



M/S Endre Dyrøy

Method for effective corrosion protection



Corrosion Solutions Norway



Corrosion protection and reduction of maintenance costs

Location	Valen. Knarrevik
Local Environment	Fishing Boat
Date	28 -29 December 2016
Condition	Light rain and wind (8.9 m / s)
Total Coatings	30 points (2 teams at each point)
Substrate Type	Flanges, couplings, panels, etc.
Duration	2 days



Increasing corrosion on hydraulic connections



AFTER applying TM198





BEFORE applying TM198



AFTER applying TM198



Summary

TM198 is 100% environmentally friendly corrosion inhibitor supplied by Corrosion Solutions Norway AS. After a simple pretreatment TM198 can be applied on structures using an applicator gun. The application is fast and efficient and can even be applied to live equipment eliminating the need for a shutdown.

M / S Endre Dyrøy is the first boat in Norway who have availed themselves of this unique corrosion inhibitor at 30 different objects / points. Most of the treated points had clear signs of corrosion, whereas some points were treated before they were particularly corroded.

Introduction

M / S Endre Dyrøy is a modern fishing boat at 64m, equipped with trawls and purse seines. It was built in 2001 and must be regarded as very well maintained.

Despite the fact that M / S Endre Dyrøy is well taken care of, so it is a general problem in this type of vessel that occurs part corrosion. Boats like this operates a tough environment, characterized by high humidity and salt.

The boat has been regularly surface treated using traditional methods (sandblasted and painted), and using grease and petrolatum tape in some areas.

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Case Study

Purpose

The purpose of this work was to apply TM198 in areas where corrosion today poses a problem, as well as areas where previous solutions are not good enough or particularly practical. TM198 is able to replace all previous solutions on the following:

Areas where sandblasting / painting has limitations because of access or complex structures such as valves, flanges, weld seams, penetrations in decks and brackets, links with various types of metal that causes galvanic corrosion.

Typical of the latter are hydraulic fittings, as well as locations where petrolatum tape is currently used. In addition TM198 is suitable for use on safety-critical areas such as control panels for winches and cranes.

Process

Before application of the TM198 started a simple pretreatment was performed. Loose paint products and corrosion particles were brushed away, and the corroded components were cleaned with a degreaser.

During the application all excess material was collected and reused in the machine. Terminations for areas of TM198 were reinforced with cable ties and trimmed and in addition a flexible sealant was used.

The Polymelt 50 Ai applicator machine was used which is suitable for use in hazardous environments.

Solution

30 points (components) of varying design and size were coated with TM198. This was done while the boat was docked in anticipation of new missions. The areas that were coated with TM198 were immediately protected from further corrosion and ready for operation.

TM198 can easily be removed for inspection or repair of equipment / components. In such cases, these points can easily be replenished with TM198 without the entire area being recoated.

Conclusion

Although M / S Endre Dyrøy is relatively new and very well maintained, corrosion is a recurrent problem involving large expenditures. The areas that were coated with TM198 forms the basis for many trouble-free years, and high maintenance costs will be spared in the coming years.



Treatment and protection of hydraulic control







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