Vision on quality
www.tqc.eu

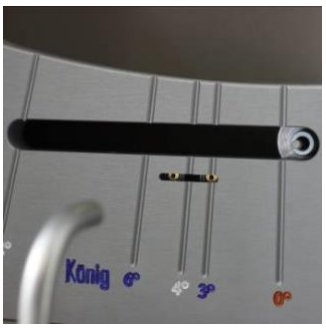
TQC PENDULUM HARDNESS TESTER
SP0500

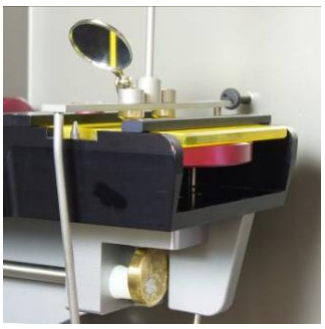
DATASHEET

PRODUCT DESCRIPTION

The pendulum hardness test is based on the principle that the amplitude of oscillation of a pendulum touching a surface decreases more rapidly the softer the surface.

Two types of Pendulum are available. Both are based upon the same principle but differ in respect of dimensions, period and amplitude of oscillation. The type of pendulum that is supplied depends on what has been ordered.





BUSINESS

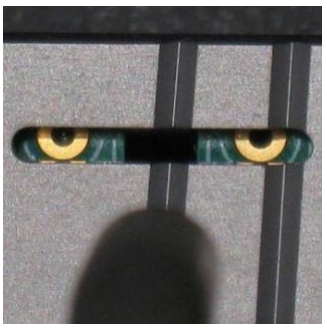
Laboratory, Coating Industry, Paint Industry, Automotive Industry

STANDARDS

ISO 1522, ASTM D4366, NBN T22-105, BS3900 E5. Look up the appropriate standard for a correct execution of the test.

FEATURES

The Pendulum hardness tester is suitable for both Persoz and König Tests. Switching between the methods only takes a push of a button.

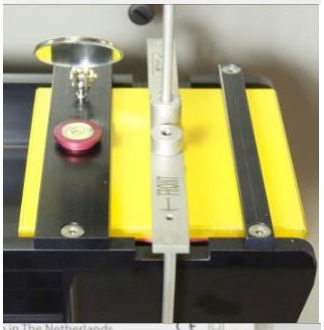


The automated electronic counting mechanism is not affected by reflections from the surrounding area.

TQC B.V.
Nijverheidscentrum 14
2761 JP Zevenhuizen
The Netherlands
T 31(0)180 - 63 13 44
F 31(0)180 - 63 29 17
E info@tqc.eu
W www.tqc.eu

Easy menu-driven interface with jog-dial.

The gas-spring supported transparent draft cover allows easy access to all parts.



The spirit level is located on the test specimen. Once leveled further calibration is not required.

Visual and acoustic signal when test is performed.

Design 'Solid Supports' to level the instrument.

Integrated storage of glass plate and pendulum.

The pendulum is positioned fully automatically by means of a stepper motor.
The release of the pendulum is automated through an electro-magnetic system. This eliminates human errors.

Menu-driven calibration menu eases both Persoz- and König calibration.

ART NO.

SP0500	Pendulum Tester (base device) , calibration certificate included

TQC B.V.
Nijverheidscentrum 14
2761 JP Zevenhuizen
The Netherlands
T 31(0)180 - 63 13 44
F 31(0)180 - 63 29 17
E info@tqc.eu
W www.tqc.eu

SP0505	Konig Pendulum, calibration certificate included
SP0510	Persoz Pendulum, calibration certificate included
VF2063	Glass plate panel
	Power Cord (Continental European plug). Other types of power cord has to be obtained locally. The device uses either 230V, or 115V

SPECIFICATIONS

SP0500 - Base Instrument

Dimensions (H x W x D)	740 x 430 x 430 mm (closed cover); 960 x 430 x 650 mm (open cover)
Weigth	26000 grams
Material	Stainless steel (front plate and small parts) Powdercoated steel (housing) Anodised aluminum (left panel) Perspex (draft cover)
Power supply	230 V / 115 V
Thickness glassplate	6 mm

	Persoz method – SP0510 	**König method – SP0505** 
Product description	Stainless steel pendulum	Stainless steel pendulum with adjustable weight
Weight	500 grams	200 grams
Pivot balls	2, made of tungsten carbide, diameter 8 mm	2, made of tungsten carbide, diameter 5 mm
Distance between pivot balls	50 mm	30 mm
Oscillation period	1 second	1.4 seconds
Deflections	From 12° to 4°	From 6° to 3°
Damping time (on glass)	Minimum 430 +/- 15 seconds	250 +/- 10 seconds
Counting method	Oscillations = time	Oscillations and time
Number of oscillations		179 +/- 7
Min. Sample dimensions	50 x 71 x * mm	50 x 55 x * mm
Max. sample dimensions	105 x 200 x 11 mm	105 x 200 x 8.3 mm

*The minimal thickness is not defined. The sample needs to be rigid! For thin samples a fill plate is required to allow the sample to be in contact with the measurement plain.

TQC B.V.
Nijverheidscentrum 14
2761 JP Zevenhuizen
The Netherlands
T 31(0)180 - 63 13 44
F 31(0)180 - 63 29 17
E info@tqc.eu
W www.tqc.eu

DELIVERY

- The instrument is delivered in a special designed hardboard box.
- To open the box remove the tape and lift the upper side of the box as shown on the picture.
- The weight of the shipment is 26 kg.

TQC B.V.
Nijverheidscentrum 14
2761 JP Zevenhuizen
The Netherlands
T 31(0)180 - 63 13 44
F 31(0)180 - 63 29 17
E info@tqc.eu
W www.tqc.eu

SPECIAL CARE

- Though robust in design, this instrument is precision-machined. Never drop it or knock it over
- Always clean the instrument after use.
- Clean the instrument using a soft dry cloth. Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- Do not use compressed air to clean the instrument.
- Always keep the instrument in its case when not in use.
- We recommend annual calibration

SAFETY PRECAUTIONS

- Always make sure the instrument is connected to an earthed electric socket.
- Always make sure the instrument's power is turned off while adjusting any electric component
- Make sure the SP0500 is positioned on a working table/bench that is suitable for this kind of instruments, and that it provides enough space (above and behind the instrument, see spec.'s) to open the draft cover.
- Use a soft dry cloth to clean the instrument. Never use abrasives or abrasive tools.

DISCLAIMER

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.

.

TQC B.V.
Nijverheidscentrum 14
2761 JP Zevenhuizen
The Netherlands
T 31(0)180 - 63 13 44
F 31(0)180 - 63 29 17
E info@tqc.eu
W www.tqc.eu