

## Online Leak Sealing

# Complex Geometry Valve Enclosure On 36" NB Pipe

**Date**

September 2022

**Client**

North Sea Transmission Line

**Location**

UK

**Scope**

Potential for a through wall defect on a buried 2" NB valve coming off a 36" NB main import line. With excavation unable to take place prior to delivery of a mechanical clamp solution, the design had to cater for multiple potential valve orientations.

**Solution**

The mechanical clamp was designed to encapsulate the valve using a saddle and strongback assembly. The multi-part design enabled the clamp to enclose the valve, regardless of what position it was found to be in once excavated. 5-axis machined seal grooves were provided to ensure a reliable seal against the main 36" NB pipe, whilst keeping the size and weight of the solution as low as possible.

Design fully pressure tested in-house prior to shipping to client.

**Results & Benefits**

- Tested and verified clamp solution delivered to site in time for excavation date.
- Client had confidence a solution was on-site if required during excavation.

