# Discover our little wizard!



The PROFOMETER 5 locates reinforcing bars and measures concrete cover quickly, simply and with complete accuracy.

The PROFOMETER 5 reinforcement locator is a lightweight, compact unit. It works with non-destructive pulse-induction that is largely insensitive to external interferences.

The PROFOMETER 5 is available in two versions: Model S and Model SCANLOG.

# Universal probe

Location, depth and diameter of rebars can be determined using one unique probe.



Display Graphical presentation of results



# THE NEW PROFOMETER 5

# Model S

# Your basic unit with the following functions:

- Location of reinforcing bars
- Measurement of concrete cover
- Storage of individual cover values and statistical evaluation
- Determination of bar diameter

### Various location aids are available:

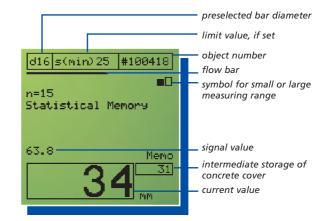
Current value: Distance from surface of reinforcement
Flow bar: Movement of flow bar indicates approach

to metal

Beep tone: Sounds immediately after crossing the bar axis Variotone: The nearer the probe to the bar, the higher

the tone

Signal value: Measurement of distance from probe to metal



# «Measuring with statistics» function

The smallest concrete cover measured remains temporarily stored in the «Memo» frame.

The statistical evaluation of the stored memo values appears when the button is pressed.

### RS 232 Interface:

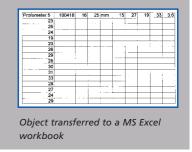
- Data printed out on directly connected printer
- Data transfer to PC for evaluation



Display



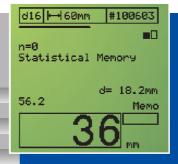
Printout of statistical values



### Determine the bar diameter of closely situated, parallel bars!

Accurately locate the axis of neighbouring bars and mark it on the concrete surface. Measure the bar spacing and enter the value in the unit.



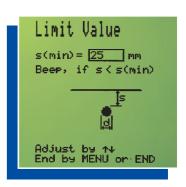


The diameter measurement can then be made and the result appears on the display.

# Detect bars with insufficient concrete cover!

- Check after removing formwork
- Quality assurance
- Evaluation basis for repair

The universal probe can be moved rapidly with the preselected limit value, without observing the display. If the cover is too low, an acoustic warning signal is given.



# **ALWAYS SEES THROUGH...**



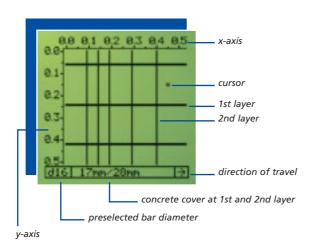
# Model SCANLOG

# Identical to Model S – with the additional features:

- «CyberScan» function to show reinforcing bars on the display
- «Measuring with grid» function for grey-scale display of concrete cover
- ScanCar probe carriage with integral path measuring device when scanning

# Make reinforcement visible with «CyberScan»!

Three scales are available: 0.5 x 0.5 m, 1.0 x 1.0 m, 2.0 x 2.0 m





# Display

# «Measuring with grid» function

# Printout of concrete cover in grey-scale

Column Row Spa Number	No.: 300000 d: 16mm Width x: 150mm Mean x: 37mm cing y: 150mm Min/Max: 5/58mm of measurements: 581 measuring: 13.073m2 smaller s(min)= 19\$
2.6 2.6	6.2 12.9 19.6 30.8 37.3 46 3.6 6.7 6.7 11.2 6.5
< 10mm	<pre>15mm &lt; 20mm &lt; 25mm &lt; 30mm &lt; 35mm &lt; 4</pre>
==> X	0.00 1.50 3.00 4.50
0.00	
0.30	
0.60	
0.90	
1.20	
1.50	
2.10	

