



OIL MAINTENANCE
MARINE

Application Study
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In close collaboration
with:
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2000

Hydraulic Oil Lauritzen Reefer Vessel - Hatch Cover

CJC™ Application Study

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™ Fine Filter HDU 15/25 PM with pump flow rate of 45 L/h and containing one **CJC™ Fine Filter Insert A 15/25** (3 µm absolute) filter insert.

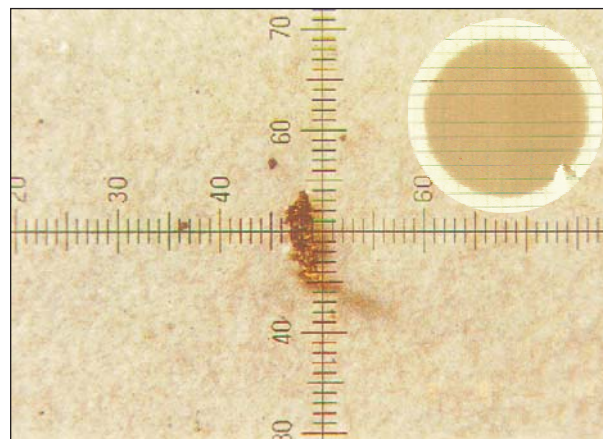
THE TEST

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 insert.

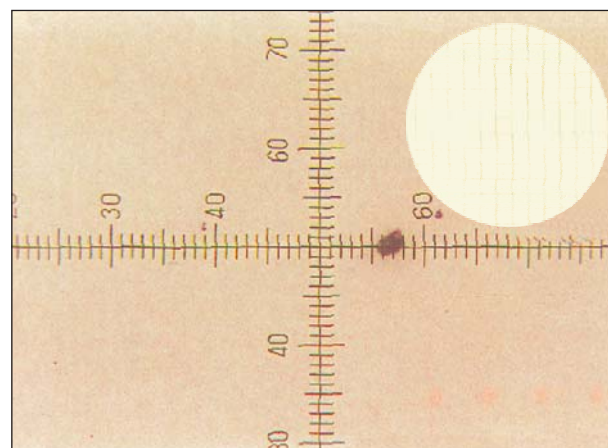
THE RESULT

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 |