Eco-Conscious Carisbrooke Opt For COMPAC Bearings

Seawater Lubricated Propeller Shaft Bearings for Latest Newbuilds

The Vectis Eagle, an 8,500 dwt multi-purpose dry cargo vessel, is Carisbrooke Shipping’s latest newbuild and first of their fleet to be fitted with Thordon COMPAC seawater lubricated propeller shaft bearings. The Finnish/Swedish 1A Ice-Class vessel was launched in September 2011 and carried out its maiden voyage through the Panama Canal travelling from China to Haiti and Brazil. Constructed at the Chinese shipyard, Jiangsu Yangzijiang Shipbuilding Ltd., the vessel is the first of eight to use seawater lubrication instead of oil.

“We chose Thordon COMPAC for this vessel because these bearings are environmentally friendly, water lubricated and come with no risk of pollution,” says Captain Simon Merritt, Technical Manager for Carisbrooke Shipping Ltd. “All equipment on board the vessel has been chosen with energy efficiency or with its minimal environmental impact in mind.”

The Vectis Eagle has a tapered key COMPAC bearing design with a shaft size of 470 mm (18.5”). The tapered key design allows for removal, inspection and re-insertion of the bearings without shaft withdrawal. Thordon COMPAC seawater lubricated propeller shaft bearings completely eliminate the risk of oil discharges from the stern tube. Seawater is used as a lubricant instead of oil and is taken from the sea, pumped through the bearings and returned back to the sea. There is no risk of damage to an aft seal by a fishing net or rope as there is no aft seal. This results in lower in-service maintenance costs and the elimination of storage, sampling and disposal of oil from the stern tube.

The Vectis Eagle is characterized by its extremely high bow and versatile single cargo hold making it currently the longest cargo space amongst its vessel class. Carisbrooke expects up to 30% reduction in fuel consumption compared to vessels of equal tonnage due to its large diameter propeller and high efficiency nozzle. The ship’s design below the waterline is hydro-dynamically optimized to further reduce drag and allow better water flow to the propeller. Careful selection of all chemicals used inboard has been made to ensure the least impact to the environment as possible.