

MARTINDALE

RESISTANCE TO ABRASION AND PILLING

Commercial reference: SI77-00 - SI85-00 - SI86-00



Martindale 2 posts



Martindale 4 posts

Type of test:
Abrasion and wear
Pilling and snagging

Type of materials:
Textiles
P.P.E.
Leathers

Standards:
ISO 12947
ISO 12945-2
ISO 17076-2
ASTM D4966
ASTM D4970
BS 3424 pt24
BS 5690

INTRODUCTION

This machine is ideal for determining the abrasion resistance of all types of fabrics and leather used for shoes, upholstery, garments, gloves and many other products. Martindale method is the international reference standard for fabric wear. Evaluation of resistance to pilling is also possible on Martindale (optional).

Martindale can also be used to test the abrasion resistance of rubber gloves, plastic and rubberized

fabrics by substituting a standard abrasive grit.

A starter kit is supplied with each instrument Martindale ■

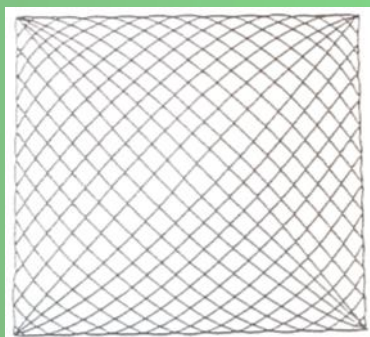
FIELD OF APPLICATION

Textiles - P.P.E. - Leathers

Martindale is a versatile instrument testing, initially designed to perform tests of wear and pilling. Number of methods use this instrument with specific accessories or consumables - Do not hesitate to contact us in case of specific request ■

PRINCIPLE

A circular test piece subjected to a defined load and the action of friction of an abrasive part (standard fabric) in a translational movement forming a Lissajous figure (see below), the sample holder freely rotatable its own axis perpendicular to the plane of the specimen.



Lissajous movement achieved through the mechanism of Martindale.

Lissajous movement begins with a circle and ellipses gradually becoming closer to a straight line from which the ellipses becoming larger form in diagonally opposite direction before repeating the drawing again. This type of movement allows bending of fibers in each direction.

Assessment tests can be done two ways, either by visual comparison, until the occurrence of a change of state of the tissue ■

DESCRIPTION

Martindale is made of a chassis with bodywork which contains the electronic and integer part of all solicitation.

The base plate accommodates all test elements (base plate, fixed sample holder, plate of solicitation, etc.).

Changing sample holder is made quickly without tools. The transition between each type of test (abrasion ⇌ pilling) is possible simply.

The system is designed with quality materials, all is machined and assembled in our workshops and can be adapted according to the needs of our customers ■

SEVERAL VERSIONS

We propose the Martindale in several versions. The simplest version is intended for educational or general laboratories are asked to carry out few tests. Other versions, with more testing stations, have a tactile controller assistant operator throughout the test.

For each version, all types of tests are available: abrasion, pilling and abrasion socks, and whatever the tested material ■

VERSION 2 POSTS - REF. S177-00



Martindale 2 posts

Version with individual displays.

Main characteristics*

Weight: 45 kg
Dimensions (WxDxH): 640x637x415 mm

VERSION 4 POSTS - REF. S185-00



Martindale 4 posts

Version 4 posts with tactile controller for tests management.

Main characteristics*

Weight: 49 kg
Dimensions (WxDxH): 640x637x415 mm

VERSION 6 POSTS - REF. S186-00

Version 6 posts with tactile controller for tests management.

Main characteristics*

Weight: 62 kg
Dimensions (WxDxH): 840x637x415 mm

Features for information only, we reserve the right to change freely in order to improve the performance of our test unit.

