

TXL-ELY-004 / 27 October 2026 · One-year manufacturer warranty

Micronaire Fiber Fineness Tester

Determines the mean wool fibre diameter by passing a controlled airflow through a wool bundle. Intended for clean, non-medullated wool, particularly combed slivers.



Model technical data

1	Measures the average fibre diameter by passing a straight air current through the wool bunch.
2	Regular wool without a medulla layer can be analysed with this device.
3	It is particularly suitable for combed slivers.

Physical specifications and utilities

Electrical supply	Approx. 220–240 V AC, 50/60 Hz, single phase; build-dependent.
Power / connected load	Approx. 30–100 W connected load for preliminary planning.
Overall instrument dimensions	Approx. 350 × 300 × 600 mm (W × D × H).
Instrument weight	Approx. 20–35 kg net.
Gross / shipping weight	Approx. 32–53.8 kg gross; estimated packing allowance.
Lab requirements	Dry filtered compressed air if the pneumatic circuit is fitted; operating pressure and flow confirmed at delivery.

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 fineness assessment by airflow
Parameters selected for the method	Fibre type, specimen mass and packing conditions
Verification points	Appropriate fibre reference, airflow and weighing

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 1136 · ASTM D1282 · IWTO 6

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 D1282-96 / 6.2, 10.3.2

1	For the WIRA submethod use a 2.500 ±0.005 g specimen and convert float height to micrometres using its calibration chart. Port-Ar and WIRA preparations differ. Record working reference, atmosphere correction and submethod.
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ISO 1136:2015 / 5.1-5.2, 7.1-7.2

1	Wool airflow fineness uses a 1.5 g specimen for constant flow or 2.5 g for constant pressure. The pump must provide at least 30 L/min at 200 mmH ₂ O; calibrate using a reference suitable for the fibre type.
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