ASTM D3787 Puncture Fixture

CRT Ball Burst Fixture for Textiles

Built to ASTM D3787 — Standard Test Method for Bursting Strength of Textiles—Constant-Rate-of-Traverse (CRT) Ball Burst Test



OVERVIEW

Ball burst fixture for measuring the bursting strength of textiles on a constant-rate-of-traverse tensile tester. The fabric is clamped between ring plates and a polished steel ball is pushed through it, recording the force required to rupture the fabric and giving a multidirectional strength value for knits and nonwovens.

KEY FEATURES

- Ring clamp holds fabric flat and secure without slippage
- Polished hardened steel ball per standard principle
- Ball and ring stay concentric during the test
- Quick-clamp specimen holder for rapid testing
- Supplied with adapters to suit your load frame (clevis or threaded)

TECHNICAL SPECIFICATIONS

Test method	CRT ball burst
Test type / loading	Ball pushed through clamped fabric
Specimens	Fabric specimens per ASTM D3787
Load capacity	5 kN standard; higher capacities on request
Fixture material	Hardened steel ball; steel clamp rings
Contact surfaces	Polished ball; textured or smooth ring faces
Machine connection	Clevis pin or threaded adapter, to suit customer frame
Compatible frames	Electromechanical and servo-hydraulic universal test machines

APPLICATIONS

- Knitted fabrics
- Nonwovens and technical textiles
- Medical and protective fabrics
- Textile production QC

ABOUT THE STANDARD

ASTM D3787 determines the bursting strength of textile fabrics using a constant-rate-of-traverse tensile testing machine with a ball burst attachment. A clamped fabric specimen is forced against a polished steel ball until it ruptures. The method suits knitted, nonwoven and other fabrics where bursting resistance is more meaningful than strip tensile strength.

Ordering & customization: Specify fabric type, 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.
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