

WHARF CONTAINER CRANE

PRODUCT

ENVIROPEEL 170 GREY

PROBLEM

Corrosion caused by weather and operation in a marine environment

SOLUTION

Coat with Enviropeel 170 using a standard Concept 12 Enviropeel Application Unit with ten metre hose

A major Australian Stevedoring Company was looking for a solution to the problem of corrosion to the cleats and pigtails on their aging mobile portainer crane servicing the Fremantle Port. This was of paramount concern to the operators due to the dangerous situation it caused to the safety of the wharf workers below when they broke free. Enviropeel was applied to secure the rails to the crane platform and jib.



The oldest crane, which required attention, has been in service since 1978 at the Port where sea containers are loaded to and from vessels. The Port is one of Australia's five major ports and is often the first and the last port of call for a variety of shipping between Australia and overseas. During 2004/2005 just over 5 million tones were shipped through the Fremantle Port in nearly half a million containers.

The cleats and pigtails on the crane platform suffered severe corrosion caused by the marine environment and being exposed to the harsh wind and weather conditions that may vary from low temperatures and downpours during winter while the summer temperatures can reach a scorching 40+°C. They were prone to breaking free and creating falling debris and a hazard to personnel working below.

*Above: A view of the Fremantle Port Portainer Crane
Left: A length of track showing the corroded cleats and pigtails*



CASE STUDY

For more information on anti-corrosion products from the Alocit Group please contact your nearest office:

AUSTRALIA

Alocit Australasia Pty Limited
112 Stirling Highway
North Fremantle
WA 6159 Australia
Tel: +61 (0) 8 9433 3339
Fax: +61 (0) 8 9433 2336
Email: admin@alocitgroup.com

EUROPE

Enviropeel Systems UK Ltd
3 Charles Wood Road
Dereham NR19 1SX
United Kingdom
Tel: +44 (0) 1362 694915
Fax: +44 (0) 1362 695350
Email: hq@alocitgroup.com

MALAYSIA

IEV-Alocit Sdn Bhd
Level 2, No.4, Jalan Bersatu 13/4
46200 Petaling Jaya
Selangor, Malaysia
Tel: +603 7960 9901
Fax: +603 7960 9902
Email: info@iev-alocit.com

UNITED STATES

Houston Office
10661 Haddington, Suite 170
Houston, TX 77043
United States of America
Tel: +1 713 465 2800
Fax: +1 713 465 2802
Email: houston@alocitgroup.com

UNITED STATES

Philadelphia Office
2379 Philmont Avenue
Huntingdon Valley, PA 19006
United States of America
Tel: +1 215 938 9870
Fax: +1 215 938 9874
Email: philly@alocitgroup.com

ENVIROPEEL
THERMOPLASTIC SYSTEMS



After viewing a demonstration of Enviropeel applications at our Perth site, the crane owners, who were very impressed with Enviropeel, decided it was the ideal solution to immediately halt the situation. Alocit Australasia was contracted to apply a coating of Enviropeel to the cleats and pigtails on the crane which was causing the most safety concerns.



The Enviropeel coating was essential to hold them in place and stop corrosion. An extra 'strip' was applied to link the outside cleats to each other, this was purely for extra security. Surface preparation was minimal, requiring no more than a brush down of loose material and dirt. The elongated bolt holes on the cleats and the irregular curved shape of the pigtails allowed the Enviropeel to flow beneath the nuts and around the pigtails thereby 'locking' the material in place, pull checks on the set Enviropeel confirmed the encapsulation of the material with the substrate. In total 208 cleats on the outside of the rail and 104 pigtails were coated with Enviropeel to complete the work.

CONCLUSION

The coating of the cleats and pigtails on this aging crane with Enviropeel has solved two problems the operators were facing. The safety hazard to personel from falling debri and the corrosion problem has been arrested due to the anti-corrosion inhibitors with in the Enviropeel itself. This was a cost effective option as oppased to decomissioning the crane sooner than the expected 2007 schedule or having to replace all the cleats and pigtails.



Top: A single cleat and pigtail prior to coating
 Above: Cleat and pigtail after being coated with Enviropeel
 Right: A length of track on the jib showing coated cleats linked with Enviropeel to improve security
 Below Right: Views of Enviropeel coated cleats

