

Newton's ring apparatus is one of the basic experiment at graduation level. With the help of this apparatus, the wave nature of light is confirmed. It is based on the phenomenon of interference of light waves obtained from single coherent (of same frequency and constant or zero phase difference). The phenomenon of Newton's ring, is the result of interference between the partially reflected and partially transmitted rays from both the lower curved surface of plano-convex lens as well as upper surfaces of the glass plate. When viewed with a monochromatic light, it appears as a series of concentric, alternating bright and dark rings centered at the point of contact between the two surfaces. The thickness of the film is radially symmetrical and increases outwards from the point of contact. By studying the ring pattern, we can determine the wavelength of the monochromatic light and also the refractive index of a given transparent liquid medium present in the wedge - shaped film.



- Traveling microscope with x-y-z axes movement**
- Horizontal measurement scale with fine and coarse movement screw**
- Cross wire in the field of view for ring's diameter measurement**
- Newton's ring assembly consisting of plano-convex lens mounted on an optically plane glass plate**
- Adjustable plane glass plate is provided to be inclined at 45° with respect to the vertical plain**
- Sodium vapour lamp as the monochromatic (5893Å) and broad light source**
- Extensive operating manual**
- 2 Year warranty**



Technical Specifications

Sodium Vapour Lamp

Wavelength	: 5893Å
Power Supply	: Input voltage 230V ± 10%, 50Hz
Operating Wattage	: 35W

Lens

Type	: Plano - convex
Focal Length	: 100 cm
Diameter	: 6 cm

Newton's Ring Microscope

Magnification	: 30 X
Weight	: 5.7 Kg
Horizontal Movement Limit	: 9 cm
Least Count of Circular Scale	: 0.001cm
Dimensions	: 5"x3"x3"

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,
Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com
Website: www.tesca.in