



Ecospeed: Ending Rudder Cavitation Damage Problems

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Founded in 1893 Ernst Russ is a Hamburg based, family owned shipping company. For close to 120 years, Ernst Russ has been offering customers the highest standards in ship management. The company has a fleet of ten vessels including five ro-ro cargo ships. Due to their higher propeller revs, the rudders of these ro-ro cargo vessels suffered particularly from cavitation damage.



Grzegorz Girjat is Superintendent of Ernst Russ, responsible for the five ro-ro ships. Those ships were built in 1999. The rudders were originally coated with a standard epoxy coating. Grzegorz Girjat explains, "During the first intermediate docking, between two and three years from launch, we observed that we already had extensive cavitation damage on the rudders. During that 2004 docking, Ecospeed was applied experimentally on the Elisabeth Russ. The application was close to the end of the docking. There was only time to grit blast the rudder and apply two coats of Ecospeed. The pitting and damage from the cavitation was not repaired but the paint simply applied over it.

The trial was successful beyond all expectations. When the ship next came out of the water in 2007 it could be seen that, despite the last minute application, no further cavitation damage had occurred. As a result, the rudders of the remaining four ro-ro ships were coated with Ecospeed, all with similar results. Based on this the bulbous bows of all the ships were also coated with Ecospeed since these vessels trade in the ice and the traditional coating in use was not holding up in these conditions. The most recent drydocking of the Elisabeth Russ in 2011, confirms that the original Ecospeed protection applied in 2004 is still holding firm and the rudder is intact, free from any further cavitation damage. (see picture on the right)

"In general everybody is looking to be in drydock as short as possible and to get all the work done as quickly as possible," explains Grzegorz. "Additional hot work on the rudder inevitably results in some collisions with other jobs. I would say for me it is quite clear. Had we not applied Ecospeed on the rudders, we would certainly have extensive work to do in drydock." At least 110 rudders have now been coated with Ecospeed with 100% success. The number increases as more and more shipowners and operators find that there is indeed an answer to rudder cavitation damage. None of these rudders has suffered cavitation damage after the Ecospeed was applied and none has had to be recoated with Ecospeed.

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New Exhaust Manifold V-CATTM Catalyst System from MIRATECH Successfully Completes One Year Trial on Harbor Tug. MIRATECH Corporation announces a successful

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KPI Bridge Oil Adds Bunker Trader for Valparaiso Office

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