



Model MT-2545 Tensile Tester with Pneumatic Sample Grips and Model MT-2500 Quality Control Software

# MT-2500 Series Tensile Testers

## Full-Featured Tensile Testers for Film, Paper and Sheet Materials

In the past, film and paper producers and converters have had the choice of tensile testers and universal test machines which are either value-priced peak-force-only machines, or expensive computer-operated integral-load cell machines. Now you can have the best of both worlds in a single instrument Oakland Instrument offers the Series MT-2500, a simple to use stand alone or computer operated tester, with optional Quality Control software for automatic calculation and graphical display of break, elongation, yield, modulus, and other, information.

### Improved Film and Paper Quality, increased Profit Margins

The Series 2500 Tensile Tester is a proven tool for more closely controlling nominal and peak strength and elongation characteristics to speed your:

- Production and additives settings and adjustments
- Research and development of new film and paper products
- Inspection of incoming film and paper products, converted materials, wovens/non-wovens, fabrics and textiles
- In-process checks to ensure on-spec product for converting operations
- Quality-control reporting

### The Oakland Advantage

#### **Conforms to ASTM, ISO and TAPPI Standards**

Conforms to ASTM D638, ASTM D882, ASTM D1934, ASTM D3330, ASTM F88, ASTM F904, ISO 527-1 standards for tensile testing of plastic film and sheet, ASTM D3354 for blocking of plastic film and sheet and TAPPI T-829 for score quality of paper and corrugated.

### Advanced Technical Features in Each Model

#### **Expandable; Industry-Leading Software**

Portable and expandable with optional software, printers and computer system. A computer is required for operation. Windows™ 7/10/Enterprise based advanced software for display or hard-copy reporting of statistical and graphical analysis of data including yield strength, break strength, elongation, modulus, tensile energy to break and friction values.

#### **Affordable**

Best of all, the series 2500 is economically priced, yet rugged enough for plant-floor use.

#### **Advanced Engineering & Technology**

- Tension and compression testing up to 450 Kg / 4.5 kN / 1000 lbf
- Full tensile, yield and stress / strain testing
- Servo drive with position feedback and interchangeable load cells
- Test travels up to 970 mm (38.2 inches)
- Broad speed range for full range of testing requirements, 2.5 to 500 mm/min (0.1 to 20 in/min)
- Uses Encoder Feedback for Elongation computation
- Computer controlled with Model MT-2500 Software for full range of testing and graphical & statistical display

#### **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.

## Specifications

	<u>Model MT-2545</u>	<u>Model MT-2533</u>	<u>Model MT-2521</u>
Mode of operation:	Off-line testing / lab use Digital force measurement	✓ ✓	✓ ✓
Materials:	All sheet materials	✓	✓
Maximum Frame Capacity:	110 Kgf/1.1 kN/250 lbf	220 Kgf/2.2 kN/500 lbf	450 Kgf/4.4 kN/1000 lbf
Maximum Measurement Capacity:	23 Kgf/0.22 kN/50 lbf 45 Kgf/0.44 kN/100 lbf 68 Kgf/0.67 kN/150 lbf 110 Kgf/1.1 kN/250 lbf	✓ ✓ ✓ ✓ 220 Kgf/2.2 kN/500 lbf	✓ ✓ ✓ ✓ 450 Kgf/4.4 kN/1000 lbf
	Other ranges available	✓	✓
Measurement Units:	Metric (SI) or English	✓	✓
Force Accuracy:	± 0.02% Full scale	✓	✓
Force Resolution:	0.45 gf/0.0044N/0.001 lbf depending on load cell		✓
Crosshead Travel:	1150 mm (45.2 in.)	850 mm (33.5 in.)	550 mm (21.5 in.)
Test Travel:	970 mm (38.2 in.)	670 mm (26.5 in.)	370 mm (14.5 in.)
Extension Resolution:	± 0.025 mm (0.001 in.)	✓	✓
Test Direction:	Tension Compression	✓ ✓	✓ ✓
Test Speed Range:	2.5 to 500 mm/min (0.1 to 20 in/min)	✓	✓
Speed Accuracy:	± 0.25 mm/min (± 0.01 in/min)	✓	✓
Sample Rate:	50 / sec	✓	✓
Calibration Certificate:	Included	✓	✓
Power Requirements:	115 VAC, 60 HZ, 230 VAC 50 Hz or consult factory for special requirements		
Overall Height	165 cm (65 in.)	135 cm (53 in.)	104 cm (41 in.)
Base Dimensions W x D:	46 cm x 43 cm 18 in. x 17 in.	46 cm x 43 cm 18 in. x 17 in.	46 cm x 43 cm 18 in. x 17 in.
Weight	59 kg (129 lb)	50 kg (109 lb)	40 kg (89 lb)
Serial Data Communications:	RS-232, 9 pin D-Sub(2) or USB serial adaptor (2) Two cables required. One for load cell and one for crosshead motor control.		✓

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

## Options and Accessories

Computer system and Model MT-2500 Quality Control Software for statistical and graphical analysis of force data required to operate tensile tester.

Optional mechanical grips or accessories required for COF, peel strength, seal strength, shrink force, three point bend, and block / re-block tests.

Available in standard or customized configurations to meet your needs.



## 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 MT2500-0122C  
Manufactured by:  
Oakland Instrument Corp.  
5220 12<sup>th</sup> Avenue East  
Shakopee, Minnesota 55379 USA

Website: www.oaklandinstruments.com