

55902 Experimental Set-Up has been designed specifically to determine the Poisson's ratio for rubber. The property of a material to compensate for change in one direction by changing in the other is explained by Poisson's Ratio.

The experiment is included in most curriculums given its wide ranging implications and hence is essential for students to understand. The apparatus consists of a rubber tube, approx. one meter long. Fitted with a rubber cork and is held rigidly at its top in bracket of a vertical stand. The stand has leveling screw on its base to ensure a level surface for conducting the experiment.

A hook is slotted weights. A pointer attachment, also at the base of the tube, is used to measure the extension of the tube on application of load with the help of a meter scale which is fitted to the stand.

The set up is complete in all respect and requires no other apparatus.

Practical experience on this set up carries great educative value for Science and Engineering Students.

Object

To determine the Poisson's ratio for rubber.

Specifications

The Complete Experimental Set-up consists of following items:

- Poisson's ratio experimental setup –
 - ♦ Rubber tube : A rubber tube about one meter long and approx 4cm in diameter is suspended vertically in a metal stand.
 - ♦ Rubber stopper with a hole
 - ♦ Meter scale 30cm
 - ♦ Burette 25ml (or a graduated cylinder)
 - ♦ Small pointer
- Slotted Weights 500gm x 4 = 2000gm with hanger 500gm (Total 2500gm).
- Vernier caliper



Note: Specifications are subject to change.