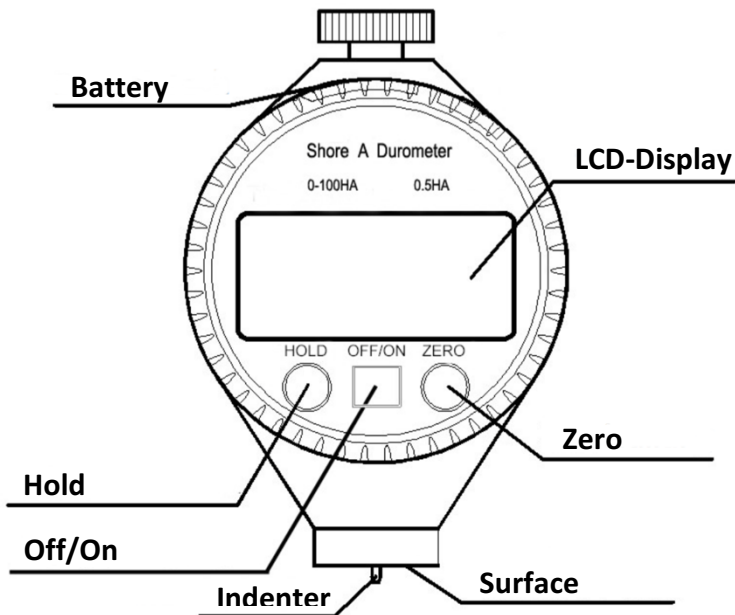


# Instructions manual

Shore A Durometer

Shore C Durometer

Shore D Durometer



## Usage

The Shore Durometer gauges are special hardness testing instruments for measurements on materials such as different kinds of rubber, plastics and glass.

1. Place the working piece on a solid base.
2. Place the gauge on a spot of the working piece which is at least 12 mm away from the edge.
3. The gauge shouldn't wiggle or stand skewed.
4. Press the gauge against the surface of the working piece. The intender has to be inside the material.
5. Check the result.
6. Repeat the measurement at least 5 times at different spots which are at least 6 mm away from each other. For porous materials the distance should be at least 15 mm.
7. Calculate the average.

## Notes

- **Before** measuring take care that the gauge displays the value 0,00. If not press "**Zero**".
- If one measures glass the gauge should display 100. The intender should not be pressed into the surface. If the gauge displays an other value than 0 or 100 slightly press the intender into the material. Should the gauge still not display 100 please contact SaluTron Messtechnik GmbH.
- If possible, measure working pieces made out of rubber under laboratory standard temperatures.
- If a result using the the **Shore A Durometer** exceeds 90, one should use the **Shore D Durometer**.
- If a result using **Shore D Durometer** is below 20, one should use the **Shore A Durometer**.
- If a result using **Shore A Durometer** is below 10 it is incorrect.
- After finishing operations please make sure that the gauge is clean and put it back into its case. Store the case at a dry location.



	<b>Shore A Durometer</b>	<b>Shore C Durometer</b>	<b>Shore D Durometer</b>
<b>Measuring range:</b>	0 - 100 HA	0 - 100 HC	0 - 100 HD
<b>Application field:</b>	For Example <ul style="list-style-type: none"> <li>- Normal rubber</li> <li>- Synthetic rubber</li> <li>- Soft rubber</li> <li>- Wax</li> <li>- Elastomeric</li> <li>- Natural rubber</li> <li>- Neoprene</li> <li>- Polyester</li> <li>- Casting resin</li> <li>- Soft-PVC</li> <li>- Leather</li> </ul> → Soft materials	For example <ul style="list-style-type: none"> <li>- Porous rubber</li> <li>- Porous plastic parts</li> <li>- Medium-hard elastomeric</li> </ul> → Porous materials	For example <ul style="list-style-type: none"> <li>- Hard rubber</li> <li>- Hard resin</li> <li>- Acryl</li> <li>- Glass</li> <li>- Rigid thermo plastic plates</li> <li>- Fibers</li> </ul> → Hard materials
<b>Hardness degree:</b>	Low	Medium	High
<b>Accuracy:</b>	± 2	± 2	± 2
<b>Resolution:</b>	0,5 HA	0,5 HC	0,5 HD
<b>Endurance:</b>	0,55 N – 8,06 N	0,55 N – 8,06 N	0 – 44,5 N
<b>Penetration depth:</b>	0 – 2,5 mm	0 – 2,5 mm	0 – 2,5 mm
<b>Angle of indenter:</b>	35°	35°	35°
<b>Spring force:</b>	8,065N / 822g	44,5N / 4536g	44,5N / 4536g

	<b>Shore A Durometer</b>	<b>Shore C Durometer</b>	<b>Shore D Durometer</b>
<b>Contact force:</b>	12,5 N	50 N	50 N
<b>Measurement path:</b>	2,5 mm	2,5 mm	2,5 mm
<b>Material thickness:</b>	≥ 6mm	≥6mm	≥ 6mm
<b>Functions:</b>	Hardness testing, zeroing	Hardness testing, zeroing	Hardness testing, zeroing
<b>Display:</b>	LCD	LCD	LCD
<b>Power supply:</b>	1,5V-AA-battery	1,5V-AA-battery	1,5V-AA-battery
<b>Standards:</b>	DIN 53505, ASTM D 2240, ISO 868, ISO 7619	DIN 53505, ASTM D 2240, ISO 868, ISO 7619	DIN 53505, ASTM D 2240, ISO 868, ISO 7619
<b>Dimensions (L x W x H):</b>	80 x 60 x 25 mm	80 x 60 x 25 mm	80 x 60 x 25 mm
<b>Weight:</b>	100 g	100 g	100 g

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