

CJCTM Application Study

Main Turbine Lubricating System

OIL FILTRATION SYSTEMS



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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 $CJC^{\mathbb{M}}$ filters, which ensures continuous particle and water free oil, subsequently clean tanks.

THE SYSTEM

Turbine nos. 3 & 4: ABB 370 Mw. Each turbine: 30,000 litres of TEXACO REGAL Ro46 **oil**.

THE PROBLEM

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

THE SOLUTION

CJCTM Filter Separator PTU3 3*27/108 GP-EPTW with pump flow rate = 3,000 ltr./hour, with CJCTM Filter Insert type BLAT 27/27 (3 μ m absolute), and water separation with CJCTM Coalescing element.

THE RESULTS

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 oil sample results after 1 year of operation look as follows:

Turbine	Particle count Acc. ISO 4402	Water content
No. 3	12/7	127 ppm
No. 4	1 1/8	131 ppm

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 $CJC^{\mathbb{M}}$ Fine Filter that we use on our coal mill gearboxes and auxiliary turbines."



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