

- **Spherometer is an instrument used mainly to determine the radius of curvature of a spherical surface - based on the principle of micrometer screw gauge.**

18. Spherometer - Disc Type

It consists of a small metal frame, supported by three legs fixed at the corners of an equilateral triangle. A screw of fine pitch passes through the centre of the metal frame. The screw forms the fourth leg. The main scale (or pitch scale) is marked on a metal strip fixed at right angles to the frame. This scale is marked in millimeters with zero mark at the centre (10-0-10mm). A circular scale is fixed to the screw head.



It carries a circular scale divided into 100 equal parts. (In some cases it is divided into 50 equal parts). The edge of the circular scale is very close to the metal strip and the metal strip is used also as a reference line for taking the circular scale reading. The disc & scales are brass lacquered & legs are made of steel black painted.

- a) 1/100
- b) 1/200

19. Spherometer - Disc Type (Stainless Steel)

Same as Cat. No. 18 but screw and legs are made from rust proof stainless steel.

- a) 1/100
- b) 1/200



EXPERIMENT NO. 03

To measure the radius of curvature of spherical surface using Spherometer.

WHAT YOU NEED

- Spherometer of any type
- Plain glass plate
- Double convex lens
- Watch glass