

Digital Concrete Test Hammers

Advanced Non Destructive Testing Concrete
Test Hammers for Measuring Compressive
Strength of Concrete & Rock



Product Comparative Matrix



Concrete Test Hammer

Parameter	Silver Schmidt Live (058200)	Original Schmidt Live (058000)	Rock Schmidt	Original Schmidt Live Print	Original Schmidt Hammer
Image					
Technology	Digital	Digital+Analog	Digital	Digital+Analog	Analog
Option1 : Impact Energy (N Type)	Type N				
Option 2 : Impact Energy (L Type)	Type L				
Measuring Range	10 to 120 N/mm ² (Ultra high performance Concrete)	10 to 70 N/mm ²	20 to 150 MPa Unconfined (or Uniaxial) Compressive Strength (UCS)	10 to 70 N/mm ²	
Energy (N Type)	2.207 Nm				
Energy (L Type)	0.735Nm				
Value measured independent of impact angle	Yes	Yes angle calculated and angle correction factor also applied automatically	Yes	Yes angle calculated and angle correction factor also applied automatically	No
Automatic Calculation of Compressive Strength	Yes		Correlation to unconfined compressive strength of rock / Estimation of weathering grade / Estimation of modulus of elasticity of rock with customized curves	Yes	No
Measurement Output	psi, N/mm ² , kgf, mpa, Q	psi, N/mm ² , kgf, mpa, rebound number	R,N/mm ² , MPa, Gpa, psi,	psi, N/mm ² , kgf, mpa, rebound number	Rebound number
Display					
Built-in , Display	100x100px, back-lit analog scale	100x100px, back-lit	17 x 71 px, graphic	100x100px, back-lit analog scale	Analog
Display Type	LCD Display / Mobile Device		LCD Display	LCD Display / Mobile Device	Mechanical
Communication / Connectivity					
Bluetooth Interface	Yes		No	Yes	No
Mobile app Connectivity	Yes		No	Yes	No
Bluetooth Printer Provided as Part of Supply	No (Optional as add on accessory)	No	No	Yes	No
USB Connectivity to Computer	No (USB cable connectivity for charging only)		USB Interface to PC	No (USB cable connectivity for charging only)	No
Data Report Output Formats	.csv, PDF		Directly to software	.csv, PDF	No
Storage	20'000 Impacts	2000 Measurement series	400 Series of 10 measurements	2000 Measurement series	NA
Battery Type & Life	Removable, 1x AAA (alkaline or rechargeable), >20000 impacts	Removable, 1x AAA (alkaline or rechargeable)	Integrated Li-ion, >5000 impacts	Removable, 1x AAA (alkaline or rechargeable)	NA
Rechargeable Batteries	Yes				NA
Recharging Via USB Charger	Yes				NA
Environmental Protection	IP54				NA

OS8000 - Original Schmidt Live



Core Less, Test more. The Original, Concrete test hammers Redefined as a Digital/ Analog test device for measuring compressive strength of concrete

Proceq has transformed Original Schmidt, its industry benchmark rebound hammer, into a cloud-connected instrument with unmatched performance and ease-of-use. Original Schmidt Live is unrivaled for testing, reporting and analysis of concrete strength and uniformity.



Measurement screen



Verification screen



Custom curve screen



The app's advantages

- Allows you to test in accordance with standards.
- All data is automatically recorded from the app to a web-based reporting tool.
- Manual data entry not required.
- Export reports in PDF or CSV.
- A Logbook feature summarises all activity, records GPS locations and lets you add notes, images and audio comments.
- Hammer verification management tools help you keep your hammer calibrated.
- Impact results can be heard live in audio on Mobile devices via text-to-speech.
- Select units, form factor and correlation curves.
- Create your own custom curve as required by standards.
- Automatic data backup.

Tough and resilient

Original Schmidt Live is a practical tool in a light and strong fiber-reinforced shell.

All mechanical components are Original Schmidt components to ensure compatibility with standards and give proven durability in tough conditions.

Standards

- USA: ASTM C805, ACI 228.1R
- Europe: EN12504-2, En13791
- China: JGJ-T23
- Japan: JCSE-G504, JIS A1155
- Russia: GOST 22690-2015

OS8000 - Original Schmidt Live



The World's Most Advanced R-value Concrete Test Hammer



Original Schmidt Live Print with Bluetooth printer

Original Schmidt Live is a versatile tool that works as a:

- Digital hammer with digital reporting and data sharing via a free, comprehensive Apple iOS app or Android app
- Digital print console by wirelessly connecting to a Bluetooth printer and directly printing out test results (optional)
- Stand-alone digital hammer (using the digital display without the app and downloading the data to the app later, if required)
- Stand-alone analog hammer (using it like an Original Schmidt with the mechanical display)

Applications

Original Schmidt Live has multiple applications and is a favorite of the concrete industry.

