

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

### **BGD 509 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 Pendulum Hardness Tester 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.

We offer three different model types: Persoz (BGD 509/P), König (BGD 509/K), and Persoz and König combined (BGD 509/K+P).



#### **Standards**

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- ISO 1522 (which supersedes ASTM D4355)
- ASTM D4366
- BS 3900-E5
- DIN 53157
- NBN T22-105
- NF T30-016

### **Technical Specification**

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- Automatic counter range: 0–999 times
- High precision machined pendulums are stable, ensuring repeatable and comparable testing results
- Can perform two test procedures: König or Persoz test
- Suitable for different thickness substrates from 0.3mm to 6.0mm
- User-friendly LCD operator interface
- Release pendulum with shutter release for more accurate test results
- Specially designed lifting platform can fix specimens easily, and the platform remains stable and shake-free when the pendulum is oscillating
- Spirit levels produced specially have high precision, allowing customers to adjust the level precisely
- Automatically record the time or times for the amplitude of swing to decrease from one angle to another and stop testing automatically
- Record the data with two light-sensitive sensors
- Can select record mode freely: Timing mode or counting mode
- Perspex cover reduces the effects of airflow on final results
- Comes with calibration certificate

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#### **Main Technical Parameters**

Model	BGD 509/K	BGD 509/P	BGD 509/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°
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	485 mm x 400mm x 770mm (LxWxH)		
Net Weight	21.5 KG		

#### **Disclaimer**

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