 Smurfit Kappa



Protecting critical parts in storage

Case Study

OXIFREE[®]
METAL PROTECTION

Protecting critical parts in storage so that they can be put into production without delay

Location	North Sweden
Local Environment	Exposed to the elements
Date	April 2019
Condition	Cold, Dry
Total Coatings	7
Substrate Type	Shafts and boltings
Duration	2 Days

Summary

Oxifree TM198 was used to protect a number of high value shafts and boltings on parts in storage of a paper mill yard in Northern Sweden. The parts were beginning to suffer from corrosion yet are required at short notice should a part fail. Oxifree TM198 provided the perfect solution being applied with minimal preparation to the parts, halting further corrosion.

Introduction

Smurfit Kappa Group plc is Europe's leading corrugated packaging company and one of the leading paper-based packaging companies in the world. The plant is extremely busy and relies upon spare parts stored in the yard outside. These critical parts are required at short notice in order to maintain production, so it is imperative the spare parts are in optimum condition for installation. The yard is subject to harsh external environmental

Objective

LocTech were awarded the work to protect the parts in storage for Smurfit Kappa. There was no need to shutdown the plant since the parts to be protected were in storage, however this would not have been an issue with TM198 since it can be applied to live equipment. There was no need for blasting, the parts were simply brushed with a wire brush to remove any loose debris.

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The parts were beginning to corrode prior to application of TM198



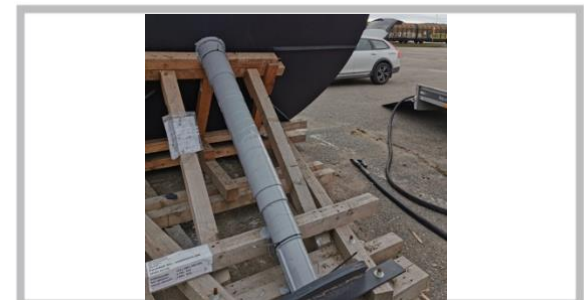
After



Before



After



Case Study



Process

A LocTech team consisting of a supervisor and an application technician completed the project.

The parts to be protected included a vent wheel shaft, rotating paper press roll and pulp blades.

The Oxifree TM198 was applied directly onto each of the part connections. 7 parts were coated in total using the Polymelt 50 unit and a 15-metre hose.

Application was in a cold, yet dry environment.

TM198 will provide protection for a long time in the harsh environment.



Solution

Following the minimal surface preparation (brushing loose corrosion away with a wire brush), a 3mm coating band was applied to the parts.

Once cured a second 3mm coat was applied on top. This extra protection to the ends of the TM198 material ensures long-term protection in the harsh external environment.



Conclusion

Smurfit Kappa were able to maintain productivity whilst extending the life of their equipment in a harsh external environment. These critical and high value parts were protected from further corrosion without costing the paper mill a shutdown allowing operations to continue as usual. The parts can be inspected at any time by simply cutting the material which can then be refilled and protection reinstated.

