

Nu-Martindale 864

ABRASION & PILLING TESTER



Nu-Martindale 864

ULTIMATE FOR FLEXIBILITY AND EASE-OF-USE

In any discussion about Martindale testing, it's abundantly clear: our Design Team leads the way, innovating constantly and searching for new ways to make abrasion testing more economic and easier to carry out.

We were the first to launch a feature-packed, six-station machine, incorporating a unique, patented, hinged top plate.

Later, we conceived and launched the very successful and versatile, single-station Mini-Martindale®.

Now, the same award-winning Team brings you the revolutionary **Nu-Martindale 864**.

This brand new machine is the absolute *ultimate for flexibility and ease-of-use*.

The **864** can be, whatever you want it to be and, whatever configuration you chose, there are definitely *no compromises* to the performance of the machine.



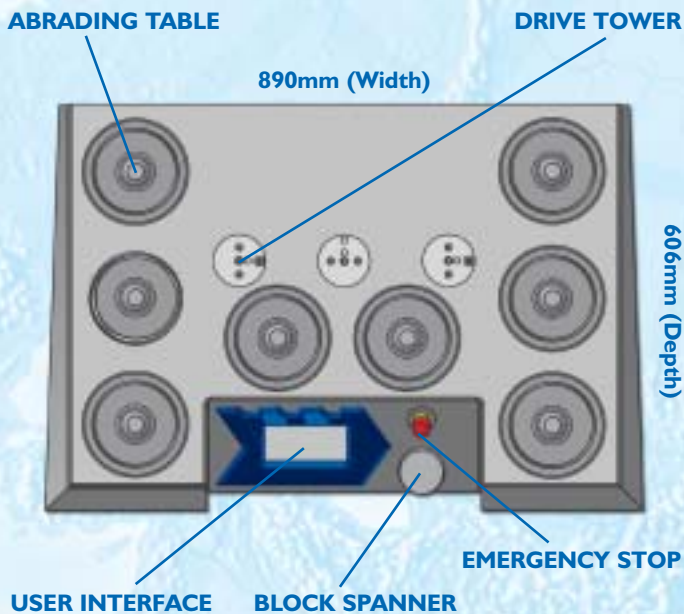
WHAT DO YOU GET ?

- ✖ 4, 6 or 8 position machine
- ✖ User-upgradeable from 4 to 6 or 8 positions
- ✖ Comfortable access to all eight abrading tables
- ✖ Easy change between abrasion, pilling and straight line motions
- ✖ Multi-lingual, versatile user interface
- ✖ Innovative touch screen graphic LCD
- ✖ Intuitive software
- ✖ Suitable for wet testing
- ✖ Ideal for tests generating high levels of friction
- ✖ Higher speed for accelerated testing
- ✖ Complies with all standards/methods
- ✖ M&S approved
- ✖ UKAS Calibration by HEALINK
- ✖ Standard 18 months warranty
- ✖ Quality Assured Consumables: abrasive, felt & foam
- ✖ Exciting modern styling
- ✖ Real value for money

8, 6 OR 4 POSITIONS

It's up to you - buy 4 now and upgrade to 6 or 8 later.

You can do the upgrade yourself - buy the *Upgrade Station Kits* and, within minutes, the job is done - no special tools or skills are required.



TOP PLATE PARKED ON THE RIGHT, FULLY EXPOSING ABRADING TABLES ON THE LEFT

EASY ACCESS

If you have a lot of testing to do, 6 or 8 positions are clearly an advantage, but only if you can reach and service them comfortably.

We employ Textile Technologists as well as Engineers, so we have an *unrivalled* understanding of operators' needs and of those issues, which really make a difference.

Comfortable and unrestricted access to the abrasing tables is of crucial importance - on the **864**, every table is easily accessible.

This is achieved by clever positioning of the tables, the radical shape of the top plate and three primary parking positions for the plate.

The top plate can be parked at the rear, on the right or on the left - leaving the tables fully exposed - *the top plate does not need to be lifted to access any of the eight abrasing tables.*

You only remove the top plate from the machine, when you want to alter the motion.

And, when you do have to take it off, you will be pleasantly surprised by the ease of handling and its light weight.

CHANGE OF MOTION

Here again, the needs of the operator have been carefully verified and altering the motion for abrasion, pilling or straight line is simple and quick - no tools are required.



SPECIAL APPLICATIONS

Increasingly, Martindale testing is being specified for novel applications.

As well as being manufactured from corrosion-resistant materials, **Nu-Martindale 864** can withstand the ingress of water, so it can be safely used for wet testing.

The **864** incorporates a powerful drive system to overcome the high levels of friction, which are generated, when rubbing, for example, rubber gloves against glass paper. The drive makes the machine suitable for a variety of similar applications.

