



# Abrasion, pilling and snagging testing range

The abrasion, pilling and snagging range together provide a rounded picture of the durability of a textile, and our instruments provide the broad range for every aspect of testing.

Quality can be assured through testing with James Heal's world-class and reliable testing instruments combined with TestWise Touch OS. All of our instruments are designed with precision in mind, to maximise consistency, providing accurate and repeatable test results, every time.



### AquAbrasion



Based on the traditional Martindale instrument, the AquAbrasion gives an accurate way of conducting wet abrasion testing using various fluids, which we have proven to be a crucial step in establishing the durability of outdoor wear.

#### Key Features

- Controlled method of dosing
- Suitable for wet and dry testing
- Unique ergonomic design



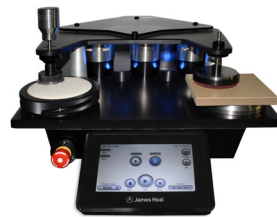
### DurAbrasion



Hard surface abrasion tooling for wet and damp testing, lacquers, coatings, wood, laminates, paints, thick samples, straps, ropes and more. Tooling applied to the Martindale instruments to offer a wider range of materials testing.

#### Key Features

- Versatile tooling for traditional Martindale
- Wide range of hard and alternative surface materials testing
- Multiple test types



### Impulse



Random Tumble Pilling Tester with interchangeable impellers and superior sample rotation for reliability, accuracy and flexibility.

#### Key Features

- Either 2 or 4 chambers
- Interchangeable impellers
- Cleaner testing with reduced dust and lint



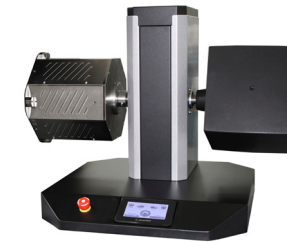
### Orbitor



Pilling and Snagging Tester with TestWise Touch™ for testing woven and knitted fabrics.

#### Key Features

- Time saving easy fit features
- Consistent and reliable 2 or 4 station models
- Standard fittings and customisable boxes, in any combination



### ProMace



Mace Snag Tester for testing the snagging resistance of apparel and upholstery fabrics.

#### Key Features

- Standards compliant
- Less risk of damage during use
- Smaller physical footprint



**We've got it covered with James Heal's end-to-end extraordinary testing solutions.**

#### Test materials

A wide range of James Heal test materials and consumables together with photographic standards for assessment are available for these instruments, visit our website for details.



#### Global support

With world-class servicing and calibration, James Heal's highly trained and experienced team of engineers are uniquely qualified to provide instrument support.



**PHYSICAL  
PROPERTIES  
TESTERS  
GROUP**

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