



CONNXT CASE

Ampelmann relies on conNXT to transfer employees safely to and from offshore work sites

Ferrying workers from the shore to various offshore facilities – including drilling rigs and wind turbines – has presented many companies with challenges for decades. In the past, many businesses relied on helicopters or personnel baskets and swing ropes to shuttle workers between platforms and ships. However, even in ideal circumstances this comes with a fair share of health and safety risks for employees: in a full 20 per cent of cases, bad weather and/or rough seas rule out the safe use of these methods.

As more industries have begun expanding their operations to the open sea and offshore platforms, Ampelmann has observed a growing demand for the secure and reliable transfer of workers to and from various platforms. To address this problem head-on, Ampelmann developed safe and secure motion-compensating gangway systems allowing for the safe and smooth passage of workers from vessels to offshore platforms – giving a new meaning to the notion of ‘walking to work’. While the solution’s uptime was already at a solid 98 per cent,

Ampelmann saw opportunities to improve its efficiency even further.

Using connxt to retrieve critical data previously lost at sea

Developed by ICT Group division OrangeNXT, conNXT is an IoT solution which can help Ampelmann to use data to improve the performance of its gangway. conNXT is a ready-to-use platform for remote monitoring, asset management and predictive maintenance and can be adapted to



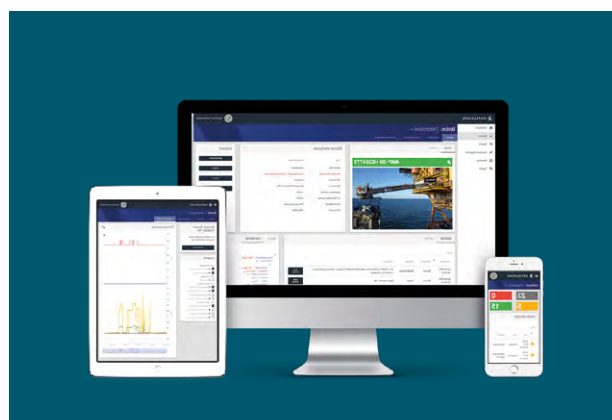
specific requirements with minimal effort.

Ampelmann's gangway system is operated on board by a highly skilled operator who can respond rapidly to changing circumstances.

For cases where vessel operators need the assistance of an engineer onshore, conNXT facilitates a stable internet connection between the offshore system and the Azure Cloud. More than 400 variables (including oil pressure, temperature, acceleration, energy consumption, warnings/alerts and error statuses) are continuously monitored on board and provide onshore engineers with detailed information that allows them to make the safest and most effective decisions at any time. This secure, scalable solution complies with the new European privacy laws and is operational within just 20 days.

So how does it work? Data exchange and a reliable connection

The first step is remote monitoring and preventive maintenance, followed by the third step: collecting and analysing meteorological data to make forecasts. conNXT also comes with a built-in IoT gateway: an application based on IoT Edge which securely connects smart devices with the Cloud. This makes conNXT significantly more reliable under real-life working conditions than any offshore internet connection. The conNXT IoT gateway enables Ampelmann to process 400+ variables



"The conNXT solution developed by OrangeNXT allows us to monitor our systems, improve our preventive maintenance programmes, and focus on putting preventive maintenance into practice"

IVAR BOOM

Manager Ampelmann data services

onsite without any gaps in the data, regardless of the ships' distance from the shore.

This IoT Gateway also analyses and processes the data on board and sends the process KPIs to the Cloud. If any unusual circumstances are detected, the IoT gateway immediately connects to, and alerts, the operational control centre at Ampelmann's head office in Delft, the Netherlands.



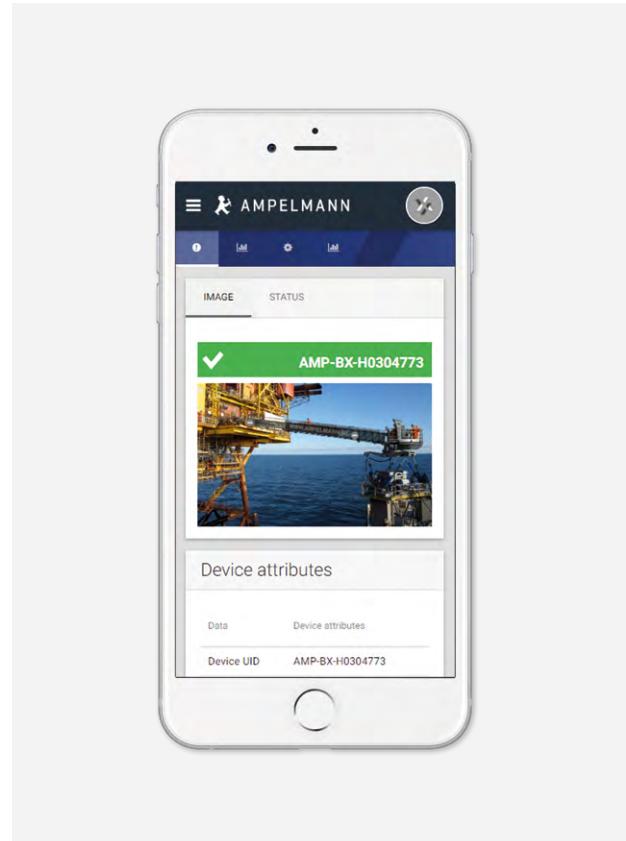


From preventive to predictive

Another priority for Ampelmann is to use this enhanced data to improve its preventive-maintenance schedule. All vessels are equipped with industrial PCs, including a removable hard drive used to store all raw data. This data is then retrieved once the vessel reaches the shore. The next step is uploading the data to conNXT, where it is further analysed. Why are some parts of our systems due for maintenance sooner? What impact do waves, installation direction, vessel types and other factors have on essential maintenance? Based on the answers to these questions, you may decide to switch from a preventive to a predictive maintenance strategy.

More information

To learn more about conNXT and its capabilities, feel free to contact us at any time – you will find our contact details below. Start monitoring your data today!



Want to know more about this case?



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