There is even a facility for altering the speed: you can configure the machine to run either at *half normal* or *one and a half times normal* speed - abrasion testing is essentially a slow process, so this unique facility opens up very interesting possibilities for developing new test methods or for accelerating tests.



STANDARDS

The **864** meets the requirements of every known national and international standard or test method for Martindale fabric abrasion, pilling and sock testing. All of our Martindale testers are M&S approved.

We are accredited by UKAS (United Kingdom Accreditation Service) for calibrating Martindale Testers, and a UKAS Certificate of Calibration is available for the **864**.



PROGRAMMABLE USER INTERFACE

We also have a team of skilled electronics engineers, who keep abreast of the very latest instrument technologies.

As a result, the **864** incorporates a state-of-the-art, easy-to-read, touch screen graphic LCD.

The software is what you would expect from us – intuitive and flexible.

You can select from the following functions:

- ✳ One preset counter with up to eight totalisers
- ✳ Up to eight preset counters with up to eight totalisers
- ✳ Create groups of totalisers with independent preset counters
- ✳ Average automatically rubs from selected groups
- ✳ Programme up to eight sequential preset steps

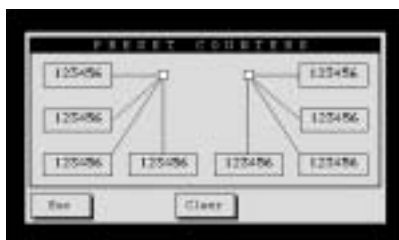
The clever software makes it easy to track different tests, running at the same time – for instance, you can control several groups of specimens, each group having different end points.

Whenever you come to the machine, you can see instantly the progress of the test(s) and the predicted finishing time(s). You can even programme an audible alert at the end of a test cycle.

With up to eight test positions, configured in two groups, the **864** is literally two-machines-in-one and is great value for money.



WELCOME SCREEN



LINKING INDIVIDUAL POSITIONS



NORMAL OPERATION

STATION KITS

The concept of *Upgrade Station Kits* was explained earlier - these allow you to upgrade your 864 from a basic four position machine to six or eight positions.

The choice is yours.
You can buy them now or later -
it doesn't matter.

You must also decide which tests you will carry out. There are three possibilities: fabric abrasion, fabric pilling (modified Martindale method) and sock abrasion.

Each type of test requires a different *Station Kit*. You need to decide how many of each you require. If your needs change, it's not a problem - all three types can be purchased subsequently.



ABRASION STATION KIT (9 OR 12 kPa WEIGHT)



PILLING STATION KIT



SOCK ABRASION STATION KIT (12 kPa WEIGHT)

HEALINK

The **Nu-Martindale 864** is a world-class product, fully supported by **HEALINK** - our world-leading Maintenance and Calibration Service - covering installation, operator training, regular maintenance, UKAS Calibration and on-line technical and applications support.



EXTENDED WARRANTY

We are so confident about the design and on-going reliability of the **Nu-Martindale 864** that we are extending our standard 12 months warranty to 18 months.

QUALITY ASSURED CONSUMABLES

To operate a Martindale, you need abrasive cloth, felt and foam. If you buy the best machine, it makes perfect sense to use the best consumables as well. Don't compromise. Your results are critical. Use our Quality Assured Consumables.

They are guaranteed *fit for purpose*, and all of our Martindale consumables are supplied with free of charge Test Reports, confirming their compliance with specifications and standards.

Coinciding with the launch of **Model 864**, we are also introducing convenient packages of pre-cut discs of abrasive cloth and foam - they are a little more expensive - but consider the convenience and the elimination of waste.



EASY ACCESS TO ABRADING TABLES

EXCITING STYLING

When we design, we think about the user, we think about ergonomics - no detail escapes our close scrutiny.

Take the position and angle of the block spanner - both carefully optimised for maximum user convenience.

We also think about style and colour. With its compact, modern styling, subtle shapes and colours, the **864** will enhance greatly the appearance of your laboratory and will certainly impress your customers!

VALUE FOR MONEY

Behind the scenes, we are investing in state-of-the-art machine tools and sheet metal punching and folding equipment, all of which is substantially improving our ability to reduce manufacturing costs.

These investments have impacted significantly on the pricing of **Nu-Martindale 864**, making the machine extremely price competitive and superb value for money.

