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SER VICE

## **Pendulum Hardness Tester**

A pendulum resting on a coating surface is set into oscillation and the time for the oscillation amplitude to decrease by an amount specified in this International Standard is measured. The shorter the damping time, the lower the hardness.

Two test procedures are considered in some detail, namely those of König and Persoz. (The Persoz and König methods differ by the period and amplitude of the oscillation. The Persoz test measures the time taken for the amplitude of oscillation to decrease from  $12^{\circ}$  to  $4^{\circ}$ ; the König from  $6^{\circ}$  to  $3^{\circ}$ .)

The instruments embody the same principle that the amplitude of oscillation of a pendulum touching a surface decreases more rapidly the softer the surface but differ in respect of dimensions, period and amplitude of oscillation.

**BGD 509/S Pendulum Hardness Tester** is the newest product which can be used in accordance with the following National and International Standards: ISO 1522, ASTM D4366, BS 3900-E5, DIN 53157, NBN T22-105, NF T30-016.

It's a simple to use instrument and can be supplied in one of three model types: Persoz, König, and Persoz & König combined

## **Features**

• Large capacitive touch screen displays various testing parameters, environment temperature and humidity, with rich and intuitive content.

• Start automatically the test with one-button. automatically move the pendulum to the release position, automatically clamp the test panels, and automatically complete the test. High degree of automation, simpler operation, completely eliminating errors caused by human operation

• Uniquely designed automatic lifting working platform, which can automatically clamp the test panel in 3 seconds and continuously provide at least 25N of clamping force, with stable platform without shaking when the pendulum swings.

High-precision pendulum machined with precision mechanical processing, strong stability, ensuring the reproducibility and comparability of test data, comparable to similar imported products.

Overall lift-up organic glass door cover, convenient operation, greatly increasing the operation space, while reducing data deviations caused by air circulation. In addition, the unidirectional resistance design prevents the instrument from being impacted when the door cover closes instantly.

- Two test methods can be switched: K pendulum (König) or P pendulum (Persoz).
- Using an electromagnet to release the pendulum for more precise test results.

◆ Built-in high-precision horizontal inclinometer with an accuracy of 0.05°, allowing customers to directly observe the horizontal deviation on the touch screen for easy and quick adjustment.

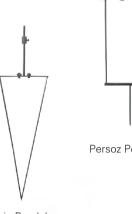
◆ Automatically count and display the timing and counting of the test in real-time, automatically stop the test when the deviation reaches as low as 3° (König) or 4° (Persoz), while calculating the test period.

- View historical test data for easy data comparison by customers.
- Suitable for test plates of different thicknesses ranging from 0.1mm to 5.5mm
- Comes with a calibration certificate.



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## **Pendulum Hardness Tester**





König Pendulum



## Main Technical Parameters

Ordering Information → Technical Item ↓	BGD 509S/K	BGD 509S/P	BGD 509S/K+P
Pendulum	König	Persoz	König+Persoz
Weight	200g ± 0.2	500g ± 0.1	200g ± 0.2/500g ± 0.1
Ball Diameter	5mm ( 0.2in )	8mm ( 0.3in )	5mm/8mm
Deflection Start	6°	12°	6° /12°
Deflection End	3°	4°	3° /4°
Period of Oscillation	1.4s	1s	1.4s/1s
Damping Time on Glass	250 ± 10s	430 ± 10s	250 ± 10s/430 ± 10s
Overall Size	425mm × 400mm × 810mm (L × W × H)		
Net Weigh	21.5 KG		