Inspect rebar cover of columns and beams with unrivalled flexibility

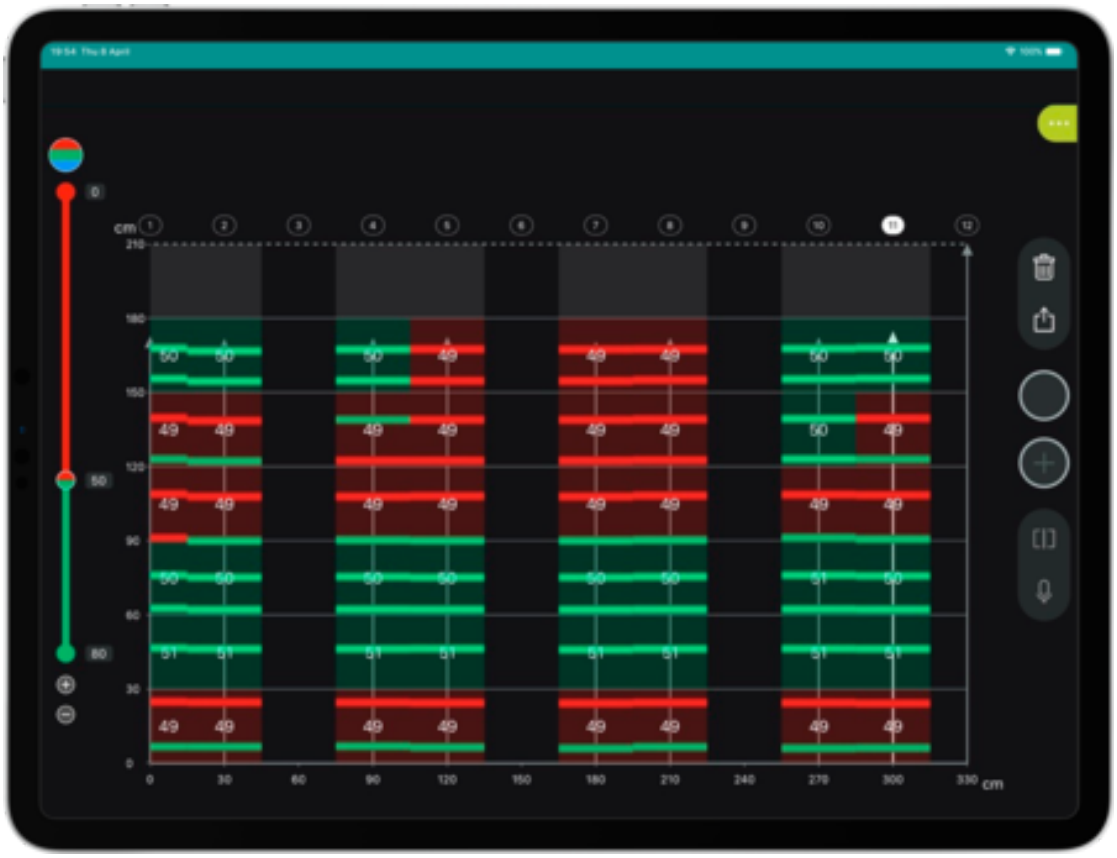
Discover unrivalled flexibility when inspecting the top layer rebar cover

The concrete cover over the first layer of rebar called stirrups plays a crucial role in structures like beams & columns. It helps to provide protection against carbonation, accidental fire, and other environmental factors that can compromise the reinforcement.

