Thwing-Albert Instrument Company

More Than a Century of Testing Solutions

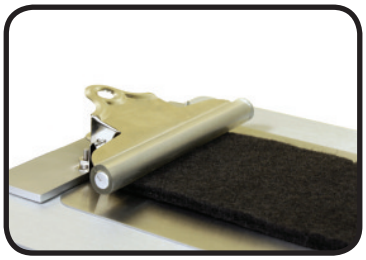
FP-2255

Friction/Peel Tester

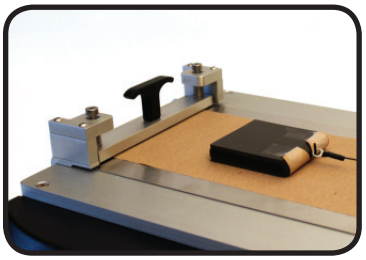
The Thwing-Albert Friction/Peel Tester is the most wide-ranging testing instrument for measuring the coefficient of friction, peel strength, seal strength and tensile strength of flexible plastic films, paper, sheet materials, labels, tapes and textile materials. It was designed to provide versatility for its users so it is useful in many different industries such as the paper, plastic, adhesives, textile, flexible packaging, foils, coatings, leather and paperboard industries, as well as others.

- Complies to industry standards for tensile, peel, and coefficient of friction testing
- Memory capacity on the FP-2255 can store 128 individual tests for COF, Peel, or Tensile
- Intuitive menu design which provides more results with fewer key strokes
- Optional FP-DAS software allows users to instantly view and analyze test data
- Ability to create, save and password protect test setups
- Offers many optional accessories and fixtures to perform a variety of peel, COF, seal tests, and tensile tests

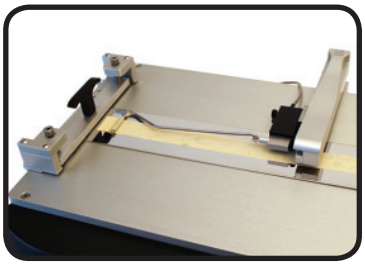
Fixtures & Accessories



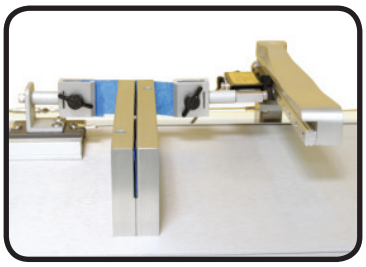
The FP-2255 shown with Clip Sample Clamp for thicker materials, as well as thin samples.



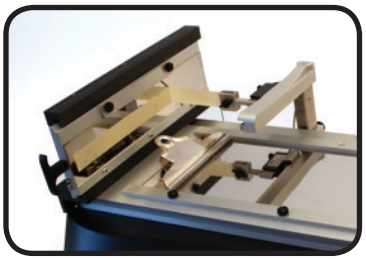
The FP-2255 shown with a Spring Sample Clamp for thin-sheeted materials.



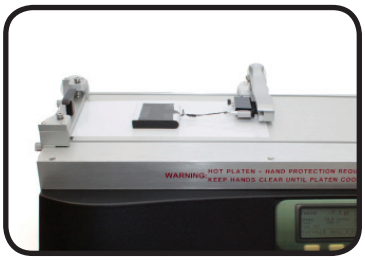
The 180 degree peel arm is included standard with FP-2255 orders.



The T-Peel fixture maintains a 90 degree angle for the tail during a peel test.



The 90 degree peel fixture is an ideal accessory for adhesive materials. Also available with a heated option.

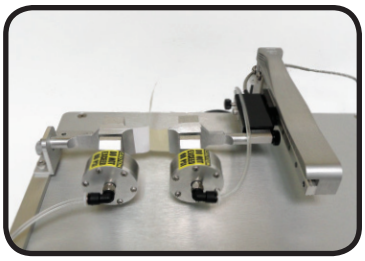


The COF Sled shown with Spring Clamp on the FP-2255 Heated Platen Fixture with Temperature Range 21°C to 204°C (70°F to 350°F).

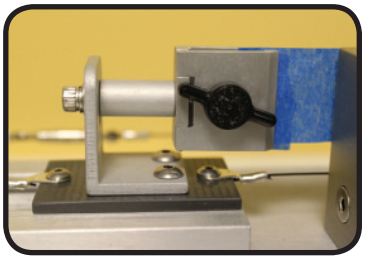
The **2255 Friction Peel Tester** can be equipped with attachments that allow testing for a wide variety of standards. Sample tests include:

- ASTM D1894 (COF for Plastics)
- ASTM D4521 (COF for Corrugated/Fiberboard)
- ASTM D2534 (Coefficient of Kinetic Friction for Wax Coatings)
- ASTM D3330 (Peel Adhesion for Pressure Sensitive Tape 180°)
- ASTM F88 (Seal Strength for Flexible Barrier Material)
- AFERA: 4001 P11
- FINAT: FTM 1-6, 10, 11
- ISO 6383 (Tear Resistance of Plastic Films)
- ISO 8295 (COF for Plastics)
- PSTC: 101 (A, B, C, D, E, F), 4, 15, 55
- TAPPI T-816 (COF for Corrugated and Paperboard)
- TAPPI T-549 (COF for Uncoated Writing & Printing Paper)
- TLMI: L-IA1, L-IA2, L-IA3

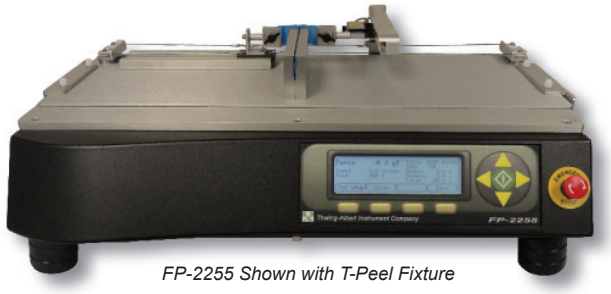
Visit **www.thwingalbert.com** for a complete listing of industry standards.



