

Reveal the **rebar** this easily

Hilti PS 200 Ferroskan



The complete system for rebar detection, cover measurement and bar diameter estimation.

- Scan large areas quickly
- Obtain a real image of the reinforcement
- Evaluate and document results for seamless report generation



HILTI

Scan modes for every application

Imagescan and Blockscan

Imagescan

- Overview of the rebar layout
- Measure the coverage at any specific point
- Estimate the rebar diameter at any specific point



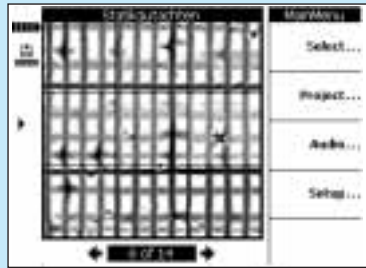
Imagescan – Detection range and accuracy (mm)

Bar Diameter	Depth									
	20	40	60	80	100	120	140	160	180	
6	± 2	± 3	± 3	± 4	± 5	0	X	X	X	
8	± 2	± 2	± 3	± 4	± 5	0	0	X	X	
10	± 2	± 2	± 3	± 4	± 5	0	0	X	X	
12	± 2	± 2	± 3	± 4	± 5	± 10	0	X	X	
14	± 2	± 2	± 3	± 4	± 5	± 10	0	0	X	
16	± 2	± 2	± 3	± 4	± 5	± 10	0	0	X	
20	± 2	± 2	± 3	± 4	± 5	± 10	± 11.5	0	X	
25	± 2	± 2	± 3	± 4	± 5	± 10	± 11.5	0	X	
28	± 2	± 2	± 3	± 4	± 5	± 10	± 11.5	0	X	
30	± 2	± 2	± 3	± 4	± 5	± 10	± 11.5	0	X	
36	± 2	± 2	± 3	± 4	± 5	± 10	± 11.5	± 13	0	

Bar diameter given. Value indicates accuracy of depth measurement in mm.
 0 - bar can be detected at this depth but no depth calculated
 X - Bar cannot be detected at this depth
 Valid for bars conforming to DIN 488

Blockscan

- Overview of the rebar layout over a large area



Note:

Bar spacing : Coverage must be greater than 1:1 to individual bars

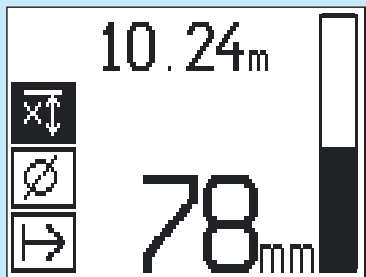
Bar Diameter Determination

± 1 standard bar diameter. Spacing : Depth of cover ≥ 3:1

Quickscan Detection and Recording

Quickscan Detection

- Quick detection of bar positions
- Quick determination of coverage depth



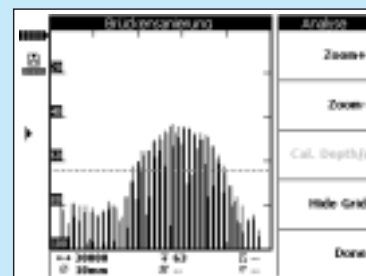
Quickscan Recording – Detection range and accuracy (mm)

Bar Diameter	Depth				
	20	40	60	80	100
6	± 1	± 1	± 2	± 4	± 5
8	± 1	± 1	± 2	± 4	± 5
10	± 1	± 1	± 2	± 4	± 5
12	± 1	± 1	± 2	± 4	± 5
14	± 1	± 1	± 2	± 4	± 5
16	± 1	± 1	± 2	± 4	± 5
20	± 1	± 1	± 2	± 4	± 5
25	± 1	± 1	± 2	± 4	± 5
28	± 1	± 1	± 2	± 4	± 5
30	± 1	± 1	± 2	± 4	± 5
36	± 1	± 1	± 2	± 4	± 5

