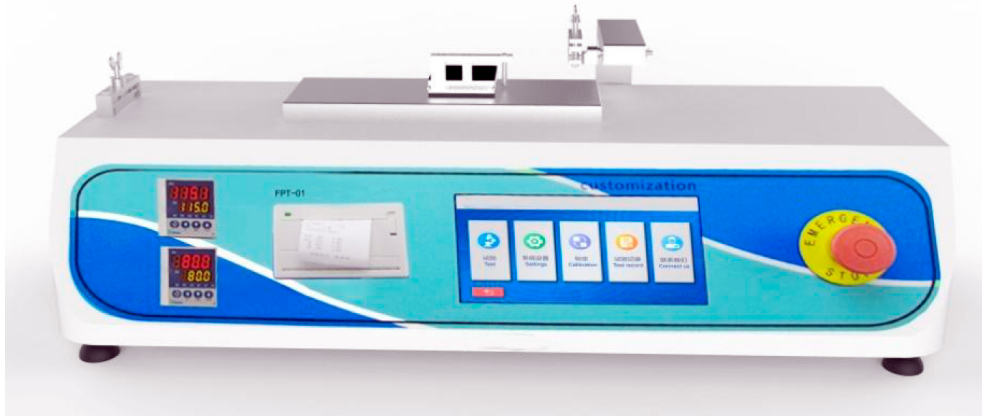


## FPT-01 Friction Peel Tester

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

#### High precision, Multifunction

- 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

#### Intelligence and High efficiency

- 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
- Provides professional customization services to meet the individual needs of users in fixtures, software, etc.

## Test Principle

**Peeling principle:** The sample is clamped between the two grips of the fixture, and the two grips move relative to each other. The force value sensor located on the movable grip and the sensors record the force and displacement change during the test, then peeling performance can be calculated accordingly.

**Coefficient of Friction 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

|                             |                                                  |                                                                                                                            |
|-----------------------------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Basic Application</b>    | 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 |
| <b>Extended Application</b> | 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 Adhesives                  | Peeling test of medical adhesives e.g. adhesive bandages and plasters                           |
| Protection Films                   | Peeling test of protection films for mobile phones or 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.

\*\* Customized grips are needed for extended applications

## Technical Specifications

| Specifications         | FPT-01                                                |
|------------------------|-------------------------------------------------------|
| Capacity Range         | 5N ,10N, 30N                                          |
| Test Accuracy          | 0.1% FS                                               |
| Displacement Accuracy  | 0.1mm                                                 |
| Sled Mass              | 200g, 500g<br>(100g, 1000g, 1814g, 2000 are optional) |
| Test Temperature       | Room Tem. ~ 99.9°C                                    |
| Drive System           | Servo drive system                                    |
| Test Speed             | 0.05 ~ 500 mm/min (Adjustable)                        |
| Accuracy of Test Speed | ±1%                                                   |
| Stroke                 | 600mm                                                 |
| Number of Specimens    | 1                                                     |
| Max specimen width     | 30mm (standard); 50mm (optional)                      |
| Clamping Way           | Manual                                                |
| Power supply           | AC 220V 50Hz/120V 60Hz                                |
| Instrument Dimension   | 800mm(L)×310mm(W)×300mm(H)                            |
| Net weight             | 50kg                                                  |

## 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, YY/T 0148, YY0852

## **Configuration**

**Standard configuration:** Instrument, touch screen, Sled of 200g, sled of 500g, Peel Test Fixture, professional software, communication cable.

**Optional configuration:** Test board (50×125mm, 40×180mm, 50×200mm), sample cutter(10#、15#、20#、25#、25.4#), standard roller, non-standard grip( with customization), micro printer, calibration weight.

---