

C610M Auto Tensile Tester

C610M Auto Tensile Tester is professionally applicable to measurement of tensile, peeling, deformation, tearing, heat sealing, adhesive, puncture force, opening force, pulling force and low speed unwrapping force as well as other properties of plastic films, composite materials, soft package materials, plastic flexible tube, adhesives, adhesive tapes, label stickers, medical plasters, release paper, protective films, combined caps, aluminum foils, diaphragms, back sheets, non-woven fabrics, rubber and paper, etc.



Product Features^{Note1}

Ten Test Modes to Meet Various Testing Demands

- Ten independent test modes including tensile test, peel test, tearing test, heat seal test, tensile test at fixed elongation, puncture test of rubber closure and puncture retention force test, etc. at users' choice
- The instrument supports bidirectional testing modes, which can be used for puncture test of rubber closure and breaking force test of ampoule and test speed can be adjusted freely
- Intelligent designs of over-travel protection, overload protect and automatic position reset guarantee safe test operation of the users

Excellent Testing Mechanism & Improved Test Accuracy

- Force measuring system is supplied by top global supplier, ensures the testing accuracy of better than 0.5% of full scale and guarantees accurate test results and good repeatability. Multiple test ranges can be selected freely.
- Servo control system powered by top global supplier and the patented high-precision ball screw multi-point positioning technology provide displacement accuracy of better than 0.5% of full scale and infinitely variable speed, facilitate the instrument with simplified and stable operation.
- Global renowned brand pneumatic control system supports pneumatic specimen clamping, avoids the specimen slipping and guarantees the accuracy of test data

High-end, Secure and Easy-to-Use Embedded Computer-controlled System

- The instrument is integrated with software requiring no external computer
- The system supports displaying and comparison analysis of group of test data as well as unit conversions of test results.
- Labthink's unique data security design by separating the test data from the computer, totally avoids the system software malfunctions caused by computer virus or faulty operations, conforms to the requirements for data traceability of China GMP (optional).
- The instrument is equipped with USB ports and Internet ports for convenient data transmission.
- Unique DataShield™ system supports centralized management of test data and can be connected to other information management system.

Applications^{Note1}

C610M is equipped with more than 100 grips for tests of more than 1000 materials. Customization is available for special material tests. Examples of instrument applications:

Basic Applications	Extended Applications (Additional Accessories Required)			
Shearing Test	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
Heatseal Strength Test	Adhesive Strength Test (soft)	Adhesive Strength Test (hard)	Peel Test of Flexible Tube Caps	Removal Force of 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
Tensile Strength Test at Defined Elongation	Peel Test of Magnetic Cores	90 Degree Peel Test of Magnetic Cards	Tear Resistance of Heat Sealing Films	Separating Force of Protect 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	Tensile Strength of Contact Lenses at Break
	Compression Resistance of Jelly Cups	Compression Resistance of Package	Compression Resistance of Sponge	

Test Standards^{Note1}

This instrument conforms to multiple standards including:

ISO 37, ASTM E4, ASTM D882, ASTM D1938, ASTM D3330, ASTM F88, ASTM F904, JIS P8113, 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, QB/T 2358, QB/T 1130

Technical Specifications^{Note2}

Specifications	C610M
Load Cell Capacity	500 N (standard) 50 N, 100 N, 250 N, 1000 N (optional) 5N (Customization available)
Accuracy	±0.5% of indicated value (2%FS ~ 100%FS) ±0.01%FS (0% ~ 2%FS)
Resolution	0.001 N
Test Speed	0~500 mm/min
Speed Accuracy	±0.5% of indicated value
Number of Specimens	1
Specimen Width	30 mm (Standard Grip) 50 mm (Optional Grip)
Clamping Way	Pneumatic Specimen Clamp
Gas Supply	Air (outside of supply scope)
Gas Supply Pressure	0.5 MPa~0.7 MPa (72.5psi~101.5psi)
Stroke	950 mm (customization available for 1200mm)
Instrument Dimension	450 mm (L) x 450 mm (W) x 1410 mm (H)
Power Supply	220VAC±10% 50Hz / 120VAC±10% 60Hz
Net Weight	95 kg

Configurations

Standard Configurations	Instrument (with embedded software), LCD Monitor, Keyboard, Mouse, Pneumatic Sample Grips, Ink-jet Printer
Optional Parts	Standard Pressure Roller, Test Plate, Sample Cutter, Laser Printer, Air Compressor
Note	1. The gas supply port of this instrument is Φ4mm PU Tubing; 2. Customers need to prepare gas supply.

Note 1: The described test standards, applications and product features should be in line with Technical Specifications.

Note 2: The parameters in the table are measured by professional operators in Labthink laboratory under strictly controlled laboratory conditions.

Note 3: DataShield™ provides safe and reliable data application support. Multiple Labthink instruments can share one single DataShield™ system which can be configured as required.

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 www.labthink.com for the latest updates. Labthink reserves the rights of final interpretation and revision.