

Proceq Europe

Ringstrasse 2
8603 Schwerzenbach
Switzerland
Phone +41-43-355 38 00
Fax +41-43-355 38 12
info-europe@proceq.com

Proceq UK Ltd.

Bedford i-lab, Priory Business Park
Stannard Way
Bedford MK44 3RZ
United Kingdom
Phone +44-12-3483-4515
info-uk@proceq.com

Proceq USA, Inc.

117 Corporation Drive
Aliquippa, PA 15001
U.S.A.
Phone +1-724-512-0330
Fax +1-724-512-0331
info-usa@proceq.com

Proceq Asia Pte Ltd

12 New Industrial Road
#02-02A Morningstar Centre
Singapore 536202
Phone +65-6382-3966
Fax +65-6382-3307
info-asia@proceq.com

Proceq Rus LLC

Ul.Optikov 4
korp.2, lit. A, Office 321
197374 St. Petersburg
Russia
Phone/Fax +7 812 448 35 00
info-russia@proceq.com

Proceq Middle East

P.O. Box: 262419
Jebel Ali Free Zone
Dubai, United Arab Emirates
Phone +971 50 482 9510
info-middleeast@proceq.com

Proceq SAO Ltd.

South American Operations
Rua Haddock Lobo, 746 - 5 andar
Cerqueira Cesar, São Paulo
Brasil Cep. 01414-000
Phone +55 11 3083 38 89
info-southamerica@proceq.com

Proceq China

Unit G, 10th Floor, Huamin •Empire Plaza
No. 728, Yan An Road(W)
Shanghai, 200050
China
Phone +86 21-63177479
Fax +86 21 63175015
info-china@proceq.com

User Guide

Mushroom Plunger

Correct use of the SilverSchmidt L Mushroom Plunger (Part No. 341 90 002)

The mushroom plunger is designed to operate exclusively with the SilverSchmidt PC Type L (Part No. 341 41 000), for measuring on fresh or low strength concrete.



The mushroom plunger accessory is a consumable item and as such is not covered by the standard 6 month guarantee for mechanical parts. However, provided the user follows the simple precautions outlined below, prolonged, consistent performance can be expected.

Precautions when using the mushroom plunger:

- Only use the mushroom plunger with the SilverSchmidt PC type L hammer. (Part No. 341 41 000)
- The mushroom plunger is intended for use on fresh or low strength concrete.
- Never use the mushroom plunger on concrete with a compressive strength above the specified range.
- The surface should be smooth. If necessary prepare with a grinding stone before impacting.
- Due to the special geometry of the plunger tip, it is susceptible to damage if impacting at an angle. Impacts should only be carried out perpendicular to the surface in a smooth, controlled manner.

Technical Specifications

Range 5 MPa to 30 MPa
Impact energy 0.735 Nm

Conversion Curve

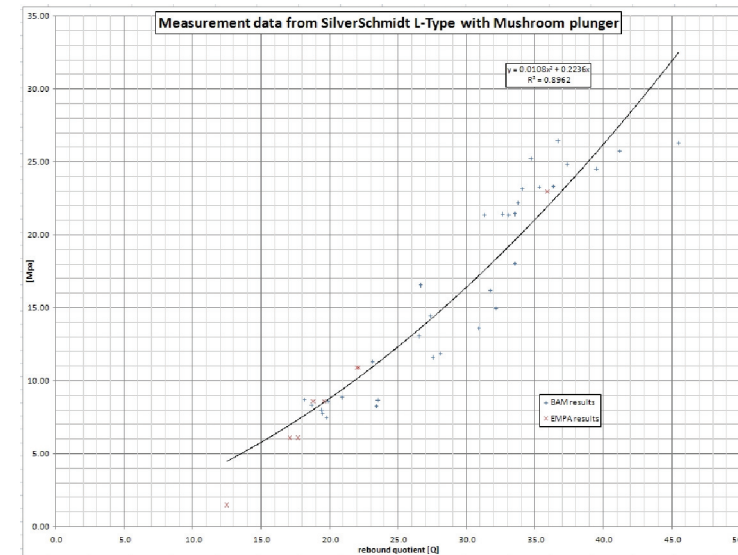
In all cases Proceq recommend to calibrate the hammer with the mushroom plunger for the specific mix under test and to program a custom curve into the hammer for in-situ testing. This is not always possible, so an example curve is provided here. It is based on limited data collected during testing carried out by the Federal Institute for Materials Research and Testing in Berlin, Germany. (BAM – Bundesanstalt für Materialforschung u. –prüfung) and by Proceq Engineers at EMPA (Swiss Federal Laboratories for Materials Testing and Research).

(The mixtures used by BAM for their testing can be seen on the www.silverschmidt.com under the downloads section and on the CD provided with the SilverSchmidt “The SilverSchmidt Reference Curve – Appendix A”.)

The Lower Limit

Limited data has been collected on very low strength concrete. For this reason the example curve has been limited to the range 5-30 MPa. During field testing, customers reported results on concrete of even lower compressive strength.

Example conversion curve for SilverSchmidt ST/PC Type L with Mushroom Plunger



Create a new custom curve for Sil

Name for the new curve:
MUSHROOM

Curve type:
 Polynomial
 Exponential

fitc = aQ^3 + bQ^2 + cQ + d

a = 0.000000
b = 0.010800
c = 0.223600
d = 0.000000

Valid range for Q:
Minimum 13 Maximum 44

Hammer type:
SilverSchmidt L

See Section 9.8 “Custom Curves” of the SilverSchmidt operating instructions for a guideline on how to enter a custom curve.