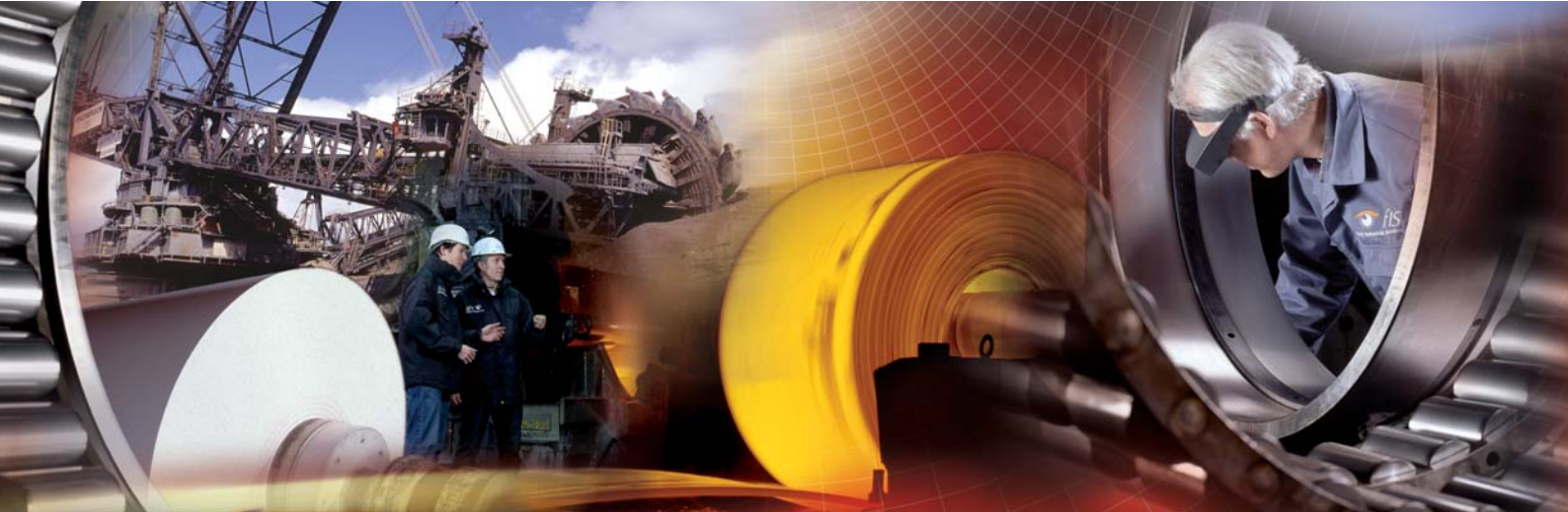


# Smart Performance Program



## Balancing of Two Fans Ensures a Ship's Operability

**Industry: Shipbuilding**

### Customer

The customer is an internationally operating German shipping company. Being a full service provider, it offers the full range of ship-related services – from shipbuilding to providing crew to the handling of all administrative tasks. Currently, the company is managing more than 30 ships of various categories and sizes. Overall tonnage amounts to more than 1.3 million tons per week.

### Challenge for Schaeffler

In August 2007, FAG Industrial Services (FIS) was asked to assist at short notice in the balancing of two exhaust fans on a tanker. This type of exhaust fans is needed for operating the ship's power supply system. The fans' insufficient performance prevent operation of the systems that are needed for unloading the cargo and continuing the journey.



#### Information about the Ship

<b>Category:</b>	Tanker
<b>Length:</b>	228 m
<b>Width:</b>	38 m
<b>Cruising speed:</b>	14 kn
<b>Number of cargo tanks:</b>	12
<b>Capacity:</b>	78,149 cbm
<b>Main engine:</b>	MAN B&W 5S60MC-C

### Schaeffler Solution

An experienced FIS service fitter was immediately sent to the customer to support. He balanced both fans with the help of an FAG Detector III, restoring the ship's operability. At the same time, he gave the shipping company recommendations on how such failures can be avoided in future by regular cleaning and vibration measurements.

### Customer Benefit

For two weeks, the customer had tried to unload the cargo in spite of the defective fans and was not able to find a suitable service provider on location to solve the problem. The immediately dispatched FIS service fitter solved the problem at once. In this way, additional costly waiting times were avoided.

Costs for whole FIS operation  
(including air fare, measurements and report): **€ 10,000**

Costs for every additional week  
the tanker would have spent  
defective in port: **approx. € 30,000**

### What's special

Exhaust fans are used on many tankers and are a sensitive bottleneck system. For this reason, their operability is of highest priority.

#### Technical Information about the Solution

##### Monitoring device: FAG Detector III

Functions used:

- Dynamic balancing
- Condition monitoring measurements for assessing the bearings' condition



Contact details for worldwide contact persons as well as further **Smart Performance Solutions** can be found on our homepage [www.smartperformanceprogram.com](http://www.smartperformanceprogram.com)