





Pilling Testing Equipment

INNOVATIVE INSTRUMENTS

pills, n—bunches or balls of tangled fibers which are held to the surface of a fabric by one or more fibers

Pilling of woollen knitted fabrics has been a problem for a long time. The development and wide use of man-made fibers in apparel has made pilling a more serious issue. SDL Atlas provides a wide variety of industry standard and innovative instruments to predict and grade a fabric's propensity to pill or fuzz.

M227A&B ICI/M&S Pilling and Snagging Tester

The ICI/M&S Pilling and Snagging Tester is a universal pilling and snagging tester drive system available with 2 or 4 drive positions. For the pilling tests, fabric specimens are mounted on polyurethane tubes which are tumbled within a cork lined box to provide a mild but controlled abrasion resulting in fuzzing and pilling of susceptible fabrics. This system allows a user to rapidly predict pilling or snagging of fabrics in a fraction of the time that such would be occur in everyday use. The controller allows the user to input test cycle and rotational speeds of 20, 30, 40, 45, 50, 60, 65, and 70 rpm. An automatic reversing function is available for 30 rpm speed.

A variety of pilling and snagging boxes, drums, and accessories are available as options to meet ISO, BS and M&S and other retailer standards including EN ISO 12945-1 and the new BS 8479. Visit SDLAtlas.com or see the current SDL Atlas catalog for details and ordering information.





M227R&S Random Tumble Pilling Tester

The Random Tumble Pilling Tester creates pilling and fuzzing on fabrics by using stainless steel rotors to tumble unmounted fabric specimens within a cork-lined chamber. This is intended to rapidly duplicate the random wear an apparel fabric will encounter in actual use. Two and four chamber models are available.



M235 Martindale Abrasion and Pilling Testers

Martindale Abrasion and Pilling Testers are widely used for testing the abrasion and pilling resistance of all types of fabric structures. Specimens are rubbed against known and standardized abradents at low pressures and in continuously changing direction so the amount of abrasion or pilling is compared against standard parameters. The design of the SDL Atlas Martindale allows removal of individual sample holders without lifting up the entire top motion plate. The tester is available with 4, 6, 8, or 9 test positions. All models come with a userfriendly programmer that includes preprogrammed batch and totalizing counters, individual station counters, a 4 position parking function, and 4 selectable test speeds. The standard testers come with sample holders and 9 and 12kPa weights. For a complete list of optional accessories and consumable supplies that are needed for specific standards visit SDLAtlas.com or see the current SDL Atlas catalog for details and ordering information.



M282 Universal Wear Tester

The Universal Wear Tester was originally designed in the U.S. Army Quartermaster laboratories for determining wear and abrasion resistance of fabrics used in clothing, footwear and industrial applications. However, when equipped with the optional M282 Elastomeric friction and base pads, the pilling of shirting and similar fabrics rubbing against skin can be predicted.

Pilling Evaluation and Grading



M227C Pilliscope Assessment Viewer

Pilliscope Assessment Viewer allows the user to assess pilling on tested fabrics against 5 standard photographs using Halogen high incident illumination. These comparison photographs of either knitted or woven fabrics are mounted on a 5 sided drum and used sequentially to grade the samples. M&S suppliers may order a Holoscopic viewing system with holograms of knitted or woven fabrics on the 5 sided drum.



M227PAV Universal Pilling Assessment Viewer

Universal Pilling Assessment Viewer is designed for all standards where the assessment of pilling is necessary whether grading against control fabrics or photographs. Note that photographs are not included and must be ordered separately as required by the individual standard. Visit SDLAtlas.com or see the current SDL Atlas catalog for details and ordering information.



M227G Pillgrade[©] Automatic Pilling Grading System

Pillgrade® Automatic Pilling Grading System removes the subjective element from grading and improves inter-laboratory reproducibility. The Pillgrade 3D fabric scanning system objectively and repeatably grades fabric specimens for surface properties and can ensure agreement on grading throughout the textile supply chain. The system outputs pilling and fuzziness data plus a 1.0 to 5.0 pilling grade according to ASTM and ISO Standards. A user supplied computer running either Windows 2000 or Windows XP is needed. For more details on the computer requirements and data output please visit SDLAtlas.com or see the current SDL Atlas catalog for details and ordering information.

Pilling Standards Matrix

	ICI Pilling	Random Tumble Pilling	Martindale	■ Universal Wear	PillGrade I
EN ISO 12945-1					
EN ISO 12945-2					
ASTM D3512					
ASTM D3514					
ASTM D4970					
NEXT TM 18					
NEXT TM 26					
M&S P17					
M&S P18A					
M&S P18B					
M&S P18C					

Note: Additional accessories or configurations may be required to meet specific standards. Visit SDLAtlas.com or contact an SDL Atlas office for full solutions to standards testing.



(USA) T: +1 803 329 2110 F: +1 803 329 2133

SC 29732-9200, USA

E: info@sdlatlas.com

3934 Airway Drive Rock Hill,

(China) T: 86 (755)2671 1168

F: 86 (755)2671 1337 E: info@sdlatlas.com.cn

1/F (South-East) & 2F, Shenjian Mansion, Central District(West), Hi-Tech Park, Nanshan, Shenzhen, 518057, P.R.C. (HK) T: 852 3443 4888 F: 852 3443 4999

E: info@sdlatlas.com.cn

3J, Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.