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## **Pendulum Hardness Testers: König & Persoz**

### **BGD 509S Series**

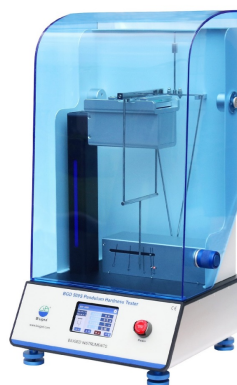
#### **Product Description**

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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° to 4°; the König from 6° to 3°. 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.

Our 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 and König combined.



#### **Standards**

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- ISO 1522
- ASTM D4366
- BS 3900-E5
- DIN 53157
- NBN T22-105
- NF T30-016

### **Technical Specification**

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- Large capacitive touch screen displays various testing parameters, environment temperature, and humidity, with rich and intuitive content
- One-button automatic test start, moving the pendulum to the release position, clamping test panels, and completing the test automatically. 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. The unidirectional resistance design prevents the instrument from being impacted when the door cover closes instantly
- Two switchable test methods: K pendulum (König) or P pendulum (Persoz)
- Electromagnet used 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
- Automatic counting and real-time display of test timing and counting, automatically stopping the test when the deviation reaches as low as 3° (König) or 4° (Persoz), while calculating the test period
- Historical test data viewing 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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#### **Main Technical Parameters**

Model	BGD 509S/K	BGD 509S/P	BGD 509S/K+P
Weight	200g±0.2	500g±0.1	200g±0.2 / 500g±0.1
Ball Diameter	5mm (0.2")	8mm (0.3")	5mm (0.2") / 8mm (0.3")
Deflection Start	6°	12°	6° / 12°
Deflection End	3°	4°	3° / 4°
Period of Oscillation	1.4 s	1 s	1.4s / 1s
Damping Time on Glass	250±10s	430±10s	250±10s / 430±10s
Overall Size	425 mm x 400mm x 810mm (LxWxH)		
Net Weight	21.5 KG		

#### **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