



Model DS-2100 Film Shrinkage Tester

Model DS-2100 Film Shrinkage Tester for Plastic Film

Full-Featured Tester for Determining Percentage Dimensional Shrinkage

Based on the temperature-controlled, hot-plate design, the Model DS-2100 offers a safer alternative to conventional hot-oil bath systems, and a faster and more precise alternative to conventional ovens for shrink film analysis and testing.

With hot plate temperatures controlled to $\pm 0.3^{\circ}\text{C}$ ($\pm 0.5^{\circ}\text{F}$), and temperature stability achieved in 15 minutes or less, the DS-2100 provides a useful quality tool for determining performance characteristics and Temperature vs. Shrinkage profile analysis of your shrink film products.

The Oakland Advantage

ASTM and ANSI Reference Standards

ASTM D2732-14 (Reference only) Unrestrained Linear Thermal Shrinkage of Plastic Film and Sheeting (Constant-Temperature Liquid Bath, 0.76 mm / 30 mils thickness or less).

ANSI ISO 11501-95 (Reference only) Determination of Dimensional Change on Heating Plastic Film and Sheeting (Circulating-Air Oven, 1 mm / 39 mils thickness or less).

Advanced Technical Features in Each Model

Easy, Error-Free Operation

The DS-2100 has been designed to give accurate, repeatable results for the Quality Control analysis of:

- Internal stresses locked into the film and released by this test.
- Percentage shrinkage of "Shrink Film"

Offering Dimensional Shrinkage with Advanced Features Testing

- Hot-plate temperature controlled to $\pm 0.3^{\circ}\text{C}$ ($\pm 0.5^{\circ}\text{F}$)
- Temperature stability achieved in 15 minutes
- Countdown LCD timer
- Back-lit, scaled, cooling area
- Direct read-out of percentage shrinkage

Affordable

Best of all, the DS Series is economically priced.

Industry-Leading Correlation Data

The DS-2100 provides a useful quality tool for determining performance characteristics and Temperature vs. Shrinkage profile analysis of your shrink film products. Factory preset operating temperature range of 20 – 150°C (70 – 300°F).

Oakland Instrument Corp.

Oakland Instrument Corp. specializes in the design, manufacture and distribution of test, measurement and control systems for the plastics, flexible packaging, and paper industries.

Customer-Driven

We team with our customers to help them solve their quality and process-control problems.

Technology-Based

Our applications knowledge and engineering depth allow us to offer both standard and custom systems based on industry leading technology.



Top-loading Hot Plate with protective flip-up heat shield. Place film sample on top of hot plate for shrinkage testing (Shown at left). Easy to read backlit measurement grid for measuring shrinkage of samples after removing from hot plate (Shown above).

Specifications

Model DS-2100

Mode of operation:	Off line testing / lab use
Materials:	All plastic film and plastic sheet materials
Measurement Range:	50 mm (2 inches) Round Sample Size 0 - 120 % Shrinkage Scale ranges available
Resolution:	1% Shrinkage
Accuracy:	± 0.5% Shrinkage
Backlit, Sealed Cooling Area:	6.4 cm (2.5 inch) diameter
Aluminum Hot Plate:	With hinged protective grill
Heater Element:	250 Watts, 115V 60 Hz.
Temperature Controller:	PID. Auto-tune. 0 - 400 °C (32 - 750 °F) 110-240V/50-60 Hz. With discrete levels of access
Display:	LCD. Set point and Actual temperatures, visual at the same time.
Sensor:	3-wire RTD BS1904 100 ohms at 0 °C (32 °F) DIN 43760-1980
Timer:	Lapse timer with alarm. Registers overshoot
Cooling Area:	Sealed for containing surplus oil
Switch:	Back light for measuring disc
Measuring Disc:	Scaled for direct measurement in percentage
Fan:	Cooling. 115 V
Fuse:	250 mA with spare in socket holder
Power Supply:	115 VAC 60 Hz or 240 VAC 50 Hz
Serial Data Communications:	N/A
Power Requirements:	115 VAC, 60 Hz, 230 VAC, 50 Hz or consult factory for special requirements
Dimensions (W x D x H, Instrument Only)	10 x 31 x 26 cm (4 x 12 x 11 inches)
Dimensions (W x D x H, Shipping)	41 x 41 x 41 cm (16 x 16 x 16 inches)
Weight (Instrument Only)	2 kg (5 lb)
Weight (Shipping)	3.5 kg (8 lb)

(Due to continuous product improvement, all specifications are subject to change without notice.)

Ordering Information



Distributed by:
Plastics Touchpoint Group, Inc.
152 Rimmington Drive
Thornhill, Ontario, Canada, L4J 6K1
Tel: 416-788-9742
Email: info@plasticstouchpoint.com
Website: www.plasticstouchpoint.com

BRO DS2100-0122C
Manufactured by:
Oakland Instrument Corp.
5220 12th Avenue East
Shakopee, Minnesota 55379 USA
Website: www.oaklandinstruments.com