

CLASSIC 513 Gradient Heat Seal Tester is professionally designed for the determination of heatsealability of plastic films, composite films, coated paper, and other sealing films under certain sealing speed, pressure and 5 different temperatures. The heatsealability of heat sealing materials would be greatly affected by the factors of melting point, thermal stability, fluidity and thickness. The optimal heatsealability parameters can be obtained accurately and efficiently through this instrument.



Professional Technology

- P.I.D. temperature control technology ensures preset temperature to be reached rapidly without any fluctuation.
- Wide range, high precision and automatic temperature and humidity control can meet non-standard condition tests.
- Wide range control of temperature, pressure and time can meet various test conditions.
- Manual or pedal switch control, as well as anti-scald design provides convenient and safe operating environment.
- The instrument is controlled by micro-computer with LCD, PVC operation panel, and menu-interface, which is convenient for customers.
- The instrument can test 5 groups of 2 specimens at a time simultaneously, and accurately and efficiently obtain heatsealability parameters of the tested specimens.
- 5 upper sealing jaws are individually controlled by 5 gas cylinders which ensure the stability of heat sealing process.
- The heating tube joints can be easily installed or removed for rapid replacement.
- Independent temperature control of upper and lower sealing jaws allows multiple combinations of test conditions.
- Equipped with micro-printer for convenient data saving, exporting and printing.

Test Standard

This test instrument conforms to the following standards:

ASTM F2029^{Note1}, QB/T 2358, YBB 00122003

Note1: The 10 sealing jaws are all heated sealing jaws as required by ASTM F2029. If necessary, the lower sealing jaws can be replaced with unheated sealing jaws.

Applications

Basic Applications	Films with Smooth Surface	Including plastic films, plastic composite films, paper-plastic composite films, coextruded films, aluminized films, aluminum foils, aluminum foil composite films and many others. Heat sealing surface should be smooth and width can be designed based on user requirements. Instrument could simultaneously perform sealing operations at 5 different temperatures.
	Films with Decorative Pattern Surface	Including plastic films, plastic composite films, paper-plastic composite films, coextruded films, aluminized films, aluminum foils, aluminum foil composite films and many others. Heat sealing surface can be designed based on user requirements. Instrument could simultaneously perform sealing operations at 5 different temperatures.
Extended Applications	Covers of Jelly Cups	The instrument is composed of the upper and lower jaws. The upper one is round-shape, while the lower one is designed as a specimen mold whose size exactly fits jelly cup. Put the jelly cup in the mold of lower jaw, and sealing operation can be finished by upper jaw pushing. (Customized parts are required)
	Plastic Flexible Tubes	The end of plastic flexible tubes is placed in between upper and lower jaws and then sealed to form a package.

Technical Specifications

Specifications	CLASSIC513
Sealing Temperature	Room temperature ~ 250°C
Sealing Pressure	0.1 MPa ~ 0.7 MPa
Dwell Time	0.5 ~ 999.9 s
Temperature Accuracy	±2°C
Temperature Resolution	0.1°C
Temperature Gradient	≤20°C
Gas Supply Pressure	0. 7MPa ~ 0.8 MPa (outside of supply scope)
Port Size	Φ8 mm PU Tubing
Sealing Area	40 mm x 10 mm
Number of Sealing Jaws	10 (2 x 5 groups) ^{Note2}
Instrument Dimension	576 mm (L) x 430 mm (W) x 510 mm (H)
Power Supply	220VAC 50Hz / 120VAC 60Hz
Net Weight	72 kg

Note2: There are five upper sealing jaws and five lower sealing jaws for heat seal test. The temperature of all the sealing jaws can be controlled independently. All of the sealing jaws are heated sealing jaws. The unheated sealing jaws can be selected as lower sealing jaws.

Configurations

Standard Configurations

Instrument, Pedal Switch, Micro-printer

Optional PartsSoftware, Communication Cable, Unheated Sealing Jaws

Note:

1. The gas supply port of the instrument is $\Phi 8$ mm PU tubing;
2. Customers will need to prepare for gas supply.

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