



CLEAN OIL
BRIGHT IDEAS

Hydraulic Oil Fishing Vessel - Hydraulic System

CJC™ Application Study

Application Study
written by:

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CUSTOMER

Vessel: m/t "ATRIA"
Shipowner: Dalmore S.A., Gdynia
Country: Poland
Contact Person: Mr. Edmund Wojciszke

THE SYSTEM

Central hydraulic system 3,500 ltr. Castrol HYPIN AWHM 68 oil.

THE PROBLEM

The shipowner had experienced problems with the hydraulic system represented by hanging valves and trapped pistons. An investigation traced this back to high oxidation levels and particle contamination. Physically the oil was black.

THE SOLUTION

A **CJC™ Fine Filter HDU 27/54 MZ** with pump flow rate 590 L/h using **CJC™ Filter Insert B 2 x 27/27** (3 μm absolute).

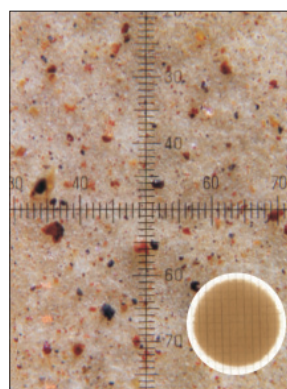
THE RESULT

Since the installation the CJC™ Fine Filter has been running 24 hours a day in order to effectively retain both particles and resin. The resin has been effectively removed by absorption into the filter insert.

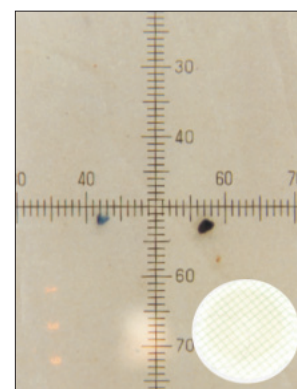
During 10 months of filtration the oil has been cleaned from ISO 4406 21/20/17 to 15/14/9. After the oil has been cleaned the hydraulic system operates without problems and the vessel's engineers can concentrate on other problems.



Fishing trawler and fish processing plant m/t "Ateria" in Gdynia Port.



Before filtration



After filtration

THE RESULT

Sample date:	09.11.00	11.11.00	23.11.00	07.12.00	22.10.01
Particle > 2 μm	1,508,416	1,392,976	700,336	801,374	19,246
Particle > 5 μm	559,240	357,814	147,592	132,098	11,073
Particle > 15 μm	76,928	20,747	24,413	14,278	351
ISO 4406 code	21/20/17	21/19/15	20/18/15	20/18/14	15/14/9
Colour membrane	Brown	1. brown	1. brown	1. brown	White
TAN mg KOH/g	0.871	0.757	0.717	0.737	0.548