

Fig. L.12.1 Glass micro balloon (Reported by: R.K. Khardekar; khardekr@cat.ernet.in)

L.13 Development of cylindrical polishing machine

The development of a cylindrical polishing machine has been completed. This machine was designed for polishing of Plano convex lenses of size 150 x 100mm, with radius of curvatures from 50mm to 300mm radius made of various types of glass materials.



Fig. L.13.1 Cylindrical Polishing Machine

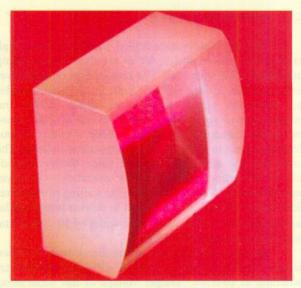


Fig. L.13.2 Plano convex lens of size 50x45x25mm with radius 50mm from BK7 glass.

The object to be polished is mounted on a table driven by a reciprocating motion mechanism. It has a 6-degree oscillating motion in a plane at right angles to the linier motion of the object table holder. Adjustable uniform pressure on the polishing tool was provided with the help of spring-loaded polishing tool holder. Fig. L.13.1 shows the photograph of the machine and fig. L.13.2 shows a glass lens polished by this machine.

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