COMMON CHARACTERISTICS*

Speed: $47.5 \pm 2.5 \text{ t.min}^{-1}$

Maximum distance made
by the sample holder:

- Abrasion: $60.5 \pm 0.5 \text{ mm}$
- Pilling: $24 \pm 0.5 \text{ mm}$
- Sock abrasion: $60.5 \pm 0.5 \text{ mm}$

Parallelism between the mobile
support and the reference plate:

$\leq 0.5 \text{ mm}$

Electrical requirements:

Single phase
110, 230V
50, 60 Hz ■

ACCESSORIES SUPPLIED

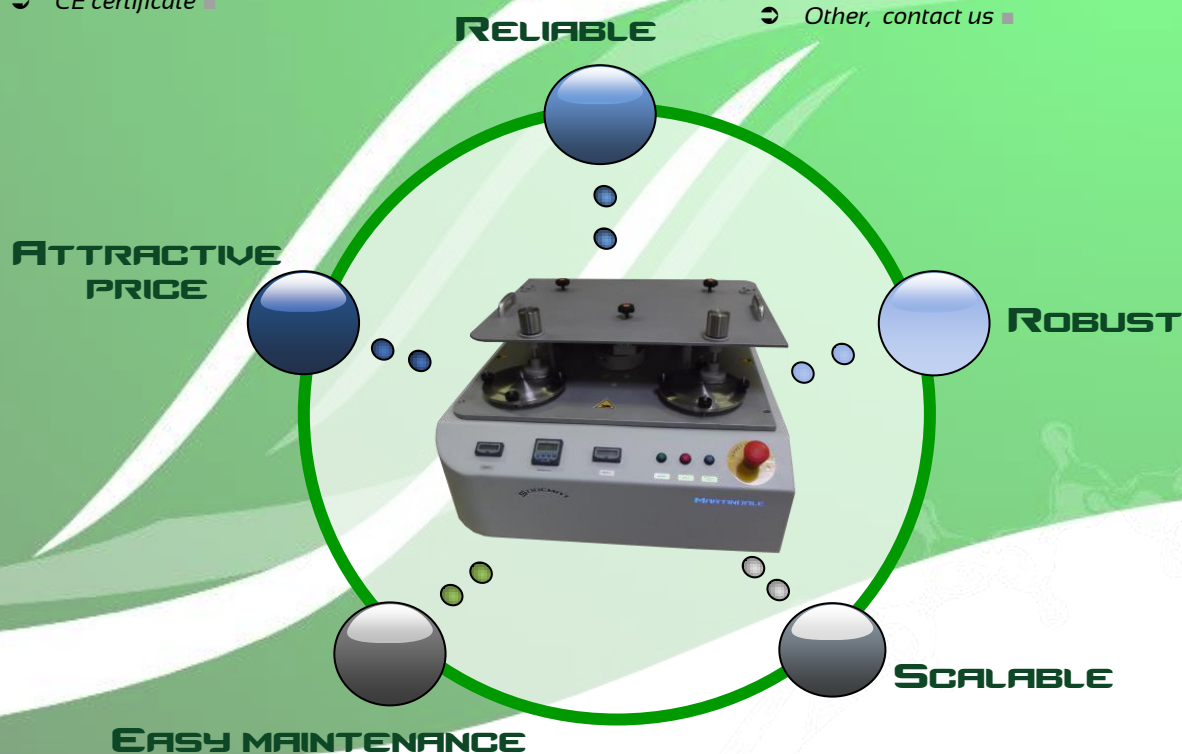
- Starter kit (abrasion)
- Power cord
- Calibration certificate
- User manual
- CE certificate ■

OPTIONS

- Abrasion testing kit comprising sample holder, the masses to apply pressure to 9 kPa and 12 kPa - Standard ISO 12947.
- Pilling testing kit including sample holder, the additional mass of 260 g, and the disk of the introduction of the sample - Standard ISO 12945-2.
- Abrasion sock testing kit, comprising supporting specimen and accessories for the set up of the specimen - Standard EN 13770-1.
- Sample cutter diam. 38 mm.
- Sample cutter diam. 170 mm
- Grey scale ISO 105 A02
- Grey scale AATCC
- Other, contact us ■

CONSUMABLES

- Abrasive fabric (pre-cut, pack or roll)
- Woven felt pad diam. 140 mm
- Woven felt pad diam. 90 mm
- Pre-cut discs of foam diam. 38 mm
- Other, contact us ■



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