

**Application**

Hot tack is a crucial property of a heat-sealed layer, as it determines the layer's ability to withstand forces attempting to separate the seal while it is still in a hot state. This characteristic holds significant importance, especially in processes like vertical form fill and seal (VFFS).

The HTT-02 Hot Tack Tester is specifically designed to assess this property by measuring the strength of heat seals formed between thermoplastic surfaces immediately after the seal is created before it has a chance to cool down to room temperature. This testing process is essential for evaluating the performance and reliability of heat seals in various applications.

Significance

Hot tack property is important since this situation occurs on vertical form-fill-seal packaging, during which not much cooling time is given.

In the packing line, contents are dropped into the bag immediately after the sealing bars have opened. Since the content can be heavy, the hot seal must be able to withstand high loads, thus requiring a high hot tack force.

Standard:

ASTM F1921

Principle

The principle of hot tack testing involves the sealing of a sample strip using two flat heated jaws, applying pressure under specific conditions. These conditions include defined temperatures, contact time, cooling time, and pressure. By subjecting the sample to these controlled conditions, the hot tack strength, or the ability of the seal to resist forces while it is still hot can be accurately assessed.

Technical Features

1. PLC-controlled for industrial-level stability.
2. User-friendly 7-inch HMI touch screen operation.
3. Compliance with ASTM F1921, offering both Method A and Method B testing.
4. Precise P.I.D. temperature control.
5. Durable aluminum encapsulated sealing jaws.
6. Features like auto zeroing, overload protection, and over-travel protection.
7. Adjustable test speeds of 200cm/min, 1200cm/min, or others.
8. RS 232 port and professional software for advanced data management. (Optional)

Main Parameters

Sealing Temp.	Ambient~250°C
Temp Accuracy	±0.2°C
Dwell Time	0.1~9999s(Heat Seal)
Dwell Time	0.1~9999s(Hot Tack)
Sealing Pressure	0.15MPa~0.7MPa
Sealing Jaws	50mmx10mm Teflon Coated
Jaws Heating	Double Heating
Load Cell	200N(Optional:30N50N100N, etc)
Accuracy	0.5 F.S.
Resolution	0.01N
Power	220V, 50 HZ

Relative Models

HTT-01 Hot Tack and Tensile Tester

TST-01 Tensile Tester

HST-01 Heat Seal Tester

GHS-02 Gradient Heat Seal Tester



The Company reserves the right to update, modify, or amend this Catalog without prior notice.

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