

ASTM D5748 Puncture Fixture

Protrusion Puncture Fixture for Stretch Wrap Film

Built to ASTM D5748 — Standard Test Method for Protrusion Puncture Resistance of Stretch Wrap Film



OVERVIEW

Protrusion puncture fixture for stretch wrap film. The film is clamped taut in a ring holder while a rounded probe is driven into it by the test machine, simulating corners and protrusions on a wrapped load and recording the force, elongation and energy to puncture.

KEY FEATURES

- Ring clamp holds film taut and wrinkle-free without slippage
- Rounded probe tip per ASTM D5748 configuration
- Probe guided concentric with the clamp for centered loading
- Polished probe surface for consistent friction
- Quick-release clamp for efficient specimen changes

TECHNICAL SPECIFICATIONS

Test method	Protrusion puncture resistance of stretch film
Test type / loading	Probe penetration at controlled rate
Specimens	Clamped film specimens, per ASTM D5748
Load capacity	500 N standard; higher capacities on request
Fixture material	Polished steel probe; aluminum or steel clamp
Probe	Rounded tip, per standard
Machine connection	Clevis pin or threaded adapter, to suit customer frame
Compatible frames	Electromechanical universal test machines

APPLICATIONS

- Stretch wrap and pallet films
- Blown and cast film development
- Film extrusion quality control
- Packaging material comparison

ABOUT THE STANDARD

ASTM D5748 determines the resistance of stretch wrap film to penetration by a probe at a standard low rate, simulating protrusions on a palletized load. A clamped film specimen is penetrated by a probe of defined shape until puncture. Maximum force, penetration depth and energy to break are reported, giving a measure of the film's protrusion puncture resistance.

Ordering & customization: Specify film thickness, required capacity and test machine connection when ordering.

Specifications are typical and may vary by configuration; confirm at time of quote. Users should refer to the current edition of the standard for test procedures. Part ref. UGC-D5748-PF