

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

Washing Fastness Tester (Gyrowash)

Rotary tumbling washing fastness. ISO 105-C / AATCC.



Model technical data

1	Number of test vessels: 6 standard; 8/12/16/20/24 tube options available.
2	Test vessel volume: 550 ml.
3	Rotation speed: 40 ± 2 rpm.
4	Operating temperature: ambient – 98 °C.
5	Temperature accuracy: ± 1 °C.
6	Programmable memory-based control system with 3.5" touch screen.
7	Colour fastness to washing, dry cleaning and chlorinated water.

Physical specifications and utilities

Electrical supply	Approx. 220–240 V AC, 50/60 Hz, single phase; build-dependent.
Power / connected load	Approx. 2500–5500 W connected load for preliminary planning.
Overall instrument dimensions	Approx. 850 × 800 × 1050 mm (W × D × H).
Instrument weight	Approx. 90–150 kg net.
Gross / shipping weight	Approx. 124–212.5 kg gross; estimated packing allowance.
Lab requirements	Water supply and drain; hot water, water quality and plumbing capacity depend on order configuration.

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	Colour change and staining of adjacent fabric
Parameters selected for the method	Vessel volume, temperature, time, detergent and balls
Verification points	Bath temperature, rotational speed and timer

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.
- The C10A record links care-label/test temperatures, measured ramp and a 30 min hold starting at target temperature. Trace specimen mass/liquor volume and reagent activity; do not add optical-brightener effects or multifibre staining scores to this result. These are method requirements; delivered modules are specified separately.

Related test methods

AATCC 61 · ISO 105-C06 · ISO 105-C08 · ISO 105-C09 · ISO 105-C10 · ISO 105-D01 · ISO 105-E03 · M&S C04 · M&S C05 · M&S C10A · M&S C12A · M&S C37

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 105-C06 (earlier edition) / 4.1-4.2

1	ISO vessel arrangement: 550 ± 50 ml; diameter 75 ± 5 mm and height 125 ± 10 mm; rotation 40 ± 2 r/min; solution temperature within ±2 °C of the selected value.
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ISO 105-C08:2010 / 5.1-5.2

1	Wash vessel 550 ± 50 mL; diameter 75 ± 5 mm, height 125 ± 10 mm; rotation 40 ± 2 r/min. Solution within ±2 °C of the selected test temperature; weighing accuracy 0.01 g.
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TS EN ISO 105-C09:2003 / 5.1-5.3

1	Recipe: vessel rotation 40 ± 2 r/min and solution-temperature deviation no greater than ±2 °C. Preparation mixer at least 1000 r/min and balance precision ±0.01 g; auxiliary preparation equipment is selected separately.
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TS EN ISO 105-D01:2011 / 6.1, 8

1	Dry-cleaning recipe: 550 ± 50 mL vessel with solvent-resistant seals, 40 ± 2 r/min and 30 ± 2 °C. Solvent and required fume hood are assessed separately from the aqueous-washing configuration.
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AATCC 61-2009 / 5.1.1-5.1.5

1	Rotation 40 ± 2 r/min; vessels differ: 500 mL (75 × 125 mm) for 1A and 1200 mL (90 × 200 mm) for 1B/2A/3A/4A/5A. Steel-ball diameter 6 mm; vessel and abrasive set are recorded for the selected test number.
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TS EN ISO 105-C10:2011 / 4.1-4.4

1	Vessel 550 ± 50 mL, diameter 75 ± 5 mm, height 125 ± 10 mm; rotation 40 ± 2 r/min and solution within ± 2 °C of the selected temperature. Approximately 6 mm steel balls and soap/alkali recipe recorded for the selected test condition.
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TS EN ISO 105-E03:2010 / 4.1

1	Chlorinated-water fastness arrangement: glass or stainless 550 ± 50 mL vessel, 40 ± 2 r/min and ± 2 °C solution-temperature control. Active-chlorine level and solution pH are tracked in separate recipe fields.
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M&S C37:2006-02 / Apparatus

1	Chlorinated-water fastness: 500 ± 50 mL vessel, chlorine-resistant seal, 27 ± 2 °C and 40 ± 2 r/min. This edition excludes infrared-heated wash wheels.
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M&S C10A — June 2007 / Apparatus 1–3; Specimen; Wash liquor; Method 1–8; Note5; pp.1–4

1	M&S C10A June 2007: vessel capacity 550 ± 50 mL, rotation 40 ± 2 rpm; infrared-heated wash wheels are not accepted in this edition. These historical method requirements do not automatically apply to sample-dyeing machines. The auxiliary stirrer must sustain about 1000 rpm for at least 10 min; balance accuracy at least ± 0.01 g.
2	Fabric specimen 100×40 mm; liquor ratio 100:1 (100 mL solution per 1 g fabric). Start at 27 ± 2 °C and ramp at 1.5 ± 0.5 °C/min. A 40 °C care label uses a 50 °C test; a 50 °C label uses 60 °C. Start the 30 min hold on reaching the target. These method volumes/specimen masses are not machine capacity or net weight.
3	The method assesses oxidative-bleach colour change; no multifibre adjacent fabric or staining assessment. Prepare fresh solution for immediate use and adjust TAED mass to documented activity. Drying limit 60 °C. Current M&S approval and delivered ramp accuracy require separate verification.