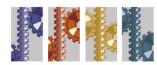


#### OIL FILTRATION SYSTEMS

# CJC<sup>TM</sup> Application Study

# Gear Oil - Industrial Gear Box Coal Terminal



# **INDUSTRY**

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and

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2004

#### **CUSTOMER**

BMA. Coal Loading Terminal, Hay Point, Queensland Australia.

Hay Point Coal Terminal, located 38 km south of Mackay, is one of Australia's largest and most efficient coal receival and export facilities.

#### THE SYSTEM

Flender 11p gearbox, 400L of ISO 680 industrial lube oil.

# THE PROBLEM

Contamination in this gearbox was greater than ISO 22/22/17, what obviously indicates a much too high ingress and generation of particles in the oil system. Also oxidation deposits where found in the oil.

The customer had serious concerns about the long term reliability of this gearbox that is crucial for production needs.

# THE SOLUTION

A CJC<sup>TM</sup> FineFilter HDU 15/25 PV was installed with a flow rate of 45 litres per hour and using a CJC<sup>TM</sup> FilterInsert BG 15/25 with a dirt holding capacity of 1.5 litres.

# THE TEST

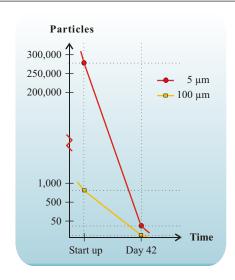
Oil samples were taken on a weekly basis using both patch analysis and laser particle counting.

# THE RESULT

Upon start up a result of greater than ISO 22/22/17. The contamination in the oil was greatly reduced over a 42 day period. The ISO particle count on day 42 is 15/13/12.



The CJC<sup>™</sup> FineFilter HDU 15/25 at the Gear Box of BMA Coal Loading Terminal.



#### THE RESULT

Particles	5 μm	100 μm	ISO code
Before:	>275,402	> 865	>22/22/17
After:	34	5	15/13/12

#### **COMMENTS**

The customer requested a trial between a  $CJC^{TM}$  FineFilter and a filter from a well known competitor. The trial was conducted over a 42 day period and the  $CJC^{TM}$  Filter out performed the other unit on trial, including removal of oil oxidation. They are now looking into fitting  $CJC^{TM}$  FineFilters to other gearboxes on the site.

