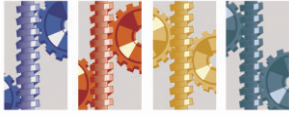




OIL FILTRATION SYSTEMS

# CJC™ Application Study

## Lube Oil - Bottle Labeling machine



### INDUSTRY

*Application Study  
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### CUSTOMER

Carlsberg Breweries A/S, Denmark.

### THE SYSTEM

Krone Topmatic labeling machine with three 20 ltr. lube oil systems per machine. Oil type Mobil SHC 630 (ISO VG 220).

### THE PROBLEM

Periodical cleaning of the machines caused dirt and water to ingress the oil to an extent that monthly oil changes were required.

### THE SOLUTION

Prior to the test a **CJC™ Filter Separator PTU2 27/27 PM-EH1** was installed, (with oil preheater and automatic water discharger) using **CJC™ BLAT 27/27 FilterInsert** (3 µm absolute). Dirt holding capacity approx. four litres.

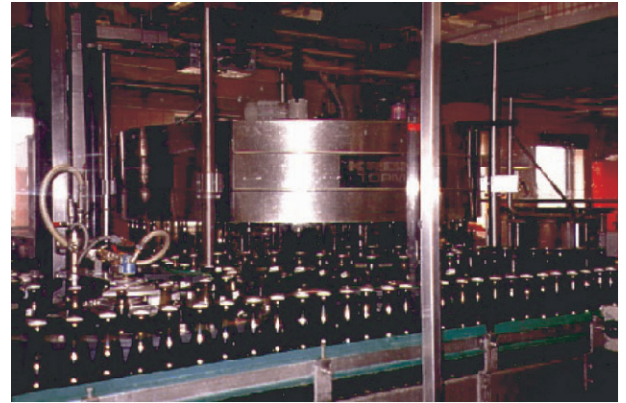
### THE TEST

**Oil sample No 1** was drawn directly from the bottom drain of the lube oil system some four weeks after the last oil change. The analysis, performed by Filtrex Services, Holland, showed metal, sand and plastic particle contamination, and the water content was high. Filtrex Services recommended a cleaning or a change of the oil.

**Oil sample No 2** was drawn after 24 hours of continuous CJC™ filtration. The particle content had been reduced to a level far below that of new oil and the water content had been reduced from 40.000 ppm to 172 ppm. Filtrex Services assessed the oil as suitable for further use.

### THE RESULT

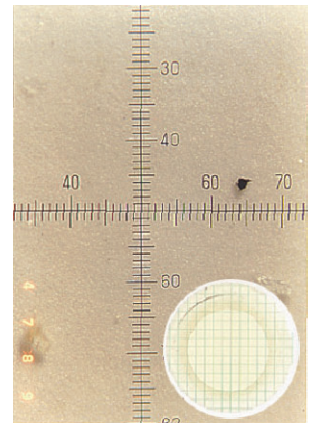
Today, the oil is drained from the labelling machines once every 6 weeks and is replaced - not with a new oil, but with dry and clean oil from the CJC™ filter unit. The average particle and water content in the oil has been reduced considerably with a minimum of oil waste.



*Labeling machine at Carlsberg Breweries A/S.*



*Before filtration.*



*After filtration.*

### THE RESULT

Particle count <b>before</b> filtration:	Particle count <b>after</b> filtration:
ISO 24/20	ISO 13/10
Water content <b>before</b> filtration:	Water content <b>after</b> filtration:
40,000 ppm	172 ppm

### COMMENTS

**Mr. Per Simonsen, Carlsberg Breweries:**  
*"Not only do we save money because we purchase less new oil but we also - which is more important - save the environment from large amounts of waste oil".*

