



## 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 Litres

### 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 unit 27/27, using a CJC™ Fine Filter insert B 27/27 was installed.

Dirt holding capacity: approx. 2 kg  
Water absorption capacity: approx. 0,9 L

### 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 unit 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.*



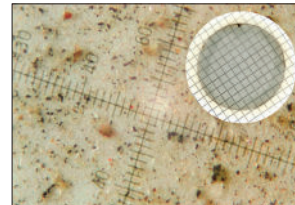
BALCAS Timber Sawmill



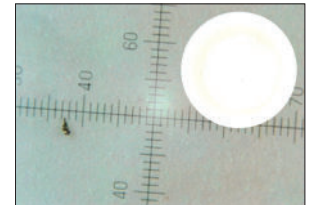
CJC™ Fine Filter unit 27/27

A used and saturated CJC™ Fine Filter insert

### OIL SAMPLE

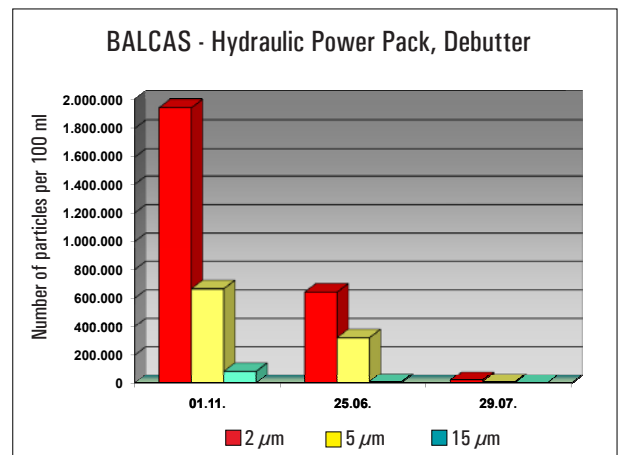


Oil Sample - BEFORE



Oil Sample - AFTER

### THE RESULT



	01.11.	25.06.	29.07.
Particles > 2 µm	1,943,240	642,333	21,164
Particles > 5 µm	665,801	320,668	8,658
Particles > 15 µm	87,514	10,357	350
ISO Code *)	21/20/17	20/19/14	15/14/9

\*) Further information on cleanliness classes are available on request.