

HSR-01 Heat Seal Tester

Brief Introduction

HSR-01 Heat Seal Tester makes heat seals by heat sealing method and can be professionally applied to the determination of the heat sealing parameters including heat seal temperature, sealing pressure and dwell time. HSR-01 Heat Seal Tester is one necessary testing instrument for laboratories, factories, scientific research organizations and institutes.



Technical Features

- ◆ Embedded micro-computer chips, simplified and efficient user interface provide users with comfortable and smooth operating experience.
- ◆ Standard, modularized and systematic designs can meet personalized requirements of the users
- ◆ Equipped with touch screen, easy to operate
- ◆ 7inch HD LCD, displaying test data and curves in real time
- ◆ Imported high-speed and high-precision chips guarantee the testing accuracy and efficiency
- ◆ Independent temperature control of the upper and lower jaws gives multiple combinations of test conditions
- ◆ By using digital P.I.D temperature control technology, the preset sealing temperature can

be achieved in a short period without fluctuation

- ◆ Most test parameters such as heat sealing temperature, pressure and dwell time can be input by operating on the touch screen
- ◆ Patented design of sealing jaws ensures the uniformity of sealing temperature on the sealing surface, the uniformity of the entire heat sealing jaw can reach $\pm 1^{\circ}\text{C}$
- ◆ Manual or pedal switch, as well as anti-scald design guarantee a convenient and safe operating environment
- ◆ The width and length of heat sealing jaws can be customized without the influence of structure

Test Principle

HSR-01 Heat Seal Tester makes heat seals by heat sealing method. It can be used to determine the optimal sealing parameters including sealing temperature, sealing pressure and dwell time, for the purpose of determining heat seal ability of flexible barrier materials. Firstly, the sealing temperature, sealing pressure and dwell time should be set on the touch screen and then the instrument will be controlled by embedded micro-processor and run the pneumatic driving mechanism so that the upper sealing jaws will move downward and complete the heat sealing of the packaging materials. By trying different combinations of those sealing parameters, the optimal sealing temperature, sealing pressure and dwell time can be determined.

Applications

Basic Applications	Films	Plastic films, plastic composite films, paper-plastic composite films, coextruded films, aluminum coated films, aluminum foils, aluminum foil composite films and many others. Note: The width of sealing surface can be customized upon user's requirements.
Extended Applications	Sealing Surfaces	Various types of sealing surfaces can be customized upon user's requirements.
	Jelly Cups	Jelly cups can be sealed with special testing accessories.
	Soft Plastic Pipes	Soft plastic tubes can be sealed from one end and become packaging containers

Technical Specifications

Item	HSR-01
Sealing Temperature	Room temperature+8 °C ~ 300 °C
Sealing Pressure	0.05 MPa ~ 0.7 MPa (Depend on sealing area)
Dwell Time	0.1~ 999.9s
Temperature Accuracy	±0.2 °C
Temperature Uniformity	± 1 °C
Heating Mode	Double Heating Surfaces (Independent Control)
Sealing Area	330 mm × 10 mm (Customization Available)
Gas Supply Pressure	0.7 MPa~0.8MPa (Not in Supply Scope)
Port Size	Φ6 mm PU Tubing
Instrument Dimension	400 mm (L) × 320 mm (W) × 400 mm (H)
Power Supply	AC 220V 50Hz / AC 120V 60HZ
Net Weight	40 kg

Standards

ASTM F2029, QB/T 2358, YBB 00122003

Configuration

Standard Configuration	Instrument, Pedal Switch
Optional Parts	Printer, Sample Cutter 15#, Silicon Rubber Plate, High-temperature Welding Cloth

- Note: 1.The gas supply port of the instrument is Φ6 mm PU Tubing;
2. Customers will need to prepare for gas supply.

Technical specifications are subject to change without further notice. Please visit our website at www.horizontester.com for latest information.