90° Peel Fixture for Rubber-to-Metal Adhesion

Built to ISO 813 — Rubber, vulcanized or thermoplastic — Determination of adhesion to a rigid substrate — 90 degree peel method



OVERVIEW

Peel fixture set for measuring the adhesion of rubber bonded to a rigid plate at 90°. The upper holder clamps the metal substrate horizontally on a pin-jointed rod, while the lower clamp grips the rubber strip, so the strip is pulled at right angles to the bond line as the crosshead moves.

KEY FEATURES

- Plate holder clamps rigid substrate horizontally for a true 90° peel
- Pin-jointed hanger rod lets the holder self-align to the pull line
- Lower clamp with knurled screw grips the rubber strip end
- Set screws locate substrate plates of different thicknesses
- Supplied with adapters to suit your load frame (clevis or threaded)

TECHNICAL SPECIFICATIONS

Test method	90° peel adhesion to rigid substrate
Test type / loading	Tensile peel at constant rate
Specimens	Rubber strip bonded to rigid plate per ISO 813
Load capacity	1 kN standard; higher capacities on request
Fixture material	Corrosion-protected steel and aluminium
Gripping surfaces	Screw-clamped plate holder; screw clamp for rubber strip
Machine connection	Pin connections, to suit customer frame
Compatible frames	Electromechanical universal test machines

APPLICATIONS

- Rubber-to-metal bonded parts
- Bonding agent and primer evaluation
- Anti-vibration mounts and bushings
- Rubber lining and coating QC

ABOUT THE STANDARD

ISO 813 specifies a method for determining the adhesive strength of rubber bonded to a rigid plate, usually metal, using a 90° peel. A rubber strip vulcanized to one face of the plate is pulled off at right angles at constant rate. The peel force per unit width is reported along with the type of failure: rubber, rubber-cement, cement-metal or mixed.

Ordering & customization: Specify substrate plate width, length and thickness, rubber strip width 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-ISO813-PF