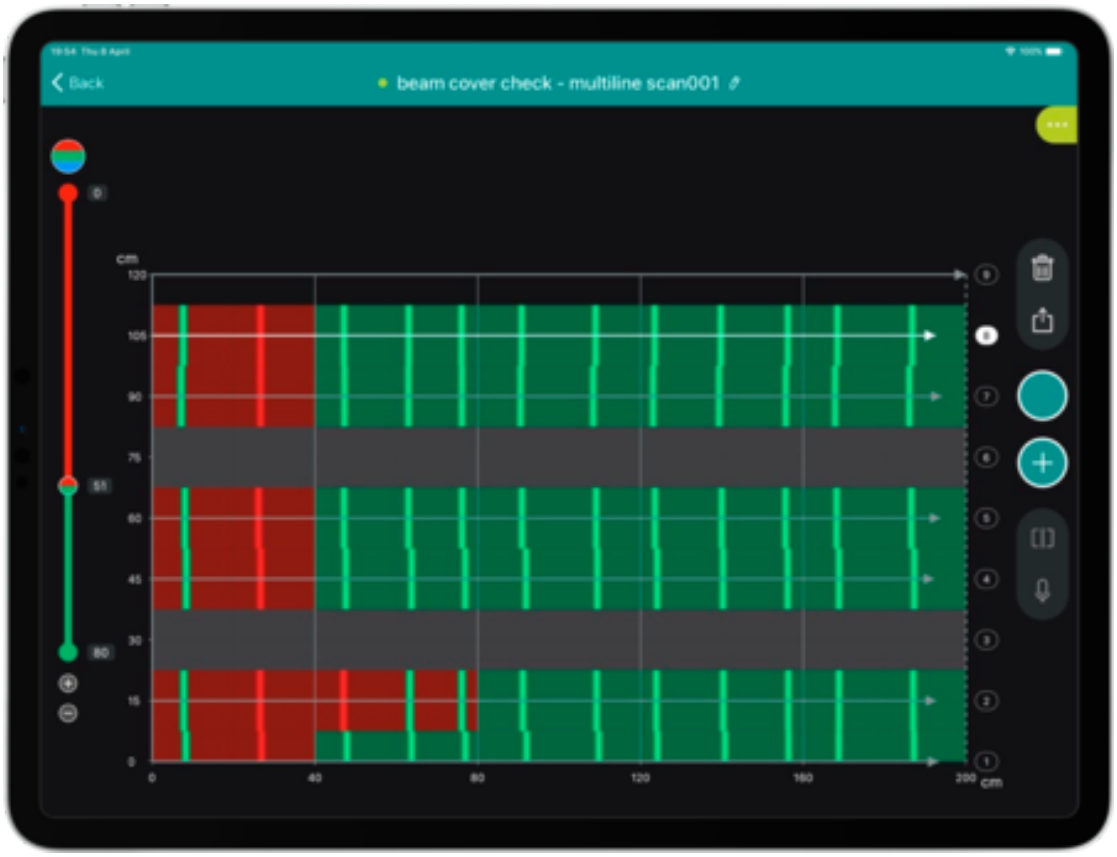
Ensuring that the top layer rebar cover is adequate is essential for maintaining the structural health and safety of buildings and bridges. As our structures age, inspections of columns and beams after accidents or fires, corrosion risk assessments, and regular qualilty control checks are becoming more and more crucial.

In order to stand the test of time, structures really need to have the right level of cover and durability. Inspecting the top layer rebar cover is typically done using a cover meter. However, most of cover meters are obsolete or limited for accurate and productive inspection works. What matters is, not only to focus only on the first rebar layer, but to scan with flexible distance and direction, and finally to obtain insightful and precise rebar cover value map.

Now, thanks to the recently updated software for the Profometer PM8000 Pro cover meter, focusing on the top layer rebar becomes easy with the new Multiline Scan measurement mode. With Multiline Scan, it is now possible to separate each face of the beam or column and focus on the top layer of that area only, making life so much easier when scanning columns and beams with several faces.



