



Martindale Motion

Abrasion and Pilling tester

Sales toolkit



PHYSICAL
PROPERTIES
TESTERS
GROUP

jamesheal.com



Martindale Motion

Martindale abrasion and pilling tester, featuring 9 individual lifting test heads, for maximised lab efficiency.



MODEL NO: **2509, 230v - 50hz** STOCK CODE: **902-988**

ACCESSORIES: **MM Abrasion station kit** STOCK CODE: **794-246**

ACCESSORIES: **MM Pilling station kit** STOCK CODE: **794-247**

Features and benefits at a glance

Individual lifting test heads

All 9 test heads lift freely in accordance to how they are set using the TestWise software, using individual lifting mechanisms that function without stopping the test, and comply to all major standards.

Jog function and variable speeds

Automatic jog function to a central stop point, as well as operating as slow (12rpm), normal (47.5rpm), fast (71.3rpm) and custom (10-90 rpm) speeds during testing.

TestWise software

Designed to be user-friendly with minimal training required, whilst offering versatile testing options and settings.

New hinged pin-access plate

New 'homing position' of the instrument, utilising the TestWise software, with drive pins accessed and changed under a new hinged back plate.

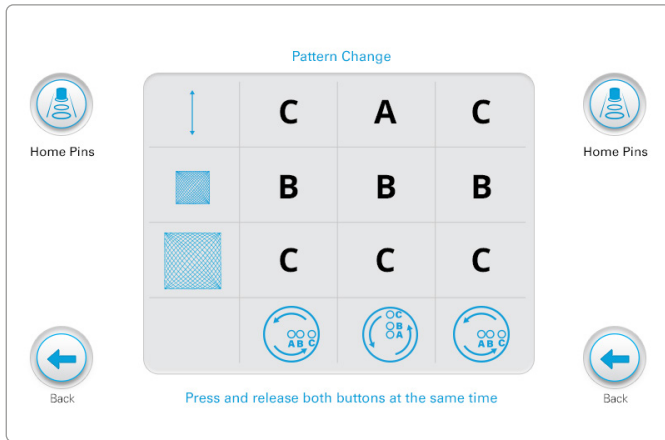
Quick-lock clamping rings

Precision engineered quick-lock clamping rings that secure test specimens in place with ease, reducing set-up time.

Service and support

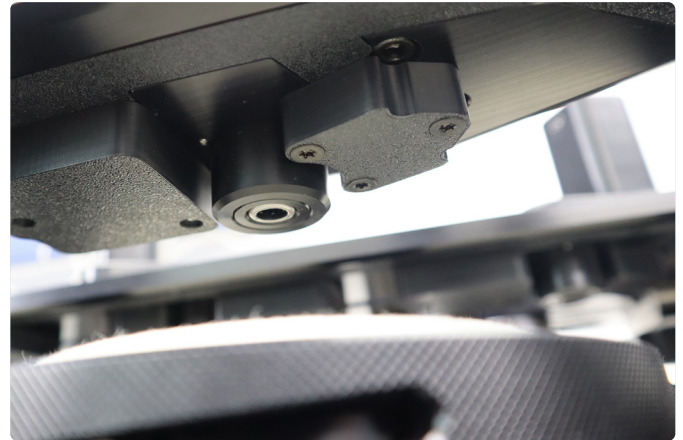
Our team of Technical Specialists offer support and guidance on testing challenge, and our expert Service Engineers offer high quality servicing and calibration to ensure your instrument stays in peak condition





Quick test change

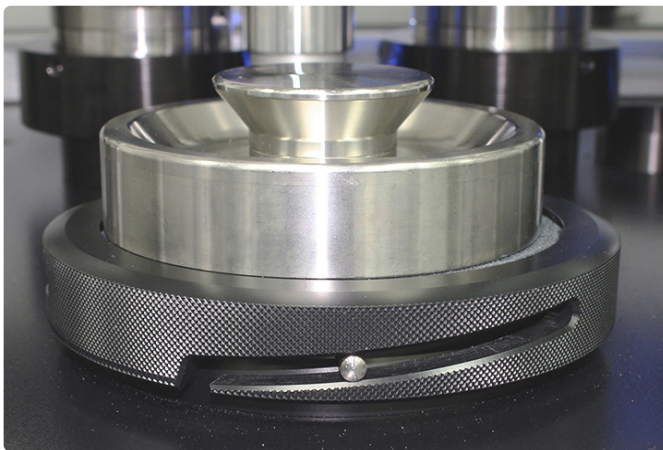
Changing between abrasion and pilling tests is laid out simply, with pin-change instructions detailed on the home screen, and the drive pins marked on the instrument, making test changes quicker, and easier than ever.



