

PROFOMETER® PM-600 / PM-630

ADVANCED CONCRETE COVER METERS





PROFOMETER® TOUCHSCREEN UNIVERSAL

Proceq – History of Innovation since 1954

Proceq SA of Switzerland, founded in 1954, is a leading manufacturer of the highest quality portable instruments for non-destructive testing of materials. The ubiquitous Original Schmidt concrete test hammer, the patented SilverSchmidt (Q-value) and the Carboteq are just an excerpt of Proceq's proud inventions.



Portfolio and Applications Overview

Revolutionary Profometer Touchscreen

As direct successors of the Profometer 5+ S and Scanlog models, **Profometer PM-600** and **Profometer PM-630** continue the successful tradition that began 40 years ago representing the sixth Profometer generation.

The Profometer PM-600 and PM-630 use a new generation and design-protected Profometer Touchscreen Unit. Both instruments offer unique on-site measuring and analysis functions, and a real time control over the measurement procedure.



Housing specially designed to be used on-site in harsh environments, including carrying strap, integrated stand and sunshield cover



High resolution colour touchscreen allowing best possible measuring and analysis of the data for an entire working day (Battery lifetime >8h)



Dual core processor supporting diverse communication and peripheral interfaces



Future proof investment through direct upgrade possibilities to upcoming Profometer products

Proceq's Cover	Basic Cover Meters		Advanced Cover Meters		Expert Rebar 1	Expert Rebar Tomography	
Meter and Expert Rebar Tomography			Spot Scan		(Future)		
Systems allow comprehensive assessment of a concrete structure.	Profoscope	Profoscope+	Profometer PM-600	Profometer PM-630	Profometer PM-650		
			19	T ₃	Imaging	Corrosion	
Rebar Localization	•	•	•	•	•	•	
Cover Measurement	•	•	•	•	•	•	
Diameter Estimation	•	•	•	•	•	•	
Data Acquisition		•	•	•	•	•	
Statistics		•	•	•	•	•	
Snapshots			•	•	•	•	
Single-Line Scan				•	•	•	
Multi-Line Scan				•	•	•	
Area Scan				•	•	•	
2D-Imaging		***			•	•	
Corrosion Data Fusion						•	
Upgrade Possibilities	• —		• ——	•	>		

All instruments conform to the following standards and norms: BS 1881 Part 204, DIN 1045 (Germany) and SN 505 262 (Switzerland).



PROFOMETER® PM-600 ADVANCED CONCRETE COVER METER

Profometer PM-600 Overview

Locate Mode

With the Locate Mode you can precisely detect the rebar location and direction as well as measure the cover and the rebar diameter.



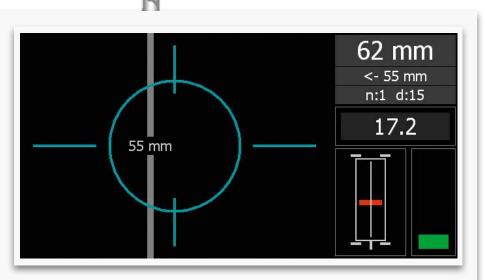
Visual assistance for speed and signal strength control



Settings directly accessible on the measurement screen



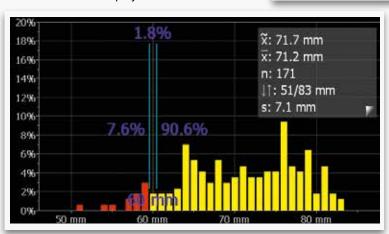
Spot Probe specially for areas with congested rebar arrangements

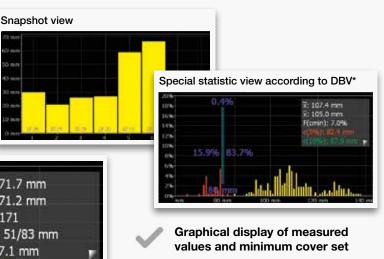


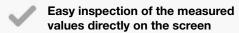
Statistics & Snapshot Views

The statistics and snapshot views allow comprehensive review of the measured data directly on the screen.

The statistics view presents a graphical overview of the distribution of cover measurements. The snapshot view shows cover for each rebar with the diameter displayed as a number.







Change settings before and after storage

Export the data to a PC via the PM-Link software

*German Concrete and Construction Association



PROFOMETER® PM-600 ADVANCED CONCRETE COVER METER







PROFOMETER® PM-630 ADVANCED CONCRETE SCAN COVER METER

Profometer PM-630 Overview

The sophisticated Profometer PM-630 augments the application range of the Profometer PM-600 with the Line and Area Scan Modes and an extensive choice of statistical views.

