

H17 Shore Scale Hardness Testers

The Wallace H17 series of hardness testers allows accurate measurement of both soft and hard materials using multiple Shore Scales.

Wallace offer a full range including the H17A for testing standard rubber, H17O for soft rubber and medium density textiles, H17D for hard rubbers and plastics, and the H17M for thin/small rubber samples.

Principle of Operation

The Wallace range of H17 digital benchtop hardness testers are designed for measuring the hardness of various materials in Shore scale.

The robust 'C' frame design allows the operator easy access from front and sides to safely load and remove samples. The adjustable anti-vibration feet reduce the effect of external vibration.

By simply pressing the start button, the instrument functions automatically, giving accurate and repeatable results.

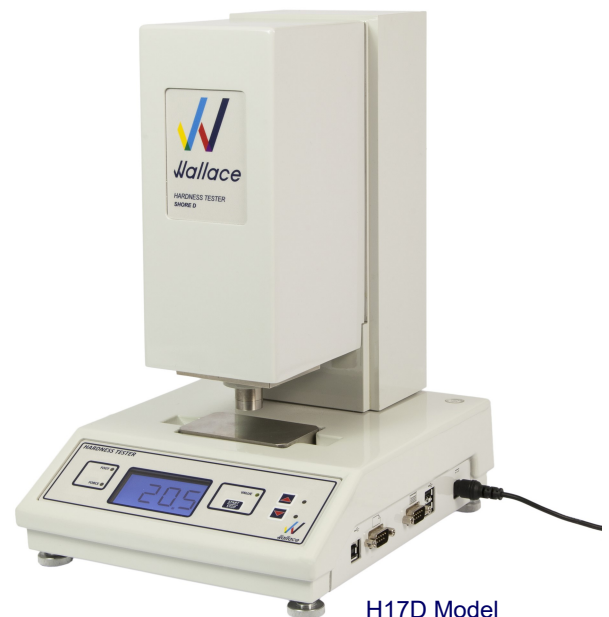
As minimal training is required, new operators soon become confident with the H17, achieving consistent readings from the outset.

Test Procedure

Buttons on the front panel easily adjust the measuring head up and down to suit the sample height. Once the start button is pressed, the foot descends to secure the sample. In line with the testing standards, once the foot contacts the sample the indentation depth is recorded, after a pre set dwell time, typically 3 seconds. At this point the instrument identifies the indenter position and the hardness value is automatically frozen and displayed clearly on the LCD screen. Data is easily captured in our traceability software.



H17A Model



H17D Model

H17 Shore Scale Hardness Testers

Specifications

	Model H17A	Model H17B	Model H17C	Model H17D
Dimensions (mm)	300(h) x 215(w) x 255(d)	300(h) x 215(w) x 255(d)	350(h) x 215(w) x 255(d)	350(h) x 215(w) x 255(d)
Weight	7.5kg	7.5kg	12kg	12kg
Resolution	0.1 units	0.1 units	0.1 units	0.1 units
Indenter Diameter & Shape	35° Truncated Cone (Frustum)	30° Cone	35° Truncated Cone (Frustum)	30° Cone
Indenter Radius	Flat	0.1mm	Flat	0.1mm
Max, Indention Depth	2.50mm	2.50mm	2.50mm	2.50mm
Measurement Range	20 - 90 A	Above 90 A Below 20 D	Above 90 B Below 20 D	Above 90 A
Force Method	Spring	Spring	Spring	Spring
Foot Force	1kg	1kg	5kg	5kg
Spring Force	8.05N	8.05N	44.45N	44.45N
Force Duration	1 or 3 seconds	1 or 3 seconds	1 or 3 seconds	1 or 3 seconds
Sample Thickness	>6mm	>6mm	>6mm	>6mm
Operating Temperature	5 to 40°C; Altitude 2000m maximum			
Humidity Range	10 to 80% RH non-condensing			
Output of Test Results to PC/Printer/Datalogger	USB connection (RS232 protocol)			

	Model H17DO	Model H17M	Model H17O	Model H17OO
Dimensions (mm)	350(h) x 215(w) x 255(d)	300(h) x 215(w) x 255(d)	300(h) x 215(w) x 255(d)	300(h) x 215(w) x 255(d)
Weight	12kg	6.5kg	7.5 kg	6.5kg
Resolution	0.1 units	0.1 units	0.1 units	0.1 units
Indenter Diameter & Shape	Ø 2.38mm ½ Ball	30° Cone	Ø 2.38mm ½ Ball	Ø 2.38mm ½ Ball
Indenter Radius	1.19mm	0.1mm	1.19mm	1.19mm
Max, Indention Depth	2.50mm	1.25mm	2.50mm	2.50mm
Measurement Range	Above 90 C Below 20 D	20 - 85 A	Below 20 DO	Below 20 O
Force Method	Spring	Spring	Spring	Spring
Foot Force	5kg	0.25kg	1kg	0.4kg
Indenting Force	44.45N	0.765N	8.05N	1.111N
Force Duration	1 or 3 seconds	1 or 3 seconds	1 or 3 seconds	1 or 3 seconds
Sample Thickness	>6mm	>1.5mm	>6mm	>6mm
Operating Temperature	5 to 40°C; Altitude 2000m maximum			
Humidity Range	10 to 80% RH non-condensing			
Output of Test Results to PC/Printer/Datalogger	USB connection (RS232 protocol)			

Standards

ISO 48-4, ASTM D2240, JIS 6301

