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

# Lisson Tretrad Carpet Wear Tester — TL-LTT-02 (Two Stations)

Two-station wear testing system for textile floor coverings. Specimens are clamped under longitudinal tension; four-foot rotating heads travel along the specimen while the soles apply controlled load and slippage, and travelling nozzles remove loose fibres. The ISO 12951:2020 Method A result is calculated from specimen mass before and after testing.




## Model technical data

| | |
|---|---|
| 1 | Method reference: ISO 12951:2020 – Method A. |
| 2 | Capacity: 2 specimens; two four-foot rotating heads. |
| 3 | Test track: 800 mm nominal; travel speed 0.28 m/s nominal. Track length follows the reference definition in ISO 12951; it is not the overall carriage stroke. |
| 4 | Sole peripheral speed: 20% above linear travel speed, nominal. |
| 5 | Head load: 15 kg per head without soles; specimen tension 20 kg tension weight. |
| 6 | Drive and loading: step motors; independently weighted pivoting heads. |
| 7 | Fibre extraction: travelling nozzles supported separately from the loaded heads. |
| 8 | Control and reporting: 4.3-inch touchscreen; PC report with manual mass entry. |
| 9 | Guarding: transparent guard, cover interlock and emergency stop. |
| 10 | Supply scope: two heads, specimen fixtures and tension weights, installed sole coverings and one spare set, integrated extraction, reporting software and the operating manual. External PC, 0.01 g laboratory balance, rotary brush cleaner and conditioning infrastructure are excluded. |
| 11 | Sole coverings (consumable): new sole coverings are fitted before each test, as required by ISO 12951:2020 (8 per test: two heads with four feet each). Sole coverings to clause 5.2.1 (SBR with white silica filler, 2.5 mm, 90 Shore A, wave profile) are ordered separately. |

## Physical specifications and utilities

| | |
|---|---|
| Electrical supply | Approx. 220–240 V AC, 50/60 Hz, single phase; build-dependent. |
| Power / connected load | Approx. 400–800 W connected load for preliminary planning. |
| Overall instrument dimensions | Approx. 1400 × 900 × 1100 mm (W × D × H). |
| Instrument weight | Approx. 150–250 kg net. |
| Gross / shipping weight | Approx. 190–337.5 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 | 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

ISO 12951

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.

ISO 12951 (earlier edition) / 5.1

| | |
|---|---|
| 1 | Tretrad track 800 ± 40 mm; specimen tension mass 20 ± 2 kg; vertical load 15 ± 2 kg; linear speed 0.28 ± 0.02 m/s. |
| 2 | Peripheral speed with sole coverings is 20 ±2% greater than linear speed; this slip ratio is independently verified in software. |