- **Concrete:** strength estimations, form work removal and to complement core testing.
- **Paper:** Roll profiling in mills and converter plants.
- **Geology:** strength testing, ageing, weathering (field and lab).

Save time and reduce human error

Prepare, test and share results up to 80 percent quicker with the Original Schmidt Live than with traditional hammers. That's an incredible time saving!

Original Schmidt Live is highly intuitive. It automatically detects and corrects for impact angle and displays the series on its screen as you work. Since series are recorded and evaluated automatically, operator influence is eliminated and time spent on manual review is saved.

Prevent read-out, transcription, and human error, and avoid losing hand-written measurements, as all data is stored instantly on a safe and secure cloud.



Original Schmidt Live with portable testing anvil

OS8000 - Original Schmidt Live



The World's Most Advanced R-value Concrete Test Hammer

Technical specifications

Impact Energy Type N	2.207 Nm (1.63 ft lbf)
Impact Energy Type L	0.735 Nm (0.54 ft lbf)
Housing Dimensions	61 x 84 x 275 mm / 2.4 x 3.3 x 10.8 in
Weight (N-hammer)	1090 g / 2.4 lb
Weight (L-hammer)	850 g / 1.9 lb
Memory	2,000 measurement series
Displays	Analog & backlit digital (100 x 100 pixels, graphic)
Charger Connection	Micro-USB
Battery	Standard AAA, alkaline or rechargeable
IP Classification	IP54

Ordering Code	Description
34010000	OS8000 Original Schmidt Live N
34010001	OS8000 Original Schmidt Live print N
34020000	OS8000 Original Schmidt Live L
34020001	OS8000 Original Schmidt Live Print L
Note:	Print version includes including Bluetooth Printer, Registration Paper Rolls (3x)

Optional Accessory	
34001301	Portable Testing Anvil OS8000 N/L Complete applicable for Original Schmidt Live Hammer
Optional	OS8000 Original Schmidt Live print N
34089001	Original Schmidt Live premium calibration certificate

Service and warranty information

Proceq is committed to providing complete support for each testing instrument by means of our global service and support facilities.

Standard warranty

- Electronic components of the instrument: 24 months
- Mechanical components of the instrument: 6 months

Extended warranty When acquiring a new instrument, max. 3 additional warranty years can be purchased for the electronic portion of the instrument. The additional warranty must be requested at time of purchase or within 90 days of purchase.

OS8200 - Silver Schmidt Live



The Gold Standard of Digital Concrete Test Hammer for measuring compressive strength of Concrete

OS8200 is the state of the art fully digital concrete test hammer on the market for concrete strength and uniformity evaluation using optical rebound hammer technology.

OS8200 Provides :

- Instant report generation on the go
- Best-in-class strength correlation
- Fully assess an entire test region in less than 10 minutes
- Connected technology allows data viewing directly on Mobile App



And is the only instrument on the market which provides :

- Apply user-defined corrections for carbonation and form factors
- Correlation to custom materials in accordance with major standards
- Automated EN13791 test region screening report
- Visual report generation using lists, bar charts and statistics on Mobile App.
- Logbook annotations for traceability (including ability to add images, geolocation, text) for test locations
- Workspace integration for cloud storage



OS8200 - Silver Schmidt Live



Specifications :

