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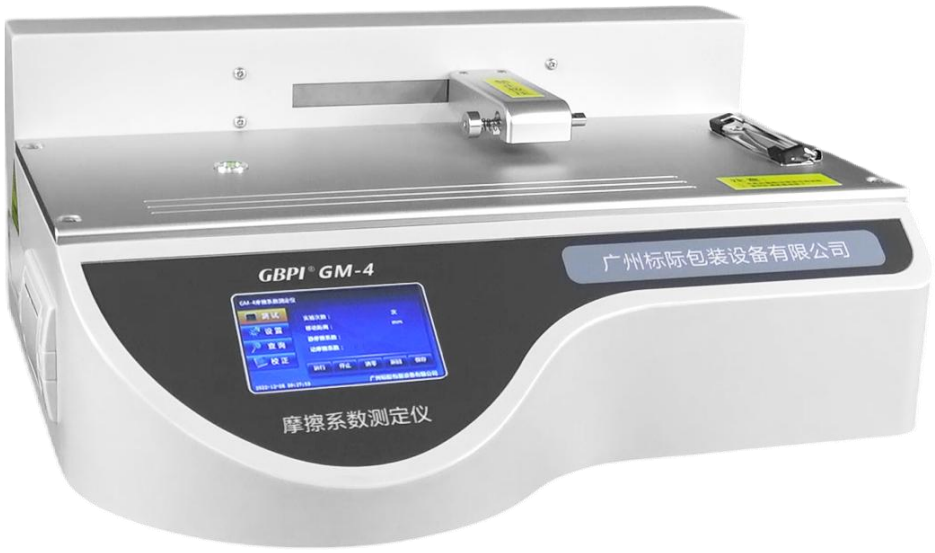
Analysis & Testing Instruments

Coefficient of Friction Tester GM-4



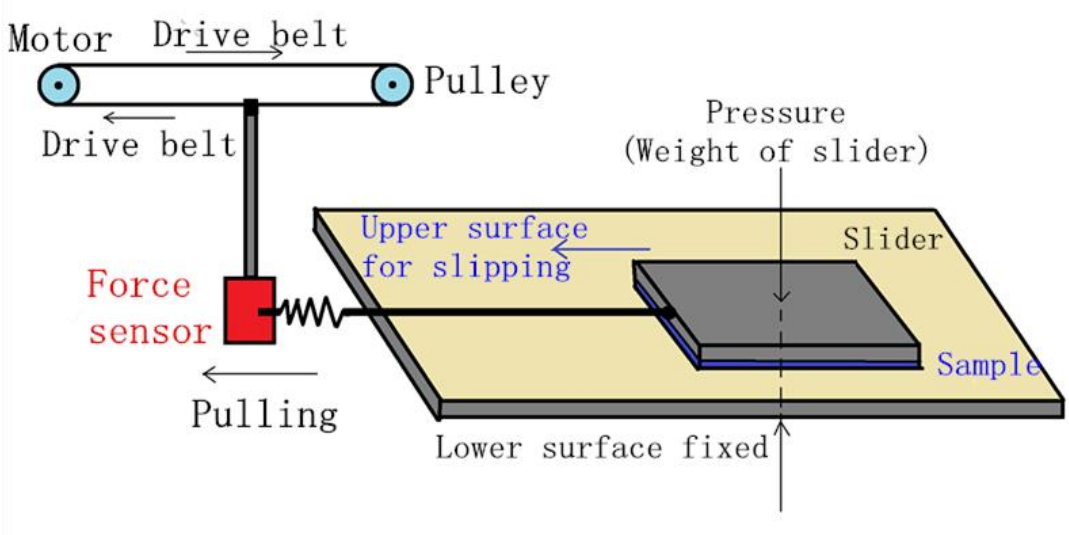
Introduction

The coefficient of friction tester GM-4 is a measuring instrument developed and manufactured by the GBPI R&D team based on various test standards of GB, ISO, ASTM and market demand. The measured friction coefficient can accurately determine the smoothness, ease of opening and uniformity of the film, so as to guide the production correctly.

It is suitable for measuring the static friction coefficient, dynamic friction coefficient and peel strength of plastic films, composite films, aluminum foils, aluminized films, plates, rubber, ceramics and other materials when sliding.

Test Principle

Clamp the strip test sample, and wrap the slider with the sample to be tested, and then place the slider on the hanging hole of the sensor. Under a certain contact pressure, the conveyor belt is driven by the motor to move the force sensor. That is, to move the two test surfaces relative to each other. The force signal measured by the force sensor is amplified by the integrator and sent to the recorder, and the kinetic friction coefficient and the static friction coefficient are recorded respectively.



Standard

ISO 8295, ASTM D1894, TAPPI T816, GB 10006

Specification

Item	Technical parameter
COF test range	0.001~0.999
Force range	0~9.8 N
Resolution	0.001
Measurement accuracy	±0.5%FS
Sliding speed	0~500 mm/min
Stroke	100 mm
Sample thickness	≤2 mm
Slider size	63 mm×63 mm (if American standard, 63.5 x 63.5 mm)
Slider Weight	200 g±2 g
Work platform size	200 mm×470 mm
Temperature range	Room temperature~100℃（optional）
Test surface temperature uniformity	±1.5℃
Instrument size	480 mm×400 mm×220 mm
Power	100 W
Power supply	AC 220 V, 50 Hz
Weight	13.6 kg

Feature

The force sensor is easy to calibrate, and the special standard block is used for quick calibration, which is convenient and fast;

The host is equipped with a liquid crystal display, which displays the coefficient of static friction and coefficient of dynamic friction in real time;

Supporting control software, the interface is simple and clear, easy to operate;

Display real-time curve, the curve can be zoomed;

Sensor over-range automatic protection function, functional modular design, easy to maintain;

The instrument is equipped with a rigid sleeve as standard, and the spring can be switched to effectively prevent the slipping and sticking of the viscous film.

Application

	Film	Suitable for static friction coefficient and dynamic friction coefficient test of plastic film and thin film
	Paper	Suitable for dynamic and static friction coefficient test of paper and cardboard
	Textiles, non-woven fabrics, woven bags	Suitable for testing static friction coefficient and dynamic friction coefficient of textile, non-woven fabric and woven bag
	Aluminum foil, aluminum foil composite film, metal products	Suitable for testing static friction coefficient and dynamic friction coefficient of aluminum foil, aluminum foil composite film and metal products

	Printing product	It is suitable for static friction coefficient and dynamic friction coefficient test of printed matter

Product configuration

Standard configuration	Host, Professional testing software, power cable, data cable, special tools, slider, weight; Heating module (optional)
Optional parts	Computers, Metrology Certificate
Remark	3-hole socket, ground wire

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