

INDENTATION HARDNESS APPARATUS

For accurately checking the shore hardness of a wide range of elastomers and plastic materials, the Ray-Ran range of **Durometers** are simply hard to beat. Due to the fact that material hardness is a key characteristic of an elastomer and one which can be related to important material properties, it is beneficial to be able to accurately measure the material hardness of a supplied product making them ideal for product design and quality control inspection.

Offered in analogue or digital scales, each durometer can be used hand held or fitted to the Ray-Ran bench mounted Lever Operated DurometerStand. Each durometer available utilizes the Shore method of hardness measurement and features a spring-loaded indenter module which



is pressed down squarely on the surface of the material to be measured resulting in its shore hardness.

The unique interchangeable modules allow for a wide and useful range of the Shore harnesses scales to be measured on one instrument. Depending on the material being tested, hardness scales are available to Shore A, B, C, D, DO and OO with each interchangeable module supplied calibrated to the durometer head. The only exception to this interchangeability is the softest Shore OO range due to its very low indenter loads.

The models offered within the Ray-Ran range are the STD226 Digital Durometer and the STD227 Analogue Durometer. Each durometer comes with its own calibration certificate tested to the relevant module, protective carry case, product user manual and 12 month return to base warranty.

TECHNICAL SPECIFICATION

Model STD 226 Digital Durometer

- Resolution - half of one degree Shore hardness scale
- Easy to use - hand held
- Sturdy, accurate and reliable
- BCD output facility
- Uses 1 x SR44 flat battery
- Multiple Modules with the same instrument head
- Supplied in convenient storage/protective case

Model STD 227 Analogue Durometer

- Resolution - one degree Shore hardness scale
- Supplied complete with tolerance settings
- Optional maximum hand
- Multiple Modules with the same instrument head
- Supplied in convenient storage/protective case

OPTIONAL ANCILLARIES

- Lever operated bench stand
- Set of 6 coloured rubber reference blocks (shore A only)
- Shore A Scale ASTM D 2240, ISO 7619 & 868, DIN 53505
- Shore B Scale ASTM D 2240
- Shore C Scale ASTM D 2240
- Shore D Scale ASTM D 2240, ISO 7619 & 868, DIN 53505
- Shore DO Scale ASTM D 2240
- Shore O Scale ASTM D 2240

WEIGHTS & DIMENSIONS: INDENTATION HARDNESS APPARATUS

	STD226	STD227
Net Weight (kg)	0.3	0.22
Width (cm)	6.5	3.8
Depth (cm)	2.5	2.3
Height (cm)	15	13.5

LEVER OPERATED DUROMETER BENCH STAND (RR/DBS)

TECHNICAL SPECIFICATION

- Can be fitted with STD227 and STD226 durometers
- Easy to use lever operated
- Large sample lever platform
- Adjustable durometer height
- Set of test weights supplied
- "V" block for cylindrical samples
- Product user manual
- 12 month return to base warranty

OPTIONAL ANCILLARIES

- STD226 Durometer
- STD227 Durometer

WEIGHTS & DIMENSIONS: RR/DBS

Net Weight (kg)	5
Width (cm)	35
Depth (cm)	25
Height (cm)	45

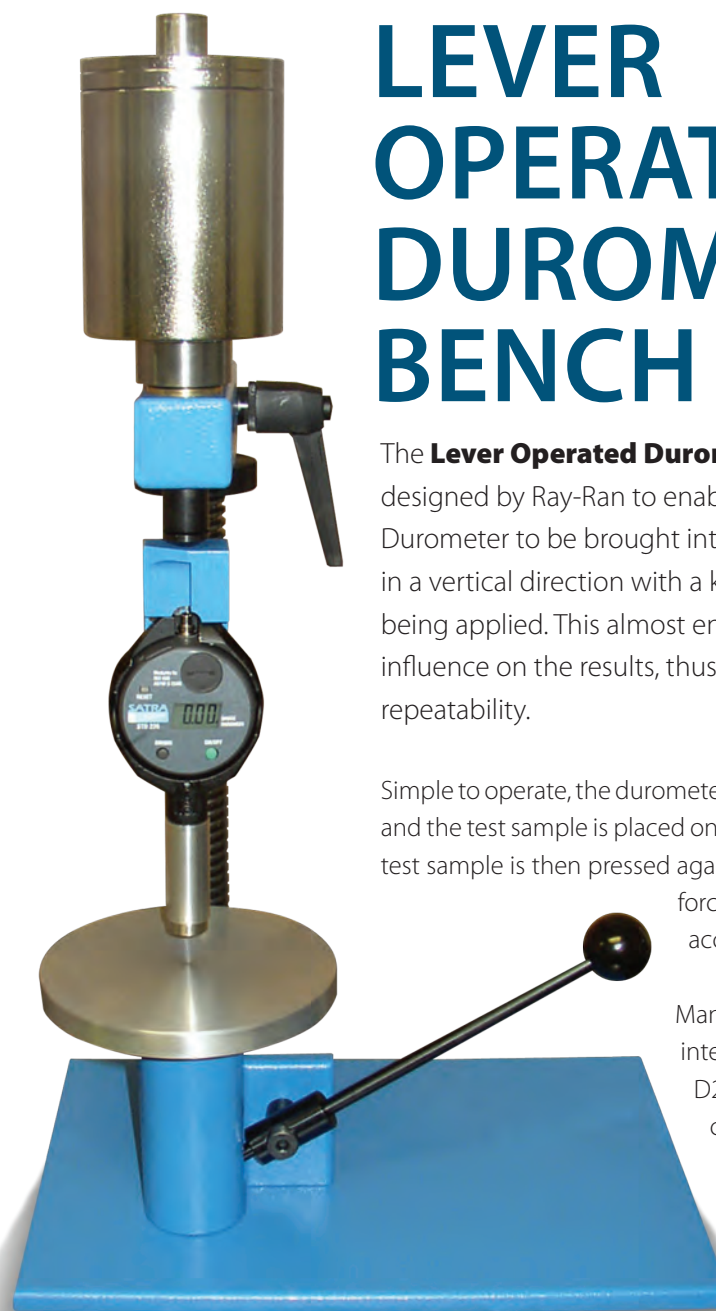
SAMPLE & COMPONENT TESTING

LEVER OPERATED DUROMETER BENCH STAND

The **Lever Operated Durometer Bench Stand** has been designed by Ray-Ran to enable the simple mounting of a Durometer to be brought into contact with a test sample in a vertical direction with a known constant loading force being applied. This almost entirely eliminates any operator influence on the results, thus ensuring greater accuracy and repeatability.

Simple to operate, the durometer is loaded with a specified static load and the test sample is placed on the lever operated surface plate. The test sample is then pressed against the durometer and the constant force of the static load applied ensuring accurate repeatable test results.

Manufactured to comply with international testing methods ASTM D2240 and DIN 53505, the apparatus can accommodate both the STD226 and STD227 durometers. The bench stand is supplied complete with all test weights to the relevant test standards an "V" block for testing polymer tube samples.



RAY-RAN

DUROMETER BENCH STAND