# TIME 5100 SERIES

Portable Hardness Testers

**LEEB** REBOUND





# TIME **5100**

#### **ABOUT**

The TIME5100 Series provides in portable hardness inspection of almost any object, polished parts and heat-treated surfaces. The hardness measurements are made by using the dynamic rebound testing method according to Leeb.

Leeb hardness testing was invented in 1975 in Switzerland and has become one of the most popular portable testing methods currently available.

The TIME Leeb Hardness testers are supplied to the industry since 1991 and can be seen as the current global standard for Portable hardness testing.



### **TECHNICAL SPECIFICATIONS**

Hardness parameter	HRC, HRB, HRA, HV, HB, HL, HS
Accuracy	0.5% ± 3HL
Max. Surface roughness of workpiece	≤1.6µm(Ra)
Impact device integrated	D integrated
Max. hardness value	940HV (Vickers)
Workpiece minimum weight	5kg - 2kg on solid support
Workpiece min. thickness coupled	5mm
Workpiece min. case hardened depth	0.8mm
Continuous working time	>8 hours
Power	2 AA batteries
Operating temperature	0°C to 40°C
Overall dimensions	155mm × 24mm × 55mm
Weight	180gr

## **D TYPE**

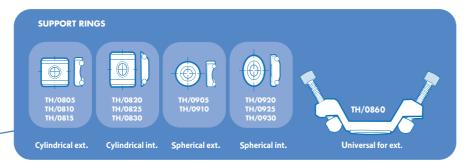
Medium impact energy, suitable for regular workpieces of 5 kg or more having grinded or polished test surfaces.

### **COMPACT & EASY TO USE...**

The D impact device and data processing electronics are integrated into one compact and ergonomic handheld device. The TIME TH170 has a USB connection for data output or connection to a mini printer.

### **2 YEARS WARRANTY**

Warranty does not apply to consumeables such as batteries, impact body or improper use.



# HIGHLIGHTS

- 1 Excellent portability for testing anywhere, anytime.
- 2 Automatic gravity compensation for testing at any angle.
- 3 Extra large LCD display.
- 4 Real-time measurement USB data output.
- 5 Mini printer available.
- 6 Easy calibration function.
- Simple to replace AA batteries.

### **STANDARD DELIVERY**

- Instrument with integrated impact device type D
- HLD Hardness test block with a traceable ASTM/ISO calibration certificate
- Cleaning brush
- Support ring
- INNOVATEST® certificate

- Additional Support rings
- USB data cable (TH 170/136)

**OPTIONAL ACCESSORIES** 

- Mini printer (TA 230)
- Power adapter printer (TA-220/0600)

# AT ANY ANGLE



#### **ORDER DETAILS**

**TIME 5100** Dynamic hardness tester with integrated impact device D



# TIME **5102**

### **ABOUT**

The TIME 5102 Series provides in portable hardness inspection of almost any object, polished parts and heat-treated surfaces. The hardness measurements are made by using the dynamic rebound testing method according to Leeb.

Leeb hardness testing was invented in 1975 in Switzerland and has become one of the most popular portable testing methods currently available.

The TIME Leeb Hardness testers are supplied to the industry since 1991 and can be seen as the current global standard for Portable hardness testing.



### **TECHNICAL SPECIFICATIONS**

Hardness parameter	HRC, HRB, HRA, HV, HB, HL, HS
Accuracy	1% ± 6HL
Max. Surface roughness of workpiece	≤0.4µm(Ra)
Impact device integrated	C integrated
Max. hardness value	1000HV (Vickers)
Workpiece minimum weight	1.5kg - 0.5kg on solid support
Workpiece min. thickness coupled	1mm
Workpiece min. case hardened depth	0.2mm
Continuous working time	>8 hours
Power	2 AA batteries
Operating temperature	0°C to 40°C
Overall dimensions	155mm × 24mm × 55mm
Weight	180gr

### **C TYPE**

Low impact energy, suitable for workpieces of 1.5 kg or more having polished test surfaces.

