FPT-01 Friction / Peel Tester

Brief Introduction

FPT-01 Friction / Peel Tester can be used to test peel strength test of adhesive laminated products, medical adhesive bandage, release paper and protection films, as well as coefficient of static and kinetic friction of plastic films, sheets, foils, paper, cardboard, woven bags, fabric (fabric style test), metal-plastic composite strip/belt for communication cable, convey belt and textile.



Technical Features

- ◆ 0.1 % FS high precision force sensor makes the accuracy and repeatability of test results.
- Focus on small force value testing to achieve accurate data testing
- ◆ Two test modes are available, coefficient of friction and 180° peel test
- Equipped with a temperature control platform to realize testing under different temperature conditions
- ◆ Equipped with advanced displacement control system, displacement accuracy can reach 0.1mm
- With advanced servo drive system, which can achieve infinitely variable speed under different testing conditions
- ◆ The sliding plane and the sled are treated by degaussing and remanence detection which effectively reduce the system errors
- Dual configuration for 7-inch color touch screen and 11.6-inch 2-in-1 PAD, providing multiple operating experiences
- Conforms to multiple ISO, ASTM and GB standards
- ◆ Powerful user-defined functions, test schemes, test standards, unit conversion, test reports, etc. can be freely defined
- Complete data analysis and reporting functions, display force-displacement, force-time, displacement-time, stress-strain curves in real time



- ◆ Intelligent designs including position restriction, overload protection, auto reset and power failure memory guarantee the safe operation
- ◆ Equipped with standard serial communication port, which can be connected to computer software to facilitate data processing and transmission

Test Principle

Put two test surface flat together. Make the two surface relative move under a certain contact pressure and record the required force. The test force divided by the gravity of the slider is the friction coefficient values.

Applications

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Basic Application	Plastic Films and Sheets	Coefficient of static and dynamic friction tests of plastic films and sheets
	Paper and Paperboard	Coefficient of static and dynamic friction tests of paper and paperboard
	Rubber	coefficient of static and dynamic friction tests of rubber products
	Printing Matters	Coefficient of static and dynamic friction tests of printing matters
	Textiles, Non-woven Fabrics and Woven Bags	Coefficient of static and dynamic friction tests of textiles, non-woven fabrics and woven bags
	Aluminum Foils and Aluminum Foil Composite Films	Coefficient of static and dynamic friction tests of aluminum foils, aluminum foil composite films and other metal products
Extended Application	High Temperature Test	Coefficient of static and dynamic friction tests at higher temperature than room temperature
	Wood and Flooring	Coefficient of static and dynamic friction tests of wood and flooring
	Photographic Films	Coefficient of static and dynamic friction tests of photographic films
	Screen of Mobile Phone and Leather	Coefficient of static and dynamic friction tests of mobile screens against the leather products
	Adhesives	Peeling test of the adhesive products
	Medical	Peeling test of medical adhesives e.g. adhesive
	Adhesives	bandages and plasters

Tel: +86-13553166613 www.horizontester.com

Jinan Horizon Imp. & Exp. Co., Ltd.

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Protection	Peeling test of protection films for mobile phones or
Films	computers
Magnetic Cards	Peeling test of the films and magnetic cards

Note: *Additional accessories or customized sample grips may need to be purchased separately to complete the tests that cannot be completed with standard sample grips.

Technical Specifications

Item	FPT-01
Capacity Range	5N ,10N, 30N
Test Accuracy	0.1% FS
Displacement Accuracy	0.1mm
Drive System	Servo drive system
Tost Spood	0.05 ~ 500 mm/min
Test Speed	Test speed could be adjusted
Accuracy of Test Speed	±1%
Stroke	10 ~ 300 mm
	200g, 500g (optional)
Sled Mass	Customization is available for other masses
Test Temperature	Room Temperature ~ 100°C
Temperature Variation	±0.2°C
Temperature Accuracy	±2°C
Specimen Thickness	≤ 2 mm
Sled	200g, 63.5mm×63.5mm Customization is available
Power Supply	AC 220V 50Hz/120V 60Hz

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^{**} Customized grips are needed for extended applications



Instrument Dimension	640mm (L)×300 mm (W)×250 mm (H)
Net Weight	25 kg

Standards

ASTM D1894, ISO 8295, ISO 8510-2, ASTM D4917, ASTM D3330, TAPPI T816, TAPPI T549, GB 10006, GB/T 2790, GB/T 2791, GB/T 2792

Configuration

Standard Configuration	Instrument, Sled of 200g, COF Test Fixture, Peel Test Fixture,
Optional Parts	Air Compressor, Standard Pressure Roller, Test Plate

Technical specifications are subject to change without further notice. Please visit our website at www.horizontester.com for latest information.

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