Ecoshield wins Seatrade 2014 Innovation in **Ship Operations Award**

The Seatrade 2014 Innovation in Ship Operations Award was won by Subsea Industries, a Hydrex company, for its breakthrough product Ecoshield®, ultimate protection from cavitation and corrosion/erosion damage for ship hulls, rudders, and ship underwater running gear.

The Innovation in Ship Operations category was sponsored by ASRY. The three short listed entries were judged by a very distinguished and knowledgeable panel of judges:

Chairman: Mr Koji Sekimizu, Secretary-General, International Maritime Organization (IMO)

Judges:

The Rt. Hon. The Lord Clinton-Davis, PC, Former Chairman, Advisory Committee on Protection of the Sea (ACOPS)

Mr John Denholm, President, Baltic and International Maritime Council (BIMCO)

Mr Pierfrancesco Vago, Chairman,



Seatrade 2014 Innovation in Ship Operations award winner Subsea Industries for Ecoshield. Left to right: HE Shaikh Daij Al Khalifa, Chairman ASRY – Sponsor; David Phillips Hydrex Communications Exec; HRH The Princess Royal; Mr. Koji Sekimizu, Secretary General International Maritime Organization, Chairman of Judging Panel; Mr. Chris Hayman, Chairman

Cruise Lines International Association Europe (CLIA)

Dr John Coustas, Chairman, Hellenic Marine Environment Protection Association (HELMEPA) Mr Roberto Cazzulo, Chairman,

International Association of Classification Societies (IACS)



Winner of Seatrade Innovation in Ship **Operations Award**



Seatrade 2014 Innovation in Ship Operations Award.

Mr Masamichi Morooka, Chairman, International Chamber of Shipping (ICS)

Mr John Platsidakis, Chairman, International Association of Dry Cargo Shipowners (INTERCARGO)

Capt Graham Westgarth, Chairman, International Association of Independent Tanker Owners (INTER-TANKO)

Capt David Cotterell, Director, Oil Companies International Marine Forum (OCIMF)

The award was presented by Her Royal Highness The Princess Royal of Great Britain, and accepted for Subsea Industries by David Phillips, Hydrex Group Communications Executive, at the Seatrade 2014 Awards Dinner held at the Guildhall in London on April 14th, 2014.

The Seatrade 2014 Awards program described Ecoshield as follows:

ECOSHIELD® durable, cavitation-



Seatrade 2014 Innovation in Ship Operations Award Certificate.

damage-proof rudder protection.

After more than 10 years of strenuous testing, Ecoshield was launched in 2013 for permanent protection against cavitation damage for rudders. The glassflake reinforced coating protects the rudder for the service life of the ship without need for recoating or major repair, and

comes with a ten-year guarantee. Ecoshield is also suitable for bulbous bow, stabilizer fins, thruster nozzles and other underwater ship gear which needs special protection from corrosion.

Until now, the problem of cavitation damage to rudders, causing erosion, pitting and sometimes complete failure, necessitating very expensive repairs or replacement has remained unsolved.

Now a very durable, tough, longlasting glassflake resin coating is putting an end to these problems.

ECOSHIELD®

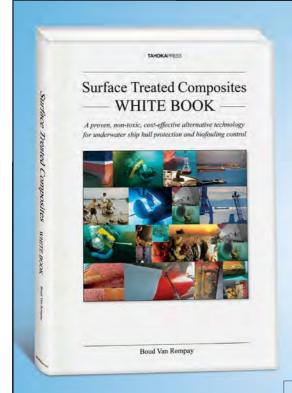
THE DIAMOND STANDARD IN STEEL PROTECTION

Ecoshield is a specially reinforced version of the well-known Ecospeed non-toxic underwater ship hull coating. Small but significant variations of the Ecospeed formula have been tested on rudders since 2002 with extraordinary results. Ships that were experiencing heavy cavitation damage to their rudders, once the glassflake coating was applied, have seen no further cavitation damage erosion for as long as 10 years after application, with no sign that the coating will need replacement during the life of the ship.

