# Labthink®

#### Professional

XLW (PC) Auto Tensile Tester is professionally applicable to the determination of force properties of various flexible packaging materials, with high precision (0.5% of full scale) and multiple test ranges. The instrument is designed with 7 independent test modes and could perform tests at seven different test speeds to meet various test conditions. Intelligent software facilitates to operate the instrument and provides data analysis and comparison functions.



- 0.5% of full scale effectively ensures accurate test results
- 7 independent test modes are available, including tensile strength, peeling force, tearing force and other force properties of flexible packages
- 1000mm extra-long stroke satisfies the test needs of various materials with extreme elongation rate
- Different test range of load cells and 7distinct test speeds to meet different test requirements
- The instrument is controlled by micro-computer with menu interface, PVC operation panel and large LCD display
- Intelligent designs of over-travel protection, overload protect, automatic position reset and power failure memory for safe test operation
- Professional operating software supports statistical analysis of group specimens, superposition analysis of test curves and historical data comparison functions
- Supports Lystem<sup>TM</sup> Lab Data Sharing System for uniform and systematic data management

## Applications

This instrument is equipped with more than 100 grips for tests of more than 1000 materials. And customization is also available for special material tests. Examples of instrument applications:

Basic Applications	Extende	d Applications ( Addit	ional Accessories Req	uired )
Tensile Property	Puncture Test of Hypodermic Needles in Artificial Skin	Puncture Test of Films	Puncture Test of Infusion Bags	Puncture/Pullout Test of Flexible Rubber Closures
Test of Tensile Strength and Elongation Rate	Opening Resistance Test of Combined Covers	Tear Test of ZD -Type Caps	Opening Force Test of Oral Liquid Caps	Puncture/Pullout Test of Oral Liquid Caps
Test of Tensile Strength at Break	90 Degree Pullout Test of Infusion Bag Caps	Pullout Test of Infusion Bag Caps	23 Degree Pullout Test of Bottle Caps	Puncture/Pullout Test of Bottle Caps or Rubber Closures
Tear Resistance Test	90 Degree Peel Test of Adhesive Tapes	Tear Resistance Test of Adhesive Binding Books	90 Degree Peel Test of Water-soluble Plasters	Tear Resistance Test of Adhesives

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Heatseal Strength	Adhesive Strength	Adhesive Strength	Peel Test of Flexible	Removal Force of
Test	Test (soft)	Test (hard)	Tube Caps	Pipes and Pipe Joints
90 Degree Peel Test	Pullout Test of Cosmetic Brush Hair	Pullout Test of Tooth Brush Hair	Tensile Strength of Ropes at Break	Opening Force Test of Jelly Cups and Yogurt Cups
180 Degree Peel Test	Peel Test of Cup Films	Pullout Test of Rubber Stoppers	45 Degree Peel Test of Bottle Membranes	Tensile Strength of Sealing Bags
	Peel Test of Magnetic Cores	90 Degree Peel Test of Magnetic Cards	Tear Resistance of Heat Sealing Films	Separating Force of Protection Films
	Peel Test of Release Paper	Tear Test Using Trouser Method	Unwrapping Force of Adhesive Tapes	Compressive Resistance of Plastic Bottles
	20 Degree Peel Test	135 Degree Peel Test of Plugs	Peeling Grips of Floating Rollers	Eccentric Grips
	Wide Sample Grips	Japanese Sample Grips	British Sample Grips	

## **Test Principle**

The pre-conditioned specimen is mounted between two grips, which move in relative direction during the test. The changes of force and displacement are separately recorded by the load cell fixed on the driven grip and embedded displacement transducer. The tensile strength, tear strength and elongation rate can be obtained by further calculation.

This test instrument conforms to many national and international standards:

ISO 37, GB 8808, GB/T 1040.1-2006, GB/T 1040.2-2006, GB/T 1040.3-2006, GB/T 1040.4-2006, GB/T 1040.5-2008, GB/T 4850-2002, GB/T 12914-2008, GB/T 17200, GB/T 16578.1-2008, GB/T 7122, GB/T 2790, GB/T 2791, GB/T 2792, GB/T 17590, ASTM E4, ASTM D882, ASTM D1938, ASTM D3330, ASTM F88, ASTM F904, JIS P8113, QB/T 2358, QB/T 1130

#### **Technical Specifications**

Specifications	XLW (PC)		
Load Cell Capacity	500N, 50N (one of them is available)		
Accuracy	0.5% FS		
Number of Specimens	1		
Test Speed	50 100 150 200 250 300 500 mm/min		
S	30 mm (Standard Grip)		
Specimen Width ———	50 mm (Optional Grip)		
Stroke	1000 mm		
Instrument Dimension	450 mm (L) x 450 mm (W) x 1410 mm (H)		
Power Supply	AC 220V 50 Hz		

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Labthin	®
FAMCIIIII	

Net Weight	68 kg	
Configurations		

Standard	Mainframe, Universal Grips, Professional Software and Communication Cable
Configurations	
<b>Optional Parts</b>	Standard Pressure Roller, Test Plate, Sample Cutter and Customized Grips

**Please Note:** Labthink is always dedicated to the innovation and improvement of product performance and function. Therefore, technical specifications are subject to change without further notice. Please visit our website at <u>www.labthink.com</u> for the latest updates. Labthink reserves the rights of final interpretation and revision.

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