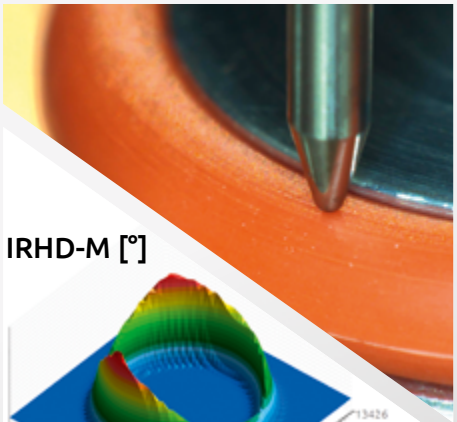
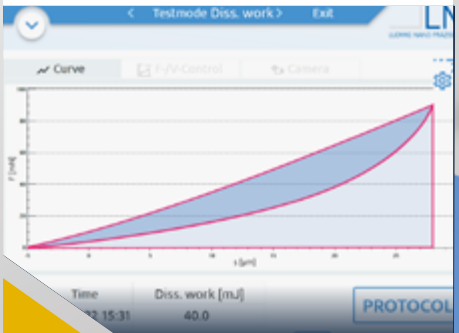
LNP®
LUDWIG NANO PRÄZISION GMBH

THE PREMIUM HARDNESS MEASURING DEVICE FOR SHORE A, IRHD-M AND MORE

LNP® Universaltester: IRHD-M for elastomers & more





Scan for more information!

NEW!
IN 2022

- **finally crosslinking detection!**
- **Change procedures as easy as a probetip**
- **Softwareassistant with error recognition**

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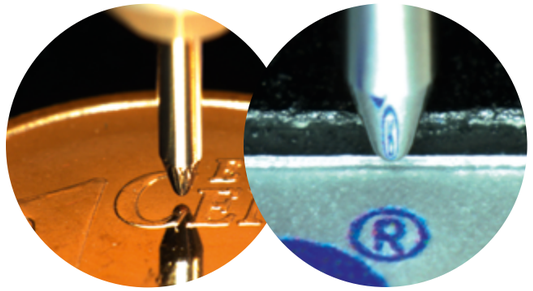
The premium measuring device

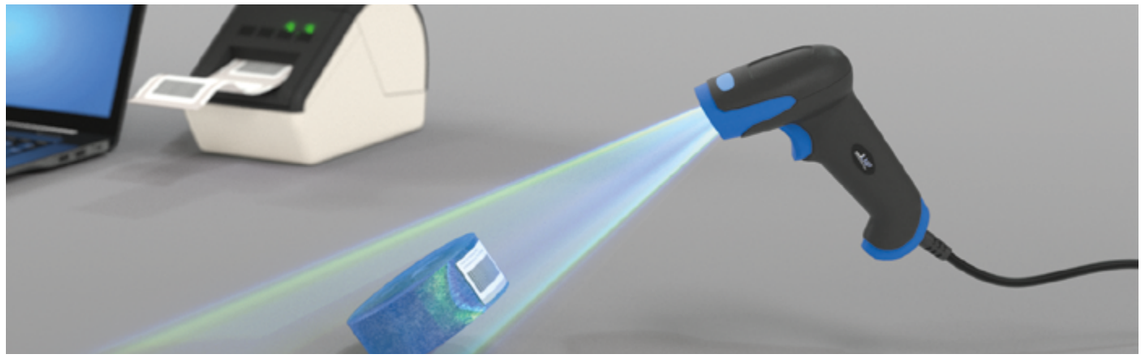
ALL BENEFITS AT A GLANCE:

- Easy to use, little training required.
- Unprecedented accuracy.
- Time savings thanks to a high degree of automation and short set-up times.
- High-precision hardness measuring head and Z-axis.
- High operating convenience thanks to fully automatic standard tests at the push of a button.
- Future-proof and network-compatible System, suitable for Industry 4.0.
- Software concept designed for networks, regular updates, remote maintenance andSupport in the maintenance contract possible. USB-Interface and LAN-Interface (optional).
- Afterwards expandable with a lot of accessories.
- Fast and efficient documentation.
- Data interface to MS Office (optional).



CARBIDE INSTEAD OF STEEL

Every hardness measurement is only as precise as the spherical shape of the test specimen. That is why our stylus tips consist exclusively of Carbide, which is processed to a high gloss. Every probe tip is tested and certified by LNP.

