i-Thickness 4100 Thickness 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 for thickness test of plastic films, sheets, paper, foils, silicon chip, coatings and other 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 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

- Mechanical contact measurement with an automatic presser foot
- Standard contact area and various testing pressures to meet distinct requirements
- Support both manual and automatic testing modes
- The system institutionally displays the maximum, minimum, and average thickness as well as standard deviation for each test
- Intelligent reminders for sensor calibration and the recoding and management of operation history can ensure a safety operation environment
- Standard gauge block is available for fast calibration

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, energy consumption, vibration, and inclination angle 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 D374, ASTM D1777, ISO 4593, ISO 534, ISO 3034, GB/T 6672, GB/T 451.3, GB/T 6547, TAPPI T411, JIS K6250, JIS K6783, JIS Z1702, BS 3983, BS 4817



Applications

This instrument is designed to test the following materials:

	<u> </u>	
	Films, Sheets and Diaphragms	
Basic Applications	Paper and Paper Board	
	Foils and Silicon Wafers	
	Metal Sheets	
	Textiles	
	Solid Electrical Insulating Materials	
	Non-woven Materials, including baby diapers and sanitary pads	
Extended Applications	Extended Test Range of 5 mm and 10 mm	
(Additional Accessories Required)	Curved Presser Foot	

Technical Specifications

	Test Range	0~2 mm (Standard)	
Test Specs		0~6 mm, 12 mm (Optional)	
	Resolution	0.1 μm	
	Test Pressure	17.5±1 KPa(Film); 50±1 KPa(Paper)	
	Contact Area	50 mm ² (Film); 200 mm ² (Paper)	
		Film or Paper is optional and customization is available	
Environment Monitoring Specs (Optional)	Voltage Monitoring Range	AC 0~250 V, with ±0.5% accuracy	
	Current Monitoring Range	$0\sim15$ A, with $\pm0.5\%$ accuracy	
	Energy Analysis Accuracy	±0.5%	
	Environmental Temperature	-10 °C~55 °C, with ±0.1 °C accuracy	
	Monitoring Range		
	Vibration Monitoring Range	-2 g \sim 2 g / $0\sim$ 400 Hz	
	Inclination Angle	-10°~10°	
	Monitoring Range		
	Environmental Humidity	0~100% RH, with ±2% RH accuracy	
	Monitoring Range	0~100% KH, with ±2% KH accuracy	
Other Specs	Instrument Dimension	461 mm (L) x 334 mm (W) x 357 mm (H)	
	Power Supply	AC 110 V 60 Hz	
	Net Weight	37 kg	
Configurations -	Standard	Mainframe (including Wireless Data Interface),	
		Professional Software, LCD Monitor, Keyboard, Mouse,	
		One Standard Gauge Block	
	Optional	Environment Monitoring Sensors (including voltage,	
		current, temperature, humidity, vibration and inclination	
	-	sensors), Presser Foot, Weight, Printer (compatible with	



	PCL3)		
Online Data Managemen	nt W. L. D. T. C. M. LL. H. L. C. A. A.		
System for Packaging Tes	Wireless Data Transfer Module, High Gain Antenna ting		

Please Note:

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