

HTT-L1 Hot Tack Tester is applicable in hot tack and heat seal performance tests for plastic films, laminated films and other packaging films. Meanwhile, it is applicable in peel, shear, tension and other test items for adhesives, adhesive tapes, laminated films, plastic films, paper and other flexible materials.



### Professional Technology

- With Digital P.I.D. temperature control system, the preset temperature could be reached in a short time without fluctuations.
- 4 force test ranges and 6 testing speeds are available to meet the requirements of distinct customers
- 4 test functions including hot tack, heat seal, peeling and tensile strength are available in this instrument
- Automatic zeroing, error alert, overload protection and stroke protection guarantee the safety operation
- Instrument could be started manually or by pedal switch which is convenient to the customer and the anti-scald design ensures the safety operation
- The instrument is controlled by micro-computer with LCD display, PVC operation panel and menu interface
- Equipped with RS232 port which is convenient for data transfer
- Supports Lystem<sup>™</sup> Lab Data Sharing System for uniform and systematic data management

### Test Standards

This instrument conforms to various national and international standards:  
ASTM F1921, ASTM F2029, QB/T 2358, YBB 00122003

### Applications

|                              |                                    |   |
|------------------------------|------------------------------------|---|
| <b>Basic Applications</b>    | Hot Tack Performance               | Plastic films, sheets and composite films e.g. PE, PP, PET and composite films used in packages for instant noodle, milk powder, washing powder, food and drugs |
|                              | Heat Seal Performance              | Plastic films, sheets and composite films   |
|                              | Peel Strength                      | Adhesives and adhesive tapes  |
|                              | Tensile Strength                   | Tensile strength test of various films, sheets and composite films  |
| <b>Extended Applications</b> | Medical Adhesives                  | Peeling test and tensile strength test of medical adhesives e.g. adhesive bandages  |
|                              | Textiles, Nonwovens and Woven bags | Peeling test and tensile strength test  |
|                              | Adhesive Tapes                     | Low speed unwrapping test   |
|                              | Protection Films                   | Peeling test and tensile strength test  |
|                              | Magnetic Cards                     | Peeling test of the films and magnetic cards  |
|                              | Bottle Caps                        | Opening force test of the aluminum plastic combination bottle caps  |

### Technical Specifications

| Specifications                 | HTT-L1   |
|--------------------------------|--|
| Sealing Temperature            | Room temperature ~ 250°C                                   |
| Temperature Control Accuracy   | ±0.2°C   |
| Temperature Measuring Accuracy | ±0.5°C   |
| Dwell Time (Heat Seal)         | 0.5 ~ 999.9 s  |
| Dwell Time (Hot Tack)          | 0.5 ~ 999.9 s  |
| Sealing Pressure               | 0.05 MPa ~ 0.7 MPa   |
| Sealing Area                   | 100 mm x 5 mm  |
| Sealing Jaw                    | Single heating or double heating (Customization available) |
| Gas Supply Pressure            | 0.5 MPa ~ 0.7 MPa (outside of supply scope)                |
| Port Size                      | Φ4 mm PU Tubing  |
| Instrument Dimension           | 1170 mm (L) x 360 mm (W) x 460 mm (H)                      |
| Power Supply                   | 220VAC 50Hz / 120VAC 60Hz                                  |
| Net Weight                     | 45 kg  |
| Capacity Range                 | 0 ~ 200 N (30 N, 50 N and 100 N are optional)              |
| Load Measurement Accuracy      | ±1% of reading from 10% to 100% of Load Cell Range         |
| Resolution                     | 0.01 N   |
| Load Speed                     | 100 150 200 300 500 and hot tack (mm/min)                  |
| Specimen Width                 | 15 mm, 25 mm or 25.4 mm (Optional and Customized)          |
| Stroke                         | 500 mm   |

## Configurations

|                                |   |
|--------------------------------|---|
| <b>Standard Configurations</b> | Instrument, Pedal Switch, Hot Tack Grips and Calibration Frame  |
| <b>Optional Parts</b>          | Professional Software, Communication Cable, Customized Heat Seal Jaw, Test Plate, Welding Cloth, Customized Sample Grips, Sample Cutter and Customized Sample Positioning Plate |
| <b>Note</b>                    | <ol style="list-style-type: none"> <li>1. The gas supply port of this instrument is Φ4 mm PU Tubing;</li> <li>2. Customers will need to prepare for gas supply.</li> </ol>      |

**Please Note:** Labthink is always dedicated to the innovation and improvement of product performance and function. Therefore, technical specifications are subject to change without further notice. Please visit our website at [www.labthink.com](http://www.labthink.com) for the latest updates. Labthink reserves the rights of final interpretation and revision.