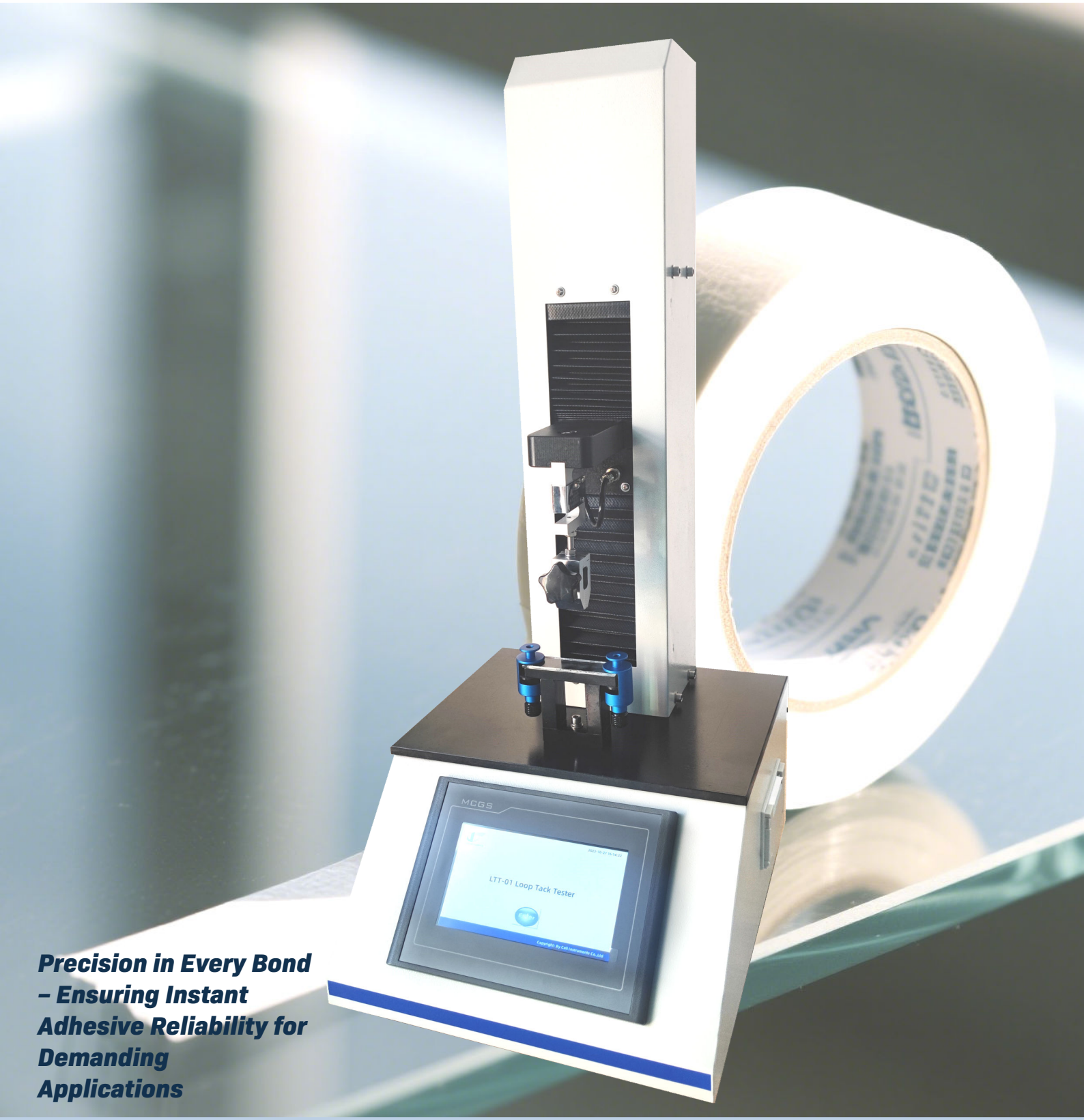
CELL INSTRUMENTS

Material Testing Solutions

# LTT-01
# Loop Tack Tester




***Precision in Every Bond – Ensuring Instant Adhesive Reliability for Demanding Applications***

*Discover the power of instant adhesion with the LTT-01 Loop Tack Tester—your definitive solution for quantifying tack and ensuring peel-fast performance in every pressure-sensitive application.*

