

TXL-ELY-008 / 27 October 2026 · One-year manufacturer warranty

Fiber Separation Comb Set

A comb set for examining fibre bundle length and length distribution by comb sorting, including Barbe and Hauteur evaluation.



Model technical data

1	Used to measure all types of fibre length and length distribution in terms of Barbe and Hauteur.
2	It measures fibres in bundle form.

Physical specifications and utilities

Electrical supply	Manual / passive base apparatus; no mains supply assumed.
Power / connected load	Approx. 0 W connected load for preliminary planning.
Overall instrument dimensions	Approx. 500 × 350 × 500 mm (W × D × H).
Instrument weight	Approx. 8–20 kg net.
Gross / shipping weight	Approx. 18.8–35 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	Fibre length and length distribution (mm)
Parameters selected for the method	Fibre preparation, measurement length and grouping method
Verification points	Length scale and reference length

Control and recording specification

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

- The need for integrated software depends on the method and selected hardware; manual instruments use an external test record.
- 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 920 · ASTM D1440 · ASTM D1575

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 D1440-96 (2002) / 6.1–6.4

1	Use a double-bank sorter for cotton fibre length distribution. The group-weighing balance has at least 25 mg capacity and 0.05 mg sensitivity; the subsample balance at least 100 mg and 0.1 mg sensitivity. Verify length calibration with reference cotton.
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ASTM D1575-90 (2001) / 1.1–1.3, 6.1–6.2

1	Sort scoured wool or card sliver into length groups; wool top and unscoured wool are outside this scope. Group weighing uses a 100 mg capacity balance with 0.1 mg sensitivity. Retain each length class and its mass.
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TS 1162 ISO 920:2004 / 5, 8.1–8.2

1	For comb sorting use a 500–4000 mg test group; weigh each length group to 1 mg accuracy. Comb spacing defines length classes. Software retains class length and mass; distinguish mass-weighted distribution from single-fibre number distribution.
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