



# **Smartindale** Martindale Abrasion & Pilling Tester

The Smartindale is used for abrasion and pilling tests on fabrics. It uses a digital algorithm to create a Lissajous curve to drive the friction. It runs accurately without calibration. You can switch the abrasion and pilling tests with a one-click touch on the screen button. No need to change the pins. After over 10 million cycles of ultra-high-intensity friction testing (equal to three years of nonstop operation) with rubber samples and double weights, the Lissajous curve is still accurate and perfect. The flip cover design is easy to see and use. Bureau Veritas (Guangzhou) and Japan Inspection BOKEN (Qingdao) use this instrument. Testers recognize it as easy to use.

# **Smartindale** Martindale Abrasion **& Pilling Tester**



## One-touch switching between pilling and abrasion testing, more efficient

One-touch switching of test modes (abrasion, pilling, or straightness) on the control panel. So you do not need to remove the cover and change the pin position.

# The Lissajous curve is calibration-free, while the test is more reliable.

Smartindale runs by an exclusive and patented digital algorithm that drives dual servo motors and precision slide rails, replacing the traditional mechanical analog drive to generate a perfect Lissajous curve. After over 10 million cycles of ultra-high-intensity friction testing (equal to three years of nonstop operation) with rubber samples and double weights, the Lissajous curve is still accurate and perfect. So the test is more reliable.

### Flip-up cover for easy observation and operation

The upper cover can be easily flipped up and locked with one hand, making it easy for the operator to observe the test; it also greatly facilitates the installation of consumables and samples; and the slow-lowering device of cover ensures the safety of operator and the machine.

Easy to use

Bureau Veritas (Guangzhou) and Japan Inspection BOKEN (Qingdao) use this instrument. Testers recognize it as easy to use.

#### **Smart Abrasion and Pilling Test**

The instrument connects to the SmarTexLab APP via IoT on a smartphone or computer. It then connects to ERP/LIMS through an API. The instrument can also connect directly to ERP/LIMS. Test sample information, test process and results can be uploaded to the system and summarized with other tests to output reports. You can communicate with ChiuVention customer service personnel online to get support quickly; receive reminders of instrument calibration, maintenance, and replacement of consumables; and perform OTA remote upgrades on a regular basis.

	<b>Power</b> 220/110V 50/60Hz
பீ	<b>Weight</b> 90kg
மாற	Dimension

ension 510\*850\*300 mm(W\*L\*H)

# Accessories

Fuse tube	2pcs
Foam wool	9 pcs Φ38 mm
Wool felt	18 pcs Φ90 mm,Φ140 mm
Wool abrasive	9 pcs Φ140 mm
Sampling plate	3 pcs Φ38 mm,Φ90 mm,Φ140 mm
Sampler	1 pc for pilling test
Sampler	1 pc for abrasion test
Press	1 pc Φ126mm,2.5kg
Fixture1	9 sets for pilling test
Fixture 2	9 sets for abrasion test
Weight 1	9 sets 12Kpa
Weight 2	9 sets 9Kpa
Rubber ring	9pcs
Test pen	1pc
Connection shaft	9pcs for pilling test
Connection shaft	9pcs for abrasion test
Stainless steel ring	9pcs 260g

#### **Optional Accessories**

EMPA990 rating chart card	1 set knitted + Woven
SM50 rating chart card	1 set IWS + ASTM
SM25 abrasion resistant wool cloth	1 pack 1.6 X 5m/pack
Sm26 woven wool felt	1 box 24 pcs/box Φ140mm
Sm26 woven wool felt	1 box 24 pcs/box Φ90 mm
SM28 polyurethane ether	
foam	1box 250 X 200mm/pc, 25pcs/box

#### Standards

ISO 12945-2-2020 ISO12947-1-1998 ISO12947-2-2016 IS012947-3-1998 IS012947-4-1998 GB/T 21196.1-2007 GB/T 21196.2-2007 GB/T 21196.3-2007 GB/T 21196.4-2007 GB/T 4802.2-2008 BS EN 530-2010 ASTM D4970/4970M-22 ASTM D4966-22

## **Optional Standards**

BS EN 388-2016+A1-2018 Protective gloves for mechanical hazards; SATRATM31 A/B Abrasion Resistance Test for Leather; PUMA; BS EN 16094-2012 Laminated wood flooring, Test method for the determination of micro-scratches; ISO 20344-2021 Item 6.12 Personal protective equipment, Test methods for footwear and boots; BS EN 13520-2002 Test methods for footwear, uppers, linings and insoles, abrasion resistance; ISO 5470-2-2021 Rubber or plastic coated fabrics, determination of abrasion resistance