***Decades of Innovation in Material Testing***

CELL INSTRUMENTS
Material Testing Solutions

# LTT-01
# Loop Tack Tester

## Why Loop Tack Matters

A rapid bond upon first contact is critical across labeling, packaging, and film applications. Loop tack measures that instant “stick”—the very first impression that determines consumer perception and end-use reliability.

In industries where rapid bonding is critical—from medical tapes to automotive labels—adhesive tack determines product quality. The LTT-01 Loop Tack Tester quantifies the instant sticking force of pressure-sensitive materials, ensuring compliance with global standards and optimal performance. By simulating real-world adhesion scenarios, this instrument enables manufacturers to deliver products that bond securely and consistently.

## Applications

Adhesive loop tack testing is essential for any material that must form a rapid bond under minimal pressure. Typical uses include(not limited to):

- Pressure-Sensitive Tapes & Films: Masking, packaging, surface protection
- Labels & Stickers: Beverage labels, security seals, promotional decals
- Medical & Pharma: Transdermal patches, wound dressings, electrode pads
- Industrial Laminates: Graphic overlays, decorative foils, protective laminates

## Test Principle

LTT-01 can conduct both Test Method A&Test Method B, facilitate both long and short samples.

## Test Procedures

1. **Sample Preparation**: A 25 mm × 175 mm (or 125mm)adhesive strip is formed into a continuous loop.
2. **Engagement**: Loop is brought into contact with a standard float-glass plate under its own weight.
3. **Separation**: At 300 mm/min withdrawal speed, the loop is peeled away.
4. **Measurement**: The peak force (in Newtons) required to initiate separation is recorded as “loop tack.”

This single-step test yields repeatable, quantitative data on initial adhesion strength.

## Standards & Compliance

| | |
|---|---|
| ASTM D6195 | Standard Test Methods for Loop Tack |
| FINAT 9 | Loop tack measurement |
| PSTC-16 | Loop Tack |
| GB/T 31125 | Test method of adhesive tapes-Loop tack |

## Features & Benefits

**1. Control & Interface**

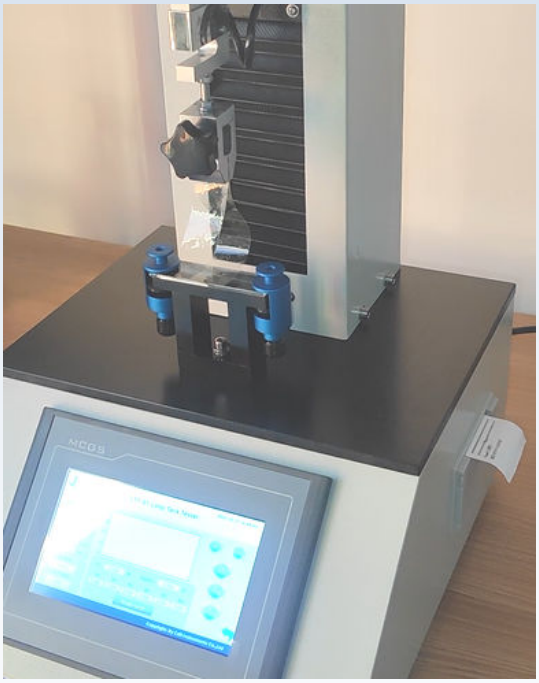
- 7-Inch Touchscreen & PLC Control: Intuitive operation with industrial-grade stability.
- Customizable Parameters: Adjust speed (1–500mm/min), easily adjustable starting point, and dwell time.

