P2 Williams Plastimeter



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- Simple, robust instrument
- Easy to use
- Measurements to 0.01mm
- Chambers for testing at elevated temperatures

The apparatus is widely used for determining the plasticity and recovery of silicones and unvulcanised rubber compounds.

The test consists of compressing a sample of

2.0cm3 volume between two parallel plates and measuring the compressed height after a specified period.

The plastimeter features two platens, a lower platen that forms the base of the instrument, and an upper platen, which can be conveniently raised and lowered by a handle. The test commences when the upper platen is gently lowered onto the sample with a force of 49N. The sample height is taken at regular intervals, commonly 3 or 10 minutes using a dial gauge measuring in 0.01mm graduations.

At the end of the test the result is converted to a Williams Plasticity Number by multiplying the sample height by 100.

Elevated Temperatures

For measurements at elevated temperatures (normally 70°C or 100°C) the sample is heated in an oven for 15 minutes before undergoing the plasticity test. For this purpose, under model ref. P2/1, Wallace offer a Plastimeter complete with Laboratory Chamber – suitable for temperatures up to 150°C.

Recovery Test

In the recovery test, the height of the sample is measured after it has been removed from the plastimeter and allowed to recover for a specified period.

The Wallace Bench Thickness Gauge (ref. S4) must be used for such measurements, as the gauge specification is tightly controlled by the relevant standard.

Accessories

S4/14 Bench thickness Gauge P2/10 Rotary sample cutter 16mm diameter

Specifications	P2 Williams Plastimeter
Weight	11 Kg
Dimensions	150(w) x 150 x (d) x 410mm (h)
Compression Force	49.00 ±0.05 N
Sample Volume	2.00 ±0.02cm ³
Standards	ASTM D926