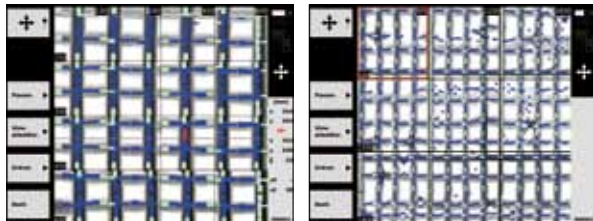


## Simply professional.

### Complete evaluation of images and data on the monitor or PC.

The scanned data can be optimally viewed, analyzed and extrapolated on the Hilti PSA 100 monitor. The data can then be transferred to any PC for further analysis in either Imagescan and Blockscan or with Quickscan recording.

### Imagescan and Blockscan



Monitor view of Imagescan    Monitor view of Blockscan

#### Detection range and accuracy (mm)

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

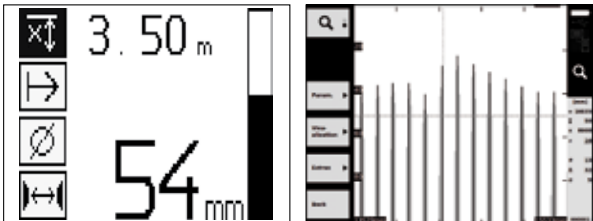
0 = The rebar can be detected at this depth but its depth cannot be determined.  
X = The rebar cannot be detected at this depth.

The value indicates the typical accuracy of depth measurement (deviation from the actual value) in mm.

#### Estimation of rebar diameter

The ratio of rebar spacing to depth of coverage must be greater than 2:1. Diameter estimation at depths up to max. 60 mm. Accuracy: ±1 standard diameter.

### Quickscan



Scanner view of Quickscan detection

Monitor view with Quickscan recording

#### Detection range and accuracy (mm) with recording

| Rebar diameter | Depth |    |    |    |    |     |  |
|----------------|-------|----|----|----|----|-----|--|
|                | 6     | 20 | 40 | 60 | 80 | 100 |  |
| 6              | ±1    | ±1 | ±1 | ±2 | ±4 | ±5  |  |
| 8              | ±1    | ±1 | ±1 | ±2 | ±4 | ±5  |  |
| 10             | ±1    | ±1 | ±1 | ±2 | ±4 | ±5  |  |
| 12             | ±1    | ±1 | ±1 | ±2 | ±4 | ±5  |  |
| 14             | ±1    | ±1 | ±1 | ±2 | ±4 | ±5  |  |
| 16             | ±1    | ±1 | ±1 | ±2 | ±4 | ±5  |  |
| 20             | ±1    | ±1 | ±1 | ±2 | ±4 | ±5  |  |
| 25             | ±1    | ±1 | ±1 | ±2 | ±4 | ±5  |  |
| 28             | ±1    | ±1 | ±1 | ±2 | ±4 | ±5  |  |
| 30             | ±1    | ±1 | ±1 | ±2 | ±4 | ±5  |  |
| 36             | ±1    | ±1 | ±1 | ±2 | ±4 | ±5  |  |

The value provides the typical accuracy of depth measurement (deviation from the actual value) in mm.

### Ferroskan detection system

| Ordering designation                                                                                                                                                                                                                                                                                      | Item no. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| <b>PS 250 Ferroskan system</b>                                                                                                                                                                                                                                                                            | ① 000000 |
| PS 200 S scanner, PSA 100 monitor, headset, 2 battery packs, 2 battery chargers, reference grid set, 2 data cables, soft pouches, adhesive tape, marker set, hand strap, PC software, PSA 55 Adapter IR, data modul, brush, cleaning cloth, meter stick, 2 producer certificates. Packed in a Hilti case. |          |

| PS 200 S Ferroskan set                                                                                                                                                                                                    | ② 000000 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| PS 200 S scanner, hand strap, soft pouch, battery pack, battery charger, reference grid set, producer certificate, PSA 55 Adapter IR, data cable, PC software, brush, clening cloth, meter stick. Packed in a Hilti case. |          |

### Accessories

|                                                                            |         |
|----------------------------------------------------------------------------|---------|
| <b>PSA 100 monitor</b> with soft case, battery pack and AC adapter         | 2006082 |
| <b>PSA 10 reference grid</b> , in mm                                       | 377654  |
| <b>PSA 75 brush</b>                                                        | 2013776 |
| <b>PUA 70 marking pens</b> , 12 pcs                                        | 340806  |
| <b>PSA 55 adapter IR</b> for buffering data, with PUA 95 data cable        | 319362  |
| <b>PUA 95 data cable</b> for data transfer PSA 55 Adapter IR - PC          | 2044481 |
| <b>PSA 65 carrying device</b> for the PSA 100 monitor                      | 2006200 |
| <b>PSA 80 battery pack</b> for scanner and PS 200 M monitor                | 377472  |
| <b>PUA 80 AC adapter</b> for the PSA 80 battery pack                       | 000000  |
| <b>PSA 82 battery pack</b> for PSA 100 monitor                             | 2006183 |
| <b>PUA 81 AC adapter</b> for PSA 100 monitor                               | 2006089 |
| <b>PUA 82 motor vehicle power adapter</b> for PSA 100 monitor              | 2006180 |
| <b>PSA 85 battery charger</b> for PSA 82 battery pack                      | 2006183 |
| <b>PSA 91 memory card MMC card</b> (for PS 200 M monitor, item no. 319281) | 305141  |
| <b>PSA 94 memory card SD card</b> (for PS 200 M monitor, item no. 031225)  | 319911  |
| <b>PSA 92 data cable</b> for data transfer between the monitor and PC      | 305142  |
| <b>PSA 93 headset</b> for voice recording with the monitor                 | 305143  |
| <b>PS 250 toolbox</b>                                                      | 2044482 |



### Productivity plus



Ruggedly-built measuring system for determining the exit point when drilling through masonry or concrete walls



Radar detection system providing high-resolution images of embedded objects in concrete



Injectable mortars for versatile, secure fastenings in concrete and masonry



Anchor systems for light, medium and heavy-duty applications

## Hilti. Outperform. Outlast.

Hilti Corporation | 9494 Schaan | Liechtenstein | P +423 234-2111 | [www.hilti.com](http://www.hilti.com)

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## Get a visible handle on rebar.