**2. Precision Mechanics**

- Ball Screw Drive: Ensures ±0.5% speed accuracy for repeatable tests.
- Compliant Glass Plate: Standardized surface for FINAT, PSTC-16, and ASTM compliance.

**3. User-Centric Design**

- Safety Mechanisms: Automatic return and limit devices protect machine and save user’s time.
- Microprinter: Instant test reports for traceability.
- Multiple Units Display: N, kgf, gf, KN and lbf are available.
- Optional Software: Data analysis and recording via RS232 connectivity.



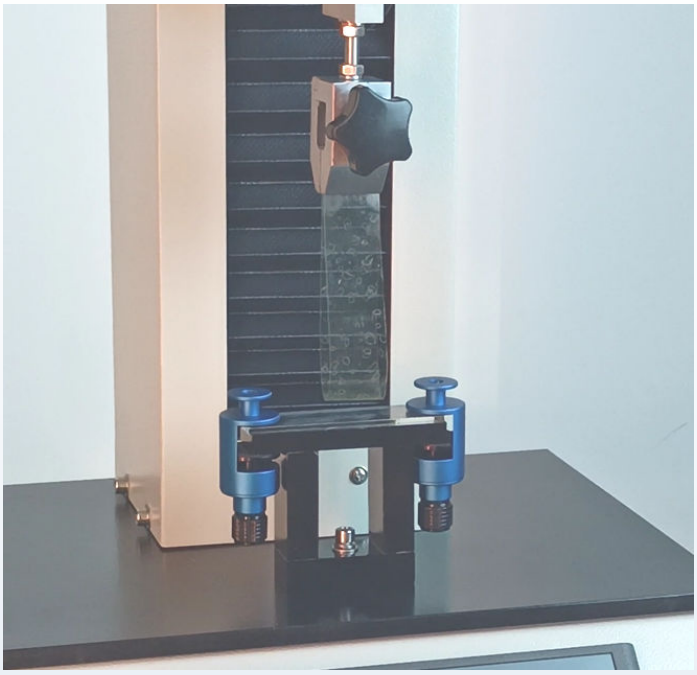
## Specifications

| | |
|---|---|
| Test Range | 200N (customizable) |
| Accuracy | ±0.5% |
| Resolution | 0.001N |
| Speed | 1–500 mm/min |
| Accuracy | ±0.1 mm |
| Stroke | 200mm |
| Sample Size | 125x25mm or 175x25mm |
| Power Supply | AC 110–220V, 50/60Hz |

