

# Model CX-1000 Film Thickness Gauge

*Gauge Profiling for Specialty and Commodity-Grade Film and Sheet Producers* 



The Model CX-1000 Film Thickness Gauge. Patent Rights Reserved

The model CX-1000 delivers more than you might expect from a film thickness gauge. Designed for off-line use in the laboratory or on the production floor, its technology is based on the capacitance principle, which uses the plastic as a dielectric. As the film transport pulls your film sample through the sensor, minute thickness variations are measured and recorded, producing a continuous profile of unsurpassed accuracy and repeatability.

# Improved Film Quality, Increased Profit Margins-

The CX-1000 is a proven tool for more closely controlling nominal and uniform film thickness in your:

- Production-die setup and adjustments
- Research and development of new film products
- Inspection of incoming film products
- In-process checks to ensure on-spec product for secondary operations
- Quality-control reporting

By measuring the baseline and ongoing performance of your extrusion system, the CX-1000 can help you improve film quality, resulting in fewer returns, less off-spec product and reduced scrap. And the CX-1000 can lower resin costs too, increasing your profit margins.

# The Oakland Instrument Advantage.

Oakland Instrument Corp.'s model CX-1000 offers numerous advantages:

### **Unparalleled Stability**

- Its proprietary sensor and electronic design reduces to negligible levels gauge drift caused by temperature and humidity fluctuations.
- Unsurpassed Accuracy and Repeatability
- Our mechanical and electronic design deliver greater accuracy and repeatability of measurement results.

# Easy, Error-Free Operation

• Equipped with intuitive keypad and easy-to-read digital display, the CX-1000 is simple to operate, minimizing the chance of operator error.

### Expandable

 You can operate the CX-1000 as a portable, stand-alone gauge, or add accessories to increase its capabilities. Expand your system with a computer and software for statistical and graphical analysis of thickness data – all available from Oakland Instrument Corp.

### Affordable

• Best of all, the CX-1000 is economically priced, resulting in fast payback of investment.

# Oakland Instrument

Oakland Instrument Corp. specializes in the design, manufacture and distribution of test, measurement and control systems for the plastics, 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 industryleading technology.



### Significant Features -

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- Portable, standalone or expandable with optional features
- Intuitive keypad data entry and easy-to-read digital display
  - Simple to calibrate
- English or metric capability
- Easy parameter setup including thickness units, film transport speed, length units and target
- Memory storage and recall of calibration/setup parameters
- Complete data display including average thickness, standard deviation, high/low measurement and position, range and sample length
- Data reports customizable with product or customer number, time and date information
- Fully adjustable film-transport and film-guide mechanisms
- Advanced setup parameters including crease suppression, upper/lower limits and data display significant figures
- Advanced data display including high and low measurement/range/average expressed as percent/deviation/percent-deviation from target
- Analog output for chart recorder for display of film thickness profiles
- Parallel output for printer-generated data tables
- Serial (RS-232) output for computer collection of thickness data

#### Specifications .

Mode of Operation:	Off-line gauging/lab use
Materials:	Nonmetallic plastic film
Measurement Range:	0-12 mils (0-300, microns), other ranges available
Accuracy:	+/-0.5% of material*
Repeatability:	+/-0.5% of material
Resolution:	
Thickness	.001 mil or 0.1% of material
Linear	0.2 mm
Temperature Stability:	0.1% per °C ambient
Sample Rate:	20 msec
Power Requirements:	115 VAC, 60 Hz
	230 VAC, 50 Hz, or consult factory for special requirements
Dimensions (HxWxD):	8 in (21 cm) x 20 in (51 cm) x 20 in (51 cm)
Weight:	50 lb (21 kg)

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

\* Since the capacitance principle is an indirect thickness measurement, it is only as accurate as the calibration method used, i.e. micrometer or weight per unit area.

\* \* Traceable to NIST Standards

### **Options and Accessories**

- Model CX-1200 Quality Control Software for statistical and graphical analysis of thickness data
- Standard or custom systems designed to meet specific customer needs
- Upgrade to Model CX-1020 or Model CX-1025 to add our self-calibrating AutoCal™ feature and automatic (Model CX-1025b) or manually-adjustable (Model CX-1025a) parallelism on the contact sensor stand for even greater accuracy

#### **Ordering Information -**

**Oakland Instrument Corp.** 

7405 Bush Lake Road Minneapolis, MN 55439 USA Tel & Fax (952) 835-4935 Web: www.Oaklandinstrument.com Email: info@oaklandinstrument.com

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