

# IMPACT TH-170 SERIES

Portable Dynamic Hardness Tester





**TH-170**  
IMPACT DEVICE D



**TH-172**  
IMPACT DEVICE C



**TH-174**  
IMPACT DEVICE DL

## FEATURES

The world famous IMPACT™ series, part of the unbeatable series of TIME dynamic Leeb hardness testers offer very affordable, but accurate hardness testing solution for on-site testing in workshops and in field operation. The units assure accurate and reliable measurement. USB to computer. Any metallic products with a minimum solid mass starting from 0.5kg can be tested according to the Leeb principle. The display shows hardness values in all common scales, such as HRC, HRB, HV, HB, HS, and HLD.

The instrument is equipped with replaceable batteries providing 16 hours continuous operation.

- Dynamic rapid hardness test procedure
- TH-170 Impact device D integrated
- TH-172 Impact device C applying low impact energy for surface hardened components and thin walled components
- TH-174 Impact device DL for testing in confined spaces
- Wide measuring range
- Direct display of hardness Rockwell HRB, HRC, Vickers HV, Brinell HB, Shore HS, Leeb HL
- For most metallic materials
- Automatic gravity compensation for testing at any angle
- Simple handling and low test expenditure
- High accuracy  $\pm 0.5\%$
- Clear LCD display showing all functions and parameters
- Conforms to ASTM A 956 and DIN 50156
- USB connection to PC

## TECHNICAL SPECIFICATIONS

Hardness parameter	HRC, HRB, HV, HB, HS, HL
Accuracy	Within $\pm 6$ HLD (TH-170) Within $\pm 12$ HLC (TH-172) Within $\pm 12$ HLDL (TH-174)
Statistics	Average (max. 270 in 9 groups)
Output	USB
Min. Surface roughness of workpiece	1.6 $\mu$ m (Ra) (TH-170/174), 0.4 $\mu$ m (Ra) (TH-172)
Impact device integrated	D (TH-170) C (TH-172) DL (TH-174)
Needle front section of DL-device (TH-174)	Diameter = 4.2mm Length = 50mm
Max. hardness value	940HV (TH-170) 1000HV (TH-172) 950HV (TH-174)
Workpiece radius (convex/concave)	Rmin = 50mm (with support ring Rmin= 10mm)
Workpiece minimum weight	2kg - 5kg on solid support (TH-170/174) 0.05kg - 2kg with coupling paste 0.5 - 1.5kg on solid support (TH-172) 0.02 - 0.5kg with coupling paste
Workpiece min. thickness coupled	5mm (TH-170/174); 1mm (TH-172)
Workpiece min. case hardened depth	0.8mm (TH-170/174), 0.2mm (TH-172)
Indentation depth	See page: Impact devices data
Continuous working time	150 h (without backlight)
Power	Batteries AAA (2 pcs)
Operating temperature	0°C to 40°C
Overall dimensions	155mm x 24mm x 55mm (TH-170/172) 210mm x 24mm x 55mm (TH-174)
Weight	180gr (TH-170/172) or 200gr (TH-174)

## ORDER DETAILS

- TH-170** Dynamic hardness tester with integrated impact device D  
**TH-172** Dynamic hardness tester with integrated impact device C  
**TH-174** Dynamic hardness tester with integrated impact device DL

## STANDARD DELIVERY

- Instrument with integrated impact device type D, C or DL
- Hardness test block with Leeb value and HRC value
- AAA Batteries (2pcs)
- Cleaning brush
- Coupling paste
- Support ring small
- USB communication cable
- USB driver cd
- INNOVATEST® certificate
- Manual
- Carrying case

## OPTIONAL ACCESSORIES

- UKAS Reference hardness blocks
- Support rings for convex, concave and spherical surfaces (only TH-170/172) (see page 93)

SUPPORT RINGS



HARDNESS TEST BLOCK



Represented by:



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