Bar diameter given. Value indicates accuracy of depth measurement in mm.
 0 - bar can be detected at this depth but no depth calculated
 X - Bar cannot be detected at this depth
 Valid for bars conforming to DIN 488

Quickscan Recording

- Long stretches up to 30 m scanned easily and quickly
- Evaluation of coverage over large areas
- Evaluation of mean coverage and standard deviation



Note:

Bar spacing : Coverage must be greater than 1:1 to individual bars

The **professional solution** for rebar scanning and documentation

The Hilti PS 200 Ferroskan is a portable, quick and easy-to-use system for detecting and measuring the depth of coverage, diameter and position of reinforcement. Suitable for detecting bars either in localised areas or for determining coverage over the whole surface of a structure, the PS 200 is a complete system including comprehensive evaluation and documentation software.

The cableless system consists of a Scanner, Monitor and PC-software. The Scanner is used to pick up the information from below the surface of the concrete. This is then transferred to the Monitor where it can be viewed and information such as the location, depth and diameter of the rebar can be determined. For further advanced evaluation or to prepare a print-ready report, the PC-software is used.

Fast

- Scans large areas quickly and easily
- Reinforcement can be shown as an image
- Single scans of up to 30m in length
- Simple, one person operation

Jobsite Tough

- Robust construction – built to take the knocks, protected against dust and water
- Scans for at least 8 hours on a single battery charge
- Data storage on removable Memory Card

Complete System

- Includes professional evaluation and documentation software

No cables, no hassles

No cable to snag or hinder your movement and no monitor hanging around your neck! PS 200 cableless operation means you can store the scan data in the scanner and download it easily and quickly using the infra-red connection. Leave the monitor in the car or carry it on the belt.



Hilti Lifetime Service

2 Years

LIFETIME SERVICE

NO COSTS

Lifetime

Lifetime

REPAIR COST LIMIT

MANUFACTURERS WARRANTY

The PS 200 M Monitor

Look at the scans that have been made and determine location, depth and diameter of bars on images or process Quickscans for immediate determination of the average coverage over large areas. Data is stored on the removable Multimedia Card. The headset connection allows you to add voice recordings to a scan – these are even available in the PC-software after you have downloaded.



The PS 200 S Scanner

The PS 200 S Scanner scans the full width between its wheels locating virtually any rebar that lies beneath. The easy to follow integrated display makes setting up the scan a snap and also gives you full information over the scan process. The Scanner can even be used on its own for simple rebar location jobs.



One Monitor – multiple Scanners




The cableless technology used in PS 200 means that several scanners can work with a single monitor. Thus you can have two or more people scanning and downloading the data to a single monitor thereby making large scanning jobs go even more quickly but at a fraction of the cost of buying additional complete scanning systems.

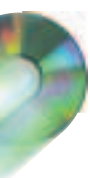
PC Software and areas of application



Supports PC processing and documentation

Specially developed PC-software permits further processing and evaluation of the data. Data is transferred seamlessly and quickly using the USB connection from the PS 200 Monitor. Features such as automatic processing of large amounts of data, automatic report generation and print out and export of images and data in various standard data formats all go towards providing the final piece of the complete detection system solution

