Shell Marine

SHELL LUBEMONITOR HELPS TANTO REDUCE CYLINDER OIL FEED RATE AND POTENTIALLY SAVE $12,420/Y[1] FOR ONE VESSEL

COMPANY: PT Tanto Intim Line

APPLICATION: Main engines

VESSEL: Container ship

KEY EDGE: Shell LubeMonitor, Shell Alexia 50

REDUCED CYLINDER OIL FEED RATE AND POTENTIALLY SAVED

$12,420/Y[1]

FOR ONE VESSEL

[1]The savings indicated are specific to the calculation date and mentioned site.

PT Tanto Intim Line (Tanto), a family owned, Indonesia-based cargo-shipping company, operates a fleet of more than 45 container vessels with a total capacity of 26,731 twenty-foot equivalent units. The company was using Shell Alexia 50 as cylinder oil for its fleet's two-stroke engines but wished to reduce its lubrication costs.

Tanto engaged Shell Marine to investigate reducing its fleet's lubricant consumption. Consequently, Shell Marine proposed a trial using Shell LubeMonitor, a cylinder condition monitoring programme designed to help customers to optimise their cylinder oil feed rate and thereby reduce overall operating costs.

The shipping company selected the *Tanto Jaya* for the trial. Shell Marine's local distributor helped to educate and train the vessel's crew on sampling procedures, conducting piston crown underside inspections and collecting the required data. Shell Marine then used the Shell LubeMonitor programme, which includes services from a Shell Rapid Lubricants Analysis laboratory, to measure the abrasive iron content in and base number of the oil samples. The data collected and the piston crown underside inspections were used as evidence to persuade Tanto that the cylinder oil feed rate could safely be reduced and thereby cut lubrication costs.

Subsequently, the cylinder oil feed rate for the *Tanto Jaya* was reduced from 420 to 396 l/d, which is a reduction of 24 l/d or 4,320 l/y for a projected, potential annual saving of about $12,420 for this vessesl.[1] These savings may increase, as the programme to optimise cylinder oil feed rate is ongoing. The same solution applied across the rest of the Tanto fleet would increase efficiency and achieve the objective of cutting lubrication costs overall.

1 CHALLENGE

Indonesian cargo-shipping company Tanto wished to cut lubricant consumption for the two-stroke-engines across its container fleet to reduce its overall operating costs.

2 SOLUTION

Shell Marine proposed a trial using the Shell LubeMonitor service to collect data from one container ship, the *Tanto Jaya*, to show that the cylinder oil feed rate could safely be reduced and thereby cut lubrication costs.

3 OUTCOME

The data and information collected using Shell LubeMonitor condition monitoring indicated that the feed rate for the *Tanto Jaya* could safely be reduced from 420 to 396 l/d,

4 VALUE

Reducing the cylinder oil feed rate for one vessel in the Tanto fleet **potentially saves about $12,420 a year** based on a lubricant consumption of 4,320 l/y.[1] These savings may increase, as the programme to optimise cylinder oil feed rate is ongoing. Applying the same solution across the Tanto fleet could improve efficiency and help to cut lubrication costs overall.

[1]The savings indicated are specific to the calculation date and mentioned site. These calculations may vary from site to site and from time to time, depending on, for example, the application, the operating conditions, the current products being used, the condition of the equipment and the maintenance practices.

SHELL SERVICE

Shell LubeMonitor

A condition monitoring programme for two-stroke marine engine cylinders that includes access to Shell tools and advice to help you strike an acceptable balance between cylinder oil costs and wear-related cylinder maintenance expenses.

Shell Rapid Lubricants Analysis

A flexible used-oil laboratory analysis service designed to save you time and money on maintenance resulting from equipment failure. This early-warning system aims to give you peace of mind that your equipment and lubricants are in optimum working order.

Shell LubeAdvisor

This on-site support from a global team of field-based engineers includes lubrication surveys, vessel assessments, and in-depth technical and applications support when required. Back-up support is provided by telephone, fax or email.

SHELL ALEXIA

Shell Alexia

The marine industry is changing rapidly as it strives to reduce fuel costs and improve environmental performance. This is increasing operational complexity and the likelihood of cold corrosion, and putting more pressure on the cylinder oils used onboard.

We have designed three Shell Alexia cylinder oils to meet your changing needs and complement the wider Shell portfolio. These oils are underpinned by a rigorous scientific understanding of oil stress and their proven performance in engines.

Contact your Shell Marine account manager to find out more or visit **www.shell.com/marine**.

Issued June 2017