

## GRADIENT HEAT SEAL TESTER



GHS-03 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 properest heatsealability parameters could 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 control of temperature, pressure and time could 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 could test 5 groups of specimens at different temperatures 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 gives multiple combinations of test conditions.
- Equipped with micro-printer for convenient data saving, exporting and printing.

### TEST STANDARDS

This test instrument conforms to the following standards:  
ASTM F2029, QB/T 2358, YBB 00122003

# 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. (Customization 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	
Sealing temperature	Room temperature ~ 250°C
Sealing Pressure	0.1 MPa ~ 0.7MPa
Dwell Time	0.1 ~ 999.9 s
Temperature Accuracy	±0.2°C
Temperature Gradient	≤20°C
Gas Supply Pressure	0. 1 MPa ~ 0.7 MPa (outside of supply scope)
Port Size	8 mm PU Tubing
Sealing Area	40 mm x 10 mm x5
Instrument Dimension	576 mm (L) x 430 mm (W) x 510 mm (H)
Power Supply	AC 220V 50Hz
Net Weight	72 kg

CONFIGURATIONS	
Standard configurations	Mainframe, Pedal Switch, and Micro-printer
Optional parts	Communication Cable
Note	1. The gas supply port of the instrument is 8 mm PU tubing; 2. Customers will need to prepare for gas supply.