New bearing housing

Design of the bearing housing has been adapted to ensure a full lift of the specimen, ideal for lightweight or a heavier fabric.

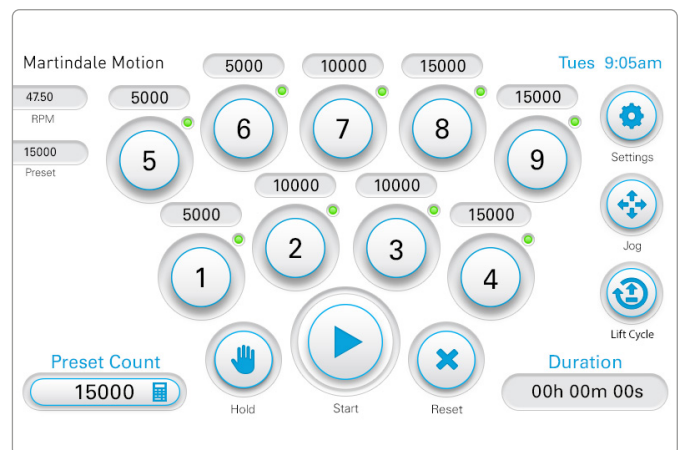
Changes made give a full lift to ensure an appropriate distance between the test head and the abradant, retaining compliance to standards.



Quick lock clamping rings

Precision quick lock clamping rings, engineered from aerospace grade aluminium, in-house in the UK.

The rings twist freely onto each station, securing the test materials and specimens in place with accuracy, and ease, reducing the set-up time and increasing throughput



Jog function and variable speeds

A simple jog function allows the operator to slowly move the top plate into the most suitable position to mount the abrasive fabric, consequently the top plate does not need to be removed in between day to day tests. Accurate testing and control over the instrument is available from the outset.

Testing can be set at variable speeds- Slow (12rpm), Normal (47.5rpm), Fast (71.3rpm), and custom (10-90rpm) - you can perform tests as stated in the standards or change the speed if users want to develop their own method.



Key benefits



Mechanical specimen lift

Individual test heads are lifted mechanically with discreetly integrated electronics, removing the need for any compressed air tubes (as used on competing models), both saving time, and increasing productivity.

Test heads can be lifted individually as well as in a chosen group, with the option to choose which station is lifted using the TestWise software. Preset lifting patterns can also be set-up to further enhance the ease and speed of test times.



Reduced operator contact time

The lifting heads are programmed to stop certain specimens at pre-set revolutions, meaning the operator spends less time at the instrument to stop, start and assess. The instrument can be run over laboratory 'downtime' to further increase testing output.

The new easy pin-change and homing feature also adds to the overall reduction in contact time for the operator.



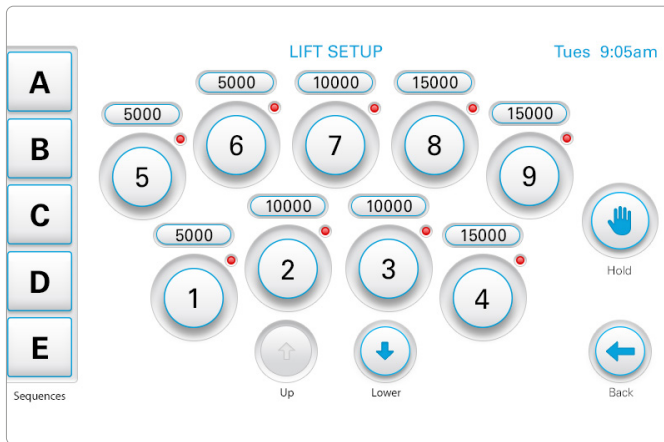
Quiet operation for noise reduction

The Martindale range of testers have a quiet operation as standard, and the new mechanical lifting heads function equally as quietly, to reduce noise pollution in busy lab environments.



