

SUCCESS STORY: INSPECTION

Efficient infrastructure management with InfraCloud **Port of Flensburg GmbH**

Digital building inspection above and below water – 50% shorter diving times

Challenge

Flensburger Hafen GmbH is responsible for the operation and maintenance of the port infrastructure – above and below water. The decades-old quay walls are constantly exposed to tides, currents, and increasing loads. Until now, regular structural inspections in accordance with DIN 1076 were carried out using traditional methods such as visual inspections and diving. Visibility in the harbor basins was often limited, planning was time-consuming, and documentation was paper-based.

Core problems:

- Time-consuming planning and implementation
- Lack of overall view of the port structure
- Limited visibility and unclear documentation of conditions



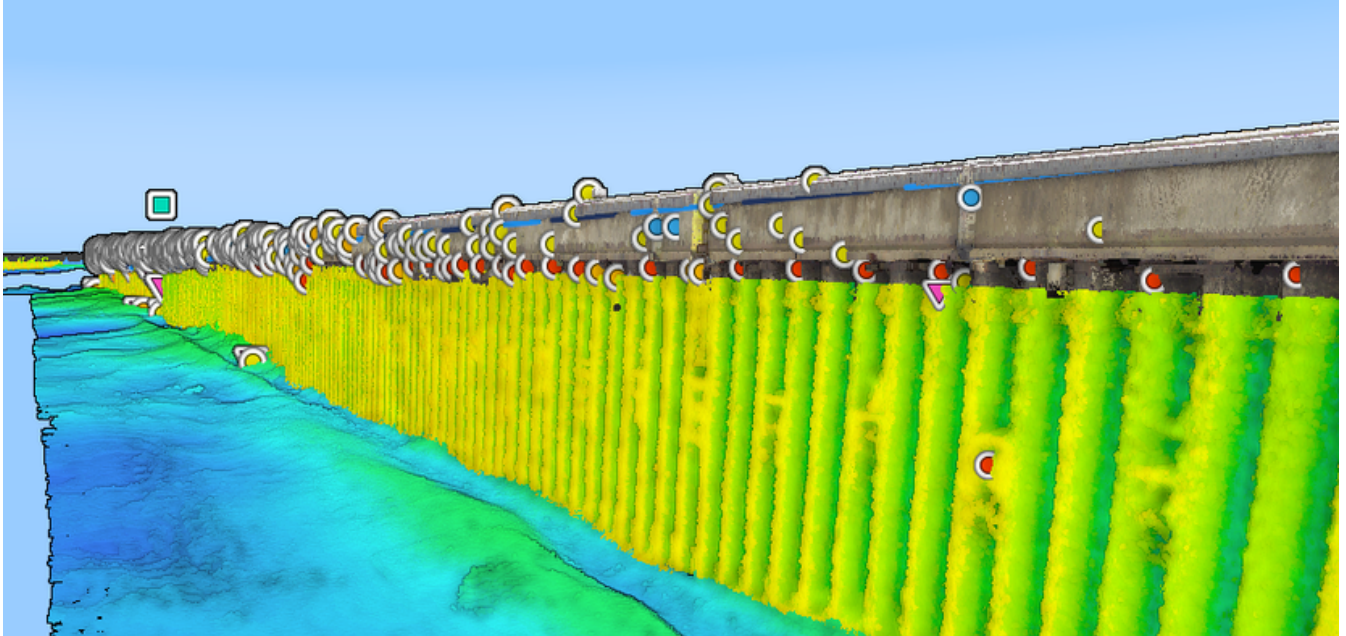
Partial view of Flensburg harbor

Solution

InfraCloud was used to digitize the entire inspection process. Before the actual structural inspection took place, the port facilities were surveyed using a survey boat. The data was integrated into InfraCloud and processed in 3D. Engineers and divers were able to target specific areas of concern using InfraCloud as a central, shared data platform. InfraCloud reduced diving times by around 50% and post-processing time in the office by around 90%.

Result

Flensburger Hafen GmbH transformed its inspection processes from a reactive procedure to a data-based system. Efficiency, transparency, and security were significantly increased, while creating a sustainable data basis for planning, construction, and operation.



All data is brought together in the InfraCloud – both above and below water. The result is a comprehensive overview of a port.

Impact in figures

- 50% shorter diving times
- 90% less post-processing
- Comprehensive overview of port infrastructure

Quote

"Thanks to InfraCloud, we can now digitally record and efficiently monitor our port infrastructure for the first time. Damage is detected more quickly, inspections are more targeted, and planning has become much easier."

— **Frank Partik**, Operations Manager, Flensburger Hafen GmbH

Outlook

In a next step, InfraCloud will be used as a strategic tool for long-term maintenance planning. The plan is to integrate additional port areas and implement continuous condition monitoring to strengthen climate resilience.