digi-schmidt

CONCRETE TEST HAMMER

- Non-destructive measurement of the concrete compressive strength and control of the uniform concrete quality (in-situ concrete and prefabricated structures)

- Detecting weak spots

- Data-Transfer to PC/printer

- Data Evaluation with ProVista Software

Concrete Testing with original DIGI-SCHMIDT Hammer, types ND and LD

By entering the depth of carbonation, the conversion of rebound value to the compressive strength is automatically compensated.
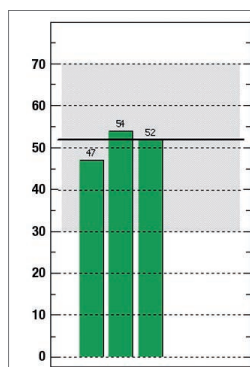
The classic ORIGINAL SCHMIDT concrete test hammer is equipped with a sensor which measures the rebound value of a test impact to a high resolution and repeatability. Basic settings and measured values are shown on the display unit. Operating is menu-guided in different languages.

The DIGI-SCHMIDT is available in two versions:

- Type ND (impact energy 2.207 Nm) - suitable for use on concrete components of 100 mm thickness or more

- Type LD (impact energy 0.735 Nm) - suitable for use on concrete components of thickness less than 100 mm (e.g. precast elements) and on cast stone material
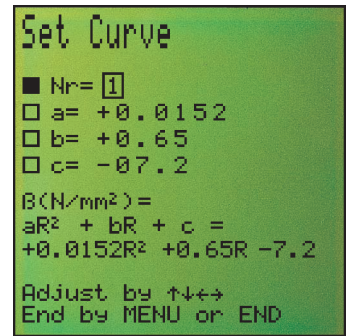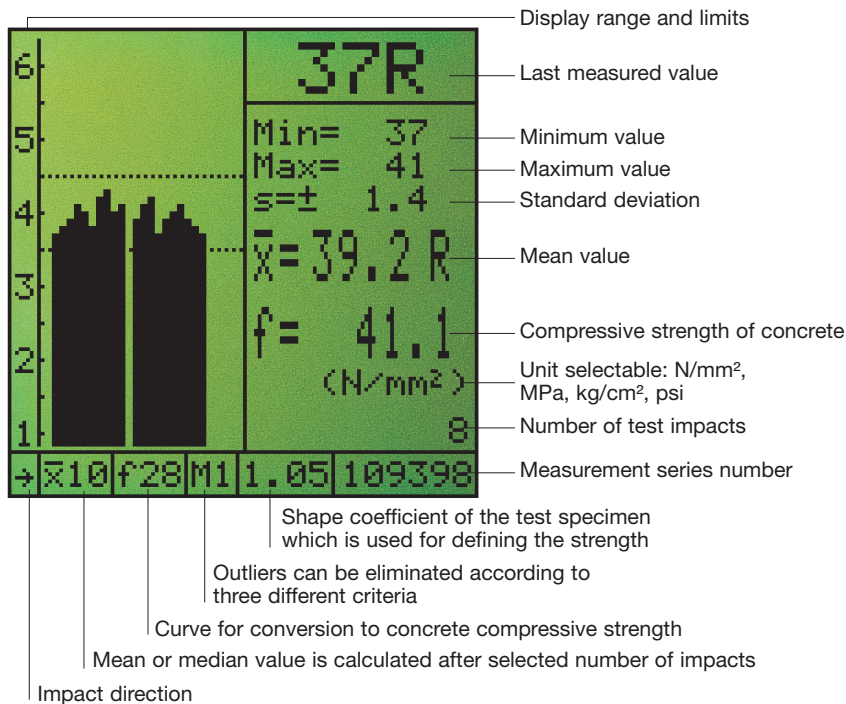
Control and data transmission to PC/Laptop

The measuring data can be transmitted easily by the serial RS 232 or via USB with adapter USB/RS 232 to a normal printer or to a PC/Laptop with the window based software ProVista. Wrongly set parameters (like impact direction) can be corrected after the transmission on the PC/Laptop.

Standards: ISO DIS 8045, EN 12 504-2, ENV 206, ASTM C 805, ASTM D 5873 (rock) , DIN 1048 Part 2, B-15.225, NF P 18-417, (J6J / T23-2001, JJG 817-1993, both China)

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Display range and limits

Last measured value

Minimum value

Maximum value

Standard deviation

Mean value

Compressive strength of concrete

Unit selectable: N/mm², MPa, kg/cm², psi

Number of test impacts

Measurement series number

Shape coefficient of the test specimen which is used for defining the strength

Outliers can be eliminated according to three different criteria

Curve for conversion to concrete compressive strength

Mean or median value is calculated after selected number of impacts

Impact direction

The standard curves for concrete aged 7 and 28 days and four additional curves are installed in the unit. Three further internal conversion curves can be programmed via the keyboard. The integrated clock stores the measured values with test date and time.

$$B(N/mm^2) = aR^2 + bR + c = +0.0152R^2 + 0.65R - 7.2$$

Technical Information

TEST HAMMER	TYPE ND	TYPE LD
IMPACT ENERGY:	2.207 Nm	0.735 Nm
MEASURING RANGE OF COMPRESSIVE STRENGTH f_C:	10 to 70 N/mm²	18 to 70 N/mm²
	for horizontal impacts and f_C for cubes 150/150/150	
ACCURACY OF MEASUREMENT:	± 0.2 R	± 0.2 R
REPRODUCIBILITY:	± 0.5 R	± 0.5 R

Display unit with non-volatile memory for max. 500 measurement series of 10 values each

DISPLAY: Graphic LCD-Display 128 x 128 Pixel

INTERFACE: RS 232 or with adapter* to USB

PC SOFTWARE PROVISTA: for evaluation and printing of the measured values and transmission to PC

TEMPERATURE RANGE: -10°C to +60°C for instrument

BATTERY: 6 LR6 batteries, 1.5V for 60 hours operation

Ordering Information

UNITS

340 00 202   Concrete Test Hammer DIGI-SCHMIDT, Type ND

340 00 211   Concrete Test Hammer DIGI-SCHMIDT, Type LD
including test hammer, indicating device, test hammer cable, transfer cable, grinding stone, operating instructions, CD with ProVista software, protection sleeve, neck/wrist strap, carrying case and certificate, 5.6 kg

ACCESSORIES

310 09 040   Testing Anvil Euro

*390 00 542 Adapter RS 232 / USB

310 99 037 Grinding stone

Subject to change without notice

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