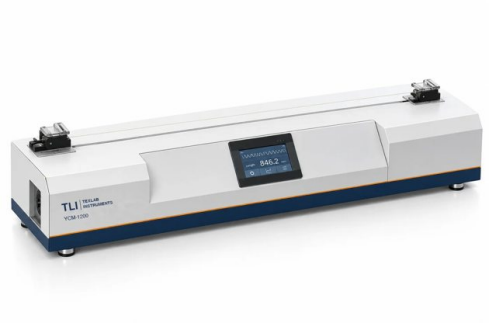
TXL-IPL-013 / 28 October 2026 · One-year manufacturer warranty

Yarn Crimp & Length Tester (TL-YCM-1200)

Platform with 1,200 mm jaw separation for measuring straightened yarn length and evaluating yarn crimp in woven fabrics. A known gauge length is marked on the fabric, the yarn is carefully removed and straightened under the tension specified for the method; crimp (%) = 100 × (L − L_0) / L_0.



Model technical data

1	Maximum jaw separation: 1,200 mm.
2	Housing width: 1,500 mm.
3	Primary measurement: straightened yarn length.
4	Evaluation: yarn crimp relative to fabric gauge length.
5	Specimen handling: two jaws with transparent upper grips.
6	Straightening tension: selected by yarn type and test method.

Physical specifications and utilities

Electrical supply	Approx. 220–240 V AC, 50/60 Hz, single phase; build-dependent.
Power / connected load	Approx. 20–100 W connected load for preliminary planning.
Overall instrument dimensions	Approx. 1400 × 350 × 600 mm (W × D × H).
Instrument weight	Approx. 15–30 kg net.
Gross / shipping weight	Approx. 26.5–47.5 kg gross; estimated packing allowance.
Lab requirements	Level, stable working surface; specimen conditioning follows the selected method.

Dimension order and approximate values are stated in each row. Packaging data are separate from instrument dimensions and net mass. Approx. rows are preliminary engineering estimates based on comparable equipment and function/capacity; they are not verified manufacturing measurements or standard requirements. Installation and shipment are finalised against the approved drawing and nameplate. Estimate scope: base product / one unit; external computer, bench and auxiliary plant excluded.

Specifications, dimensions, and power requirements are approximate and subject to change without prior notice for continuous design improvements.

Product technical specifications and images may vary according to manufacturing conditions and applicable standards.

Test and configuration

Measured output / function	Crimp, shrinkage or length change (%)
Parameters selected for the method	Pretension, heat treatment and reference length
Verification points	Length, pretension and temperature where applicable

Control and recording specification

Method-specific software and recording requirements follow. Delivered software modules are defined by the order scope.

• Method code and edition, specimen ID, operator and selected test parameters are linked to the record.

• The calculation and endpoint are defined by the selected method edition; instrument signals and operator assessments are kept distinct.

• Raw measurements, units, valid/invalid test flags and the reported result remain traceable.

• Calculations are checked against known inputs and an independent calculation; sensor channels are checked against calibration values.

Related test methods

ISO 7211-3 · ASTM D3883

Listed methods are application references. Suitability is established by assessing hardware, method edition and calibration together.

Test parameters for the reviewed method

The values below were reviewed in selected clauses of the stated source edition. They are not a declaration of equivalence to a later edition or independent instrument verification.

ASTM D3883-99 / 6.1, 10.7, 11

1	Apply controlled straightening tension to extracted yarn; prepare ten yarns per direction. Crimp percentage uses in-fabric length as denominator, while take-up uses straightened yarn length. Software keeps both denominators and original/final lengths distinct.

ISO 7211-3:1984 / 5-10, Annex

1	Crimp in yarn removed from woven fabric: adjustable parallel grips, distance measurement and yarn-specific straightening tension. Condition at least 16 h; measure 10 threads from each of five fabric strips. Record fabric length, straightened length and tension.