

MARTINDALE ABRASION & PILLING TESTERS

Our Martindale testers are used to determine the abrasion and pilling resistance of all kinds of textile structures, including apparel, upholstery, industrial and coated.

The lissajous figure abrasion tester makes it also possible to test toothbrushes, scouring powders and work surfaces.

Operation

Samples are rubbed against known abrasents at low pressures and in continuously changing directions and the amount of abrasion or pilling is compared against standard parameters.

The unique design allows removal of individual sample holders for examination without lifting the top motion plate or stopping the test.

The equipment is supplied complete with electronic predetermined batch and totalising counters as well as all sample holders and 9 kPa weights and loading devices to carry out standard tests.

Our Martindale testers are modern machines, true to the original design parameters and therefore capable of operating to all the latest standards.

All Martindale standards require either 3 or 4 samples of the same fabric to be tested and averaged.

Models

- 4 station tester suitable for smaller laboratories
- 6 station tester suitable for 2 sets of 3 tests
- 8 station tester for 2 sets of 4 tests, and to allow for future expansion of testing facilities at the most economical cost



Martindale testers with 4, 6 or 8 test stations

Features

- Available with 4, 6 or 8 sample positions on a common drive system with a common information and control panel.
- Common features cover operation, safety and EMC (electromagnetic conformance) compatibility.
- Original tooth-belt differential drive system eliminates noisy and oily gearbox transmission system and eliminates backlash. Fancooling eliminates heat transfer to abrasent fabric and sample.
- Rapid motion stroke change from abrasion to pilling.
- Liquid crystal display panel showing cycle count for individual test stations with keypad control. Presetable batch and totaliser count system.
- Removable sample assembly allows removal whilst running of individual sample holders for examination. Facility to stop individual position counter during examination if required.

Physical specifications

Dimensions (6 pos.)
74 x 63.5 x 30 cm (WxDxH)

Net Weight
120 kg

Standards

ISO 5470, DIN 53863/53865, BS EN ISO 12947-1, 12945-2, BS 3424/5690, BS EN 388/530, IWTO 40-88, IWSTM 112/196, ASTM 4966/4970, IS 12673, JIS L1096, M+S P17, P19, P19A, P19B, SFS 4328, SN 198525, 198529



removable sample holder assembly

Performance data

Specimen numbers

Abrasion 1-8
Pilling 1-8

Specimen area

Abrasion 6.45 cm²
Pilling 64 cm²

Test pressure

Abrasion 9 or 12 kpa
Pilling 2.5 or 6.5 cN/cm²

Rotational speed (outer pegs)

Abrasion 47.5 rpm
Pilling 47.5 rpm

Speed ratio (inner: outer pegs)

Abrasion 30-32
Pilling 30-32

Total stroke

Abrasion 60.5 mm
Pilling 24 mm

Parallelism (top plate to abrading tables)

Abrasion ± 0.05 mm
Pilling ± 0.05 mm

Circumferential parallelism (sample holders to abrading tables)

Abrasion ± 0.05 mm
Pilling ± 0.05 mm



Agent