

THK-02 Thickness Tester

THK-02 Thickness Tester, basing on mechanical contacting method, is applicable to thickness measurements of plastic films, sheeting, paper, corrugated paperboard, textiles, non-woven fabrics, solid insulation materials, aluminum foils, silicon wafers and many other materials.



Product Features

- Standard contact area and test pressure. Customization is available for non-standard testing requirements
 - Adopt grating sensor, high detection accuracy and fast response speed, repeatability up to $0.2 \mu\text{m}$
 - Multiple test ranges can be selected
 - Automatic lifting presser foot facilitates to minimize system errors caused by human factors during the test
 - Embedded micro-computer chips, simplified and efficient user interface provide users with comfortable and smooth operating experience
 - Manual or automatic operating mode for convenient test
 - Standard, modularized and systematic designs can meet personalized requirements of the users
 - 7 inch HD colorful LCD touch screen, display test data in real time
 - Built-in micro-printer can print the historical test data in real time
 - Equipped with standard RS232 port which is convenient to PC connection and data transmission
 - Standard thickness measurement tools can be used for calibration and inspection
 - The maximum, minimum and average values as well as standard deviation and other
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- statistical data can be displayed in real time, which is convenient for the data analysis
- Provides professional customization services to meet the individual needs of users in fixtures, software, etc.

Originality Design

- Removable threaded connection counterweight can meet various standard requirements and non-standard pressure customization
- The measuring bracket is made of nodular cast iron with high vibration absorption characteristics and minimal temperature change, which effectively reduces the impact of external vibration and temperature changes on the test
- Imported high-speed and high-precision chips guarantee the testing accuracy and efficiency

Test Principle

The pre-conditioned specimen is placed on a flat test plane, the pressure foot which is paralleled to the test plane will drop down on the upper surface of the specimen with certain pressure applied on. The displacement sensor with the pressure foot will detect the space between the upper and lower surface of the specimen, which is the thickness of the specimen.

Applications

Basic Applications	Plastic Films and Sheets
	Paper and Paper Board
	Metal Sheets
	Foils and Silicon Wafers
	Textiles and Non-woven Fabrics
	Solid Electrical Insulating Materials
Extended Applications	Extended Test Range of 5mm and 10mm
Applications	Curved Presser Foot

Technical Specifications

Specifications	THK-02
Test Range	0~2mm (Standard) 0~6mm, 0~12mm (Customization Available)
Resolution	0.1μm

Speed	1~25/min (Adjustable)
Parallelism of Pressure Foot	±2µm (mechanical adjustment, block check)
Repeatability	0.2µm
Test Pressure	17.5±1kPa (Film), 50±1kPa (Paper)
Contact Area	50mm ² (Film), 200mm ² (Paper) Note: Select one presser foot for film or paper; Customization is available
Power Supply	AC 220V 50Hz / AC120V60Hz
Instrument Dimension	300mm (L)×400 mm (W)×435 mm (H)
Net Weight	30kg

Standards

ISO 9073-2, ISO 12625-3, ISO 5084, ISO 4593, ISO 534, ISO 3034, GB/T 6672, GB/T 451.3, GB/T 6547, GB/T 6672, GB/T 451.3, GB/T 6547, GB/T 24218.2, ASTM D645, ASTM D374, ASTM D1777, ASTM D6988, ASTM F2251, ASTM D3652, TAPPI T411, TAPPI T411, DIN 53105, DIN 53353, DIN 53370, JIS K6250, JIS K6328, JIS K6783, JIS Z1702, JIS K6250, JIS K6783, JIS Z1702, BS 3983, BS 4817, BS 2782-6, FEFCO No 3, EN 1942

Configuration

Standard Configuration: Instrument, Micro-printer, Standard Gauge Block

Optional Parts: Weight, Auto sampler
