Shore® IRHD Model 903/2000: Description

This precision automated system is designed to produce readings to laboratory standards in a production environment and reduce the operator introduced error commonly associated with IRHD testing.

The DuroTronic™ 2000 IRHD instrument provides timed automatic operation with LCD readout. The Model 903/2000 may be interfaced, using the integral RS-232C connection, to a PC or LAN (local area network) for convenient data transfer.

The standard test system is designed to comply to ASTM D1415, "Standard Test Method for Rubber Property — International Hardness" (2.5 mm indentor), as well as ISO 48, Type N. The IRHD method measures the indentation of a spherical indentor in elastomeric materials under precise load and time parameters.

The measurement is accomplished by applying a minor load to the indentor, which establishes the '0' IRHD position. A major load is then applied, the indentor penetration is again electronically measured and the IRHD hardness measurement of the test specimen is displayed.

Shore® IRHD Model 903/2000: Features

- Model 903 Operating Stand with precision machined aluminum frame and cast jig plate, precision ground shafts, and four linear bearings which provide virtually friction free carriage movement;
- DuroTronic™ 2000 IRHD Transducer with precision LVDT and solid state electronics;
- The IRHD Transducer is manufactured of aircraft grade black anodized aluminum and fitted with linear bearings;
- Quality components provide accuracy within ± 0.3% at full scale;
- DuroTronic™ 2000 IRHD Transducer controls the 903 Stand timed operation;
- Displays, stores and automatically averages hardness determinations, for data transfer to statistical software applications;
- RS—232C Interface output;
- Vinyl dust cover included.

Shore® IRHD Model 903/2000: Specifications & Pricing

Standards:	ASTM D1415 & ISO 48
Indicator:	Scale: 0—100 Display: Backlit 4 Digit LCD Resolution: 000.1
Throat Depth:	76 mm (3 inch)
Throat Height:	79 mm (3.125 inch)
Specimen Table:	152 x 128 mm (6 x 5 inch)
Indentor Diameter:	2.50 ± 0.01 mm (0.098 ± 0.0004 inch)
Presser Foot OD:	20 ± 0.01 mm (0.78 ± 0.0004 inch)
Presser Foot ID:	6 ± 1 mm (0.24 ± 0.04 inch)
Minor Force:	0.29 ± 0.02 N
Major Force:	5.4 ± 0.01 N
Total Indentor Force:	5.7 ± 0.03 N
Total Foot Force:	8.3 ± 1.5 N
Time, Minor Force:	5.0 ± 0.01 s
Time, Major Force:	0—99 s Adjustable
Power Required:	110/120 VAC 60 Hz (9130—260) 220/230 VAC 50 Hz (9130—261)
Weight:	35 lb. (15.9 kg)
List Price:	Please Submit a RFQ (#903/2000)
Durometer Replacement:	Please Submit a RFQ (#9130-010, 110 VAC)
Durometer Replacement:	Please Submit a RFQ (#9130-020, 220 VAC)
Operating Stand:	Please Submit a RFQ (#9130-260, 110 VAC)
Operating Stand:	Please Submit a RFQ (#9130-261, 220 VAC)
Certificate of calibration is included.	

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