



# Affri 3001 Shore A Hardness Tester

Can work in accordance with:  
ASTM 2240, ISO R.868, DIN 53505, JIS K7215



This portable hardness tester, tests by using a point which penetrates the material under spring pressure, with variable force depending on the model. A direct reading is displayed on the dial which is graduated from 0 to 100 Shore Hardness Units.

## Features

In compliance with **ISO R.868, ASTM 2240, DIN 53505, JIS K7215 specs.**

Slim measuring nose to ensure exact measurement, as well as on small components. Suitable for tires, soft flexible rubber, plastic, PVC, polyester, neoprene, leather, Thiokol & Nitrile rubbers, medical components, paper, sponge, etc. using **Shore A, B, C, D, O, OO, E, M, 000, 000-S** scales.

Optional clamping system to apply a constant and vertical pressure on all test pieces, also on curved surfaces assuring accurate results. The tester can be installed on the relative bench support for laboratory purposes

**With tungsten tip which outlasts hardened steel up to ten times**

### Analog

3001 Shore A	Soft, flexible rubber, plastic, PVC, polyester, neoprene, leather, Thiokol & Nitrile rubbers, tyres
3011 Shore B	Same as A scale for high values
3004 Shore C	Same as D scale for low values
3002 Shore D	Scale for hard and rigid surfaces synthetic materials, acrylics, plexiglass,
3010 Shore DO	Same as B and C
3009 Shore O	Same as A scale for low values
3008 Shore OO	For sponge, natural rubber, silicone
3013 Shore E	ASTM D 2240 - 02 a
3014 Shore M	ASTM D 2240 - 02 a
3015 Shore 000	ASTM D 2240 - 02 a
3016 Shore 000-S	ASTM D 2240 - 02 a

## Technical Specifications

### SHORE (ISO 7619 / ASTM E2240)

Shore A	ASTM E2240 / ISO 7619	Frustum 35°	Soft surfaces, flexible rubber, natural rubber, plastic, PVC, polyester, neoprene, leather, nitrile rubbers, tyres, etc
Shore D	ASTM E2240 / ISO 7619	Cone 30°	Hard and rigid surfaces, ceramic and composites, acrylics, plexiglass, print rolls, cellulose, acetates, nylon, etc
Shore B	ASTM E2240	Cone 30°	Medium values. As A scale for higher values.
Shore C	ASTM E2240	Frustum 35°	Medium-hard values. As D scale for lower values.
Shore DO	ASTM E2240	Ball 1.2 mm	From medium-hard to hard values. As B and C.
Shore O	ASTM E2240	Ball 1.2 mm	Low values and very flexible materials. As A scale for low values.
Shore OO	ASTM E2240	Ball 1.2 mm	Very soft rubbers, sponges, expanded rubber, foam rubber, natural rubber and silicon
Shore E	ASTM E2240	Ball 2.5 mm	Very soft rubbers, natural rubber, elastomers, casting resin, soft PVC, leather, etc.
Shore M	ASTM E2240	Cone 30°	As A scale, for thin specimens and elastomer materials.
Shore 000	ASTM E2240	Ball 6.35 mm	Ultra-soft rubbers, sponges, expanded rubber, foam rubber, natural rubber and silicon.
Shore 000-S	ASTM E2240	Ball 10.7 mm	Ultra-soft rubbers, viscoelastic polymers.

	soft	-----	hard	
<b>A</b>	10 20 30 40 50 60 70 80 90 100			
<b>B</b>		10 20 30 40 50 60 70 80 90 100		
<b>C</b>			10 20 30 40 50 60 70 80 90 100	
<b>D</b>				10 20 30 40 50 60 70 80 90 100
<b>DO</b>		10 20 30 40 50 60 70 80 90 100		
<b>O</b>			10 20 30 40 50 60 70 80 90 100	
<b>OO</b>	10 20 30 40 50 60 70 80 90 100			

Indicative range for each scale (this cannot be used as a conversion reference)

## Packing List

Affri Shore "A"

Calibration Tester – to Check Accuracy to ISO

Calibration Certificate

Conformance Certificate to **ISO R.868**

Soft Plastic Carry Pouch

