

## Stability of a Floating Body Apparatus (EDC-FM-111FB)

### EXPERIMENTAL DATA:

- Determination of the metacentric height.
- Study and determination of buoyancy, center of buoyancy, center of gravity, metacenter, stability and heel.
- The apparatus determines and analysis of the stability of floating bodies, and determining the Transparent floating body with rectangular frame cross-section



### 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-corrosion 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. • Clinometers with scale for displaying 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.

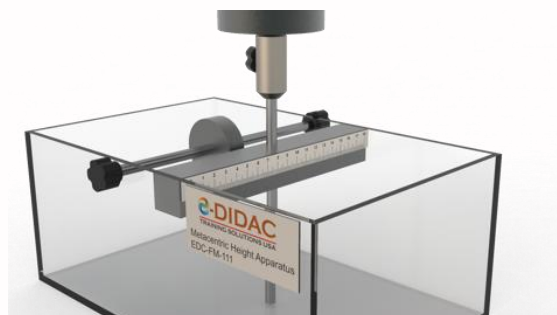
The equipment requires a Hydraulics Bench (EDC-FM-100HB) as the source of water supply.

### 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:

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### Floating Body:

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

### Clinometer:

- Scale range:  $\pm 30^\circ$

### Weights:

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

### Water Tank:

- Minimum capacity: 50L