

90° Rubber-to-Metal Adhesion Peel Fixture

Built to ASTM D429 — Standard Test Methods for Rubber Property—Adhesion to Rigid Substrates



OVERVIEW

Peel fixture for 90-degree stripping tests of rubber bonded to rigid metal strips. The bonded substrate is held in a fixture that keeps the rubber tab pulled at a right angle to the bond line while the tab is gripped in the upper jaw, giving a consistent peel geometry throughout the test.

KEY FEATURES

- Maintains a constant 90° peel angle between rubber tab and bonded substrate
- Rigid clamping of the metal strip prevents rotation and bending during peel
- Upper grip for the rubber tab with serrated or rubber-faced jaws
- Quick-change specimen loading for production test volumes
- Optional fixture variants for other D429 methods on request

TECHNICAL SPECIFICATIONS

Test method	Rubber adhesion to rigid substrates, 90° stripping
Test type / loading	Tensile peel at 90° to the bond line
Specimens	Rubber strip bonded to metal plate, per ASTM D429 geometry
Load capacity	5 kN standard; higher capacities on request
Fixture material	Hardened steel body, corrosion-resistant finish
Gripping surfaces	Serrated jaw faces for rubber tab; positive substrate clamp
Machine connection	Clevis pin or threaded adapter, 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 tank and roll lining QA

ABOUT THE STANDARD

ASTM D429 covers procedures for testing the static adhesional strength of rubber to rigid materials, most commonly metals. The methods include pulling rubber bonded between two metal plates apart in tension and stripping a rubber strip from a metal plate at 90 degrees, as well as variants for other geometries. Results report the force needed to separate rubber from the substrate and the failure mode.

Ordering & customization: Specify the D429 method, substrate dimensions, 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-D429-PF