CBR Puncture Fixture with 50 mm Probe for Geotextiles

Built to ASTM D6241 — Standard Test Method for Static Puncture Strength of Geotextiles and Geotextile-Related Products Using a 50-mm Probe



OVERVIEW

CBR-style puncture fixture for static puncture strength of geotextiles. The specimen is clamped between rings over a cylindrical mold while a 50 mm diameter flat-ended plunger is pushed through it by the test machine, recording the maximum force and plunger displacement at puncture.

KEY FEATURES

- 50 mm diameter flat-ended plunger per ASTM D6241
- Ring clamp with bolted or quick-action closure prevents slippage
- Plunger guided concentric with the clamping ring
- Rugged construction for high-strength geotextiles
- Mounts in compression on any universal test machine

TECHNICAL SPECIFICATIONS

Test method	Static (CBR) puncture strength, 50 mm probe
Test type / loading	Compression-driven plunger puncture
Specimens	Geotextile specimens, per ASTM D6241 geometry
Load capacity	20 kN standard; higher capacities on request
Fixture material	Steel plunger and clamp rings, corrosion-resistant finish
Plunger	50 mm diameter flat end, per standard
Machine connection	Clevis pin or threaded adapter, to suit customer frame
Compatible frames	Electromechanical and servo-hydraulic universal test machines

APPLICATIONS

- Woven and nonwoven geotextiles
- Geocomposites and drainage products
- Installation survivability evaluation
- Geosynthetic conformance testing

ABOUT THE STANDARD

ASTM D6241 measures the static puncture strength of geotextiles and geotextile-related products using a 50-mm diameter probe, often called the CBR puncture test. A clamped specimen is pushed by the flat probe until rupture, and the maximum force and displacement are reported. It is widely used in geosynthetic specifications for installation survivability.

Ordering & customization: Specify material strength range, clamping style, 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-D6241-PF