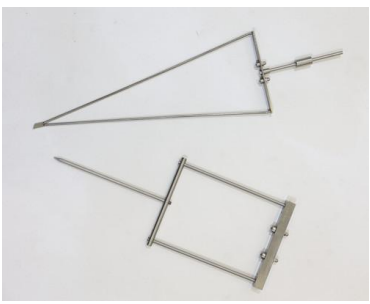
PENDULUM HARDNESS TESTER

The Pendulum Hardness Test is based on the principle that the amplitude of apendulums oscillation will decrease more quickly when supported on a softersurface. There are several hardness tests which relate the damping of an oscillatingmotion to hardness of surfaces, and BY-II meets the requirements of the Koenig andPersoz tests specified in International Standards.

The Persoz test measures the time taken for the amplitude of a pendulum to decrease from 12° to 4°. The Koenig test measures the time taken from 6° to 3°. The times taken in Persoz tests are approximately twice those in the Koenig tests and so the Persoz has a greater degree of discrimination, the Persoz does however tend to skid on hardersurfaces.

The essential part of this apparatus is the pendulum. The Konig and Persoz specifications require differing pendulums. For Konig the pendulum is triangular with an adjustable counterpoise. The assembly swings supported on two ball bearings of 5mm diameter which rest on the test surface. The counterpoise is used to adjust theperiod of oscillation to the specified 1.4 seconds.



The Persoz pendulum is a square frame with a pointer. Itis supported on ball bearings of 8mm diameter and theoverall weight is greater than the Konig pendulum.

Standards

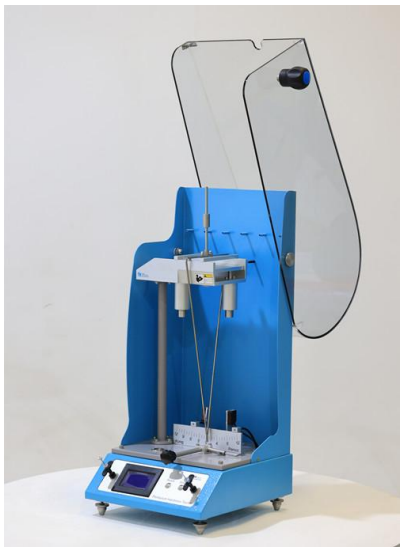
ISO 1522, ASTM D4366, BS3900:e5:1973, DIN 53157

Technical Specification

Pendulum Type	Konig	Persoz	Konig+Persoz
Deflection Start	6°	12°	6° / 12°
Deflection End	3°	4°	3° / 4°
Period of Oscillation	1.4±0.02sec	1±0.01sec	1.4±0.02sec / 1±0.01sec
Mass Of Pendulum	200g	500g	200g / 500g
Ball diameter	5mm	8mm	5mm / 8mm
Damping Time on Glass	250±10sec	430±15sec	250±10sec / 430±15sec
Frequency of Swing	172 - 185	430±15	172~185 / 430±15
Power	AC220V 50Hz		
Dimensions	380×340×790mm		

Ordering information

Product Ref	Description
BY-II	Pendulum Hardness Tester



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