



**CLEAN OIL
BRIGHT IDEAS**

CJC™ Application Study

CUSTOMER

Genesis Energy
1000 MW Huntly Thermal Power Station
Huntly, New Zealand

THE SYSTEM

16xCE 863 pulverizer fuel worm drive gearboxes.
Oil Type: Mobil 632 gear oil
Oil Volume: Approx. 2000 L

THE PROBLEM

Patch testing indicated coal, wear and dirt particles. Moisture ingress was also a problem when the units came off line. Individual gearbox filters was decided on, and then ruled out due to prohibitive wiring and control installation costs.

THE SOLUTION

A CJC™ Fine Filter HDU 27/54 MZ-E2H1MPTY, with CJC™ Filter Insert B 27/27 - a fully portable unit mounted on a drain tank with 2 heaters.

FINANCIAL BENEFITS

Cleaner oil has prolonged oil change intervals. The portable filter offers filtration even when the crushers are off line, covering all units on a rotation basis. Potential oil and equipment lifetime has increased.

THE TEST

Genesis' technical staff invited tenders followed by an on-site trial from interested suppliers. From the beginning, they were sceptical of many of the claimed filtration performances. Units were matched against gearboxes with similar patch tests, and CJC™ outperformed all others.

THE RESULT

Oil Sample A
Sample shows extremely high level of coal, rust, fe, and bronze contamination up to 100 µm in size.

Oil Sample B
Sample shows an estimated ISO cleanliness code of -/15/13.

COMMENTS

*Mr. Derek Krippner,
Plant Performance Engineer:
"The CJC™ Fine Filter went on to clean up another
4 gearboxes before blocking up! Impressive."*



Pre-trial site inspection at Genesis Energy



Commissioning the successful CJC™ Fine Filter HDU 27/54 MZ

OIL SAMPLES

Oil Sample A

Oil Sample B



*Before and after patch tests.
After a trial period of 10 days - ISO Code - / 15 / 13*