Single-Line Scan

Linear scan of the cover across the first layer of rebars over a long distance, with or without diameter measurement.



Measuring over long distances



Increased rebar detection capabilities (higher resolution)



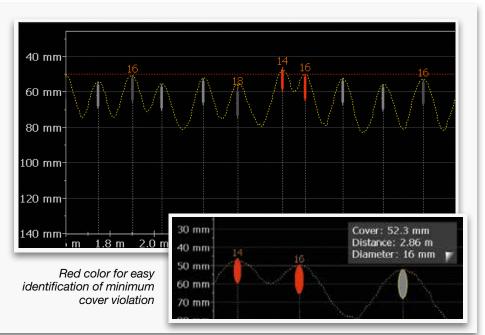
Zoom in to scale rebars according to your needs



Change settings before and after storage



Display with cover curve or signal strength curve



Multi-Line Scan

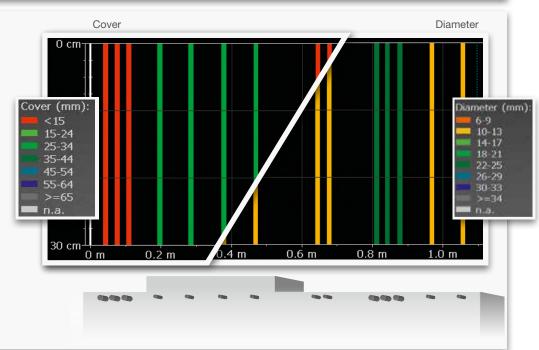
Multiple linear scans across the first layer of rebars over a rectangular area. Cover and diameter are shown in one view. Each line can be viewed individually in the Single Line View.



Color classification depending on cover and rebar diameter settings



Automatically detects diagonal rebars





PROFOMETER® PM-630 ADVANCED CONCRETE SCAN COVER METER

Area Scan

The grid display of the Area Scan Mode allows a simplified view of the measured cover data.

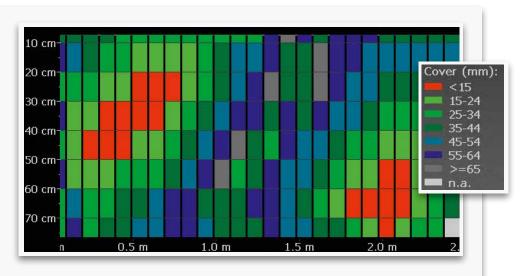
It is best suited for a combination with potential field measurements.



Individual grid size can be selected



Use in combination with Canin+ half-cell potential measurements for corrosion analysis









NDT Concrete Cover Meter to Reinforcing Bar Detection Training Concept

Proceq's training modules are strongly focused on a practical approach to routine testing of in-situ concrete quality using the whole range of our cover meter products.

Training facilities are located at Proceq headquarters in Schwerzenbach (Switzerland), Chicago (USA), Singapore and London (UK). All training modules are conducted in English (German, French and Spanish can be organized on demand).

Training fees include all necessary training material and documentation and exclude all travel, accommodation and meals. Course dates are determined by Proceq. Please contact your local Proceq representative.

Essentials of Cover Meter Detection using the Electromagnetic Pulse Induction Technology				
Description	Prerequisites	Duration	Locations	Course No.
Characteristics of concrete; overview of NDT methods; electromagnetic pulse induction technology principle and methods for cover measurement, rebar localization and diameter measurement; product and practical training (Profoscope, Profometer PM-600, Profometer	Any technical background or prior experience with NDT products will allow quicker and deeper comprehension of the course material.	1 day	 » Schwerzenbach (Zuerich, Switzerland) » Chicago Illinois (United States of America) » Singapore » London (United Kingdom) 	970 00 500

Profoscope(+)

Basic Cover Meter

Get the most trusted instrument for rebar detection, cover depth and rebar diameter measurements.

The Profoscope instruments are used to determine the location and concrete cover of the reinforcing bars in reinforced concrete structures. The instruments can also estimate the bar diameter. The Profoscope's rebar detection function and it's capability to identify the mid-point between two rebars are groundbreaking.

- » **Versatility:** Rebar location and orientation, cover measurement and rebar diameter assessment all provided by a single, fully integrated, cordless instrument.
- » Ease of use: The intuitive user interface and the the realtime visualization of the rebars make the instrument very easy to use.
- » **Durability:** Sealed housing for use in rough environment with replaceable protection cover for long lasting performance, over a wide temperature range.



