

Getting Started

In response to market demand Heals have designed and manufactured the Martindale 1300 Series of Abrasion and Pilling Testers. The 1300 Series comprises three (3) instruments:

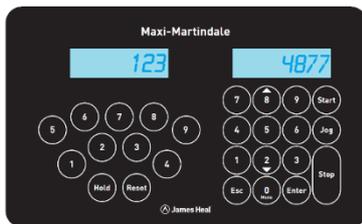
- Model 1309 Maxi-MartindaleNine (9) station instrument
- Model 1305 Midi-Martindale Five (5) station instrument
- Model 1302 Mini-Martindale Two (2) station instrument for special applications

Model 1309 has a hinged lift-up Top Plate for easy access to Abrading Tables.

This Quick Start Guide describes the use of Model 1309, Model 1305 and Model 1302 which are primarily designed for the testing of textiles, leather and related materials.

The Control Panel

The features on the 1309, 1305 and 1302 Control Panels are identical. The only difference being the number of stations shown in the mimic.



Model 1309
Maxi-Martindale
Control Panel



Model 1305
Midi-Martindale
Control Panel



Model 1302
Mini-Martindale
Control Panel

Using the Control Panel

The following gives brief instructions for setting the Preset Counter and using the Totalisers.

Setting the Preset Counter

The Preset is the number of rubs required for the current interval of testing, in this example 5000 rubs. You can enter a new Preset value at any time the instrument is not running.



Preset Counter:
Type in a number from
1 to 999,999



Press Escape if you make
a mistake



Starting and Stopping



After setting the Preset Counter to the required number of rubs, press the **Start** key. The instrument will run until the Preset value counts down to zero at which point the instrument will stop, ready for inspection.

If required, the **Jog** key is used to make small movements of the Top Plate while replacing felt, abrasive cloth, etc, therefore providing better access to the abrading stations. This removes the need to manually lift the Top Plate.



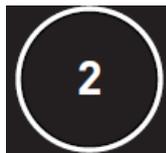
You can stop the instrument at any time by pressing the **Stop** key. The Emergency Stop button will also stop the instrument. The Emergency Stop button must be reset before the instrument will start again.

Using the Totalisers

This sections illustrates how to Select, Reset, Reset All and Hold the Totaliser Counters.

To select Totaliser #2

Press



Totaliser #2 is displayed

To Reset a Totaliser

Press



Totaliser #2 is Reset to zero

To Reset all Totalisers

Press and hold

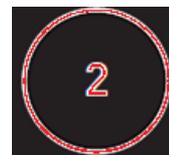


for 2 seconds



All Totalisers are Reset to zero

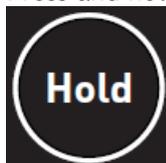
To switch a Totaliser On or Off



Station Key #2 changes colour: White = ON Red = OFF

To switch all Totalisers On

Press and hold



for 2 seconds



All Red Station Keys turn White (On)

Lifting the Top Plate on the Martindale 1309



The Martindale 1309 has an additional which is not present in the Martindale 902 and 905 - the Top Plate can be lifting on hinges allowing easy access to all nine stations.



Rests for front Top Plate

The Top Plate is in two parts and both parts can be removed.

The larger front part can be detached from the smaller back part, simply but carefully lift the front part and it will detach from the back part.

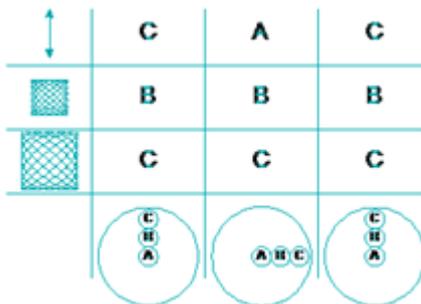


When detached, the front Top Plate can be stored by placing against the Rests



The smaller back part can be lifted away to allow access to the Drive Pins to change the motion of the Martindale.

Changing the Rubbing Motion



The instrument is supplied with the Drive Pegs in position C ready for abrasion testing. To change the motion, lift or remove the Top Plate and set the Drive Pegs as required: Straight Line, 24mm Lissajous or 60.5mm Lissajous.

Typically the 60.5mm Lissajous motion is used for abrasion tests and the 24mm Lissajous motion for pilling tests, however, there are some exceptions so check the test method.

It takes 16 rubs to make a complete Lissajous figure.