Model	Type N	Type L
Applications	High- precision compressive strength estimation and strength uniformity assessment	
Measurement Ranges		
Ultra-High Performance (UHPC)	Up -to 120 MPA / 17405 PSI	-
Normal and High Strength	10 -100 Mpa / 1450 -14500 psi	
Fresh*	-	5 -30 Mpa / 725 - 4351 psi
Technology	Optical Rebound Velocity Quotient	
Impact Angle Independent	Yes	Yes
Impact Energy	2.207 Nm	0.735 Nm
Probe Weight	1.08 kg / 2.38 lbs	0.84 kg / 1.85 lbs
Digital Display	100 x 100 px, back-lit	
Display and Processing Unit	iOS® or Android® device (not included)	
Connectivity	Bluetooth® 4.0 EDR Low Energy to iOS® or Android® device	
Accessories	Bluetooth printer: optional / included in print model / mushroom plunger (for type L only)	
Measurements settings		
Rebound value calculation	EN12504-2; ASTM C805; JGJ-T23; JSCE; JIS; Mean	
Units	N/mm², MPa, psi, kg/cm²	
Form factor correction	Cube, 2:1 cylinder, 1:1 core, user-definable	
Carbonation correction	User-definable	
Reference and custom curves	Reference curves for Europe, China and Russia Custom curves (required by major standards)EN13791 characteristic strength determination using rebound value alone	
Parameters		
Memory capacity	ca. 20'000 impacts	
Impacts per series	Max. 70	
Battery	Removable, 1x AAA (alkaline or rechargeable), flight- safe	
Battery autonomy	> 20'000 impacts	
Operating temperature	0 to 50°C / 32 to 122 °F	
Operating humidity	<95% RH, non-condensing	
Storage temperature	-10 to 70°C / 14 to 158 °F	

Software	Original Schmidt live app & website interface
Workflow features	Voice read-out of each impact on mobile device Logbook with geolocation, audio, image and text annotations Series statistics Single series reporting: PDF, CSV Test-region reporting(multiple series): PDF, CSV, uniformity report, EN13791 characteristic strength report
Verification features	Options: EN12504-2, Manufacturer's recommendation, JGJ-T23 User reminder when verification check on anvil is required User guidance for verification procedure
Cloud features	Cloud synchronization Cloud-enabled Logbook Cloud-based report generation

Product version	Ordering Code
34150000	OS8200 Original Schmidt Live, Type N
34151000	OS8200 Original Schmidt Live, Type L
34015001	Upgrade Original Schmidt OS8200 N/L TO Original Schmidt OS8200 Print N/L including Bluetooth Printer, Registration Paper Rolls (3x), Carrying Case
Optional Accessory	Print version includes including Bluetooth Printer, Registration Paper Rolls (3x).
34101401	Portable Testing Anvil Os8200 N/L Complete Applicable for Digital Concrete test hammers OS8200 & Silverschmidt
31009040	TESTING ANVIL EURO "N/NR/ND/L/LR/LD"
Optional	
31089002	EURO Anvil Premium Calibration Certificate

Standard warranty

- Electronic components of the instrument : 24months
- Mechanical components of the instrument: 6months

Extended warranty

When acquiring a new instrument, max. 3 additional warranty years can be purchased for the electronic portion of the instrument. The additional warranty must be requested at time of purchase or within 90 days of purchase.

Portable instruments for the field assessment of rock properties

The world's most advanced rebound hammer, with unmatched dispersion characteristics, durability and measuring range has now been fully adapted for rock testing. The following features of the hammer make it ideal for rock testing applications



Models

Type N: Standard impact energy, 2.207 Nm. Recommended for field work. For core testing ISRM* recommends that cores should be at least moderate strength (> 80 MPa) and at least T₂ size (≥ 84 mm).

Type L: Low impact energy, 0.735 Nm. Recommended impact energy in the ASTM D 5873 standard for testing of cores. ISRM* recommends for testing on cores of moderate strength and above of at least NX size (≥ 54 mm).

*See section "Standards and Guidelines"

Application Overview

Recommended Instruments	Type N	Type L
Geomorphological applications which investigate the bulk hard-ness properties of a rock outcrop	•	
Prediction of weathering grades	•	
Relative dating of landforms such as moraines and rock glaciers	•	
Correlation to Unconfined (or Uni-axial) Compressive Strength (UCS)	•	•
Correlation to Young's Modulus	•	•
Prediction of penetration rates for tunnel boring machines and rotary drum cutters	•	
Testing on weak rocks, porous rocks and those with thin weathering crusts		•
Testing on cores	≥ 84 mm Ø	≥ 54.7 mm Ø
Testing on rectangular blocks	> 100 mm thick	•

Specifications :

Impact energy	(N) 2.207 Nm, (L) 0.735 Nm
Dimensions of housing	55 x 55 x 250 mm (2.16" x 2.16" x 9.84")
Weight	570 g
Max. impacts per series	99
Memory capacity	Dependent on length of test series Example: 400 series of 10 impacts
Display	17 x 71 pixel, graphic
Battery lifetime	> 5000 impacts between charges
Operating temperature	0 to 50°C (32 to 122°F)
IP Classification	IP54