

## Jetting of production separator on a FPSO Norwegian North Sea, 2023

**98.8%**

Customer satisfaction score

**Zero**

HSE Incidents or manual handling

**Zero**

NPT (>159h operation)

**3m<sup>2</sup>**

Logistical footprint

### Challenge

A customer in the Norwegian North Sea had a production separator without a jetting system installed. With an unknown amount of solids in the separator, the operator wanted to avoid solids reaching the platform's closed drain system.

Being on an FPSO the deck space was limited and so was the time window for the operation.

With potential exposure to harmful substances (H<sub>2</sub>S, NORM, Benzene) and less than a week to complete the operation, an automated operation was preferred.

### Solution

An ultra-compact (1.1x1.1m) stand-alone jetting unit was mobilised for separating the solids. Together with the cyclone, an ejector was installed to boost the supply pressure, increasing the overall separation efficiency of the jetting unit.

By utilising the patented real-time solids weighing system, the operation could quickly be finalised once all solids were removed while also providing valuable information on the amount.

### Result

Within seven days, FourPhase mobilized, operated and demobilized equipment and personnel to perform a jetting operation on the FPSO. By over pressurising the separator solids were flushed to the jetting unit and removed.

Zero HSE incidents during the entire operation. No separator confined space entry and no sand was produced to the export flow line. Quantified solids from well to 166kg, providing information on how to optimize production going forward.

Pål Hapnes, Asset Production Manager - Alvheim, said: "We trusted FourPhase with the solids management scope and are very happy with the execution their team delivered both on and offshore."

