

## i-Strentek 1100 Auto Tensile Tester

- ❖ Online Data Management System for Packaging Testing-The ultimate cloud computing technology for test data processing and management
- ❖ Designed with embedded computer control system and intelligent operating software
- ❖ Can be used to test tensile, peeling, tearing, heat sealing and other mechanical performance of various materials
- ❖ Conforms to ASTM, ISO, JIS and other international standards



### ***Online data management system for packaging testing***

Comes with two versions to meet distinct needs of our clients: :

#### **The Cloud Version**

- Consist of 6 functional modules: Test Management, Target Management, Instrument Management, File Management, Settings, and Online Support
- Cloud services: storage, calculation, and analysis of mass test data
- Automatically upload original test data to the cloud server to guarantee data security
- Intelligent statistical analysis of test results
- Easily accessible through the internet on PCs, laptops, mobile phones, and other devices anywhere and anytime, to check and review the real time test results and historical test reports, as well as analytical graphs and statistical information

#### **The Intranet Version**

- Featured with storage space for vast data, correlation analysis, trend analysis, and statistical analysis of test data, as well as report printing and data export functions
- Easily accessible via computers through Intranets
- “One Click Upgrade” to the powerful “Cloud Version”

## Functionality

- Test precision is better than 0.5% of full scale which guarantees the accuracy of test results
- The system supports bidirectional test modes of stretching and compression and 8 independent testing programs of tensile, peeling, tearing, heat sealing, etc. to meet different test requirements
- Load cells with multiple specifications and seven testing speeds are available for various testing conditions
- Pneumatic specimen clamping mechanism evenly applies pressure to the specimen, effectively avoids the slippage of specimen, and ultimately ensures the accuracy of test data
- Auto return function, position limit and overload protection ensure the safety operation
- Test parameters and test results could be displayed in different units. Data comparison analysis is available for users to review

## Design

- Embedded computer control system provides safer and more reliable data management as well as test operation.
- The instrument can be easily operated with a mouse, a keyboard, and a monitor, without requiring a PC.
- The instrument is equipped with four USB ports and dual Internet ports for convenient data transmission.
- Sophisticated energy consumption and test environment monitoring and analysis functions for better test accuracy and reliability. (Relevant sensors are needed. For more information, please refer to the configuration in Technical Specifications.)

## Software

- **Interface:** Windows-based operating interface
- **Statistics:** easy calculation for historical results, instrument usage, energy consumption, and large statistical information
- **Data Comparison:** by presetting target value and range, the system automatically generates data comparison after each test and intelligently judges whether the specimen passes or fails the test
- **Test Report:** can provide detailed test reports in various customized patterns
- **Energy Consumption and Test Status Monitoring (Additional Sensors Required):** the system monitors and displays real-time voltage, current, and energy consumption of instrument as well as ambient temperature and relative humidity during the test, which serves to evaluate test data reliability
- **User Management:** multi-level account management for better data management and protection
- **Operation Log:** system automatically records all the operations by the user, which is easy to review

## Test Standards

This instrument conforms to the following standards:

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

## Applications

This instrument can be used to measure the following items:

Basic Applications	Extended Applications (Additional Accessories Required)		
	Tensile Property	Penetration Force of Hypodermic Needles in Artificial Skin	Pullout Force of Rubber Stoppers
Tensile Strength and Elongation Rate	Unwrapping Force of Adhesive Tapes	Tear Test Using Trouser Method	Separating Force of Protective Films
Tensile Strength at Break	Puncture Force of Films	Opening Force of Combination Covers	90 Degree Peeling Force of Adhesive Tapes
Tear Resistance	Pulling Force of Cosmetic Brush Hair	Tensile Strength of Ropes at Break	90 Degree Peeling Force of Magnetic Cards
Heat Seal Strength	Tearing Force of Oral Liquid Caps	Pulling Force of Tooth Brush Hair	23 Degree Pulling Force of Bottle Caps
90 Degree Peel Test	Deformation Test of Foam Compression	Tearing Force of Adhesive Binding Books	Peeling Force of Floating Rollers
180 Degree Peel Test			
Tensile Strength Test at Defined Elongation			

## Technical Specifications

<b>Test Specs</b>	Load Cell Capacity	500 N (Standard) 50 N (Optional)	
	Test Accuracy	Better than 0.5% FS	
	Test Speed	Forward 50 100 150 200 250 300 500 (mm/min) Backward 50 100 150 200 250 300 500 (mm/min)	
	Specimen Width	30 mm (Standard Grip) 50 mm (Customized Grip)	
	Stroke	950 mm	
	Clamped By	Pneumatic Control	
	Gas Supply	Air (outside of supply scope)	
	Gas Supply Pressure	0.5 MPa ~ 0.7 MPa	
	<b>Environment Monitoring Specs (Optional)</b>	Voltage Monitoring Range	AC 0 ~ 250 V, with $\pm 0.5\%$ accuracy
		Current Monitoring Range	0 ~ 15 A, with $\pm 0.5\%$ accuracy
Energy Analysis Accuracy		$\pm 0.5\%$	
Environmental Temperature Monitoring Range		-10 °C ~ 55 °C, with $\pm 0.1$ °C accuracy	

	Environmental Humidity Monitoring Range	0~100% RH, with $\pm 2\%$ RH accuracy
<b>Other Specs</b>	Instrument Dimension	450 mm (L) x 450 mm (W) x 1410 mm (H)
	Power Supply	AC 110 V 60 Hz
	Net Weight	70 kg
<b>Configurations</b>	Standard	Mainframe (including Wireless Data Interface), Professional Software, LCD Monitor, Keyboard, Mouse, Universal Grips, Pneumatic Clamping System
	Optional	Environment Monitoring Sensors (including voltage, current, temperature, and humidity sensors), Standard Roller, Testing Plate, Sample Cutter, Customized Grips, Printer (compatible with PCL3)
	Online Data Management System for Packaging Testing	Wireless Data Transfer Module, High Gain Antenna

Note: 1. The gas supply port of the instrument is  $\Phi 4$  mm PU Tubing;  
 2. Customers will need to provide gas supply.

**Please Note:**

- ❖ Pictures used are for illustration purposes only and may differ from the actual product received.
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