Quick, and safe useability

The new hinged back plate eliminates the need to remove the top plate, offering an even safer and quicker way of accessing the drive 'pins'. All new features give a universally upgraded user experience, which is safer than ever, and is suitable for people of varying height and physical capability.



New TestWise screens

New features such as lifting presets, the homing function, and test switching (abrasion to pilling and vice versa), offer more dynamic user elements through the TestWise operating software, which includes several new screens. These new features and functions deliver an easier, enhanced user experience.

The homing function offers a quick and easy pin-change, saving time and physical effort when changing between tests.



Modified sample holders

Designed for frequent use and wear, these new sample holders (test heads) are highly durable, and offer easily serviceable components, requiring very few items of tooling, and only minimal training.

Abrasion and pilling sample holders comply to the same test standards as that of the classic 1609 Martindale.



Woven and knitted fabrics



Leather



PPE



Sportswear



Coated fabric for upholstery



Workwear

What is it testing for?

- Abrasion resistance, to assess the durability of textiles
- Pilling resistance, to assess appearance.

Is there a main standard?

The main standard for Abrasion testing is ISO 12947 Series, which comprises of 4 parts. ASTM D4966 is the American version. The main pilling standard is the ISO 12945-2

There has been significant consideration during the innovation process to ensure that the physical design elements of this instrument, comply to the same standards as all traditional Martindale models.

(This does not include all modified Martindale set-ups such as DurAbrasion).

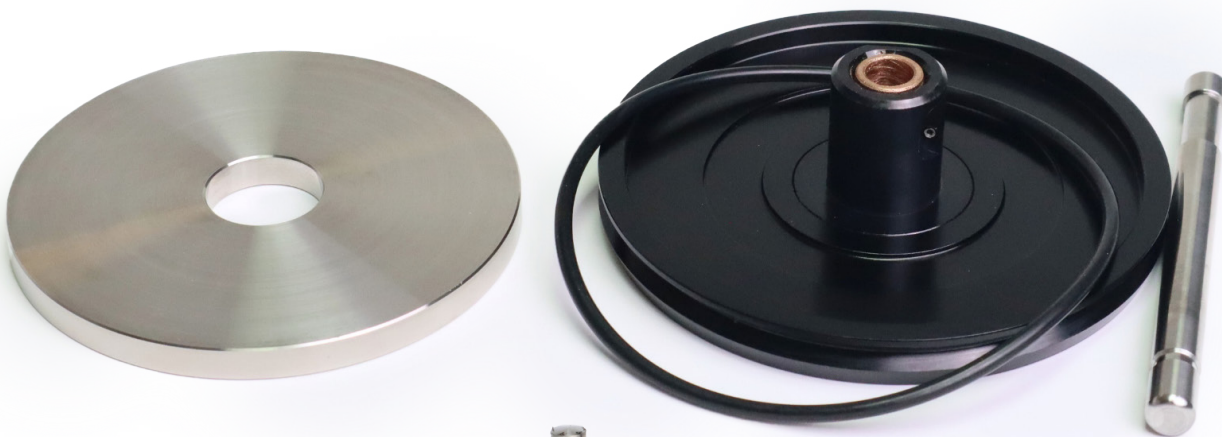
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Martindale accessories

Martindale Motion accessories, which includes the test heads and spindles, have been adapted and the design enhanced to provide the most durable and reliable accessories. New test heads contain easily serviceable components, with minimal tooling required.



794-247 Pilling Station Kit



794-246 Abrasion Station Kit

Test materials



701-202 Martindale Abrasive Cloth SM25



701-207 Pre-Cut Discs of Martindale Abrasive Cloth SM25



714-612 Woven Felt Pads (140 mm diameter)

