


# Safe scale separation during Coiled Tubing operation UK North Sea, July 2022

  
Reduced deck space  
to 2x2m

**4,771 kgs**

Total solids  
removed

  
Reduced POB to  
4 man crew

### Challenge

Due to a significant scale buildup on a field on the UK Continental Shelf, a customer had planned for a CT operation. Flowback requirements included scale and possibly other harmful substances to be handled accordingly. With limited deck space and personnel available onboard, an automated solution was considered favorable.

The scope included an estimated >50t solids production, with solids particles down to approximately 20 microns from four different wells.

### Solution

An automated solids management system, the DualFlow unit, and a compact choke manifold were installed to manage the flowback return.

The whole solids management spread was remotely monitored and operated from a control cabin at a safe distance. All flowback produced during the Coiled Tubing operation was routed through the solids management package to enable separation. By utilising automated safety features on the Dualflow, such as interlocking valve operation, the offshore operator could safely manage the operation.

### Result

4 771kgs of scale was safely separated during the 12-week operation from four different wells, with an average of 170 kg/hr and spikes above this on one well. The DualFlow removed the risk associated with hazardous operations and manual handling and provided a solution with less resulting carbon emissions. With a 2x2m footprint, minimum deck space was utilised and carried out with a 4-man crew, reducing POB.

Not only was the scale cleaned out of the wellbore, the real-time solids data also delivered valuable production insights. This identified that the well was continuing to produce scale, and when and where in the pipe it was coming from. Given these successful results, the FourPhase technology has once again proved itself in dealing with scale build-up in wells.

