

TXL-DER-001 / 27 October 2026 · One-year manufacturer warranty

Elastomer Sole Abrasion Tester

Determines the abrasion resistance of elastomer materials such as shoe soles. It has a touch screen and stops at the set test value with ± 0.1 metre accuracy. The test path can be selected from 1 metre to 40 metres.



Model technical data

1	Determines the abrasion resistance of elastomer materials such as shoe soles.
2	Stops at the set test value with ± 0.1 metre accuracy.
3	The test path can be selected from 1 metre to 40 metres.

Physical specifications and utilities

Electrical supply	Approx. 220–240 V AC, 50/60 Hz, single phase; build-dependent.
Power / connected load	Approx. 100–300 W connected load for preliminary planning.
Overall instrument dimensions	Approx. 650 × 450 × 500 mm (W × D × H).
Instrument weight	Approx. 35–60 kg net.
Gross / shipping weight	Approx. 63.5–100 kg gross; estimated packing allowance.
Lab requirements	Suitable ventilation / process exhaust; external fan and duct loads are excluded from this preliminary estimate.

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	Change in mass, appearance or damage after abrasion
Parameters selected for the method	Abradant, load, motion, cycles and endpoint
Verification points	Motion, counter, load and condition of abradant

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

DIN 53516 · ISO 20344 · EN 12770

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

Historical method references: DIN 53516

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.

TS EN 12770:2004 / 4.1, 5

1	Outsole abrasion arrangement: drum diameter 150 ± 0.2 mm, speed 40 ± 1 r/min; traverse 4.20 ± 0.04 mm per revolution. Normal force 10 ± 0.2 N; cylindrical specimen diameter 16 ± 0.2 mm.
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TS EN ISO 20344:2012 / ISO 20344:2011 / 8.3

1	For non-leather footwear outsole abrasion, the edition invokes ISO 4649:2010 Method A: 40 m abrasion path and 10 N vertical load. This mapping covers outsole abrasion only, not the standard's other footwear tests.
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DIN 53516:1987-06 / 5.1, 6.1, figures 2-3

1	Rubber-abrasion arrangement: drum diameter 150 ± 0.2 mm, length approximately 500 mm and speed 40 ± 1 r/min; abrasion path 40 m and normal load 10 ± 0.2 N. Drum size is not overall instrument size.
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