

ASTM D751 Puncture Fixture

Ball Burst and Puncture Fixture for Coated Fabrics

Built to ASTM D751 — Standard Test Methods for Coated Fabrics



OVERVIEW

Puncture/ball burst attachment for testing coated fabrics per ASTM D751 on a universal test machine. The fabric is clamped in a ring and a polished ball or probe is driven through it, measuring resistance to bursting and puncture under multidirectional stress.

KEY FEATURES

- Polished hardened ball for consistent loading
- Ring clamp secures coated fabric without slippage
- Mounts on a CRE tensile machine
- Quick-release clamp speeds specimen changeover
- Rigid frame keeps the ball centered in the clamp ring

TECHNICAL SPECIFICATIONS

Test method	Ball burst / puncture of coated fabrics
Test type / loading	Ball pushed through clamped fabric, constant rate
Specimens	Coated fabric specimens per ASTM D751
Load capacity	5 kN standard; higher capacities on request
Fixture material	Hardened steel ball; steel clamp ring and frame
Contact surfaces	Polished steel ball; ring clamp
Machine connection	Clevis pin or threaded adapter, to suit customer frame
Compatible frames	Electromechanical universal test machines

APPLICATIONS

- Rubber- and plastic-coated fabrics
- Tarpaulins and protective covers
- Inflatable and industrial fabrics
- Coated fabric QC

ABOUT THE STANDARD

ASTM D751 covers a collection of methods for testing coated fabrics, including thickness, breaking strength, elongation, tear, bursting strength, hydrostatic resistance and adhesion of coating. The bursting strength procedures load a clamped specimen with a ball or diaphragm until rupture. The methods apply to fabrics coated with rubber, plastics or similar materials.

Ordering & customization: Specify fabric type, expected burst force, required capacity and test machine connection.

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-D751-PF