

Shore® Micro Hardness Model 714: Description



Shore®

The Shore® Micro Hardness Tester, first introduced in the early 1970s, was developed in response to the need for an affordable instrument to test specimens that are small, thin, irregularly configured or could not otherwise be accommodated by typical durometer types.

[ASTM D2240](#) and ISO 7619 now include the *Type M (Micro Hardness)* durometer ... read a summary of the this, and other, significant developments in [DuroMatters: Basic Durometer Testing](#).

The development of the Shore® Micro Hardness Tester was predicated on the concept that the instrument would perform durometer tests on such specimens, quickly and easily, with both precision and accuracy, while being affordable in comparison to its IRHD ([ASTM D1415](#), [International Rubber Hardness Degrees](#)) counterpart.

The Shore® Micro Hardness Tester was modeled after the familiar ASTM D2240 Type A durometer, however it employs a much 'lighter' mainspring and a considerably 'smaller' indenter. This makes the Shore® Micro Hardness tester quite suitable for its intended purpose, yet too delicate to be used as a hand held instrument.

The incorporation of a high quality operating stand overcame the element of sensitivity and added considerable flexibility, as the stage (integral specimen platform) was designed to incorporate a multitude of specimen support fixtures, allowing the testing of such difficult-to-test items such as medical tubing, o-rings, etc.

The hydraulically dampened operating stand controls the rate of descent of the durometer to the test specimen to attain minimal indenter penetration and material deformation producing increased accuracy while virtually eliminating operator influence.


The total force necessary to attain a full scale reading is approximately 10% of that of a Type A durometer. The lower requirements of force coupled with a smaller indenter, allows for the testing of finished products rather than specially prepared test specimens.

This easy to use, precision instrument is capable of accurately producing hardness determinations on test specimens with cross sectional diameters as small as 1.25 mm (0.050 inch).

Shore® Micro Hardness Model 714: Features

- A unique system of o-ring fixtures with interchangeable inserts exactly tailored to accommodate standard cross-sectional diameters from 1.78 mm to 6.99 mm (0.070 – 0.275 inch). Special sizes are available upon request;
- A flat insert is provided which allows testing of irregularly shaped and flat thin specimens;
- A Test Block Kit designed for checking the state-of-calibration is included;
- The Operating Stand is constructed of durable stainless steel and cast iron, features a hydraulic dashpot, adjustable table height and precision rack and pinion;
- A vinyl dust cover is included.

Shore® Micro Hardness Model 714: Specifications & Pricing

Indicator:	Scale: 0–100 Sweep: 265° Resolution: 1 point
Standards:	ASTM D2240 (Type M) ISO 7619 Type M
Physical Specifications:	
Throat Depth:	22 mm (0.875 inch)
Throat Height:	32 mm (1.25 inch)
Specimen Table:	95 x 55 mm (3.7 x 2.2 inch)
Indenter Diameter:	0.7874 ± 0.025 mm (0.031 ± 0.001 inch)
Indenter Extension:	1.25 ± 0.02 mm (0.049 ± 0.001 inch)
Weight:	17 lb. (7.7 kg)
List Price:	Please Submit a RFQ (Part Number 407140000)
Durometer Replacement:	Please Submit a RFQ (#9130–273)
 Special (custom sizes) inserts for the specimen platform are available by request.	

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