



# INDONESIAN FREIGHT FORWARDER REDUCES CYLINDER OIL FEED RATE USING SHELL LUBEMONITOR

**COMPANY:** PT Salam Pacific Indonesia Line

**APPLICATION:** Main engines

**VESSEL:** Container ship

**KEY EDGE:** Shell Lube Monitor, Shell Alexia 50

**REDUCED OIL FEED RATE SAVES  
THE COMPANY ABOUT**

**US \$17,300**

**A YEAR PER VESSEL<sup>1</sup>**

<sup>1</sup>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.

Based in Surabaya, Indonesia, interisland freight forwarding company, PT Salam Pacific Indonesia Line (PT SPIL), has a strong fleet of 73 vessels and 28 offices located across the Indonesian archipelago. PT SPIL is renowned for being the shipping pioneer of East Indonesia. In 1996, the growing need for broader coverage and the demand for more-reliable interisland shipments led PT SPIL to improve its service through handling more break-bulk cargo and using more-efficient means of transport utilising unitised containers. Supported by a Shell team, the company continues to improve its network to provide high-quality services for its customers. As part of this process, PT SPIL wanted to reduce and optimise its vessels' lubricant consumption and to cut its lubrication costs without compromising on engine protection.

With support from Shell Marine, PT Cakrawala Maju Mapan (PT CMM), the Shell Marine distributor, suggested a trial using one of Shell Marine's technical services programmes, Shell LubeMonitor, in the main engines of the containership MV SPIL HANA to see if there were any opportunities to optimise the cylinder oil feed rate. As the vessel is using Shell Alexia 50 cylinder oil, PT CMM believed that such a programme could result in a reduction in feed rate that would help to reduce and optimise cylinder oil consumption.



To run the trial, PT CMM needed to educate and train the vessel's crew on sampling procedures, piston underside inspection and collecting the necessary data. They also had to persuade them that all the data and the piston underside inspections could be used to help reduce the feed rate safely and, thus, optimise lubricant consumption. PT CMM proposed using the Shell Lube Monitor service to monitor engine wear through measuring the iron in the cylinder oil in the MV SPIL HANA using a Shell Onboard Test Solutions device.

The feed rate was initially reduced from 180 to 160 l/d: a reduction of 20 l/d or 3,600 l/y. After a period of satisfactory results at 160 l/d, the feed rate was reduced further to 120 l/d: a total reduction of 60 l/d or 10,800 l/y.

With the feed rate reduction programme, PT SPIL has reduced its lubricant consumption and increased its efficiency for a more-effective fleet. It reports savings on lubrication costs of about US \$17,300 a year for one vessel.<sup>1</sup> Further savings may be possible, as the programme is ongoing and still striving to achieve the optimal feed rate.

# 1

## CHALLENGE

Interisland freight forwarder PT SPIL wanted to reduce and optimise its vessels' lubricant consumption and cut its lubrication costs without compromising on engine protection.

# 2

## SOLUTION

With support from Shell Marine, PT CMM, the Shell Marine distributor, suggested a trial using Shell LubeMonitor in a reduced feed rate programme on the MV SPIL HANA.

# 3

## OUTCOME

The trial showed that the feed rate could be successfully reduced from 180 to 120 l/d: a reduction of 60 l/d or 10,800 l/y.

# 4

## VALUE

With the feed rate reduction programme, PT SPIL has successfully reduced its lubricant consumption. It reports **savings on lubrication costs of about US \$17,300 a year** for one vessel.<sup>1</sup>

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### 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 LubeAnalyst

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 is putting more pressure on the cylinder oils used onboard.

