



**CLEAN OIL**  
BRIGHT IDEAS

# Lube Oil Paper Machine

## CJC™ Application Study

Application Study  
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### CUSTOMER

Norske Canada, Elk Falls Division in Campbell River, BC, Canada.

### THE SYSTEM

**Machine type:**  
Paper machine bowser lube system.  
**Oil type:** 12,000 litres of Chevron CLARITY 220 ISO VG220.

### THE PROBLEM

Poor oil quality led to a reduction in the bearing life expectancy. Initial ISO code was 22/21/18 (2/5/15 µm); target cleanliness level was set at 19/16/13. Water ingress was also a problem, though they already had a vacuum dehydrator installed to help dry the oil.

### THE SOLUTION

A CJC™ Fine Filter HDU 2\*27/108 GP-EPT was selected to bring the oil down to the target cleanliness level. This unit was fitted with a GP-33-4 pump at a flow of 3,200 litres/hour. We chose a CJC™ Filter Insert BLA 27/27 for its ability to handle excessive water concentration.

### THE TEST

Oil samples were taken prior to installation, and sent to the laboratory for analysis. Samples were then taken at regular intervals, and the results compared.

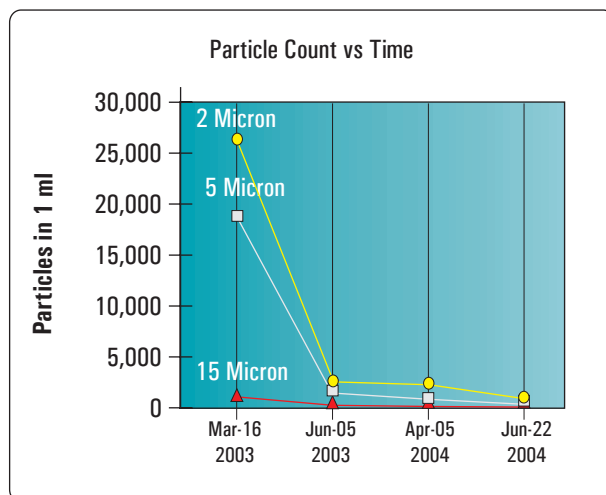
### THE RESULT

The sample results show a dramatic improvement in the first three months; particulate levels dropped to 18/17/14 as the oil quality improved. The subsequent months show a more gradual improvement, highlighting CJC's ability to actually clean the inside surfaces of the lube oil system (valves, hoses, etc.) by circulating clean oil. The most recent laboratory results indicated an ISO code of 16/14/11, roughly 1/100th of the initial particle count.



CJC™ Fine Filter HDU 2\*27/108 GP, Norske Canada

### OIL ANALYSIS



### THE RESULT

Sample Date	Mar-16-2003	Jun-05-2003	Apr-05-2004	Jun-22-2004
ISO Code	22/21/18	18/17/14	18/16/13	16/14/11