

# REFERENCE STUDY

MARINE



#### **CLIENT**

Tide sjø in Norway is a subsidiary company of Tide ASA with a fleet of 80 vessels.

of Tide ASA with a fleet of 80 vessels. MF Fedjefjord is a ferry transporting cars between Fedje and Sævrøy

Contact: Chief Engineer Einar Støldal

#### **SYSTEM**

Gear box 1 - Schottel STP1010RL Oil volume 1700 liters Mobilgear 150 cSt oil

### **CHALLENGE**

### ABNORMAL WEAR AND PROBLEMS WITH OVERHEATING

Tide sjø experienced a number of problems with their thruster gear box on the MF Fedjefjord ferry. There were signs of abnormal wear and problems with overheating, and valve failures

occurred. The oil analysis showed that the lubrication oil in the gear box was very contaminated.



## **SOLUTION**

### EUROPAFILTER'S KIDNEY LOOP OIL FILTRATION

Europafilters EF2115 kidney loop oil filtration unit was assembled in an offline circuit, treating the lubricant continuously while the ferry was still in operation.



# **RESULT**

#### ELIMINATED PROBLEMS AND ECONOMICAL SAVINGS

The results gave large savings for Tide sjø, both economical and environmental. The wear on parts decreased considerably, the problems with overheating were eliminated and the valve function was restored again. The NAS 1638 went from class 8 to class 5; the iron content went from 58mg/kg to 10mg/kg and the water content from 90 ppm (Karlfisher) to 65 ppm (Karlfisher). The system shows continuously good operating conditions for the gear box after the installation.



