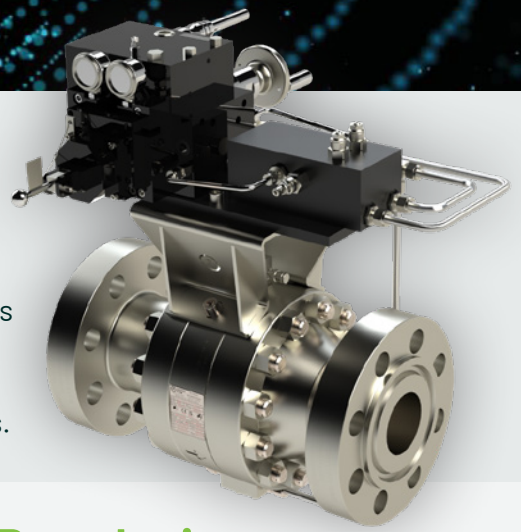
Oxford Flow ES Stemless Valves

High Pressure Live Gas Project



One of the largest gas processing facilities in Europe

High pressure and restricted flow conditions to simulate real-world process performance

Severe service valve project in extremely harsh process conditions

Oxford Flow's ES Stemless Valves successfully perform several hundreds of cycles with zero seat leakage and zero emissions.

equinor

KÅRSTØ FACILITY

Processes

90 million

standard cubic meters per day of rich gas, condensate and light oil

Production comes from

30 fields

around the Norwegian Continental Shelf

PROJECT BACKGROUND

Most isolation valves are not able to withstand the erosive force of restricted flow at high differential pressures. The goal of this project was to prove that the ES Stemless Valves will accommodate those erosive forces over hundreds of cycles with no damage to valve internals, while providing tight shutoff when required, with zero emissions.

The goal was to replicate, in live hydrocarbon service, the harsh conditions under which valves are expected to perform.

PROJECT RESULTS

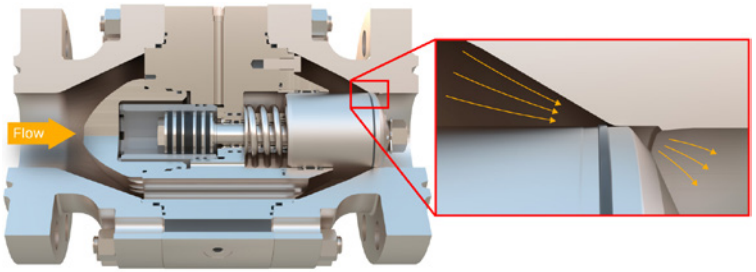
1 **500 cycles completed**
at 120 bar differential pressure and restricted flow.

2 **No visible leakage**
After cycling, both valves passed low pressure (7 bar) seat test with no visible leakage and zero emissions for five minutes.

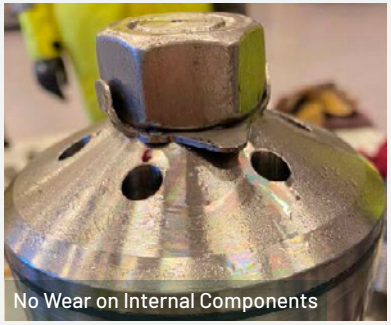
3 **No evidence of damage**
Tear down inspection revealed no evidence of damage or wear to sealing surfaces, in spite of extremely high velocities.

The project was a success. The valves were tested bubble tight after excessive cycling that will normally destroy any isolation valve.

Revolutionary zero emission valves




After Test


No Wear on Internal Components