Boud Van Rompay, Founder of Hydrex and its subsidiary, Subsea Industries, and the developer of Ecoshield said, "We are delighted to receive this prestigious award. We know that the judges are highly expert and discriminating and we take the award as a very valuable acknowledgement for our achievement with Ecoshield. It is a simple solution that puts an end to cavitation and corrosion damage which has plagued the shipping industry for more than a century."

David Phillips, who accepted the award for Subsea Industries noted that in presenting the award for Ecoshield, The Princess Royal was very conscious of the severity of the problem that Ecoshield has solved and acknowledged the importance of Ecoshield in having cracked the long-term issue of cavitation and corrosion damage to hulls, rudders and underwater running gear. Her Royal Highness's knowledge of and care for the shipping industry came through very strongly throughout the Seatrade Awards dinner.

Elsewhere in this issue of the Ecospeed Newsletter, the case study of a Danaos ship recently drydocked is a typical Ecoshield story. Five years after the coating was originally applied, the rudder shows no signs of any cavitation or corrosion damage and the coating looks as good as new. This is a clear example of why Ecoshield received the Seatrades 2014 Innovation in Ship Operations Award. Putting an end to cavitation and corrosion damage is a breakthrough in coatings and protection which will be felt and remembered throughout the shipping industry.



The Reference on non-toxic hull coatings

Surface Treated Composites WHITE BOOK

A proven, non-toxic, cost-effective alternative technology for underwater ship hull protection and biofouling control.

by Boud Van Rompay

order your copy today at www.tahokapress.com



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a new era in hull protection and fouling control

Ecoshield in excellent condition on rudder after five years in service

Recently the container vessel m/v Maersk Deva came into drydock at the Santirul Naval Constanta shipyard in Constanta, Romania. The ship had been sailing with Ecoshield on her rudder for five years, but the coating was still in very good condition and did not need to be replaced.

Ecoshield was applied on the rudder in February 2009. Mr. G. Zolotas, the Fleet Technical Coordinator of Danaos Shipping Co. Ltd. Says that the "coating system has been introduced to us by your local representative some years back when we were looking for a hard coating to protect our rudders from cavitation phenomena. Our coating team consisting of highly qualified professionals with FROSIO red level certificates evaluated the coating and gave the green light for application."

Cavitation corrosion damage is a problem most ship owners come across. Often a rudder is not given the proper protection against cavitation and the resulting erosion and corrosion damage. In those cases the financial consequences can be extensive for the owner. Cavitation tests have confirmed that Ecoshield, however, performs extremely well 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 from the very start for the life of the vessel. It is the only known coating that can provide this type of full protection.



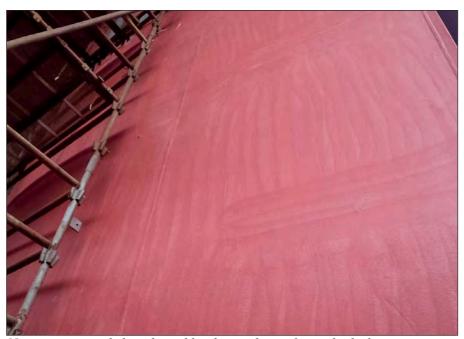
Severe cavitation damage on the rudder prior to Ecoshield application.



The rudder of m/v Deva when the vessel came into drydock five years ago, showing multiple damages.



Ecoshield was applied in 2009, protecting the rudder from then on.



No repaint is needed on the rudder during this or future drydockings.



Rudder of m/v Deva after five years of service with Ecoshield.

When m/v *Deva* came into drydock, the difference with earlier dockings was striking. "After 5 years of operation at various speeds there were minor detachments in way of high cavitation areas only and those were easily repaired," says Mr. Zolotas.

Ecoshield is guaranteed for ten years As a result of the application no repainting was needed during the drydocking or will be needed during future dockings. At most, minor touch-ups may be required. Maintenance of the vessel's stern area can therefore be planned without having to take into account any coating or hot work on the rudder.

More information on the effect of cavitation, along with some case studies can be found in Hydrex White Paper No. 6: *Rudder cavitation damage solved*, which is available for download for free at www.shiphullperformance.org.

