

Mechanical Concrete Test Hammer - Original Schmidt –Type N



The quality of concrete is mainly judged by its compressive strength directly affecting the load-bearing capacity and durability of concrete structures. Proceq invented the **Original Schmidt**, the world's first and now most widely used test hammer for analyzing the compressive strength of concrete properties.

The Original Schmidt will hit the concrete at a defined energy whereas its rebound is dependent on the hardness of the concrete and is measured by the instrument. The Original Schmidt is available in models with different impact energies, each test hammer designed for a specific test application, in order to meet the needs of the customers to investigate a wide range of material types and sizes, such as bridge decks, thin walls, cast stone components or small components.

- [Features](#)
- [Applications](#)
- [Standardization](#)
- [Technical Data](#)

Features

- Type N Original Schmidt: Rebound values are read from a scale for subsequent calculation of the mean. Compressive strength values can be read from a conversion diagram
- Type NR Original Schmidt: Rebound values are recorded as a bar chart on a paper strip which has a capacity for 4'000 test impacts
- Type L Original Schmidt: Handling equals type N, but the type L offers an impact energy three times smaller
- Type LR Original Schmidt: Handling equals type NR, but with impact energy three times smaller. The LR also features a paper strip for recording up to 4'000 test impacts without reloading

Applications

- The Original Schmidt is used for the non-destructive measurement of the concrete/mortar compressive strength characteristics
- Control of uniform concrete quality
- Detection of weak spots in the concrete
- The type L/LR Original Schmidt operates with significant lower impact energy, making this test hammer the ideal option for testing thin walled items with a thickness between 50 to 100 mm (2 in. and 4 in.) or for analyzing small components.

- It is suitable for examining cast stone components which are sensitive to impact. In rock mechanics, the type L/LR Original Schmidt is commonly used for the classification of rock cores and brittle rock

Standardization

The following standards can be applied to the Original Schmidt:

- | | |
|--------------------|---------------------|
| • ISO/DIS 8045 | • ASTM D 5873(Rock) |
| • EN 12 504-2 | • NFP 18-417 |
| • ENV 206 | • B 15-225 |
| • DIN 1048 part 2 | • JGJ/T 23-2001 |
| • BS 1881 part 202 | • JJG 817-1993 |
| • ASTM C 805 | |

Technical Data

	Original Schmidt Type N	Original Schmidt Type NR	Original Schmidt Type L	Original Schmidt Type LR
Measuring range		10 - 70 N/mm ² (1'450 to 10'152 psi)		
Impact energy		2.207 Nm		0.735 Nm
Paper strip	No	Yes	No	Yes

Warranty

- Standard 2-year limited warranty on electronic parts of the Original Schmidt
- Optional extended warranty periods up to 3 additional years

Please contact us for more information on Original Schmidt.