

CASE STUDY:

Gas feed Lines

OVERVIEW

In November 2020, Zerosion Corrosion Defence were contracted to provide dedicated care 10 x live gas feed lines. The lines had been neglected for several years and corrosion and oxidation had caught hold on the lines. Zerosion were called in to provide asset life extension to the lines and to arrest instigated corrosion and protect them for the future.

The lines were in use daily and could not be shut down for maintenance, so a system was sought that could remove the onset oxidation and protect it. We used Zerosion and Zerosion primer and adhesive primer to protect both the flanges and the lines.

The Objective

The objective for all bolted section coating is to provide:

- To arrest and remove the established corrosion
- To protect the lines for 10 years
- To conduct work whilst lines were live.



Technical/Project Approach

Deliverable	Description	Deliverable	Description
Manpower	2 x ZCD technicians	Budget	On budget
Duration	5 days	Equipment	Zerosion application equipment, ATEX suitable equipment.
Material Used	90 litres Z-FP 10 litres Z-AP	Site issues	ATEX environment Weather

The project

This project was one of the projects you really enjoy participating in, the customer was fantastic to work with, so it made the project a joy – even if it was cold.

The remit on the project was simply to arrest the established corrosion and protect the lines for the future. We opted against coating the stainless expansion joint, filter, and condensers – as they are stainless and galv.

We started by sniff testing all lines to check for escaping gas, then moved on to cleaning each line using a plastic scarpers and plastic blade, to remove flaking paint loose rust, ensuring that we expose any areas where oxidation had found any type of vein. Once the entire line was free from debris and no corrosion was left hidden, we cleaned 5 of the lines within the area with a solvent degreaser, as there was glue and grime on the surface. Once cleaned, we went over with the ACI to kill any oxidation on the surface and remove any ingrained corrosion, properly and carefully. Once we were happy, we applied the adhesive to the flat lines and the white ACI primer to the flanges, ensuring the faces of each void and each thread was coated. We then applied 3 coats of Yellow Zerosion to ensure long term protection.

Considering the project was carried out in late November, it was a great, clean project and, we only lost 1 day to the weather, which was made up for working into the night.

Images