# Printout of concrete cover in mm

Object No.: 300000 d: 15mm Column Width x: 150mm Mean x: 37mm Row Spacing y: 150mm Min/Max: 5/56mm Numbor of measurements: 581 s(min): 25mm Area of measuring: 13.073m2 smaller s(min)= 194															.9%							
=> x 0.00 0.30 0.60 0.90 1.20 1.50 1.80 2.10 2.40 2.70 3.00 3.3																						
ı		0.00	0.30	0.0	0	n.36		. 20	'	1.00		1.6	, ,	2.19	,	2.44	,	2.7	,	3.0		3.30
ı	0.00	38 4	2 39	33 19	18	24	33 :	38	44	50	47	46	47	50	58	46	55	47	44	43	44	44
ı	0.15			19 19																		
ı	0.30	42 4	3 19	19 18	19	17	14	19	33	50	49	48	54	53	57	46	50	50	50	43	48	42
ı	0.45			14 13																		
ı	0.60			19 19																		
ı	0.75			19 18																		
ı	0.90			24 19																		
ı	1.05			29 22																		
ı	1.20			27 24																		
ı	1.35 1.50			26																		
ı	1.65			22 28																		
ı	1.80			29 26																		
ı	1.95			26 31																		
ı	2.10			26 27																		
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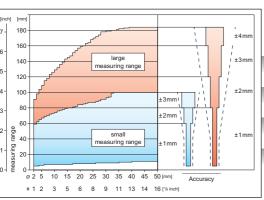
# Object transferred to a MS Excel workbook

	object	x-grid	y-grid	sum	I A	d T	X	min	max	s(min)	<s(min)< th=""></s(min)<>
		[mm]	[mm]	[-]	[m2]	[mm]	[mm]	[mm]	[mm]	[mm]	[%]
	300000	150	150	581	13.073	16	37	5	58	25	19
m	0.00	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	1.50
0.00	38	42	39	33	19	18	24	33	38	44	50
0.15	43	42	33	19	19	18	24	24	33	41	48
0.30	42	43	19	19	18	19	17	14	19	33	50
0.45	43	38	19	14	13	9	13	13	12	12	38
0.60	38	34	18	19	19	6	7	9	- 8	14	13
0.75	32	33	31	19	18	11	12	6	11	7	14
	38	23	23	24	19	14	11	7	7	13	29
0.90											

# Numerical display



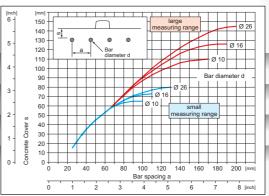
Graphical display



- Ø bar diameter in mm
- # bar diameter in «Bar size #»
- --- limit of accuracy required by standard BS 1881: Part 204: ± 2 mm or ± 5%

PROFOMETER 5 measures up to 50% more accurately than required by this standard!

# ... and unsurpassed resolution



The diagram shows the minimum bar spacings **a** at which the bars can still be individually detected as a function of the concrete cover **s**.

Example: Bar diameter d = 16 mm
Concrete cover s = 55 mm
Minimum bar spacing a = 70 mm

# Model S

# **Basic equipment:**

### ■ Display unit

with non-volatile memory for 40 000 measured values, which can be spread over 63 objects. Display on 128 x 128 graphics LCD, RS 232 interface. Software for printing statistical values and transfer to PC. Battery operation 45 hours, temperature range –10°C to +60°C.

### Universal probe

The probe automatically compensates for any effects resulting from magnetic aggregate material or special cement.

- Probe cable 1.5 m
- Carrying strap
- Headset
- 3.5" diskette for data transfer
- Carrying case 463/365/107 mm. Total weight 2.4 kg

Model S can be upgraded to Model SCANLOG.

# Model SCANLOG

# Identical to Model S – with the additional features:

«CyberScan» function for displaying the reinforcement. «Measuring with grid» function for grey-scale display of concrete cover. The results of both functions can be stored, printed out and transferred to a PC.

PROCEO SA

- ScanCar probe carriage with path measuring cable 1.55 m
- Transfer cable 1.5m

Subject to technical modification

■ Interface converter serial/parallel, incl. 2.0 m cable

# Accessories for both models

Test block

Telescopic rod for universal probe or ScanCar Marking pen for universal probe





Standards: SIA 162 / DIN 1045 / DGZfP B2 / BS 1881: Part 204







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