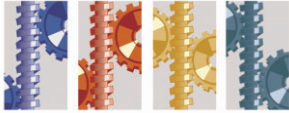




OIL FILTRATION SYSTEMS

CJC™ Application Study

Hydraulic Oil - Hydro Turbine Control System



INDUSTRY

*Application Study
written by:
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C.C.Jensen Ltd.
United Kingdom*

2000

THE SYSTEM

A Boving Control System on Hydro Turbine with 3,000 litres of oil ESSO FM 68.

THE PROBLEM

An environmentally friendly vegetable oil has a faster oxidation process than a standard mineral oil; thus, making clean and dry oil even more important than normal.

The particle content in the oil was very high causing problems with mechanical parts and reducing oil lifetime.

THE SOLUTION

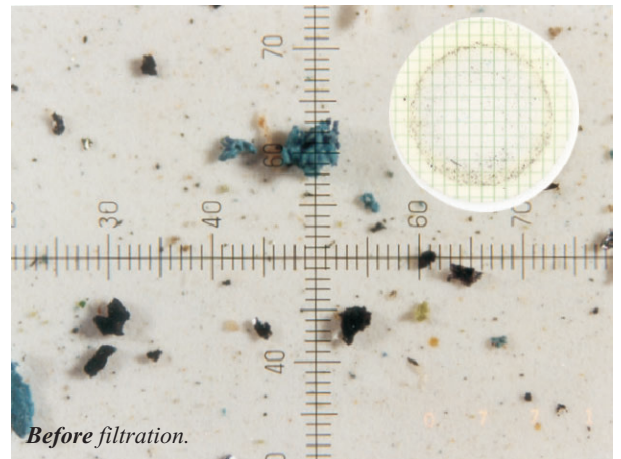
A **CJC™ FilterSeparator PTU3 27/108 MZ-EPW**. The unit is equipped with 4 **CJC™ Filter Inserts BLAT 27/27** with a filtration ratio of 3 µm absolute. The dirt holding capacity is 4 ltr. per element. Furthermore the CJC™ Filter Separator is capable of separating free water from the oil.

THE RESULT

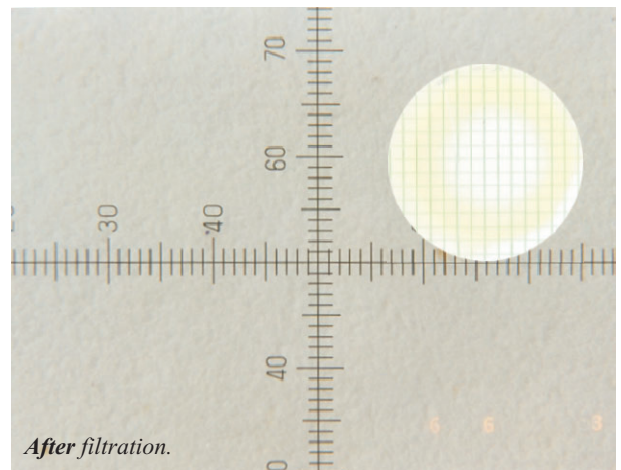
The achieved reduction from an ISO code 20/19/17 to 12/11/8 will give the machines component a theoretical life time increase of 8 times!

REFERENCES

More than 300 CJC™ Filters are operating on Hydro Turbines, installed in Sweden, Scotland, Norway, Germany, Switzerland and Spain.



Before filtration.



After filtration.

THE RESULT

Date	June 30	July 14	July 21	July 30
Particles > 2µm:	627,284	5,027	4,970	2,565
Particles > 5µm:	377,104	3,224	2,906	1,374
Particles > 15µm:	111,596	813	701	183
ISO Code:	20/19/17	13/12/10	13/12/10	12/11/8
Water, ppm:	325	498	318	332

COMMENTS

Jim Currie, Norson Services:

"The CJC™ Fine Filter is very easy to use. I have been very satisfied with the results obtained".

