



OIL FILTRATION SYSTEMS

# CJC™ Application Study

## Lubrication Oil - Paper Machine



### INDUSTRY

*Application Study  
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### CUSTOMER

Norske Skogindustrier ASA,  
Saugbrugsforeningen,  
Halden, Norway.

### THE SYSTEM

Central lubricating system for PM 4 paper machine. The tank contains about 13,000 litres of Mobil DTE BB Oil PM mineral oil. The tank consists of 3 chambers (return, settling and suction). Oil temperature 60°C. A centrifuge used to be installed on the lubricating system, but it could not keep up.

### THE PROBLEM

A high water content was detected over a long period of time on PM 4. Large water drops were to be found under the top of the tank. The oil was discoloured and cloudy, and the water content was as high as 3.1% (31,000 ppm).

The situation became even more serious, when rust in both bearings and bearing housings was found during a maintenance stoppage. Bearings also seized due to rust formation. Several bearings and bearing housings had to be replaced during the stoppage.

### THE SOLUTION

For water removal a **CJC™ Desorber D38 GP-EH1T** with a **1400 ltr./h circulation pump** was installed during September 2000. The Desorber draws the oil from the return chamber and delivers the treated oil back to the suction chamber.

### THE RESULTS

The Desorber has taken out an average amount of 0.5 litres of water per hour since it was installed. All visible water drops under the top of the tank have disappeared and the oil has regained its original colour and is clear.



*CJC™ Desorber D38 GP-EH1T.*

### THE RESULT

Date	Water Content (ppm)
11. July	31,000
18. October	480
20. December	215

### COMMENTS

**Maintenance Manager Per-Erik Halvorsen:**

*"The result proves that the CJC™ Desorber we have purchased is an extremely efficient water removing device. We also have experienced that the desorber is very easy to operate and to maintain. After running-in it requires no adjustments and almost no surveillance. It is remarkable how much water it is able to remove".*

