



CLEAN OIL  
BRIGHT IDEAS

Application Study  
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**BALCAS**

# Hydraulic Oil Hydraulic Power Pack, Debutter, Sawmill

## CJC™ Application Study

### CUSTOMER

**BALCAS Timber Ltd.** Largest sawmill plant in Ireland.

### THE SYSTEM

Hydraulic power pack for the debutter system.  
A debutter (a butt end reducer) shaves off the flare on a log to leave it parallel and therefore easily cut. The hydraulic power unit drives all the movements of this process.

**Oil Type:** GEM 46  
**Volume:** 600 L

### THE PROBLEM

Sticking servo valves, that had to be cleaned every week, gave a lot of maintenance work on this power pack. The particle level was high, mainly due to the harsh environment. The system further suffered from a high level of varnish/resin that caused the valves to stick.

### THE SOLUTION

Due to the contamination level, a **CJC™ Fine Filter HDU 27/27 P**, using a **CJC™ Filter Insert B 27/27** was installed.

### THE TEST

After years of running with high temperatures and dirty oil, it took a very long time to clean the system and reach a good oil cleanliness. The first filter insert was saturated after approx. 3 months.

### THE RESULT

After installation of the CJC™ Fine Filter HDU 27/27, the results were reduced from ISO Code 21/20/17 to ISO Code 15/14/9 meaning a reduction on 2 µm count from just under 2,000,000 to 21,000 e.g. **a reduction factor of almost under 100** - making cleaning of the servo valve unnecessary.

### COMMENTS

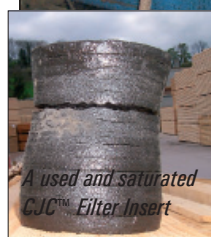
*Since the installation of the CJC™ Offline Filter we have never had to clean or to do maintenance on the valves.*



BALCAS Timber Sawmill

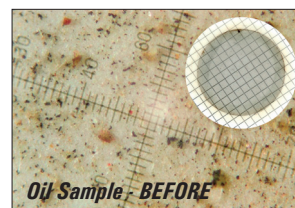


CJC™ Fine Filter HDU 27/27 P



A used and saturated CJC™ Filter Insert

### OIL SAMPLE



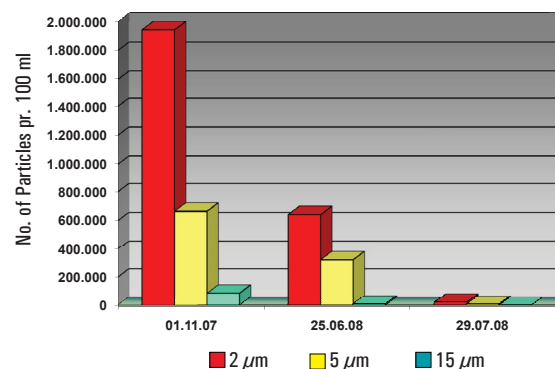
Oil Sample - BEFORE



Oil Sample - AFTER

### THE RESULT

BALCAS - Hydraulic Power Pack, Debutter



	01.11.07	25.06.08	29.07.08
Particles, 2 µm	1943240	642333	21164
Particles, 5 µm	665801	320668	8658
Particles, 15 µm	87514	10357	350
ISO Code	21/20/17	20/19/14	15/14/9