

Tire Cord and Yarn Tensile Test Fixture

Built to ASTM D885 — Standard Test Methods for Tire Cords, Tire Cord Fabrics, and Industrial Filament Yarns Made from Manufactured Organic-Base Fibers



OVERVIEW

Capstan-style tensile fixture for testing tire cords and industrial filament yarns per ASTM D885. The cord wraps around a curved drum before being clamped, so friction gradually reduces tension at the clamp and breaks occur in the free length rather than at the jaws.

KEY FEATURES

- Capstan wrap reduces load at the clamp to prevent jaw breaks
- Smooth, radiused drum surface avoids cord damage
- Accepts tire cords and industrial filament yarns
- Quick clamping for fast specimen loading
- Matched upper/lower pair keeps the cord on the load axis

TECHNICAL SPECIFICATIONS

Test method	Tensile properties of tire cord and yarn
Test type / loading	Tension, constant rate of extension
Specimens	Tire cords and filament yarns per ASTM D885
Load capacity	5 kN standard; higher capacities on request
Grip type	Capstan (wrap) drum with clamping end
Gripping surfaces	Smooth radiused drum; flat clamp face
Machine connection	Clevis pin or threaded adapter, to suit customer frame
Compatible frames	Electromechanical universal test machines

APPLICATIONS

- Tire cord (nylon, polyester, aramid)
- Industrial filament yarns
- Tire and rubber reinforcement QC
- Fiber producer labs

ABOUT THE STANDARD

ASTM D885 covers methods for testing tire cords, tire cord fabrics and industrial filament yarns made from manufactured organic-base fibers such as nylon, polyester and aramid. Methods include breaking strength, elongation, and other properties. Tensile tests use grips that avoid slippage and jaw breaks on high-strength cords.

Ordering & customization: Specify cord or yarn type, expected breaking load and test machine connection. Supplied as a matched pair.

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-D885-TF