NU-MARTINDALE 864 ABRASION & PILLING TESTER

How to Order

902-925	NU-MARTINDALE ABRASION AND PILLING TESTER MODEL 864 230/110V 50/60Hz Instrument is supplied as standard with 4 working test stations Upgrade Station Kits (maximum 2) must be ordered separately Each Upgrade Station Kit contains sufficient parts to upgrade 2 test stations All Station Kits for abrasion, pilling, or sock testing, must be ordered separately
ACCESSORIES - UPGRADE STATION KITS	
794-401	UPGRADE STATION KIT Comprising: 2 x Bearing Housings (for top plate) 2 x Quicklock Clamping Rings (for abrading tables)
ACCESSORIES - ABRASION BS EN ISO 12947-1	
794-402	ABRASION STATION KIT Comprising: 1 x Sample Holder 1 x 9 kPa Weight 1 x 12 kPa Weight Recommended minimum order quantity : 4
902-222	CIRCULAR CUTTER For the rapid and accurate preparation of 38mm diameter test specimens
766-200	HEAL'S GREY SCALE FOR ASSESSING CHANGE IN COLOUR For assessing change in colour of test specimens
788-761	LISSAJOUS FIGURE MARKER PEN For checking the Lissajous Figure according to BS EN ISO 12947-1
CONSUMABLES - ABRASION	
701-202	Pack (5 m) Abrasive Cloth
701-203	Roll (50 m) Abrasive Cloth
701-207	Pack (100) Pre-cut Discs of Abrasive Cloth (140mm diameter)
714-602	Pack (20) Non-Woven Felt Pads (140mm diameter)
714-612	Pack (20) Woven Felt Pads (140mm diameter)
786-256	Pack (1750) Pre-cut Discs of Foam (38 mm diameter)
ACCESSORIES - PILLING BS EN ISO 12945-2	
794-509	PILLING STATION KIT Comprising: 1 x Sample Holder 1 x Sample Retaining Ring 1 x Ring Weight Recommended minimum order quantity : 3
525-256	SPECIMEN MOUNTING MANDREL This is an essential accessory for mounting specimens for the pilling test
766-451	FULL SET EMPA PHOTOGRAPHIC STANDARDS This complete set consists of 3 x 4 mounted photographs for woven fabrics and 3 x 4 for knitted fabrics
CONSUMABLES - PILLING	
714-602	Pack (20) Non-Woven Felt Pads (140mm diameter)
714-612	Pack (20) Woven Felt Pads (140mm diameter)
714-601	Pack (20) Non-Woven Felt Pads (90mm diameter)
714-611	Pack (20) Woven Felt Pads (90mm diameter)
356-301	Pack (10) Sample Retaining Rings
ACCESSORIES - SOCK TESTING BS EN 13770-1	
794-505	SOCK ABRASION STATION KIT Comprising: 1 x Sock Sample Holder 1 x Pinned Ring 1 x Precision Ball Recommended minimum order quantity : 4
525-311	Block Spanner Adaptor (one per instrument required)
525-748	12 kPa Weight (one per Sock Abrasion Station Kit required)
CONSUMABLES - SOCK TESTING	
393-254	Pack (2) Spare Precision Ball
701-202	Pack (5 m) Abrasive Cloth
714-612	Pack (20) Woven Felt Pads (140mm diameter)
ACCESSORY - ABRASION & PILLING	
902-221	CIRCULAR CUTTER For the rapid and accurate preparation of 140mm diameter upper and lower specimens for the pilling test

technical data

	ABRASION	PILLING	SOCK ABRASION
SCOPE	Flat woven, knitted and certain non-woven fabrics	Woven and knitted fabrics (staple spun yarns)	All fibre compositions and all end uses
NO. OF SPECIMENS	Up to 8	Up to 8	Up to 8
EXPOSED AREA OF TEST SPECIMEN	6.45cm ²	64cm ²	3.14cm ²
WORKING PRESSURE ON TEST SPECIMEN	9 kPa (apparel) 12 kPa (upholstery)	2.5 cN/cm ² (knitteds) 6.5 cN/cm ² (wovens)	12 kPa
ROTATIONAL SPEED OF OUTER DRIVE UNITS	47.5 +/- 2.5rpm	47.5 +/- 2.5rpm <i>User selectable options: x 0.5 and x 1.5 standard speed</i>	47.5 +/- 2.5rpm
TOTAL STROKE OF DRIVE UNITS	60.5 +/- 0.5mm	24.0 +/- 0.5mm	60.5 +/- 0.5mm
PARALLELISM OF TOP PLATE TO ABRADING TABLE	0.05 mm	0.05 mm	0.05 mm
MAXIMUM CIRCUMFERENTIAL PARALLELISM OF SAMPLE HOLDERS TO ABRADING TABLES	0.05 mm	0.05 mm	0.05 mm
PHYSICAL DATA	Width: 890 mm Height: 352 mm	Depth: 606 mm Weight: 110 kg	



Healink offers a totally comprehensive, worldwide support programme; providing a full range of services designed to maximise the potential of your testing resources.

AGENT

We reserve the right to alter the specification or modify the appearance without notice



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