



# Hot Tack Tester and Seal Tester SL-25

Model 75-56

## Hot Tack Tester and Seal Tester SL-25

The SL-25 Hot Tack and Seal Tester is a single-station testing center for single- or multi-layer flexible film structures.

Its main function is to seal film samples and provide data on seal strength, giving you the information you need to confirm the right sealing conditions for your packaging films.

On its own, the SL-25 works as a heat sealer, sealing film samples from 1" to 8" wide at temperatures, pressures, and dwell times you set. Attach the SL-25 Hot Tack/Seal Test Unit and testing expands to include Hot Tack, Seal Test, Hot Tack Profile, and Seal Test Profile testing.

### GraphMaster Pro Interface

GraphMaster Pro runs the SL-25's user interface, in one of four testing modes: Seal Test, Hot Tack Test, Seal Test Profile, and Hot Tack Profile. It supports profiles built from temperature, dwell time, and pressure.



TMI Buchel Hot Tack Tester and Seal Tester SL-25

## Technical Specification:

|                                          |                                                   |
|------------------------------------------|---------------------------------------------------|
| <b>Applications:</b>                     | Adhesion Testing                                  |
| <b>Seal Temperature Set Point Range:</b> | 21 to 400 °C                                      |
| <b>Temperature Resolution:</b>           | ± 0.1 °C (32.18 °F)                               |
| <b>Temperature Measuring Accuracy:</b>   | ± 0.15 °C (32.27 °F)                              |
| <b>Seal Pressure Range:</b>              | 30 to 800 N (actual pressure depends on jaw area) |
| <b>Sealing Pressure Resolution:</b>      | 0.68 kPa (0.1 psi)                                |
| <b>Dwell Time Range:</b>                 | 0.1 to 100 seconds                                |
| <b>Sealing Dwell Time Resolution:</b>    | 10 ms                                             |
| <b>Control Accuracy:</b>                 | ± 0.025 ms                                        |
| <b>Cooling Time Range:</b>               | 0 to 6000 seconds                                 |
| <b>Peel Rate Range:</b>                  | 1 to 100 mm/sec                                   |
| <b>Jaw Length Range:</b>                 | 25.4 to 230.2 mm                                  |
| <b>Jaw Width Range:</b>                  | 4.9 to 25.4 mm                                    |
| <b>Samples Per Test Group:</b>           | 1 to 100                                          |
| <b>Seal Load Cell Capacity:</b>          | 1000 lbs (4,448 N)                                |
| <b>Seal Load Cell Accuracy:</b>          | 0.89 N (0.09 kg)                                  |
| <b>Hot Tack Load Cell Capacity:</b>      | 25 lbs (111.2 N)                                  |
| <b>Hot Tack Load Cell Accuracy:</b>      | 0.1 % full scale                                  |
| <b>Calibration:</b>                      | ASTM E-4                                          |
| <b>Standards:</b>                        | ASTM F1921 (hot tack), ASTM F2029 (heat seals)    |
| <b>Air Supply:</b>                       | 90 - 120 psi, clean and dry                       |
| <b>Site Surface Load Rating:</b>         | 275 lbs (125 kg) minimum                          |

## Standard Features:

- PSoC 5 family microprocessor, standardized across the TMI/Büchel product line
- No internal PC - connects to a customer-supplied PC by USB, running GraphMaster Pro software
- GraphMaster Pro software, downloaded and updated through the GraphMaster Download Center
- Computer-controlled seal pressure, temperature, and dwell time
- Test profiles by temperature, dwell time, and pressure
- Air dryer and filter built in for clean, dry air supply
- No onboard display or touch screen - everything is controlled from the customer's PC using GraphMaster Pro
- Conforms to ASTM F1921 for hot tack seal testing
- Conforms to ASTM F2029 Standard Practices for Making Heatseals for Determination of Heatsealability of Flexible Webs as Measured by Seal Strength

## Optional Features:

- SL-25 Hot Tack/Seal Test Unit (75-56-01) - required to run Hot Tack, Seal Test Profile, and Hot Tack Profile tests
- Quick Change Seal Jaw Inserts
- Phenolic Seal Jaw Tray, for safely storing hot jaw inserts
- Footswitch, for hands-free machine cycling

## Computer Specification:

- No internal PC - instrument is driven by GraphMaster Pro software on a customer-supplied PC
- Connection: USB A Male to USB Mini B Male cable
- Processor: PSoC 5 family microprocessor (instrument electronics)

### Disclaimer

The information contained in this document is liable to modification from time to time in the light of experience and our policy of continuous product development. Check the Industrial Physics website for the latest version.

## Benefits:

- Test parameters are fully computer-controlled, giving you a temperature set point range of 21 to 400°C, a seal pressure range of 30 to 800N (actual pressure depends on jaw area), a dwell time of 0.1 to 100 seconds, and a peel rate of 1 to 100mm/sec.
- A configurable cooling time of 0 to 6000 seconds gives the seal time to cool before peeling, and you can run groups of up to 100 samples per test series.
- GraphMaster Pro runs on a PC of your choice, connected to the instrument by USB, so you're not tied to hardware built into the unit itself.

### Contact Details

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