Air Clamps



Manual Clamps



FP-2255 Shown with T-Peel Fixture

Specifications

Physical Specifications - Model FP-2255

Dimensions:	27 in L x 12 in W x 7 in H (685.8 mm x 304.8 mm x 177.8 mm)
Shipping Dimensions:	29 in L x 21 in W x 15 in H (838.2 mm x 609.6 mm x 355.6 mm)
Net Weight:	44 lb (20 kg)
Approx. Gross Weight:	52 lb (23.6 kg)

Performance Data - Model FP-2255

Measurement

Load Cell Range:	0.5kg, 1kg, 2kg, and 10 kg
Force Resolution:	0.1g for all load cells
Force Accuracy:	10%-100% of the load cell capacity, 0.25% of measured value; Less than 10% is .025% of the load cell capacity
Force Units:	Grams, Kilograms, Ounces, Pounds, and Newtons

Travel Speed

Standard Speed:	1 to 20 in/min (25.4mm to 508mm)
High Speed:	10 to 110 in/min (254 to 2,794 mm/min)

Standard COF Sleds

200gm, 500gm, 1000gm, and 3lb (Other sleds are available. Software accepts variable sled weights.)

Test Times

0.1 to 99 seconds- Variable for COF, and Peel

Travel Distance

0.1 to 14.0 in (0.3 to 38 cm)

Test Result Readouts

Tensile and Seal: Peak
Peel: Average, High, Low, Standard Deviation
COF: Static, Kinetic, Slide Angle, Standard Definition of Kinetic Data
Statistical Analysis

Power Requirements

110 VAC, 50/60 Hz 220/230 VAC, 50Hz 240 VAC, 50Hz

Specifications subject to change without notice.

FP-DAS Acquisition Software

FP-DAS is a Windows based software program that works in conjunction with the Friction/Peel Tester. With FP-DAS running, friction or peel measurement data is automatically captured, a test curve is displayed and reports are created.

Simplified Set-up

Only a few steps to install FP-DAS software program onto your PC or laptop and connect it to the Friction/ Peel Tester via a USB interface and start testing.

Data Acquisition

Automatically capture test results and statistics for Friction and Peel testing and store them with test identifiers. Data capture includes:

- **Peel Testing -**

  Max, Mean, Min, and Standard Deviation

- **Coefficient of Friction Testing -**

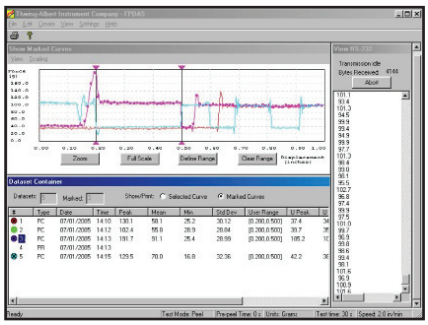
  Static, Kinetic, Static Slide Angle, and Kinetic Standard Deviation

- **User Defined Results -**

  Specific to your testing needs

- **Report/Statistical Data -**

  Max, Min, Average, and Standard Deviation



FP-DAS provides PC integration with the Friction/Peel Tester. Mark specific test curves, overlay multiple curves, and set data range for analysis.

Data Management

Include information identifying test conditions and sample type, add and delete tests from group data, mark files to view multiple curves and define viewable data range.

Transfer to other Programs

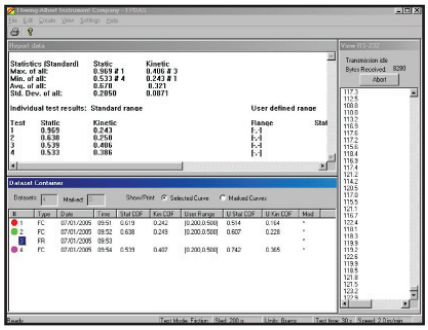
When tests have been completed, all data can be saved as a text file that can be opened in other software programs including Notepad & Excel.

Built-in Reporting

Create a report of a series of tests by selecting “Report” on the Friction/Peel Tester or select specific test results to be included.

Print Hardcopy Results

When it is time to print a report or test curve, simply highlight what you require and select print. Print multiple curves by marking all of the curves you want.



Selecting a report dataset will display results. The report can be printed, saved or exported at any time.

Thwing-Albert Instrument Company
14 W. Collings Avenue, West Berlin, NJ 08091, USA
tel 856-767-1000 ■ fax 856-767-2615 ■ info@thwingalbert.com

www.thwingalbert.com

An ISO 9001 Registered Company