



SONOMATIC

CASE STUDY

ADDED VALUE FROM REPEAT INSPECTIONS

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SUBSEA COMPARISONS

Repeat inspections are used to monitor the health of an installation and estimate the life remaining under existing conditions. Every year Sonomatic not only carries out numerous repeat inspections for their clients globally, but also, by the means of specialist statistical analysis, helps to determine the fitness of an installation, essential to planning its future maintenance.

Subsea installations are one of the most challenging to inspect. Harsh environments, dependence on ROV's and divers can cause variation in both inspection position and quality of data from one year to another.

Thanks to Sonomatic's experience in data analysis, those variabilities can be accounted for and their impact mitigated. Small variations in the inspection area can introduce large statistical errors and that is what happened during a repeat subsea inspection. A small axial, and circumferential offset in the area inspected, together with measurement variability, due to inspection conditions, indicated a significant change in the wall thickness.

Use of Sonomatic's proprietary SIMS software allowed the integrity team to easily re-process both sets of data using various waveform analysis approaches and highlight an external feature that aided scan alignment. The improved results showed no change to the extent of degradation across the repeat inspection area, and only a minor reduction in the absolute minimum. SIMS allows Sonomatic to store comparison data in one project, meaning future inspections can be added easily, making analysis more efficient. This is also integrated into the mini Twin.

