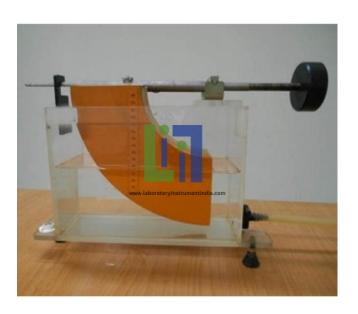


Email: sales@laboratoryinstrumentindia.com

Product Name:
Hydrostatics Experiments

Product Code: LBNY-0005-15800020



## **Description:**

The apparatus, which is illustrated in Fig. 1, consists of a valve base and a bronze barrel which has a precision machined bore into which fits a stainless steel piston. Calibration of Pressure Gauges is used for the calibration of the Bourdon type pressure gauge supplied with the Cussons Hydraulic Bench and other gauges of a similar rating using the dead weight method. Fitted to the valve base are two connections and a blanking plug. A connection for the pressure gauge under test is pre-fitted and supplied with a length of plastic pipe suitable for connection to the pressure gauge via the auxiliary tapping on the Hydraulics Bench. The piston is fitted with a platform which can carry calibration weights the weights supplied with the apparatus are equivalent to pressures of 0.5 bar and 1 bar. The piston and platform have a total weight equivalent to 0.5 bar pressure. A non-return connection for the water supply from the hydraulics bench is fitted on one side of the valve block. A spill-pipe is fitted into the barrel which prevents the piston being ejected by excess pressure. The Bourdon gauge, fitted on the Bench, is a simple device and normally very reliable in service. On the third side of the block is a blanking plug which is removed to allow the apparatus to be drained of water. The apparatus is mounted on a plastic base for stability. After an extended period of use, slight deviations of value are likely to occur and for "accurate" work a calibration curve for the instrument is necessary. The basic element of the gauge is a curved, elastic-metal tube, usually of brass or stainless steel, which changes its geometry when filled with fluid under pressure. This distortion is transmitted by linkage to the gauge pointer. The dead weight tester is not subject to variations and can, therefore, be used as a reliable.

### **Technical Specification:**

#### **Expermental Capabilities:**

Determination of the Metacentric Height for a flat bottomed vessel Experiment to illustrate the floatation characteristics of a flat bottomed vessel (pontoon).

**Dimensions And Weights:** Nett: 390 x 300 x 800 mm, 13.0 Kg.



# **Laboratory Instrument India**