

Shore Durometer HPSA



Durometer according to Shore for determining the indentation hardness of soft rubber, elastomers, natural rubber, polyester, soft PVC, leather, etc.

Shore A hardness tester according DIN 53505, ISO 7619, ISO 868 and ASTM D 2240

Durometer with large seating for accurate measuring

Special features

- » The spring loaded outer ring assures a constant measuring pressure and eliminates false readings due to difference between operators
- » Flat bottom prevent tilting and improves the measuring accuracy
- » Working face 18 mm \varnothing
- » Adjustable Min./Max. indicator marks to highlight the working range of the hardness tester
- » Optionally available: Calibration certificate with calibration report

Standard features

- » Easy to use
- » High repeatability
- » Application range 10 - 90 Shore A units
- » Certificate of Compliance with the order 2.1 according EN 10204 is included

Operation

For measuring the hardness, the spring-loaded outer ring of the housing is pressed downwards until the edge of the ring meets the colored marking on the housing. This ensures a constant pressure and prevents measuring errors.





The principle used to measure shore hardness is based on measuring the resistance force of the penetration of a pin into the test material under a known spring load. The amount of penetration is converted to hardness reading on a scale with 100 shore units.

As the depth of indentation is max. 2.5 mm the test material has to have a minimum thickness of 6 mm. If thickness is less stack some samples till you reach the required thickness.

Technical specifications

- » Indentor: Cone 35°, Ø 1.25 mm
- » Depth of indentation: 0 – 2.5 mm
- » Typical applications: Soft rubber, elastomers, natural rubber, soft PVC, leather, etc.
- » Accuracy: ± 1 hardness unit
- » Application range: 10 – 90 Shore A
- » Standard: DIN 53505, ISO 7619, ISO 868, ASTM D 2240
- » Measuring spring force: 0.55 – 8.065 N
- » Test pressure*: Approx. 12.5 N
- » Display range: 0 – 100 Shore A units
- » Scale diameter: 54 mm
- » Working face: 18 mm Ø
- » Base plate: 45 mm Ø
- » Weight, net (gross): Approx. 300 g (500 g)
- » Dimensions: 50 x 58 x 114 mm (LxWxH)

Indentor

Cone	Tapered pin	U-grooved	Ball
 Shore A Shore C	 Shore B Shore D	 Shore O Shore DO	 Shore AO