

Arctic trawler extended drain intervals, increased productivity over 17 years

Ocean Prawns | Rolls-Royce Ulstein 240 gearbox



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Mobil SHC™ Gear 220 fully synthetic oil's superb wear protection and resistance to degradation helped extend the trawler's main propulsion gear oil drain interval to 120,000 hours, lengthen gearbox life, reduce consumption and decrease filter changes, resulting in low maintenance costs.

Situation

Ocean Prawns is a modern shrimp trawler operating in the Arctic Ocean. Its engine and gearbox must perform reliably from -30°C (-22°F) in winter to 30°C (86°F) in summer. Since 1996 (approximately 120,000 hours), Ocean Prawns has used Mobil SHC Gear 220 synthetic gearbox oil in the main propulsion gear. During this time, the vessel's main engine changed from a Wärtsilä 8L32 to a Wärtsilä 18V32, increasing the load on the Rolls-Royce Ulstein 240 gearbox by 100 per cent.

Recommendation

Mobil SHC Gear 220 oil is a scientifically engineered, fully synthetic lubricant designed to provide outstanding wear protection for gears and bearings operating under extreme load conditions. It offers performance advantages that conventional mineral oils cannot match. The product's high viscosity index enables a wide operating temperature range and excellent low-temperature startup. Mobil SHC Gear 220 lubricant shows no tendency to plug fine filters, and is compatible with ferrous and non-ferrous metals, even at elevated temperatures.

Impact

Mobil SHC Gear 220 oil and the SignumSM Oil Analysis programme helped Ocean Prawns A/S to extend the trawler's main propulsion gear oil drain interval to 120,000 hours, despite operating conditions that included extreme temperatures and a new engine that significantly increased stress on the gearbox. The classification society approved Ocean Prawns' use of the new engine with the stipulation that only Mobil SHC Gear 220 oil could be used in the gearbox.

With Mobil SHC Gear 220 oil, Ocean Prawns has experienced problem-free operation and **outstanding productivity for 17 years.**