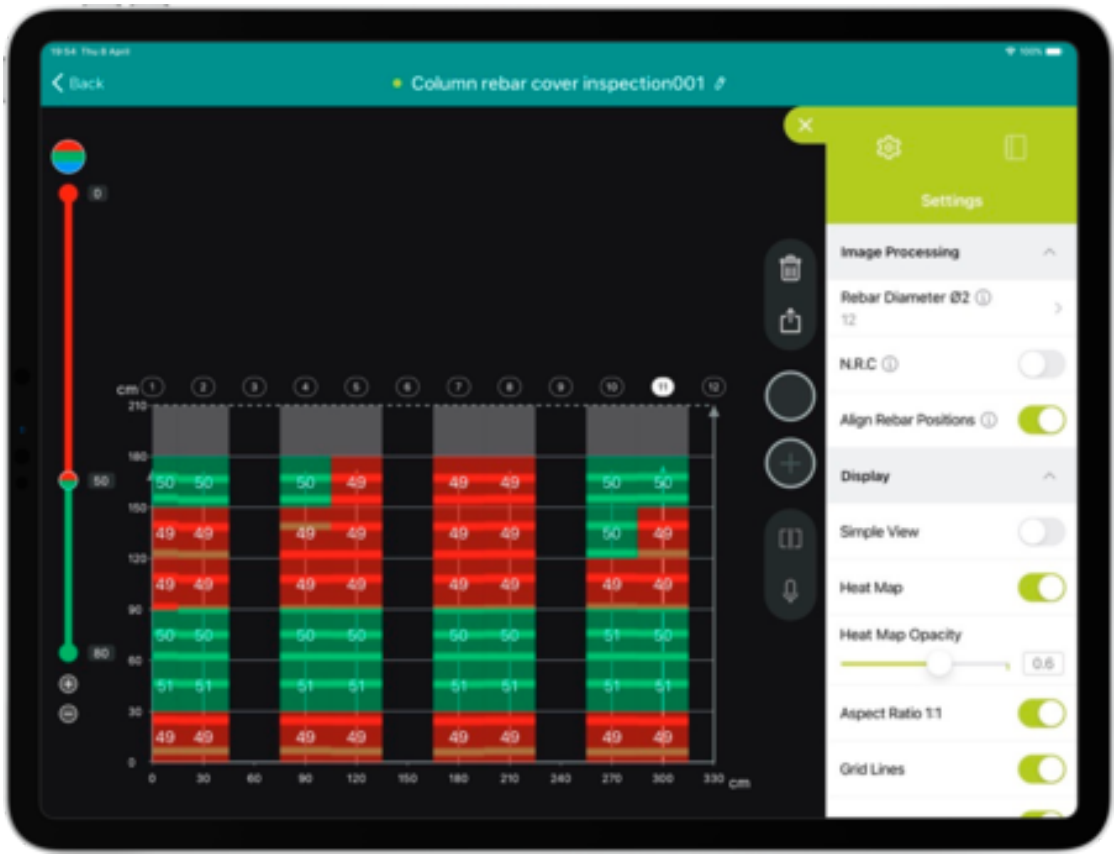
Scanning column’s stirrups in vertical scanning direction



