



TECHNICAL CIRCULAR No. 386 of 06th January 2017

To: All Surveyors/Auditors

Applicable to flag: All Flags

Groundbreaking protection

Reference: **Ship Painting**

Groundbreaking protection for rudders and running gear

Over the last few months a number of vessels have had their rudders and thruster tunnels coated with Ecoshield at shipyards in China, Romania, Turkey, the U.S.A. and France. These include several container vessels, vehicle carriers, a passenger vessel and an oceanographic research vessel. The applications will protect the rudders against cavitation and corrosion damage for the remainder of their entire service lives.

Cavitation tests in a flow channel, carried out in France, have confirmed that Ecoshield performs extremely well, even under severe cavitation. The coating will prevent corrosion damage from reoccurring on an existing ship or can protect the rudder(s) of a newbuild vessel against cavitation and corrosion damage for the life of the vessel. Ecoshield is guaranteed for ten years. No repainting is needed during future dockings.

Ecoshield will prevent corrosion damage from reoccurring on an existing ship or can protect the rudder(s) of a newbuild vessel against cavitation and corrosion damage for the life of the vessel. Ecoshield is guaranteed for ten years.

Ecoshield will keep on protecting these rudders against cavitation and corrosion damage.

The rudder of another container vessel from the same owner was given the same treatment recently. He now has over 40 of his vessels sailing with Ecoshield on their rudders. The recent dockings in Naples confirmed once more that Ecoshield is the best possible way to protect your rudders against cavitation and corrosion damage.

Vehicle carriers, container vessels, bulk carriers and tankers were among the vessel types that were treated. No repaint will be needed on the rudders of all those vessels during future drydockings.

Customer Service Center

5201 Blue Lagoon Drive, 9TH. Floor,
Miami, Fl., 33126
Tel: 1 (305) 716 4116,
Fax: 1 (305) 716 4117,
E-Mail:

joel@conarinagroup.com

Technical Head Office

7111 Dekadine Ct.
Spring, Tx., 77379
Tel: 1 (832) 451 0185,
1 (713) 204 6380

E-Mail: cbozenovici@vcmaritime.com

Protection of the running gear of your ships is best begun at the newbuild phase. When a ship comes into drydock, maintenance of its stern area, especially cavitation and corrosion damage repair, can take a long time. There are strict procedures concerning blasting, painting, welding and propeller and stern tube seal work. Painting is then assigned to the end of the schedule. As a consequence it may be rushed or not done at all or else prolong the stay in drydock.

With an Ecoshield application one can avoid these problems from day one because the underwater gear will not need to be repainted during future drydockings. Ecoshield will remain intact for the lifetime of the vessel. It is guaranteed for ten years. At the most, quick and easy touch-ups amounting to less than 1% of the surface area will be required. Planning the maintenance of the vessel's stern area therefore becomes much easier.

The coating can also be used to protect vessels that have been in service for some time and are already facing cavitation and corrosion damage. Such was the case with the rudders coated.

Groundbreaking protection for all running gear

Besides offering rudder protection, Ecoshield is also suitable for thrusters, azimuth thrusters, azipods, thruster nozzles, Kort nozzles, thruster tunnels and other underwater ship gear which needs special protection from corrosion. The extra strength coating protects these areas for the service life of the ship. There is no need for recoating or major repair. For this reason the nozzle of an oil tanker was also coated with Ecoshield, as was the thruster tunnel of a vehicle carrier.

Conclusion

If one takes into account the costs of the temporary underwater repairs and the regular inspections required by a condition of class until the next drydocking or the costs for rudder repairs in drydock, it becomes clear that the investment in a coating system that offers extra protection from day one is very easily won back.

REFERENCES:

- **Ecoshield Coatings**

ATTACHMENTS: No.

Kindest Regards,
Cosmin Bozenovici
Naval Architect – Conarina Technical Head Office

Customer Service Center

5201 Blue Lagoon Drive, 9TH. Floor,
Miami, Fl., 33126
Tel: 1 (305) 716 4116,
Fax: 1 (305) 716 4117,
E-Mail:

joel@conarinagroup.com

Technical Head Office

7111 Dekadine Ct.
Spring, Tx., 77379
Tel: 1 (832) 451 0185,
1 (713) 204 6380

E-Mail: cbozenovici@vcmaritime.com