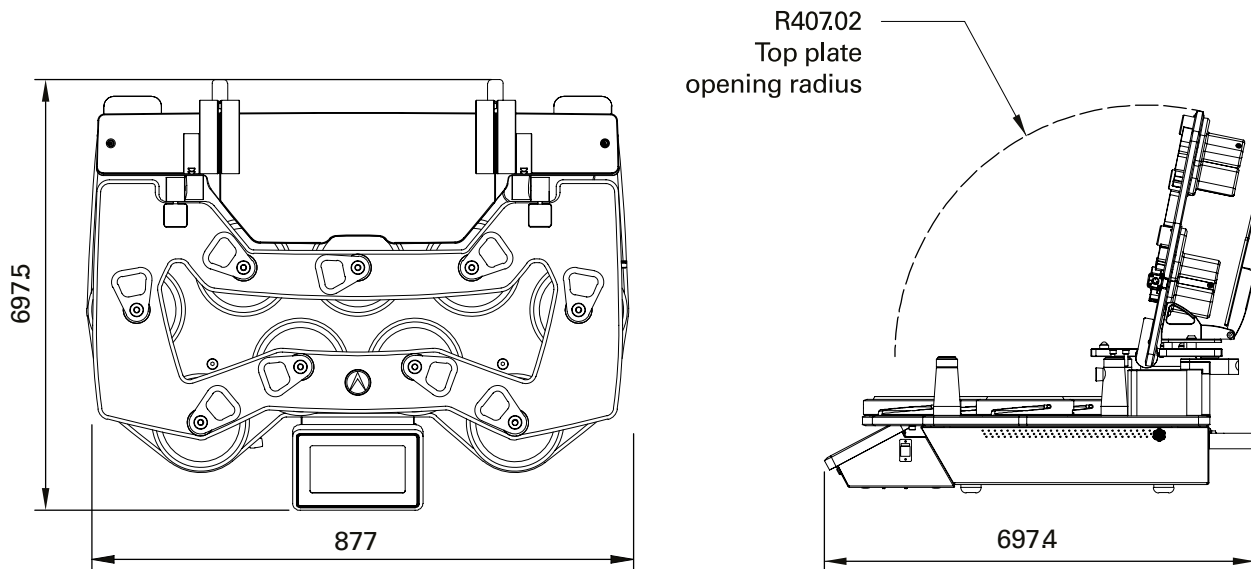


786-256 Pre-cut Discs of Foam (38mm diameter)

Martindale Motion

Height	Height (lid open)	Width	Depth
308	635	877	6974

Please note the working width and height when allocating space for this instrument

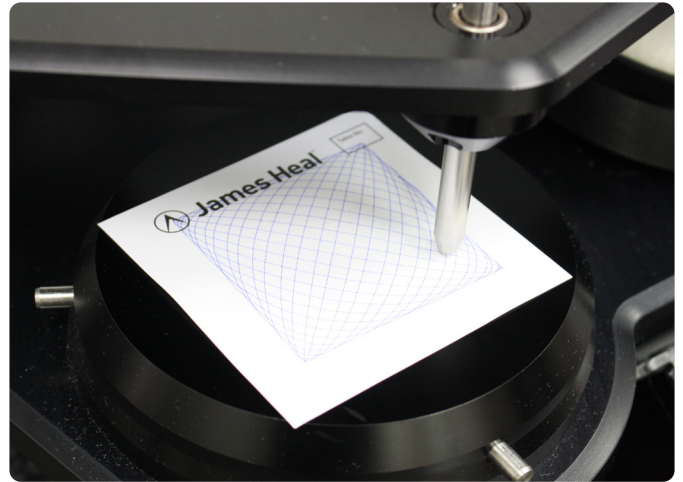


Stock Code	Description
Electricity	110 to 230V AC 50/60Hz Single Phase 0.5 / 1 A 60W *
Air	Not required
Bench or Floor Standing	Bench
Water Supply	Not required
Drainage	Not required
Air Extraction	Not required
Conditioning	It is recommended the instrument is located within a conditioned atmosphere.



Service and support

The James Heal Martindale calibration service offers a comprehensive check into 12 different points on the instrument, ensuring it complies with strict measurements as set by UKAS. These include abrasion and pilling lissajous figures, spindle bearing friction, sample holder insert protrusion and the parallelism between the abrading table and sample holder insert.



Service

Ensures your instruments are kept in reliable working condition, avoiding unnecessary downtime to your business.

Calibration

Ensures your test equipment meets its Accuracy Specifications. A UKAS Calibration is a superior form of calibration, where it compares against a prescribed standard.

Technical support

Lead by our Head of Testing who has over 30 years of practical experience in the textiles industry, our applications support answers questions on how to test on the Martindale.





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