



**OMEGA TYPE ES - 452** Experimental Set-Up has been designed specifically to study variation of surface tension with temperature using Jaeger's method.

Surface tension is the fundamental property of a liquid surface. By virtue of property of surface tension, the free surface of liquid behaves like a stretched membrane. There is an inherent property of liquid to alter its shape in such a way that the area of its free-surface is minimum possible and this fact can be readily explained on the basis of molecular theory.

The setup is absolutely self-contained and requires no other apparatus.

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

### OBJECT

To study variation of surface tension with temperature using Jaeger's method.

### FEATURES

The Complete Experimental Set-up consists of following items.

#### 01 Apparatus for measuring surface tension including

**Jaeger's apparatus:** To measuring surface tension including Jaeger's apparatus, A thin glass tube bottle, funnel tube, manometer tube, capillary tube, glass biker A fine motion adjustable stand whose height can be increased or decreased slowly. A beaker can be put over it.

#### 02 Travelling Microscope

With horizontal & vertical scales. The bed is of heavy casting, thoroughly aged, machined and is fitted with leveling screws. On the dovetail guide ways slides the horizontal carriage which can be clamped at any position by means of a thumb screw. A second sliding carriage slides along a gun metal vertical pillar fitted on the horizontal carriage. The slow motion guide bars are made of sturdy material and the motion is very smooth

2.1 **Microscope Tube:** Inclinal in any angle. True vertical and horizontal positions marked focusing.

2.2 **Guide Ways:** The guide ways over which slides the vertical carriage is made of gun metal.

2.3 **Scales and Vernier:** Made of life time Stainless Steel.

2.4 **Optics:** True achromatic objective with 7.5 cm. focusing distance from object, 10X Ramsden Eyepiece with fine cross wire

2.5 Least Count

Horizontal Scale : 0.001cm.

Vertical Scale : 0.001cm

03 Beaker : 500 ml

04 Thermometer : 110°C

05 Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Experimental procedure, Report Suggestions and Book References

We are committed to the continuous development of our products, and therefore reserve the right to amend specifications without prior notice.

**OMEGA ELECTRONICS**