



CLEAN OIL
BRIGHT IDEAS

Application Study
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CJC™ Application Study

Engine Lube Oil Marine Diesel Engine, Harbour Tug Boat

CUSTOMER

Ship: "Abeille Gascogne (22)"
Owner: Bourbon Group,
Les Abeilles Le Havre
Type: Harbour Tug Boat (60 TBP)
Contact: Mr. Laurent Menager,
Technical Manager



THE SYSTEM

Engine: ABC 8DZC (LFO), 2404 hp.
Oil Sump: 600 litres
Oil: Elf Disola M 3015

THE PROBLEM

The oil was highly contaminated with blow-by debris, combustion particles, soot and wear metals. Resulting in oil changes every 1000 running hours.

In order to extend the oil change intervals and to lower the running costs, the owner decided to install an off-line Fine Filter, drawing oil from the bottom of the sump.

THE SOLUTION

A CJC™ Fine Filter HDU 27/81 MZ with a pump flow rate of 180 litres/hour, with 3 x CJC™ Filter Inserts B 27/27 (rating: 3 micron absolute) was installed.
 Contamination holding capacity: 3 (x 4 litres of particles and 2 litres of fluids).



THE TEST

In order to compare the oil sample reports, the Fine Filter was only installed on the port engine and samples were taken periodically to monitor the progress of the oil contamination and characteristics.

THE RESULT

The soot contamination has been reduced immediately and the TBN value in the port engine is stabilized so that the oil could be used up to 3000 running hours.

THE RESULT

Port Engine				
Sample Date	Engine Hours	Oil Hours	Soot (%)	TBN mg KOH/g
08.11.2005	12245	1037	0.4	12.5
22.06.2006	13666	2458	1.0	10.8
09.08.2006	14003	2795	1.1	9.9

Starboard Engine				
Sample Date	Engine Hours	Oil Hours	Soot (%)	TBN mg KOH/g
08.11.2005	12221	1033	1.6	12.8
Oil Change				
22.06.2006	13632	77	0.7	13.4
09.08.2006	13967	410	1.2	12.7