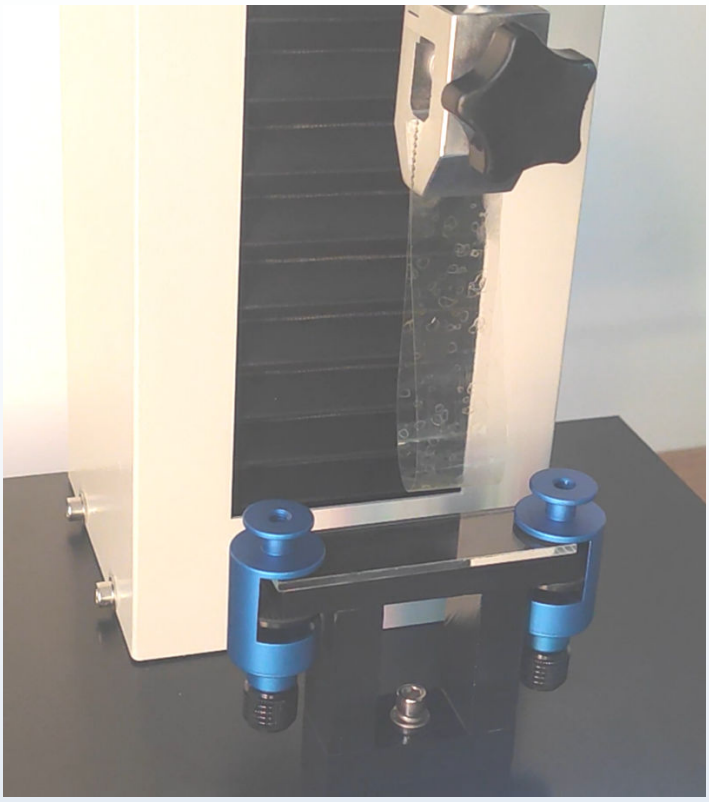
CELL INSTRUMENTS

Material Testing Solutions

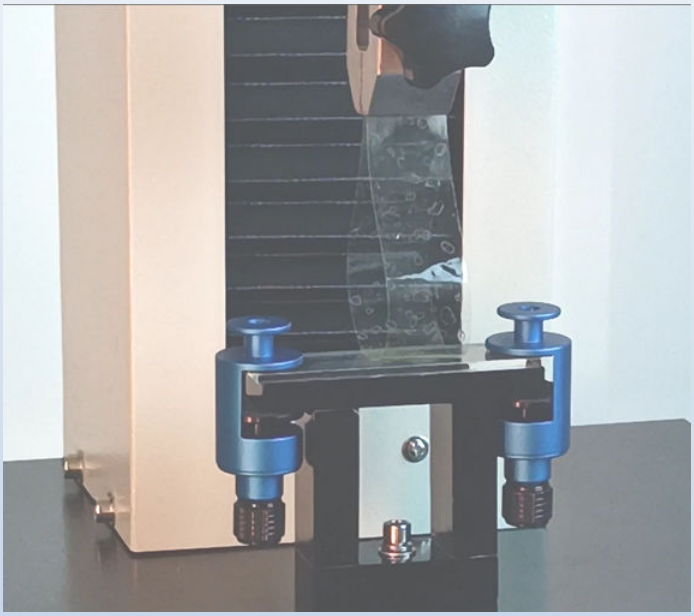
# LTT-01
# Loop Tack Tester



Before Tack

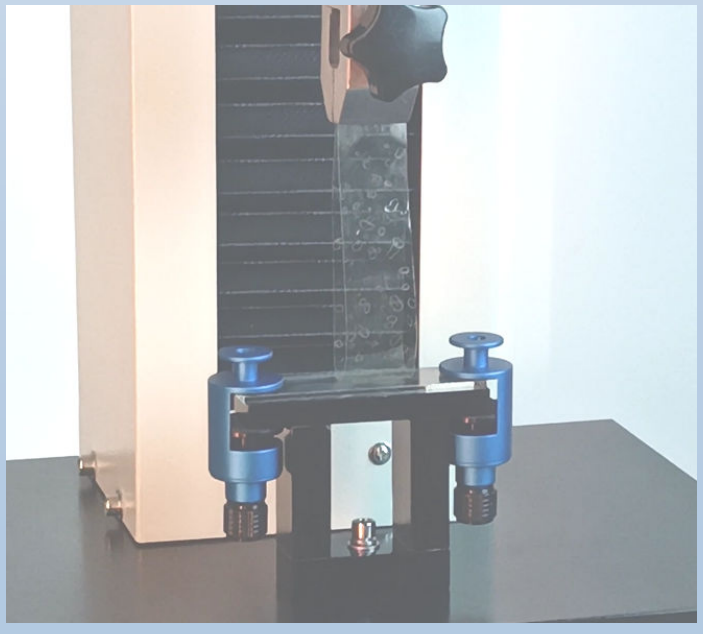


Pre-Test



During Tack


Multi-Unit



After Tack

**Cell Instruments Co., Ltd.**
No. 5577 Gongyebei Rd, Licheng District, Jinan, 250109, P.R.C.
Web. www.celtec.cn www.leakagetester.com
www.packqc.com
www.qualitester.com
www.cnceltec.com (Chinese)
Email: info@celtec.cn
Phone: +86 18560013985 (Mobile/WeChat)