

# Material Testing Devices Hardness Tester HGIB Shore A and Shore D

for hardness tests according to  
Shore A and Shore D.



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# Hardness Tester

## HGiB Shore A und D

### Applicability

This pocket instrument is for quick, not stationary hardness tests according to Shore A on elastomers, natural rubber products, cast resins, polyester, plasticized PVC, neoprene, leather and similar materials and according to Shore D on hard rubber, acrylic glass, hard plastic, thermoplastic press rolls, vinyl plates, resopal and so on. With this hardness testing method, a steel needle in form of a truncated cone for Shore A and in form of a point for Shore D is pressed into the testing material. The amount of the penetrating resistance is indicated at a scale.

This method is standardized according to DIN 53505, ASTM D 2240, Part 20 and BS 903.

### Function

In the measuring instrument there is a testing needle on which a spring power has an effect. The load will expand from 280.5 to 806.5 cN (Shore A) and from 1335 to 4450 cN (Shore D) respectively if the needle initially protruding by 2.54 mm is pressed back by this amount.

Duringt his test the instrument is shock-free pressed by the prescribed pressing power against the test specimen until the supporting surface lies completely.

After about 3 seconds the hardness can be read.



### Technical Data

#### Shore A

Testing Body: truncated cone 35  
 Measuring Range: 30 .... 100 Shore A  
 Contact Pressure: about 12.5 N  
 Spring Power: 280.5 .... 806.5 cN  
 Limit of Error: +/- 1 Shore A

#### Shore D

Testing Body: point 30  
 Measuring Range: 30 .... 100 Shore D  
 Contact Pressure: about 50 N  
 Spring Power: 1335 .... 4450 cN  
 Limit of Error: +/- 1 Shore D

Graduation Dial Value: 1 Shore hardness unit  
 Varnish: hammer blow varnish  
 Dimension: 100 x 70 x 20 mm  
 Weight incl. case: about 300 g

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