### **COMPACT & EASY TO USE...**

The C impact device and data processing electronics are integrated into one compact and ergonomic handheld device. The TIME 5102 has a USB connection for data output or connection to a mini printer.

### **2 YEARS WARRANTY**

Warranty does not apply to consumeables such as batteries, impact body or improper use.

# SUPPORT RINGS TH/0805 TH/0810 TH/0815 TH/0830 TH/0910 TH/0905 TH/0920 TH/0925 TH/0930 Cylindrical ext. Cylindrical int. Spherical ext. Spherical int. Universal for ext.

# HIGHLIGHTS

- Excellent portability for testing anywhere, anytime.
- 2 Automatic gravity compensation for testing at any angle.
- 3 Extra large LCD display.
- 4 Real-time measurement USB data output.
- 5 Mini printer available.
- **6** Easy calibration function.
- Simple to replace AA batteries.

#### **STANDARD DELIVERY**

- Instrument with integrated impact device type C
- HLC Hardness test block with a traceable ASTM/ISO calibration certificate
- Cleaning brush
- Support ring
- INNOVATEST® certificate



PERFORM TESTS



### **OPTIONAL ACCESSORIES**

- Additional Support rings
- USB data cable (TH 170/136)
- Mini printer (TA 230)
- Power adapter printer (TA-220/0600)

#### ORDER DETAILS

**TIME 5102** Dynamic hardness tester with integrated impact device C.



# TIME **5104**

### **ABOUT**

The TIME 5104 provides hardness testing capacity in hard to reach places. Part of the wide range of TIME portable hardness testing instruments.



### **TECHNICAL SPECIFICATIONS**

Hardness parameter	HRC, HRB, HRA, HV, HB, HL, HS
Accuracy	2% ± 12HLDL
Max. Surface roughness of workpiece	≤1.6µm(Ra)
Impact device integrated	DL integrated
Max. hardness value	950HV (Vickers)
Workpiece minimum weight	5kg - 2kg on solid support
Workpiece min. thickness coupled	5mm
Workpiece min. case hardened depth	0.8mm
Continuous working time	>8 hours
Power	3.7V
Operating temperature	0°C to 40°C
Overall dimensions	210mm × 24mm × 55mm
Weight	200gr

### **DL TYPE**

Specially designed protruding needle impact device to test in narrow or confided spaces. Medium impact energy, suitable for regular workpieces of 5 kg or more having grinded or polished test surfaces.

### **COMPACT & EASY TO USE...**

The DL impact device and data processing electronics are integrated into one compact and ergonomic handheld device. The TIME 5104 has a USB connection for data output or connection to a mini printer.

### **2 YEARS WARRANTY**

Warranty does not apply to consumeables such as batteries, impact body or improper use.

# HIGHLIGHTS

- 1 Excellent portability for testing anywhere, anytime.
- 2 Automatic gravity compensation for testing at any angle.
- **3** Extra large LCD display.
- 4 Real-time measurement USB data output.
- Mini printer available.
- 6 Easy calibration function.
- Simple to replace AA batteries.

### **STANDARD DELIVERY**

- Instrument with integrated impact device type DL
- HLD Hardness test block with a traceable ASTM/ISO calibration certificate
- Charger
- Cleaning brush
- Needle nose
- INNOVATEST® certificate

# PERFOR AT ANY

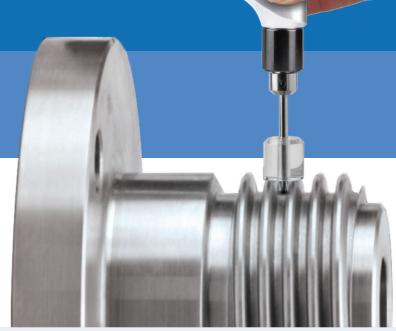




- USB data cable (TH 170/136)
- Mini printer (TA 230)
- Power adapter printer (TA-220/0600)

#### **ORDER DETAILS**

**TIME 5104** Dynamic hardness tester with integrated impact device DL



Distributor:

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