



Preservation of Wellhead & Bolted Connections

Case Study

Preservation of wellhead & bolted connections for long term protection against corrosion

Location	France
Local Environment	Onshore Gas Storage
Date	December 2018
Condition	Dry
Total Coatings	1 Complete Wellhead
Substrate Type	Flanges & Bolts
Duration	2 days

Summary

Oxifree TM198 was used to coat a gas storage wellhead in France to provide long term protection against corrosion, mainly due to the lower part being located within a chamber that constantly fills up with water.

Introduction

The client operates a gas storage facility in France, with a number of wellheads that are constantly requiring maintenance due to corrosion.

Objective

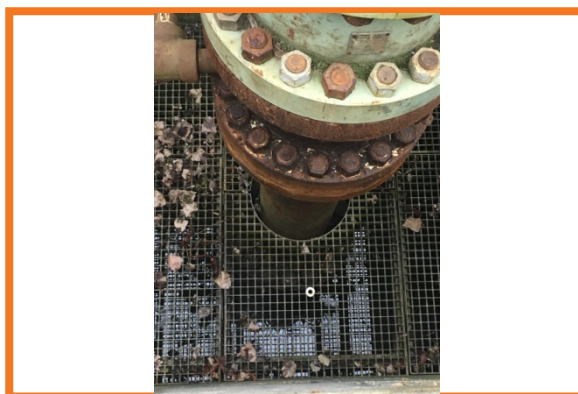
Oxifree was selected as a solution by the client as it required minimal surface preparation and could be applied very quickly over a short period of time, despite the time of year and the temperature being very cold.



Wellhead prior to coating with Oxifree TM198



Wellhead prior to coating with Oxifree TM198



Carrying out minimal surface preparation



Case Study



Process

An Oxifree team consisting of a supervisor and an application technician completed the project in 2-days.
The Oxifree TM198 was applied directly onto the wellhead per Oxifree application procedures.

The wellhead was coated using the Polymelt 50 unit and a 15-metre hose.

Oxifree TM198 application taking place



Solution

Following the minimal surface preparation (brushing loose corrosion away with a wire brush), 2 x 2mm coats of Oxifree TM198 were applied in sections on the wellhead working from the top downwards.

In the future, the material is easy to remove for inspection. The anti-corrosion inhibitor oil within TM198 will also act as a penetrating oil for the bolt threads.

Lower section of wellhead complete



Conclusion

The client is now able to preserve the life of the wellhead in this harsh onshore environment. The wellhead can be inspected at any time by simply cutting the material which can then be repaired using the SG1 Handgun or by ultrasonic testing (NDT).

Completed section of wellhead



Case Study



Site Updates

November 2025

Client representative present with Oxifree Management

Due to various operational reasons, COVID and change of client management, a site visit to inspect the Oxifree coatings was not made possible until this time.

As with all Oxifree applications it is important that we visit the site at a later date to talk to the client about the ongoing protection Oxifree is providing and for our technical engineers to inspect the coating/coatings.

After initial discussions with the client, concerning the effectiveness of Oxifree in protecting this wellhead, especially the lower section, which is constantly filled with water, Oxifree managed to pay a visit and carry out visual inspection.

Access was limited as the client didn't want to lift all grating etc.

The client advised that random UT inspections have taken place over the past 7-years and they are completely satisfied that the project is proving to be a success, and they are very happy with the protection that Oxifree TM198 is providing to their equipment.

Top section, washed down and still looking good



Lower section, washed down and still looking

