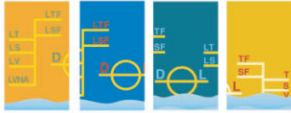




OIL FILTRATION SYSTEMS

CJC™ Application Study

Hydraulic Oil - Reefer Vessel, Hatch Cover



MARINE

*Application Study
written by:
Lars Bo Andersen
C.C.Jensen A/S
Denmark*

*In close collaboration with:
Lauritzen Reefers A/S*

2000

CUSTOMER

Vessel: M/S Chilean Reefer.
Shipowner: Lauritzen Reefers A/S.
Contact person: Peter M. Petersen.

THE SYSTEM

MacGregor Navire hatch cover hydraulic system with 1,100 litres of BP Bartran HV15 oil.

THE PROBLEM

Due to particulate contamination and resin formation in the oil the hatch covers had to be opened manually (resin formation is the end product of oil oxidation).

The formation of resin will coat cylinders, pumps and other component surfaces. This can lead to operation difficulties and breakdowns.

THE SOLUTION

CJC™ FineFilter HDU 15/25 PM with pump flow rate of 45 ltr./hour and containing one **CJC™ Fine FilterInsert A 15/25** (3 µm absolute) filter insert.

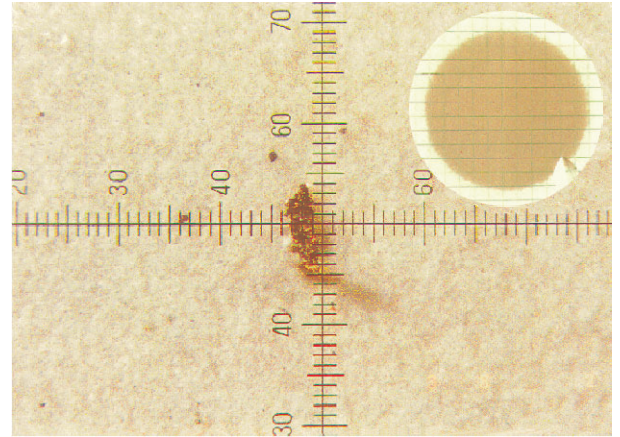
THE TEST

The filter was installed to run 24 hours a day in order to effectively retain both particles and resin. The resin is removed by absorption of the resin into the element.

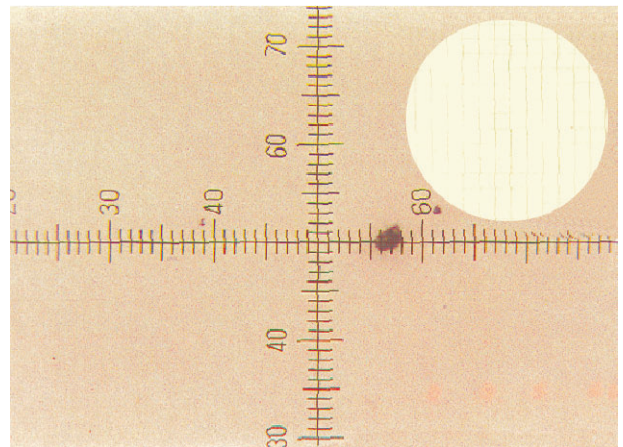
THE RESULT

The operation of the hatch covers significantly improved within the first month after installing the filter. After a period of 3 months the problems had disappeared completely.

As can be seen from the enlarged membrane photos (right) the oil cleanliness has clearly improved: the resin formation in the oil has been removed or reduced significantly.



Before filtration.



After filtration.

THE RESULT

Particle size:	Before filtration	After filtration
> 2 µm:	69,264	15,007
> 5 µm:	27,485	4,418
> 15 µm:	4,385	427