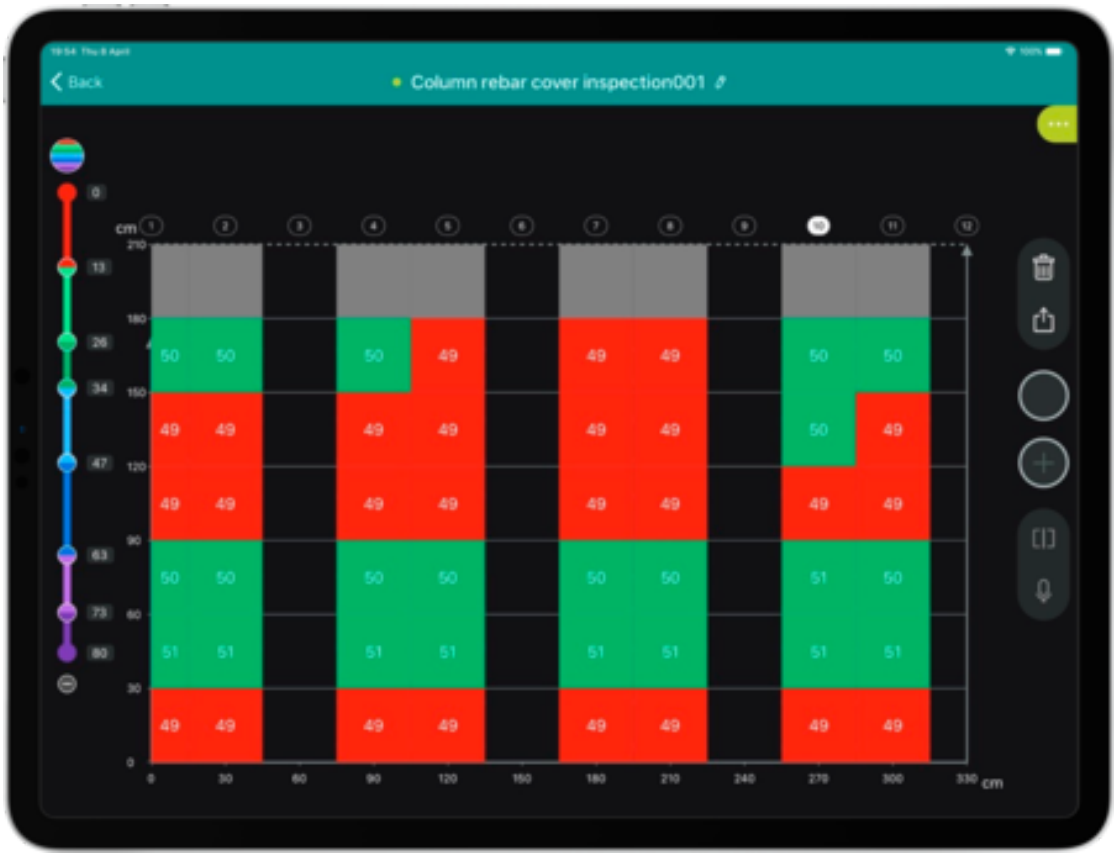
Scanning beam’s stirrups in horizonal scanning direction

The new measurement mode also brings an unrivalled level of flexibility for how you scan. You can stop whenever you want, skip a line and even scan in zig zags. This brings a simplified way to scan because a traditional area scan has disadvantages if you want to be quick and focus on the top layer only.

When using Multiline Scan mode, you don’t have to give a distance, or input all of the dimensions, only define the cells. You can have several rebars in one cell, for example, you can have a large cell with five rebars inside. The most conservative reading with low cover will make the cell red as shown in the Heatmap below.



Define analytic cells dimensions to include one or several detected rebar providing the minimal cover value for heat map



Adjust the opacity to create full cover value heat maps with rich color palette

With the data visualized on the iPad in several ways, including Line scan view and Heatmap, the onsite workflow for this application is more efficient than ever. For example, after a fire or accident, time is a critial factor. There is a often a sense of urgency for NDT on the supporting beams and other areas to find out if the structure is still safe. This is why it is crucial to have reliable cover data, fast.

Key advantages of using Multiline Scan measurement mode on the PM8000 Pro cover meter:

✔️ Increased flexibility and ease of use

✔️ Boosted productivity in the field

✔️ Better quality of reporting

✔️ Improved safety by focusing on beams and columns integrity How to use Multiline Scan measurement mode

The new measurement mode is accessible to all PM8000 Pro users with a quick update of the Profometer PM app to version 2.3. In the app, simply click Measurement Mode from the Settings panel, and choose Multiline Scan to begin leveraging the time savings and flexibility when scanning beams, columns and all types of structures. Unlock the full potential of your projects with the Profometer PM8000 Pro. Contact us to schedule a demo.