



North Sea Platform - Velocity Flush of 140m³ Heating Medium

Client	North Sea Platform
Project	Velocity Flush of 140m ³ Heating Medium
Location	North Sea
Size of Contract	Compact project

THE CUSTOMER

A North Sea Platform have experienced problems with heater battery coils leaking. Following an investigation involving laboratory analysis it was found that a fractured heat exchanger had leaked gas into the system turning it corrosive. Altrad Services were contacted and asked to devise a methodology to flush this unit.

THE CHALLENGE

The heater batteries were found to be of mixed materials of construction - copper and stainless steel. The copper containing metal was found to be corroding (due to galvanic action) resulting in the subsequent failures.

Because the system was so large and subsequently the volume of water required, also so large, it was necessary to commission a supply vessel containing clean high-quality water sourced from a local power station. This was transported by using our own fleet of road tankers to the docks.

ALTRAD SERVICES' SOLUTION

Altrad Environmental Services team produced a method statement which was accepted by the client allowing the team to then mobilise equipment to site. The team set up and pressure tested all temporary equipment and hoses.

As the majority of equipment (flushing and chemical dosing pumps etc.) was set up on the supply vessel deck, equipment setup on the Platform was kept to a minimum, just leaving the setting up of the hose coil and connections.

Radio contact with the supply vessel was established for pump operation and the team carried out the first velocity flush with no problems. After changing over pumps the Altrad Services team then dosed a cleaning chemical which also acted as a H₂S scavenger, added heat from the system waste heat recovery and circulated the hot solution for 16 hours. Following this chemical stage the system pumps were stopped and the system drained down.

A final fill and high velocity flush was carried out until the effluent water quality from the system was equal to that of the inlet water provided from the Supply Vessel. All the waste flushing water remained on the platform and was directed to the "miscellaneous" tank. The system was then handed over to the platform chemist who dosed the system with corrosion inhibitors.



Offshore North Sea Platform

ABOUT ALTRAD SERVICES

Altrad Services is an international leader in the provision of critical industrial services principally to the energy and natural resources sectors.

Our multi-disciplinary service offering includes access systems, insulation, specialist coatings, passive fire protection, refractory linings, environmental services, oil and gas storage tanks and heat exchanger replacement and refurbishment.