NEW

elcometer®
inspection equipment

Elcometer 3045
Pendulum Hardness Tester

Reliable & **repeatable** measurement of **coating hardness** using either the **Persoz** or **König pendulum** method

- **Fully automatic test for accurate & repeatable readings**
- **Automatic calibration - adjusting the unit to meet the specified standards**
- **Sturdy and robust design to ensure consistent results**

Elcometer 3045

Pendulum Hardness Tester

The time taken for a pendulum resting on the test coating to reduce its oscillation from one set point to another can be used to calculate the hardness of the coating.

- Accurate, repeatable and reproducible coating hardness measurements
- Sturdy, dustproof and robust design ensures consistent results
- Fully automated test - position the sample, close the door and press start
- Menu driven operation, in multiple languages
- Batch memory stores all test data for output to a PC via the supplied ElcoMaster® software

- Rigid perspex door provides easy access for sample positioning
- Automated calibration ensures pendulum operates precisely within specified limits
- Infrared optical measurement of oscillations
- Internal storage for the calibration tile and pendulum
- Adjustable feet and dual axis bubble-level indicator ensures test is accurate

STANDARDS:
ASTM D 4366, BS 3900 E5, DIN 53157, ISO 1522, NF T30-016

ElcoMaster® data management software

2 YEAR* WARRANTY

* The Elcometer 3045 Pendulum Hardness Tester is supplied with a one year warranty against manufacturing defects, which can be extended to two years via www.elcometer.com

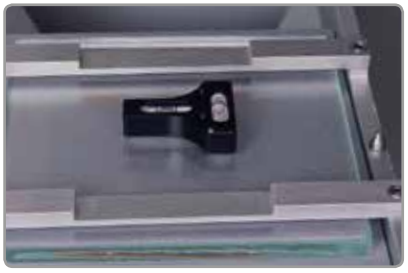
Pendulum Hardness Tester

Elcometer 3045

The Elcometer 3045 Pendulum Hardness Tester is equipped with a number of unique features designed specifically to maximise repeatability and reproducibility of the pendulum hardness test method, including:

Maximum sample size
200 x 110 x 14mm (7.85 x 4.33 x 0.55”)

Infrared optical measurement of oscillations



Dual axis bubble-level indicator ensures accuracy

Automated Calibration

Utilising the supplied glass calibration tile the Elcometer 3045 performs a full calibration routine and automatically adjusts the unit to meet the specified standard.

Fully Automated Test

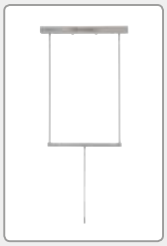
Once the sample and pendulum are in position and the door closed, pressing the Start button:

- Lifts the sample on to the balls of the selected pendulum
- Moves the pendulum to the correct Start position
- Automatically releases the pendulum, counting the number of oscillations until the movement has decayed and stores them into the batch memory
- Returns the sample and pendulum to the start position ready for the next test in the set of three

Output to the PC

Each set of results can be stored and transferred to the PC for further analysis and report generation.

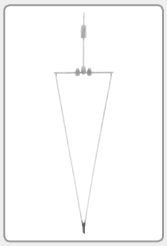
The hardness of a coating is measured by the number of oscillations within the specified limits of amplitude. The Persoz test measures the time taken for the amplitude of oscillations to decrease from 12° to 4°, and the König test measures the decrease from 6° to 3°. So the softer the coating, the higher the dampening on the balls, the faster the reduction in amplitude of swing, therefore the less cycles of oscillation.



Persoz Method

Stainless Steel pendulum, weight 500g (17.6oz), fitted with 2 balls of 8mm (0.3”) diameter

Oscillation Period:	1 second ±0.01 seconds
Deflections:	12° to 4°
Damping Time on Glass:	430 seconds ±15 seconds

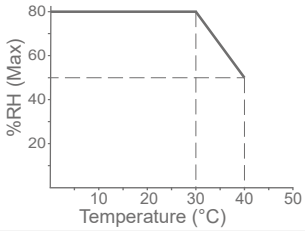


König Method

Stainless Steel pendulum, weight 200g (7.05oz), fitted with 2 balls of 5mm (0.2”) diameter

Oscillation Period:	1.4 seconds ±0.02 seconds
Deflections:	6° to 3°
Damping Time on Glass:	250 seconds ±10 seconds

Technical Specification

Part Number	Description		Certificate
K3045M001	Elcometer 3045 Persoz & König Pendulum Hardness Tester		●
Pendulum	Persoz Pendulum*	König Pendulum*	
Part Number	KT3045P001	KT3045P002	●
Oscillation Period	1 second ±0.01 seconds	1.4 seconds ±0.02 seconds	
Measurement Deflection	12° to 4°	6° to 3°	
Damping Time on Glass	430 seconds ±15 seconds	250 seconds ±10 seconds	
Number of Oscillations	430 ±15 oscillations	172 to 185 oscillations	
Maximum Specimen Panel Dimensions	200 x 110 x 14mm (7.85 x 4.33 x 0.55")	Dimensions	500 x 330 x 760mm (19.7 x 13 x 29.9")
Relative Humidity (%RH) Operating Range		Operating Temperature	5°C to 40°C (41°F to 104°F)
		Instrument Weight	17kg (37.5lb)
		Standards	ASTM D 4366, BS 3900 E5, DIN 53157, ISO 1522, NF T30-016
Packing List	Elcometer 3045 Persoz & König Pendulum Tester, Glass Test Piece, Dual Axis Bubble Level, 20 x Glass Cleaning Wipes, Cleaning Cloth, 3 x Pin Release Wire, 2 x Arm Slide Wear Plate, Spare Fuse (315mA), Mains Leads: UK, EUR & US, RS232 Cable, ElcoMaster® Software, Test Certificate, User Guide (please order Pendulum separately)		

Accessories

KT3045P009	Glass Test Piece
KT3045P003	Dual Axis Bubble Level
KT3045P004	Arm Slide Wear Plate, Pack of 2
KT3045P005	Pin Release Wire, Pack of 3
KT3045P006	Glass Cleaning Wipes, Pack of 20

● Test certificate supplied as standard *Please order Pendulum separately

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