



Diesel and Engine Lube Oil Tanker – Diesel Engine MTU, 1,140 kW

CJC® Application Study

CUSTOMER

Vessel: TMS „SHENANDOAH“,
the building year 2010,
launching 16th July 2011
Type: Tanker, water inland vessel
Shipowner: Roland Schnoering

SYSTEM

Main engine: MTU engine type 12V 4000 M53
Lube Oil: 280 L
Fuel consumption: 510.000 L in 6,300 RHs

PROBLEM

Particles and water in diesel lead to wear of injection nozzles and fuel pumps and corrosion formation. Also, microbial growth is possible. To avoid these the shipowner Roland Schnoering has installed a CJC® Fuel Care System at the main engine (MTU Motor 8V 4000 M60) of his former tanker, which he sold in 2009. Because of the excellent experiences with CJC® for decades, Roland Schnoering decided to equip the successor tanker, also called „SHENANDOAH“, with CJC® Lube Oil and Fuel Care Systems from the beginning.

SOLUTION

Engine lube oil: A CJC® Fine Filter Unit 27/54 with CJC® Depth Filter Insert B 27/54 (3 µm absolute) and a pump flow of 60 L/h was installed.
Dirt holding capacity: approx. 4 kg
Water absorption capacity: approx. 1.8 L

Diesel / Fuel: A CJC® Filter Separator 27/81 with CJC® Depth Filter Insert FU 27/81 (3 µm absolute) and a pump flow of 540 L/h was installed. A coalescer-element separates the water from the oil in a subsequent step.

Dirt holding capacity: approx. 6 kg

Both filter systems simultaneously remove particles, water and oil degradation products from the oil and fuel.

RESULT

Since vessel launching in 2011, the engine is running reliably without any breakdowns or failures. The engine is always serviced with clean and water-free lube oil and diesel to ensure optimum engine performance.

Result engine lube oil:

The oil lifetime can be extended by 50% – from 1,000 up to 1,500 running hours (manufacturer recommends an oil change after 1,000 running hours). Only after nine months, the filter insert has been replaced.

Result diesel / fuel:

In total 706,000 Litres fuel were dried and cleaned with only one filter insert set. The fine filter insert was not saturated at this time, so the lifetime is much longer.



Tanker TMS „SHENANDOAH“



MTU diesel engine type 12 V 4000 M53 with installed CJC® Fine Filter Unit 27/54 (le) for lube oil filtration and CJC® Filter Separator 27/108 (ri) for diesel filtration.

COMMENT

Roland Schnoering, Shipowner TMS „SHENANDOAH“:

"I have had already for my former vessel (also Shenandoah) a diesel filter and was always satisfied. For my new vessel, I wanted to install a CJC diesel filter again. To optimize the engine performance, I decided to buy a CJC oil filter for cleaning the engine lube oil!"