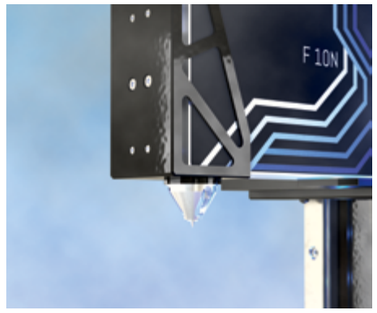


OPTIONAL SCANNER AND PRINTER

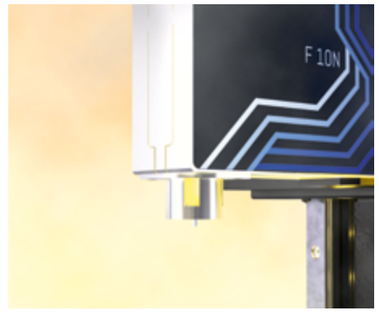
- Direct start of your own test sequences and programs.
- Organize and manage test objects and workpieces..

Scope of delivery LNP® Universaltester devices

1	LNP® hardness measuring head IRHD-M or Shore a
2	Motorized Z-Axis, 250 mm travels
3	LNP® Standard Software
4	LNP® Action controller with emergency off function
5	High-quality precision granite plate
6	integrated control
7	Windows Convertible Notebook (Touchscreen) Database connection on request



LNP® IRHD-M probe tip

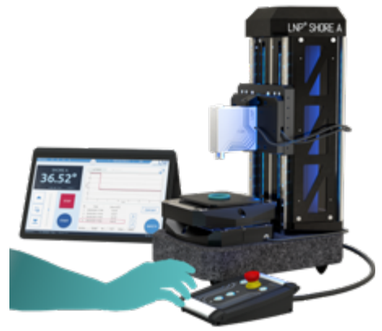


LNP® SHORE A probe tip

LNP® Universaltester - One device for many procedures

STANDARD TESTING WITH LNP® UNIVERSALTESTER

The divices can work without lens support rings, so that even jagged samples can be measured. With a change of the probe tip, the measuring device can be used for any standard procedure that you need.



LNP® UNIVERSALTESTER ON: 034332

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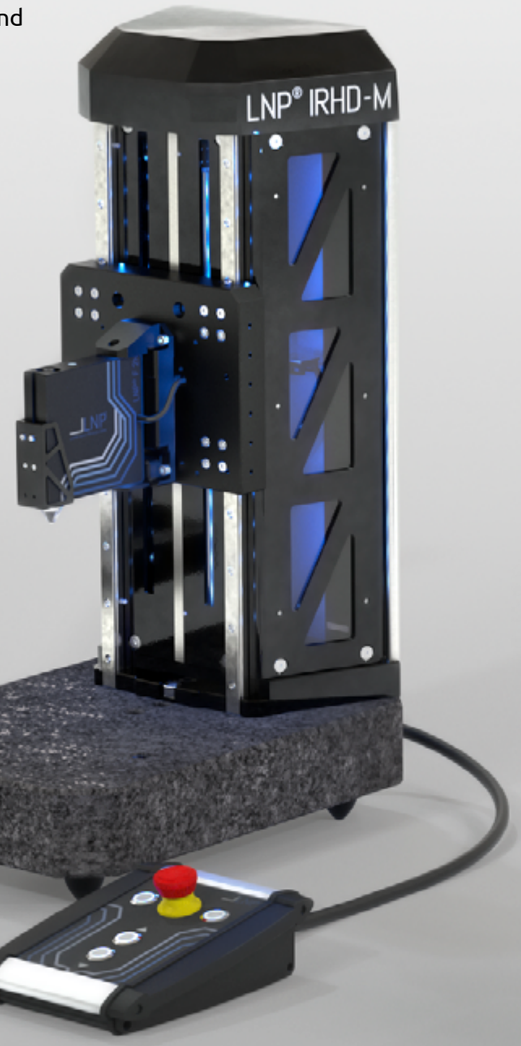
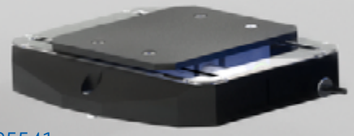
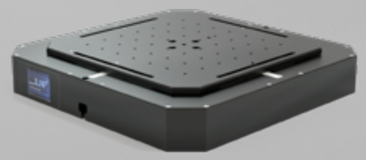
034973-02 CAMERA
5MP, USB3 - with telecentric Lens and LED ring light



