



Email : sales@laboratoryinstrumentindia.com

**Product Name :**  
Centre Of Pressure

**Product Code :**  
LBNY-0005-1030007



#### **Description :**

The equipment consists of a vertical panel that holds a clear plastic quadrant, to which students add water. The quadrant has engraved lines to help students keep the plane in a vertical or angled position. The cylindrical sides of the quadrant have their central axis coincidental with the moment measurement axis. This product allows students to measure the moment due to the fluid (hydrostatic) thrust on a fully or partially submerged plane. The plane works in either a vertical or inclined (angled) position. Students then compare their measurements with theoretical analysis. The total fluid pressures on these curved surfaces therefore exert no moment about this pivot. Therefore, the moment is only due to the fluid pressure on the plane test surface. Students measure this moment using weights suspended from a level arm. A scale on the panel of the apparatus shows the head of water. They then initially balance the quadrant tank using one of the weight hangers and the smaller trimming tank. They take results by balancing incremental weights on the hanger with known quantities of water. To perform experiments, students level the apparatus using its levelling feet and spirit (bubble) level. They decide whether to test either a vertical or inclined plane. Students note the relationship between the moment and the water height (h). They then use the results to calculate the equivalent moment of force (M) or hydrostatic thrust.

#### **Technical Specification :**

Net Dimensions and weights: 460 mm wide x 400 mm high x 160 mm front to back and 4 kg

Slotted weights:

100 x 10 g

Weights hanger:

2 off 10 g each

Accessories included):

Syringe

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Water colouring.



**Laboratory Instrument India**