PROFOMETER® PM-600 / PM-630 ADVANCED CONCRETE COVER METERS

Ordering Information

Units

PART NO.	DESCRIPTION	
392 10 001	Profometer PM-600 consisting of Profometer Touchscreen, universal probe with probe cart, probe cable 1.5 m (5 ft), battery charger, USB cable, chalk,	
	DVD with software, documentation, carrying strap and carrying case	
392 20 001	Profometer PM-630 consisting of Profometer Touchscreen, universal probe with probe cart, probe	
	cable 1.5 m (5 ft), battery charger, USB cable, chalk, DVD with software, documentation, carrying strap and carrying case	
391 10 000	Profoscope unit consisting of Profoscope, start-up test kit, batteries, canvas bag, carrying strap, chalk, documentation	
391 20 000	Profoscope+ unit consisting of Profoscope+, start- up test kit, batteries, memory card, USB-cable, canvas bag, carrying strap, chalk, documentation, ProfoLink software	
Upgrades		
	Coffware Linguish from Distances PM 600 to	
392 00 115	Software Upgrade from Profometer PM-600 to	

Accessories

PM-630

ACCESSUI IES	
392 40 040	Profometer PM-6 Telescopic extension rod 1.6 m (5.3 ft) with probe cable 3 m (10 ft)
327 01 063	Profometer PM-6 Probe cable 3 m (10 ft)
327 01 068	Profometer PM-6 Probe cable 10 m (33 ft)
390 00 270	Profometer test block
327 01 053	Quick charger
327 01 033	Battery complete
392 00 004S	Profometer PM-6 Self-adhesive protective film for probe (set of 3)
325 34 018S	Chalk (set of 10)

Proceq SA

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Technical Specification

Cover Measuring Range		Up to 185 mm (7.3")		
Cover Measuring Accuracy		± 1 mm to ± 4 mm (0.04" to 0.16")		
Measuring Resolution		Depending on diameter and cover		
Path Measuring accuracy on smooth surface		± 3 mm (0.12") + 0.5% to 1.0% of measured length		
Display		7" colour display 800x480 pixels		
Diameter Measuring Range		Up to 63 mm (2.5")		
Diameter Measuring Accuracy		± 1 bar size		
Memory		Internal 8 GB Flash memory		
Regional Settings		Metric and imperial units and multi- ti-language supported		
Battery		Lithium Polymer, 3.6 V, 14.0 Ah		
Battery Lifetime		> 8h (in standard operating mode)		
Mains		9 V – 15 V / 2.0 A		
Weight (of display dev	ice)	About 1525 g (incl. Battery)		
Operating temperature	0°C – 4	0°C (Charging, running instrument) 40°C (Charging, instrument is off) 10°C – 50°C (Non-charging)		
Humidity		< 95 % RH, non condensing		
IP Classification		IP54		
Standards and Directives		CE certification		
*				

*charging equipment is for indoor use only (no IP classification)

Service and Support

Proceq is committed to providing the best support and service available in the industry through the Proceq certified service centers worldwide. This results in a complete support for the Profometer PM-6xx by means of our global service and support facilities.

Warranty Information

Each instrument is backed by the standard Proceq warranty and extended warranty options.

- » Electronic portion of the instrument: 24 months
- » Mechanical portion of the instrument: 6 months

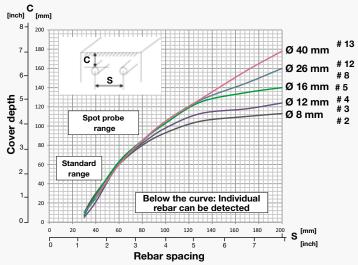
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The Profometer Measuring Range [Inch] [Imm] The Profometer Measuring Range R

Rebar size

Unsurpassed Resolution



The Technology

The Profometer PM-600/630 uses **electromagnetic pulse induction technology** to detect rebars. Multiple coil arrangements in the probe are periodically charged by current pulses and thus generate a magnetic field.

On the surface of any electrically conductive material which is in the magnetic field eddy currents are produced. They induce a magnetic field in the opposite direction. The resulting change in voltage can be utilized for the measurement.

Advanced signal processing allows localization of a rebar, determination of the cover and estimation of the rebar diameter. This method is unaffected by all non conductive materials such as concrete, wood, plastics, bricks etc.

However any kind of conductive materials within the magnetic field will have an influence on the measurement.

