

# Hardness of Rubber: Durometer

## DUROMETER... THE MEASURE OF THE HARDNESS OF RUBBER COMPOUNDS

The Durometer is the International Standard Instrument used to measure the hardness of rubber or rubber-like materials. Durometers measure hardness by the penetration of an indenter into the rubber sample. The calibrated reading is expressed in a number value. The hardness values are always expressed in terms of plus or minus (+/-) five points (example: 60+/-5 Durometer).

It is important to note that when testing hardness of a rubber sample, the material should not be less than 1/4" thick (.250").

DUROMETER TYPE (SHORE)	APPLICABLE TO THESE TYPES OF MATERIALS
Type A (Shore)	Soft rubber & plastics
Type D (Shore)	Hard rubber & plastics
Type 00 (Shore)	Sponge & foam

## APPROXIMATE DUROMETER HARDNESS COMPARISONS

The values listed are approximate and are not to be used as an exact equivalent. This information is provided as a selection guide only.

Here are a few examples of hardness based on Durometer scale:

- Rubber Band                    30 Shore A
- Inner Tube                      55 Shore A
- Rubber Tire                    65 Shore A
- Rubber Shoe Heel            70 Shore A
- Typewriter Platen            95 Shore A

DUROMETER TYPE		
SHORE A	SHORE D	SHORE 00
100	58	
95	46	
90	39	
85	33	
80	29	98
75	25	97
70	22	95
65	19	94
60	16	93
55	14	91
50	12	90
45	10	88
40	8	86
35	7	83
30	6	80
25		76
20		70
15		62
10		55
5		45

