



### Features

Tesca Transmitted Light Polariscope is a bench top mounted frame which allows the study of stress patterns and photoelasticity resulting from geometrical changes in loaded mechanical models. Photoelastic analysis is achieved by passing light through the mechanical stress models while a tensile load is applied. The frame has the Transmitted Light Polariscope filter and quarter wave plate mounted to rotational frames. These frames allow the rotational angle of the plates and filters to be adjusted and hence vary the colourisation seen by the user. The frame can sit in front of a light box which supplies monochromatic or white light. Rubber mounting feet enable it to sit firmly onto the light source. Transmitted Light Polariscope can be vertically or horizontally mounted onto the light box.

### Specifications

- To be bench top unit for teaching of photoelastic principles
- To be used with white light or monochromatic light source
- To be supplied with quarter wave plates and polarisation filters, and light box
- Wave plates and filters to be easily mounted
- A variety of mechanical specimens supplied

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.tescaglobal.com

- Adjustable loading mechanism
- To have fine tuning loading mechanism using loading spring, dial gauge and screwjack
- Wave plates and filters can be rotated through varying angles to vary colourisation

### Experiments

- Photoelastic analysis of standard mechanical models
- Analysis of Crane hook under tensile load
- Tensile loading of beams, perforated beams, plates, overlap element
- Variation of stress colourisation
- Rotational position of wave plate and filters