

STABILITY OF A FLOATING BODY

Mod. HB4/EV

DESCRIPTION

The module consists of a plastic rectangular floating tank whose centre of gravity can be varied by moving two weights along a horizontal and a vertical rod. In this way it is possible to pass from a stable equilibrium situation to another situation of unstable equilibrium, and to determine the metacentre position. A plumb-bob suspended from the mast indicates the inclination of the tank on a graduated scale. The module can be let float in the volumetric tank of the hydraulic bench or in a container with appropriate dimensions.



TRAINING PROGRAM:

- Determining the centre of gravity of the tank
- Determining the metacentric height and therefore the position of the metacentre for the tank stability
- Variation of metacentric height with angle of heel

TECHNICAL CHARACTERISTICS:

- Tank dimensions:
 - length: 350 mm
 - width: 200 mm
 - overall height: 475 mm
- Max. angle of heel: $\pm 13^\circ$

REQUIRED

HYDRAULIC BENCH MOD. HB/EV OR HB-E/EV
- NOT INCLUDED -

or vessel with suitable dimensions



SUPPLIED WITH

THEORETICAL-EXPERIMENTAL
HANDBOOK



OPTIONAL

SPREADSHEET SOFTWARE
For fluid mechanics equipment
Mod. SW-HB4/EV

