

Multibeam and Laser Scan Integration



In real life, professionals were able to see how QPS Quinsy software in combination with multibeam and laser scanning facilitates inspections of quay walls and other water borders. Last week, several demonstrations were given with co-operation of the Rotterdam Port Authority.

The survey vessel *Freedom* was for this occasion equipped with a Reson 8101 multibeam sonar and a Riegl VQ250 laser scanner. As the sonar equipment was already familiar, the interface to the laser scanner made it interesting. This device is able to collect up to 200,000 points/second in 360°, with the scanning head making 100 rotations/sec. This is an advantage compared to its predecessor that could collect 10,000 points/second and

make 20 rotations/second.

The two data collectors were synchronised every 0,001s and in total, the software handled about 300,000 measurements/s for real-time display. The result was amazing as due to the amount of points of the laser scanner, the image was very detailed, even bricks in the wall could be visualised. Also, the laser scanner could see the wind wall behind trees, which before was not possible. For the Rotterdam Port authorities, this kind of technique is of value as this improves the monitoring of the 80km of watersides in the area. And they already were thinking of new applications such as reality measuring of bridge heights and inspection of finished building work.

<https://www.hydro-international.com/content/news/multibeam-and-laser-scan-integration>