035542
LNP® LINEAR AXIS TYPE XY
Automatic axis
for X and Y directions

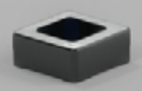


035541
LNP® LINEAR AXIS TYPE X
Automatic axis for X direction. Also available as type Y!



034947 LNP® DC CROSSTABLE
Usable with granite plate

035540
LNP® ROTARY TABLE G
Automatic rotary axis with space for several samples.

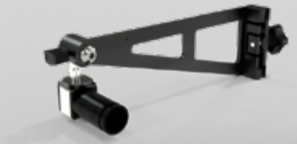


035170
LNP® HARDNESS REFERENCE BLOCK 4.0
Exact device check with logging software!

Extensive equipment:

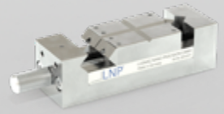
Our equipment allows you to to determine the degree of automation. Your desired workstation configuration is not yet included or you need some answers for a particular application? Contact us!
We would be happy to provide you with an individual solution

035007 LNP® HEATING TABLE WITH CONTROLLER
For heating specimens up to 230 °C. With IR camera.

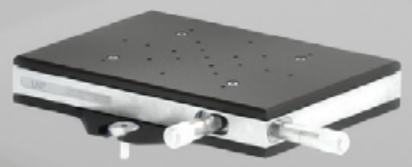


034973-02 CAMERA
5MP camera mit 25 mm lens

LABELPRINTER AND SCANNER
035543 scanner
035544 labelprinter



031077 LNP® PARALLEL VICE
In different variations



033394
LNP® FLEXURE HINGE CROSS TABLE V1
Manual basic cross table for X and Y axes.

034103
LNP® SAMPLE HOLDER EVEN
Base sample holder for test specimens and small components.

034843
LNP® ANGLE ADJUSTMENT & ROTARY TABLE-K-BUNDLE
With automatic rotary axis, manual angle adjustment and three-jaw chuck.

State: May 2022. ***Subject to technical changes.***
Illustrations of products within the brochure may differ.

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Our software solution:
From a quick test to serial inspection

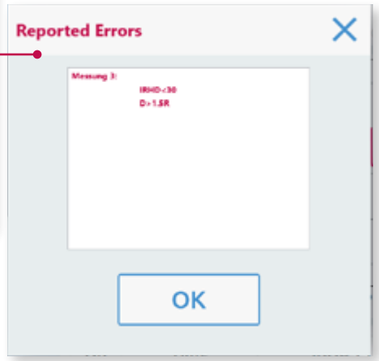
1. EASY TESTMODE
For quick testing in between! Measurement on the push of a button, with a history of the recent measurements and their results.

2. STANDARD TEST MODE
Measurements at the push of a button and according to the standard. Tolerance limits and other statistical values are clearly displayed and logged.

3. EXTENDED OR SERIAL TEST MODE-
Write your own test procedures, set the tolerance limits for each product type and evaluate them. Measure the back relaxation with adjustable times and more!

Softwareassistant for error detection

SUPPORT FOR YOU
The Error detection tool points out implausible measurements and gives clues for future prevention.



One Device for every Standard?
Just a probetip change away with LNP!

CHANGING PROBETIPS
The changing of probetips is menu-guided. Just follow the illustrated instructions on the screen.

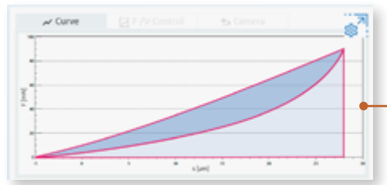
IN ADDITION TO IRHD-M ISO 48 YOU CAN ALSO CHOOSE:

VLRH DIN ISO 27588
SHORE A/M ASTM 2240
SHORE 00 ASTM 2240
SHORE 000 ASTM 2240

SHORE A MIKRO
Hardnesstopography
E-MODUL according LNP
Microtribology

Crosslinking detection finally made easy

INPUT FIELDS
define freely all necessary parameters for measuring dissipated work, stiffness and more.



Have a look at our homepage!
We are at your disposal for further questions gladly available at any time.

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Do you have questions about the possible standard procedures?

Look for more information on our homepage!

"Does the sample thickness have an influence on the measurement result?"

"What properties does a material or a workpiece have to have in order to obtain meaningful results from the hardness test?"

"Why shouldn't Shore A values simply be converted into IRHD M values?"

Are you already acquainted with our universal measuring system?

One measuring system, all processes, fully automated!
LNP® measuring systems based on the LNP nano touch are the right choice for material analyzes that go in depth and for Problems that require different measurement methods.

Scan for informationen about the LNP®-measuring system

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