OIL FILTRATION SYSTEMS

CJC™ Application Study

Gear Oil - Supply Vessel, Bow Thruster

MARINE

Application Study written by:
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2001

CUSTOMER

Vessel: "Highland Fortress"
Gulf Offshore, Aberdeen, Scotland.
Type: Supply vessel.
Contact person:
Operations Superint. John Scott.

THE SYSTEM

2 off Ulstein thrusters type 150 TV (bow). Oil type: Mobil SHC 629 (150 cSt), approximately 800 litres per thruster system.

THE PROBLEM

The oil was contaminated with water, particles and resin deposits leading to frequent oil changes and subsequent dry docking.

THE SOLUTION

CJC™ FilterSeparatorUnit PTU2 27/27 PM-DH1PW with 2 off 1.65 kW preheaters and automatic water discharging, using **CJC™ Filter Insert BLAT 27/27** (3 µm absolute). Water separation by means of a CJC™ coalescing element.

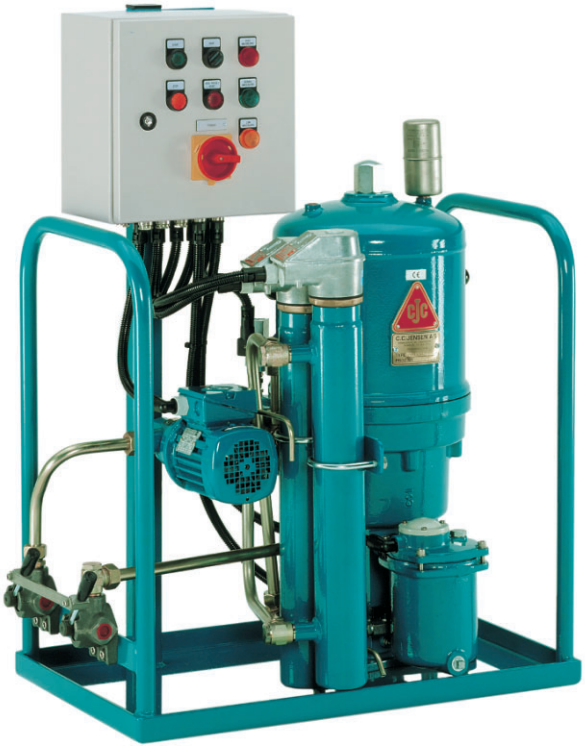
THE TEST

The filter separator unit was installed between the two bow thrusters and had a valve system installed enabling the unit to operate on one thruster unit at a time.

The oil samples were taken through a sampling point before the CJC™ Filter - one prior to start up and one after a short period of filtration / separation.

THE RESULT

The remarkable in this case is the speed with which the CJC™ unit was able to reduce the water content in the oil. In less than 48 hours the condition of the oil was brought from "not usable" to "usable" and a considerable amount of solid particles were removed - including resinious oxidation products.



CJC™ Filter Separator Unit PTU2 27/27 PM-DH1PW.

THE RESULT

Thruster System	Before	After
Hours of filtration:	0	48
Water content, ppm:	25,490	1,720
Particle cont. 2 µm:	> 1,000,000	< 250,000
ISO 4406 Class:	21/19/16	18/17/13

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