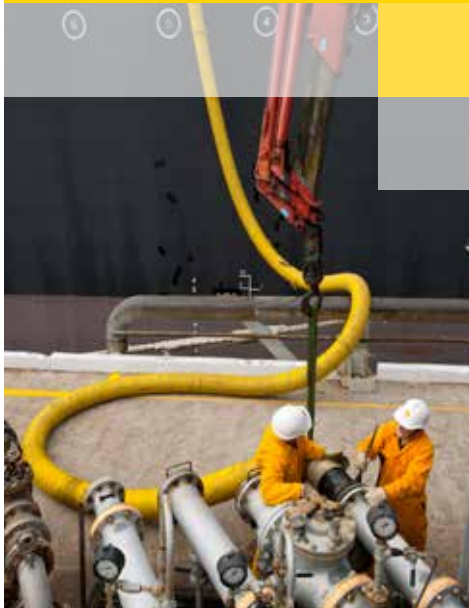




# SHIP MANAGEMENT COMPANY REDUCES OIL FEED RATE BY 25% USING SHELL LUBEMONITOR SERVICE

**COMPANY:** Oskar Wehr KG (GmbH & Co.)  
**COUNTRY:** Germany  
**APPLICATION:** Main engines  
Vessel: Bulk carriers and containerships  
**KEY EDGE:** Shell Lube/Monitor



**Oskar Wehr KG (GmbH & Co.) of Hamburg, Germany, is part of the Wehr Group and currently provides commercial and technical management services to 25 vessels, including 12 containerships ranging in size from 1,730 to 5,100 TEU, and 13 bulk carriers ranging in size from 55.000 to 176.000 dwt.**

Oskar Wehr aimed to reduce the operational costs of these vessels, so, in 2015, started working with Shell on a detailed cylinder condition monitoring programme utilising the Shell LubeMonitor service. This included using the onboard Shell Onboard Alert iron wear measurement device; monitoring the total base number (TBN) with Shell Onboard Plus kit; and using the Shell Rapid Lubricants Analysis oil and equipment condition monitoring service with the support and guidance from Shell lubrication experts. Oskar Wehr immediately equipped the whole fleet with facilities to take both the onboard measurements.

Engine monitoring started in January 2015 on the container vessel Wehr Hong Kong, which is powered by a MAN B&W 9 K90 MC-C engine, when the feed rate was adjusted to 0.8 g/kWh using Shell Alexia 50 (BN70) and Shell Alexia S4 (BN60) cylinder oil. In October 2015 after comprehensive monitoring of lubricant performance, the vessel was able to reduce the oil feed rate by 25% to 0.6 g/kWh.

In addition, some of the vessels' engines were inspected. Their liners and pistons remained in good condition.

# 1

## CHALLENGE

To cut its fleet running costs successfully, Oskar Wehr contacted Shell for support on optimising the cylinder lubrication feed rate of the main engines of its 25 vessels while following the equipment manufacturer's recommended guidelines.

# 2

## SOLUTION

Shell worked closely with the technical department of Oskar Wehr in order to understand the operating conditions and lubrication needs of the vessels using the Shell LubeMonitor Service. Cylinder monitoring onboard using the Shell Onboard Alert and Shell Rapid Lubricants Analysis services were proposed to help optimise the cylinder oil feed rate and manage engine wear. The monitoring revealed that the cylinder oil feed could safely be reduced by a significant 25%; this has now been applied to all the vessels.

# 3

## OUTCOME

Through close collaboration with Shell and by using the Shell LubeMonitor service, Oskar Wehr has cut its cylinder oil costs by reducing the oil feed rate by 0.2 g/kWh in each of 25 vessels while complying with the equipment manufacturer's feed rate recommendations.

# 4

## VALUE

Oskar Wehr reports saving up to \$20,000 per vessel per year. The company is very satisfied with the performance of the Shell Alexia cylinder oils and the Shell LubeMonitor service.

### 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 LubeCoach

A training programme designed to help you realise the potential benefits of a fully optimised lubrication plan and to get maximum return from your investment with a better qualified team.

### 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 four 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.