	Verification of Reinforcement	Checking Coverage	Avoiding Rebar Hits
			
Task	<ul style="list-style-type: none"> ■ Change of use of buildings when plans are not at hand ■ Acceptance inspections of concrete components ■ Checking reinforcement before structural repair ■ Post-installed reinforcement 	<ul style="list-style-type: none"> ■ Building acceptance inspections ■ Coverage checking over a large area during renovation ■ Quality Control 	<ul style="list-style-type: none"> ■ Hammer drilling without the costly problem of drilling into rebars ■ No cutting through statically relevant reinforcing bars ■ Achieve considerably longer drill bit life
What is required	<ul style="list-style-type: none"> ■ Position of reinforcement ■ Depth of coverage ■ Bar diameter 	<ul style="list-style-type: none"> ■ Depth of coverage 	<ul style="list-style-type: none"> ■ Position of the reinforcement
Types of Scan	<ul style="list-style-type: none"> ■ Imagescan ■ Quickscan for checking 	<ul style="list-style-type: none"> ■ Quickscan Recording ■ Imagescan in difficult situations 	<ul style="list-style-type: none"> ■ Quickscan ■ Blockscan ■ Imagescan where through-holes are drilled
Typical Structures	<ul style="list-style-type: none"> ■ Industrial buildings, floors and decks, beams, supporting columns etc. 	<ul style="list-style-type: none"> ■ Bridges, tunnels, underground car parks etc. 	<ul style="list-style-type: none"> ■ Repetitive fastening applications, ventilation ducts, through-holes etc.



Multimedia CD-Rom:
tips and tricks on Ferroskan use,
software download



www.hilti.com:
PS 200 information online



Application brochure:
where and how to use the
Ferroskan

Program Hilti PS 200 Ferroskan System

Ordering designation

PS 200 Ferroskan System

Item no.

377638

Comprising: PS 200 S Scanner, Hand Strap and Soft Pouch; PS 200 M Monitor, Soft Pouch and Memory Card; Headset; 2 Battery Packs; 2 Battery Chargers; Carry Belt; Reference Grid Set; Adhesive Tape; Marker Set; USB Data Cable; PC-Software on CD-ROM; Operating Instructions. Packed in a Hilti case.



Accessories and Replacement Items

Ordering designation

PS 200 S Scanner

Item no.

For expanding a PS 200 Ferroskan System with additional Scanner or as replacement. Comprising: PS 200 S Scanner, Hand Strap and Soft Pouch; Operating Instructions.

PS 200 M Monitor

Comprising: PS 200 M Monitor, Soft Pouch and Memory Card, Operating Instructions.

PSA 91 Memory Card

32 MB Multimedia Memory Card

PSA 92 Data Cable

USB data cable. 2.0 metres long

PSA 93 Headset

For voice recording and playback on the Monitor.

PSA 10 Reference Grid Set

Metric reference grids (pack of 5).

PUA 70 Marker Set

China markers (pack of 12).

PSA 90 PC-Software V.5.0

PC-Software on CD-ROM for processing and documenting scan data

PSA 80 Battery Pack

Battery Pack for Scanner or Monitor

PUA 80 Battery Charger

Replacement or additional charger for charging single Battery Pack.

PSA 60 Soft Pouch

Soft pouch for PS 200 S Scanner

PSA 61 Soft Pouch

Soft pouch for PS 200 M Monitor

PSA 62 Carry Belt

Carry belt for Scanner and Monitor soft pouches

PSA 63 Hand Strap

Ensures the Scanner cannot be dropped

PS 200 Case

Hilti case for PS 200 Ferroskan System

PSW 200 S-1 Wheel Set

4 Replacement wheels for the Scanner, complete with Allen wrench



Technical Data

Scanner Memory Capacity	Up to 9 Imagescans plus up to 30m of recorded Quickscan
Monitor Memory Capacity/Type	32 MB Removable Multimedia Card (150 Images or 75 Quickscans)
Battery Life	Typ. 8 hours
Protection Class	IP 54 as per IEC529
Operating Temperature Range	-10°C to +50°C
Scanner Dimensions / Weight	229×132×132 mm / 1.4 kg
Monitor Dimensions / Weight	264×152×57 mm / 1.4 kg
Minimum System Requirements for PC Software:	Microsoft® Windows® 98, 16 MB RAM, 8 MB free hard disk space, CD-ROM Drive, USB v. 1.1 interface.



Hilti Australia
23 Egerton Street, Silverwater
New South Wales 2128
Phone: 131 292
www.hilti.com.au