

CASE STUDY:

Compressed Air Lines

OVERVIEW

We were tasked to provide pipeline protection to around 600 meters of live 12” compressed air line. The airline, situated 5m from trestles, showed clear signs of corrosion and scarring from environmental decay and consisted of straight runs, moisture traps, diameter changes, flanges, valves and suspension brackets, the line was mainly situated on uneven ground, causing access issues and also traversed road and rail line..

According to site regulation, the line had to be coated in white coating, and due to this being a live line and the height, blasting would have caused a problem.

The Objective

The objective was simple on this project, to provide long term protection from elemental and chemical attack, to the entire lines including peripheries and to the susceptible brackets. The coating had to be in white, the line could not be blasted and we would have to work around other repair teams.

The Project

This project took what on the surface should have been a straight forward application to a longer than planned process, losing time through COVID restrictions, through underestimation of the difficulties of the terrain, underestimating the degradation and accumulated grime of the line, and, the typical access issues.

The project started with a thorough clean of the line, to remove the dirt, chemical and grime from the line, this was undertaken using a solvent based cleaner & scouring pads.

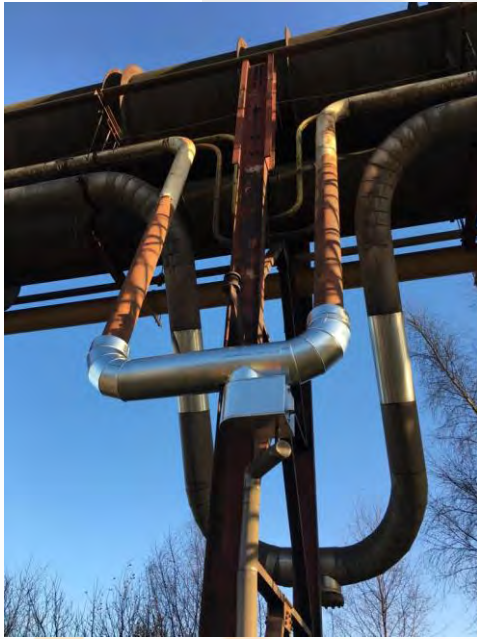
Once the line was cleaned thoroughly, an application of the VCI corrosion inhibitor was applied in sections along the line, to enable the team to apply a coat of Z-SP to the prepared surface, a specific area at a time. Due to the issues relating to access, the decision was taken to apply VCI, then 2 x white coats in “one sitting” at one entire length of boom access of the MEWP.

Once the entire line was coated in 2 coats of Z-SP, the team went over the line with a third, topcoat, to ensure comprehensive protection.

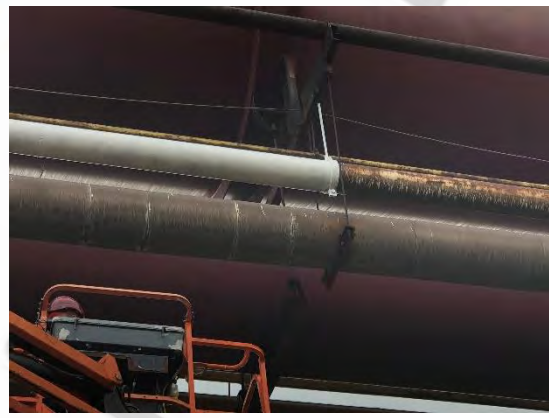
Technical/Project Approach

| Deliverable | Description | Deliverable | Description |
|---------------|---|-------------|--|
| Manpower | 5 x Zerosion technicians, working in teams due to CV-19 | Budget | On budget – we did not charge for the over running of the project. |
| Duration | 22 days | Equipment | application equipment, MEWP |
| Material Used | 760ltrs Z-FP, 30ltrs Z-OE | Site issues | Undulating terrain, road and rails lines |

Before



During





Completed



