UNRESTRAINED LINEAR THERMAL FILM SHRINKAGE HOT PLATE METHOD

Designed and manufactured by Ray-Ran, the **Hot Plate Thermal Film Shrinkage** Apparatus is used to determine the thermal shrinkage of plastic film & sheeting and is ideal for most quality control procedures where precise results are essential.

The principal of the hot plate method to determine film shrinkage is similar to the liquid immersion method, notably to determine the amount of shrinkage of a film when heated to release the internal stresses produced due to the manufacturing methods.

The integrated hot plate with digital temperature controller, heater and a PT100 platinum resistance thermometer accurately maintains the test temperature to within ± 0.1 °C and the built in electronic timer monitors the duration of the test.

The hot plate test procedure is very simple and quick to conduct. A film sample of round or rectangular shape is placed on a hot plate which is maintained at a constant temperature. The surface of the hot plate is lightly oiled with silicone oil to ensure good heat transfer from the hot plate to the film and a light cover plate which keeps the film flat is placed on the top of the film sample. After a set time, the film is removed from the hot plate and cooled to room temperature. It is then re-measured and its percentage shrinkage determined.

Although the Hot Plate Film Shrinkage Apparatus is not controlled by any international test standards, it's economical features and high temperature accuracy make it a valuable piece of testing equipment within the polymer industry.

TECHNICAL SPECIFICATION

- Simple determination of Unrestrained Film Shrinkage
- Hot plate method
- Simple to operate
- PID electronic temperature control
- Resolution 0.1°C
- PT100 PRT sensor accurate to 0.1°C
- Electronic timer HR:MIN:SEC
- Sample cover plate
- Product user manual
- CE declaration certificate
- 1 year return to base warranty

OPTIONAL ANCILLARIES

- Test sample cutter Ø50mm
- Test sample cutter 50mm x 50mm
- Silicone oil (100ml bottle)

WEIGHTS & DIMENSIONS: RR/FSHP	
Net Weight (kg)	6
Width (cm)	20
Depth (cm)	30
Height (cm)	25