

# Oxifree

## Case Study



**Location: Middlesbrough**

**Date: Aug 2012 - Present**

**Customer: SSI / TATA**

**Weather: Dry**

### Introduction

Sahaviriya Steel Industries (SSI) and TATA Steel are currently undertaking a £9 billion site rejuvenation project at Teesside that will see steel manufacture for global distribution being undertaken at the site.

The rejuvenation programme involves site and utilities assessment and cost reduction to limit spiralling maintenance costs.

### Objective

SSI contacted Oxifree UK to assist with site corrosion and protection issues for the Ammonia by-products processing plant, which was considered by the site assessment team to be low priority for repair / replacement. However, as established corrosion was widespread throughout the plant, the objective was to arrest that corrosion for a period of time until funding became available to replace the defective areas.

### Process

Oxifree UK and SSI undertook a preliminary assessment of heavily corroded areas in and around the Ammonia processing plant and a plan to coat valves and flanges was conducted.

It was decided that the butterfly and motor driven valve and bleed stop units were the first to be treated followed by heavily deformed flanges.

Works commenced in August and work was halted after 3 days once the heavily damaged units were coated, due to reallocation of funding following a cooling tower water feed incident.

## Project

A long term project was assigned to Oxifree UK to coat corroded valves and flanges in a volatile atmosphere that consisted of EX and Toxic dangers. The Polymelt 50 ATEX unit was used with specifically trained technicians to comply with the hazardous environment.

During the project an incident involving the site cooling tower, prevented continuation of the project as funding was temporarily diverted. Oxifree Senior Management and SSI Staff were detailed to assess the decay of the Ammonia valves and only coat the selected with greatest decay.

Oxifree UK are to recommence the Ammonia processing plant encapsulation and deterioration prevention scheme in 2013.

Oxifree UK are to be contracted to complete corrosion prevention works on newly installed site cooling tower pipe run in late 2012 / early 2013 to include pipe run coating, flange protection and pipe support trestles and brackets.

## Project Photographs