### Hilti. Outperform. Outlast.

#### Applications

- Rebar verification and analysis
- Checking concrete coverage over large areas for structural repair work
- Building acceptance inspections
- Coring and hammer drilling without costly rebar hits and avoidance of damage caused by cutting through structurally significant reinforcement

#### Advantages

- Scans large areas of concrete quickly and easily
- Provides accurate depth of cover measurements for reinforcement at depths up to 100 mm
- Records scan data automatically over lengths of up to 30 meters
- Displays a clear 2D image of the reinforcement on the monitor for on-the-spot structural analysis and depth of cover assessment or printing

#### Highlights

- PC software for professional scan evaluation and data management:**
- Subsequent data analysis on a PC
  - Collective evaluation of several individual scans with the same parameters, use of various data formats, and much more
  - Capable of combining multiple scans for visual presentation (in 2D/3D views)
  - Provides data evaluation and visualisation of areas up to 45 x 45 m



Rebar detection and verification: acceptance inspections, changes of building use or post-installed rebar connections.



Checking coverage: for acceptance tests, renovation work and for quality control purposes.



Avoid rebar hits: avoiding costly rebar hits while coring and hammer drilling.

## More insight. Fewer surprises.

The Hilti PS 250 Ferroskan system provides a non-destructive means of locating reinforcing bars and measuring their depth of concrete cover. This complete, easy-to-use cordless detection system, consisting of a scanner, monitor and PC software can also estimate the diameter of rebars found. Employing the induction principle, the scanner locates rebars accurately and reliably within concrete structures. The results of scans are displayed on the portable monitor unit as easily interpretable 2D-images for direct on-site data analysis. Alternatively, scan data can be transferred to a PC via an adapter or via the monitor unit for further analysis, creation of assessment reports and for archival purposes.



### Imagescan

- Scans large areas of concrete in a grid pattern
- Locates rebars at depths of up to 160 mm
- Produces clear, easily interpretable 2D images of the layout, for measurement of depth of concrete cover and for estimation of rebar diameter
- Multiple Imagescans can be combined for large-area analysis (PC application)

### Blockscan

- Provides an overview of the rebar layout over a large area (up to a maximum of 180 cm x 180 cm, i.e. 3 x 3 Imagescans)

### Quickscan recording

- Scans long stretches of up to 30 m in length, quickly and easily
- Records and evaluates the data automatically while indicating the average depth of cover, the number of bars found and the standard deviation
- Multiple Quickscans can be combined for large-area analysis using the PC application

### Quickscan detection

- Quickly measures the depth of cover over reinforcing bars located at depths of up to 100 mm, allowing their positions to be marked directly on the concrete surface



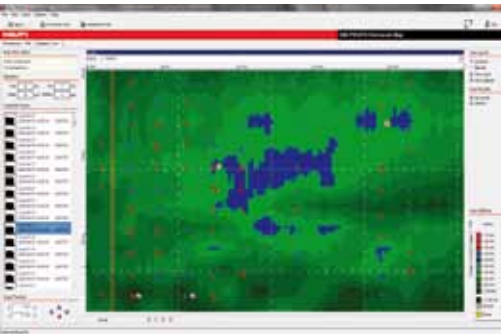
### Performance data

|                                             |                                                                   |
|---------------------------------------------|-------------------------------------------------------------------|
| Scanner memory capacity                     | Up to 9 Imagescans plus up to 30 meters of recorded Quickscans    |
| Monitor memory capacity / type              | 180'000 Imagescans, 112'000 Quickscans or 18'000 Blockscans       |
| Battery life scanner / monitor              | 8 hours / 2 hours on average                                      |
| Protection class                            | IP 54 in accordance with IEC 529                                  |
| Operating temperature range                 | -10°C to +50°C                                                    |
| Dimensions / weight of scanner              | 260 x 132 x 132 mm / 1.4 kg                                       |
| Dimensions / weight of monitor              | 292 x 208 x 65 mm / 2.26 kg                                       |
| Minimum system requirements for PC software | Pentium Pro, 1024x768 screen resolution, 512 MB Ram, Microsoft XP |

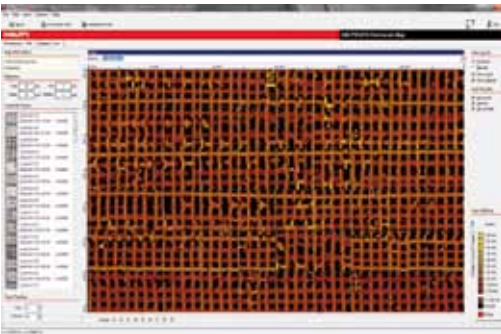
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Quickscan data for analysis of depth of concrete cover, displayed using the Hilti PROFIS Ferroskan PC application.



Ferroskan MAP combines multiple scans in a large-area view showing where depth of cover is inadequate (with statistics).



Multiple scans can be combined visualizing the rebar layout and layers in 2D or 3D and depth of cover (with statistics).