

Puncture Resistance Fixture for Protective Clothing

Built to ASTM F1342 — Standard Test Method for Protective Clothing Material Resistance to Puncture

OVERVIEW

Puncture fixture for evaluating protective clothing materials. The material is clamped between plates over an opening and a puncture probe is driven through it by the test machine, recording the maximum force needed for penetration. Interchangeable probes allow different puncture hazards to be simulated.

KEY FEATURES

- Clamping plates hold the specimen securely around the test opening
- Interchangeable probes for the probe types defined in the method
- Probe alignment centered over the clamped area
- Quick specimen loading for routine testing
- Compact design mounts to standard load cells

TECHNICAL SPECIFICATIONS

Test method	Probe puncture resistance
Test type / loading	Compression-driven probe penetration
Specimens	Protective clothing material samples, per ASTM F1342
Load capacity	500 N standard; higher capacities on request
Fixture material	Hardened steel probes; steel or aluminum clamping plates
Clamping	Bolted or quick-clamp specimen plates
Machine connection	Clevis pin or threaded adapter, to suit customer frame
Compatible frames	Electromechanical universal test machines

APPLICATIONS

- Protective gloves and garments
- Coated fabrics and elastomers
- PPE material selection
- Glove manufacturing QC

ABOUT THE STANDARD

ASTM F1342 measures the resistance of protective clothing materials, including gloves, coated fabrics and elastomers, to puncture by a probe. The specimen is clamped and the probe pushed through at a constant rate, with peak force recorded. Different probe types are defined to represent different puncture hazards, supporting material selection and performance classification.

Ordering & customization: Specify required probe type(s), material thickness range, capacity and 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-F1342-PF