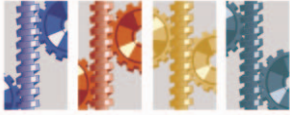




OIL FILTRATION SYSTEMS

CJC™ Application Study

Lubrication Oil - Main Turbine



INDUSTRY

*Application Study
written by:
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Denmark*

2000

CUSTOMER

A/S MIDTKRAFT, Denmark.

THE APPLICATION

C.C. Jensen has worked within the power sector for 50 years, on applications such as:

- Turbine lube oil steam/gas/hydro.
- Turbine control oil mineral. based/phosphate ester.
- Coal mill gearbox oil.
- Transformer oil.

At present more than 650 turbines worldwide are equipped with CJC™ filters, which ensures continuous particle and water free oil.

THE SYSTEM

Turbine nos. 3 & 4: ABB 370 MW.
Each turbine: 30,000 litres of TEXACO REGAL R&O 46 oil.

THE PROBLEM

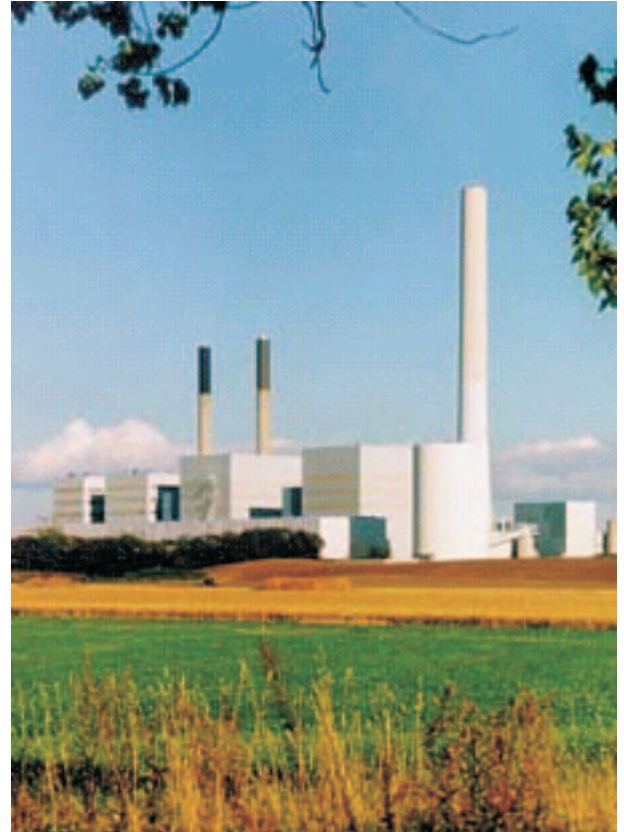
The centrifuges were approaching an expensive overhaul and the oil supplier recommended Midkraft changed them, as high speed centrifuges can damage the additive package of an oil.

THE SOLUTION

CJC™ FilterSeparator PTU3 3*27/108 GP-EPTW with pump flow rate = 3,000 ltr./hour, with **CJC™ FilterInsert BLAT 27/27** (3 µm absolute), and water separation with CJC™ Coalescing element.

THE RESULT

The purchase cost of the CJC™ Filter Separators was lower than the cost of the overhaul of the old centrifuges. The centrifuges were scrapped and the filter separators installed.



THE RESULT

Turbine	Particle count Acc. ISO 4406	Water content
No. 3:	12/7	127 ppm
No. 4:	11/8	131 ppm

The oil sample results after 1 year of operation.

COMMENTS

Jørn Lærche, Maintenance Manager:

"We are very satisfied with these results as they are obtained without changing the filters inserts and with a minimum of service. We also have a mobile CJC™ Fine Filter that we use on our coal mill gearboxes and auxiliary turbines."

