Hardness tester

By the help of the hardness tester for padder rolls of shore A the hardness of a material can be identified. It is especially used in the textile industry for plastic or rubber rolls. The uniform hardness of the rolls surface is decisive as it significantly determines pickup, the squeezing- or calender effect.

Picture 1 – hardness tester shore A

Application

Hardness after shore is the resistance against the infiltration of a body of certain geometrical shape in a sample under defined pressure. The penetration depth is measured and shown on a 100-part shore-scale. As the penetrating body reclines a way of max. 2.5 mm the sample body must have at least a thickness of 6 mm. If appropriate more samples have to be put on top of each other to achieve minimum thickness.

For measurement the springy stored outer ring is pushed to the bottom as long as the edge of the ring equals a colored marking at the shell. Thereby a uniform pressure onto the surface of the sample is generated and measuring errors are avoided.

Characteristics

- Generation of a constant pressure through springy stored outer ring for the minimization of measurement errors that can be caused by different users
- Great surface prevents tilting and improves the measurement accuracy
- Hardness tester with variably adjustable extreme value markers (min, max) to emphasize the working area resp. tolerance area

Hardness tester	Ord.No. ZB-SHP01e
penetration body	trunkated cone 35° Ø 1.25 mm
penetration depth	0 - 2.5 mm
application	rubber, elastomers, soft-PVC etc.
precision	± 1 hardness units
measuring range	10 – 90° Shore A units - middle hard rolls 70-75°, soft rolls 50-60°
norms	DIN 53505, ISO 7619, ISO 868, ASTM D 2240
measuring spring force	0.55 - 8.065 N
jacking force	ca. 12.5 N
indicating range	0 - 100 shore A units
sale diameter	54 mm
measurement tray	18 mm Ø
shell	44.5 mm Ø
weight	about 500 g
dimensions	50 x 58 x 110 mm (LxWxH)
optionally	calibration certificate
package item	1 piece

Orders at:

Flexuma | GmbH
Rathausgasse 4, D-89522 Heidenheim
p: +49 7321 95 58 81
f: +49 7321 95 58 79
http://www.flexuma.de | info@flexuma.de