

# Preventive maintenance doubles piston overhaul interval

Danaos Shipping Company, Ltd | Wärtsilä 7RT-flex82C



Energy lives here<sup>™</sup>

Mobil Serv<sup>SM</sup> Cylinder Condition Monitoring enabled Danaos Shipping to optimise the performance of two Wärtsilä 7RT-flex82C engines. Data showed that the cylinder oil feed rates could be reduced by 5.6 per cent and the time between engine overhauls doubled.

## Situation

Shortly after taking delivery of the vessels MV Hanjin Buenos Aires and MV Hanjin Versailles, it became clear to Danaos Shipping that their reduced load operation could cause engine oil-related issues. The company called in ExxonMobil to investigate if the problem could be tackled while also helping to optimise engine performance and oil consumption.

## Recommendation

ExxonMobil suggested implementing Mobil Serv Cylinder Condition Monitoring to monitor and quickly detect changes in cylinder conditions. Used in tandem with laboratory analysis, this would help ensure Danaos Shipping's engineers fully understood how the engines were performing on Mobilgard<sup>™</sup> 570, a 70 BN cylinder oil, and what could be done to optimise the cylinder lubrication feed rates.

## Impact

Mobil Serv Cylinder Condition Monitoring, alongside Mobilgard 570 cylinder oil, proved to be a key part of the preventive maintenance plan on the two container vessels. It made it easy for their engineers to optimise the performance of the engines and reduce feed rates by 5.6 per cent while doubling the time between piston overhauls, leading to potential cost savings and decreased maintenance.

The Mobil Serv Cylinder Condition Monitoring data also enabled Danaos Shipping to confirm that Mobilgard 570 cylinder oil provided continued outstanding protection to the engines as feed rates were optimised, enabling the engines to follow the Wärtsilä-recommended minimum feed rate without them showing any adverse wear effects.

---

Mobil Serv Cylinder Condition  
Monitoring data enabled a 5.6%  
reduction in cylinder oil feed rates.

---