KARG Industrietechnik

# Hardness Tester

## Series HD 3000:
## Shore-Hardness Tester with analogic display

Low cost Shore-Hardness tester for the universal use

### Features:

- Conform to DIN, ISO and ASTM
- Drap pointer available
- Large dial surface
- Full 360° dial
- superior 1/2 point accuracy
- Ergonomic handheld design

## Series HDD:
## Shore-Hardness Tester with digital display

The new Shore-Hardness tester for precise and reproducable measurements

### Features:

- Conform to DIN, ISO and ASTM
- Large LCD display
- Time set-up from 1 ... 99 s
- Resolution 0,1
- Superior 1/2 point accuracy
- Ergonomic handheld design
- AUTO-OFF function
- HOLD-function
- Measurement memory
- Low battery warning
- Data port: RS 232


### Options:

**Operating stand OS-2**

The Durometer Operating Stand works on the constant load principle.
The sample is positioned on the support table. The Durometer is lowered shock-free by means of a manually operated lever. The hardness value can be read directly from the Durometer.

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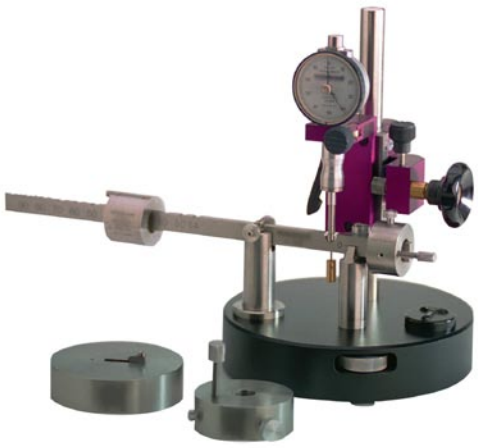
### Calibrator RC-1

The Calibrator Model RC-1 was designed for in-house calibration. The Calibrator comes with weights for calibrating the spring-load of durometers in the A, B, C, D, DO and O scales. Due to the new design it is also possible to use durometers of almost all renowned manufactures by applying our optional adapters. Model RC-1 is a great way for reducing costs in quality control. The calibrator conforms to national and international standards such as DIN 53505, ISO 868, ISO 7619 and ASTM D 2240.



## Technical data:

| | HD 3000 | HDD | OS-2 |
|---|---|---|---|
| **Hardness Tester for Shore** | **A, B, C, D, D0, 0** | **A, B, C, D, D0, 0** | **A, B, C, D, 0, 00** |
| Display | Shore analogic | Shore digital | - |
| **Dimension** | | | |
| Dial diameter (mm) | 57 | - | |
| Total length (mm) | 121 | - | |
| Width (mm) | - | 64 | |
| Height (mm) | - | 112 | |
| Depth (mm) | - | 26 | |
| Extension (mm) | - | - | 115 |
| Support table diameter (mm) | - | - | 98 |
| Max. sample thickness (mm) | ∞ | ∞ | 180 |
| **Characteristics** | | | |
| Range | 0 ... 100 | 0 ... 100 | |
| Accuracy | +/- 0,5 | +/- 0,5 | |
| Resolution | 1 | 0,1 | |
| Weigth (kg) | 0,184 | 0,279 | 19,8 |
| Data port | - | RS 232 | - |

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## Micro IRHD Hardness Tester:

The MICRO IRHD SYSTEM provides hardness readings on elastomers according to MICRO IHRD. Recommended specimen thickness is 1 to 5 mm. It complies to international standards such as DIN ISO 48, ISO 48, ASTM D 1415 and BS 903:Part 26A.


### Features:

- Conform to ISO and ASTM
- Fully automatic measurement
- Modular system
- Automatic table movement
- Built-in Auto-Diagnostics
- PC-controlled
- User friendly Windows Software

### Options:

**O-Ring centering device**

The patented O-Ring Center Device fully automatically cooperates with the MICRO IRHD SYSTEM. O-Rings with a cord dia. of 0.8 mm to 8 mm will just be placed on the measuring table and pushed to the positioning pin. The cord is keyed into the MICRO IRHD software. Integrated electric motors are exactly driving the measuring table to the measuring axis. This results in measuring the highest position of the O-ring.


**X-Table centering device with sample holder**

The centering device with sample holder fully automatically cooperates with the MICRO IRHD SYSTEM. This fixture is designed to measure O-Rings and round style parts. Each sample requires a sample holder which has an identification number. This number is keyed into the MICRO IRHD software. An integrated electric motor is driving the measuring table to the exact position of the measuring axis. After the first measurement, the sample holder can rotate to the next measurement at a different spot.

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### X-Table centering device

The X-Table centering device with digital gauge has to be used with the MICRO IRHD SYSTEM. This fixture is designed to measure small irregular parts. Two straight pins are used as rest positions for the sample. The sample can be easily fixed with modelling clay. The digital gauge enables exact measuring at the measuring axis e. g. the highest point of the sample.

Features:
- Digital gauge: Measuring range: 0...25 mm, resolution: 0.001 mm
- Standard sample holder: Exterior dia.: 50 mm, Matrix 5 mm x 5 mm, 60 holes dia. 2H7, 2 straight pins included
- Connecting hole in base for sample holder: 8H7
- Sample holder is fixed with a straight pin preventing any rotation

### Prism centering device

The prism centering device is designed to measure hoses and cables.

Features:
- Fixture enables exact measuring at the measuring axis
- Exterior dia. of sample: 4.....50 mm
- Centering prism is removeable to measure bigger parts

## Technical data:

| | Micro IRHD |
|---|---|
| **Dimension** | |
| Measuring unit (mm) | Ø 200 x 470 |
| Controller | |
| Width (mm) | 290 |
| Height (mm) | 75 |
| Depth (mm) | 260 |
| Max. sample thickness (mm) (without centering device) | 90 |
| **Characteristics** | |
| Resolution (IRHD) | 0,1 |
| Weigth (kg) | 17,5 |
| Data port | RS 232 / USB |
| Power supply (V/Hz) | 230 / 50 |