



Nouryon

Formerly **AkzoNobel**
SPECIALTY CHEMICALS

Flange & Conductor Protection – Storage Wellhead

Case Study

OXIFREE[®]
METAL PROTECTION

Corrosion Prevention On Flanges & Conductors



Lower flanges & conductors

Location	Hengelo, Netherlands
Local Environment	Onshore Storage Wellheads
Date	October 2018
Condition	Dry
Total Coatings	4 Wellheads
Substrate Type	Flanges, Bolts & Conductors
Duration	6 Days



Summary

Oxifree TM198 was used to protect the lower flanges and conductors on 4 off storage wellheads for AkzoNobel Chemicals (Now Nouryon).

TM198 was selected for its minimal preparation and ability to provide the solution without a operational shutdown.

After



Introduction

The storage wellheads are owned by Nouryon and are part of their onshore brine storage network which is inherently a corrosive environment. Salt has been produced in this region for over 100 years and currently accounts for 5% of the gross regional product.

Objective

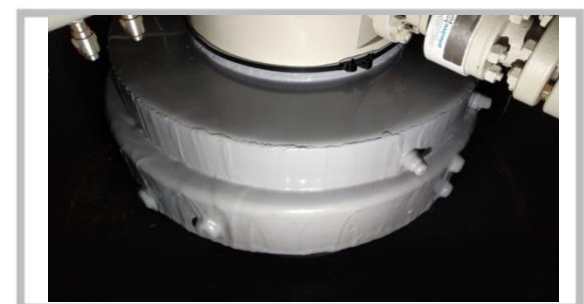
Oxifree were requested to carry out the coating of TM198 on all of the bottom flanges and lower parts of the conductor. The conductors were at the point where preventative protection was the best solution to stop them from becoming too corroded and therefore difficult and expensive to maintain and replace.

The top part of the wellheads had previously been blasted and painted and were in good condition.

Before



After



Case Study



Process

Oxifree application technicians completed the project in 6 days. The Polymelt 50 applicator machine was used for the job.

TM198 was applied directly onto each of the flange assemblies and conductors as requested by the client.

Solution

No sand-blasting was required and weather was not an issue during application as the wellheads were inside small wooden huts.

A 4mm coat was applied to each flange assembly and conductor.

The coating, as approved by the operator, will ensure the flanges, bolts and conductors are protected for many years.

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.

Conclusion

There was severe corrosion on all of the conductors. Traditional solutions of blasting/painting for these areas was deemed as not a viable option by the client, since the paint solution locks the nut to the bolt and eventually corrosion sets in further lending the assemblies un-maintainable.

Oxifree TM198 allows for access as it can be easily removed and reinstated and is the only viable cost-effective solution to ensure future maintenance is not an issue.

Lower flanges & conductors

