

# **Silver Schmidt Live Rebound Hammer**

Measure & compare concrete compressive strength on any smart device with the Silver Schmidt Live, the latest version of Proceg's Q Value Rebound Hammer.

The Silver Schmidt Q value mechanism is still the clear leader for service life between calibrations, range of compressive strength values [10 to >100 MPa] and a low scatter between individual measurements.

The latest version brings this mechanism into Proceq's Live world, now you can can verify the hammers calibration, create an instant report onsite and share the data back to the office. All on any recent iOS device.

#### **Traditional Hammers vs Silver Schmidt**

The classical rebound hammers suffer from the following insufficiencies:

- 1. The rebound value varies with impact direction.
- 2. The rebound value is affected by internal friction.
- 3. Limited sealing causes premature loss of accuracy

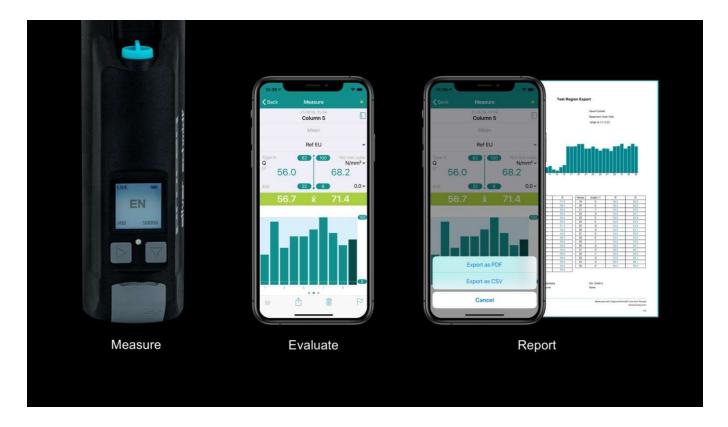
The unique design and high quality construction of the Silver Schmidt address all of these issues .



Conversion curves are provided for a wide range of concrete compressive strength, including low and high strength concrete fc <10 MPa (5MPa using Mushroom Head) and up to 100MPa.

Conversion curves for different types of modern concrete are pre-set in the Silver Schmidt, based on Hammer tests performed by an independent institution.

The user can also create their own custom conversion curves, more appropriate for their local materials.





## **Silver Schmidt Live Rebound Hammer**

#### **Dependable Measuring Results**

- High accuracy due to differential optical absolute velocity encoder
- Measurement inherently independent of impact direction, meaning no corrections necessary
- Built-in correction for carbonation and form factor gives increased test accuracy and dependability of test results
- Registration of true rebound coefficient yields extended resolution across a wider range
- Automatic Verification management with the optional portable verification anvil

## **Low Strength Concrete**

Type L hammers strike with a lower impact energy and are suitable for testing of thin concrete sections and where the hammer is to be used primarily for low strength concretes down to 10 MPa. A mushroom Head reduces the minimum to 5 MPa.



## **Silver Schmidt Live App**

#### Flexibility for all applications:

- Correlation to custom materials
- Apply user defined corrections for carbonation, form factors, etc.
- Select standard units and statistical methods
- Hammer verification management according to requirements of major standards

### **Collaboration and reporting:**

- Visual report generation using lists, bar charts and statistics
- Single and multiple series export in PDF or CSV format
- Logbook annotations for full traceability (geolocation[GPS], text, images, voice)

### Measuring Rebound Coefficient ("Q"-Value)

The Q value in SS Live is based upon speed of rebound, it brings greater accuracy at high strength.

Independent testing demonstrates that the Q-value is better for working with high strength concrete. Also delivering tighter, more accurate correlations for custom material curves.

#### **10th Percentile Conversion Curve**

A lower 10th percentile curve is recommended by the major standards EN 13791 and ASTM C805/ACI 228.1 to provide a safety margin to take into account the various factors that may affect the in-situ tests. 90% of the data pairs lie above the curve and 10% lie below.

This curve is intended to give a conservative estimate in those cases that the hammer is not calibrated for the specific mix under test. For older hammers firmware release v1.0.3 adds the new curve to your hammer.

#### **Compliance With Industry Standards**

Data collection and processing of test results comply with major industry standards: EN 12504-2, ENV 206 ASTM C805, ASTM D5873 (Rock), BS 1881, part 202

## **Specifications**

Test Hammer	Type N	Type L
Impact Energy	2.207 Nm	0.735 Nm
Compressive Strength Range	10 - 100 MPa	10 - 100MPa (5 - 100 MPa with Mushroom Head)
Battery Life	> 20,000 impacts between charges	
Battery	Standard AAA, alkaline or rechargeable	
Display	Any compatible Apple iOS device	
Memory	Instrument memory - 20,000 impacts Display memory - Memory of Device	
Connections	Low energy Bluetooth, USB	
Operating Temperature	0° to 50°C	
Warranty	*6 months Mechanical and Battery 2 Years Electrical Components	

Perth: 0408 034 668 Sydney: 0418 381 709 Melbourne: 0428 315 502 Brisbane: 0419 477 715 Auckland: 64 274 738758

www.pcte.co.nz