minimum 400 mm
- Horizontal scale: 180 mm
- Vertical scale: 400 mm
- Height scale of the floating body: 120 mm

Clinometer:

- Scale range: ±30° or better

Weights:

- Floating body without clamped weights: 2.7 kg
- Vertical clamped weight: 575 g
- Horizontal clamped weight: 196 g

Water Tank:

- Minimum capacity: 50L