OIL FILTRATION SYSTEM

MARINE

Application Study written by:
Jacek Błażczak
C.C. Jensen A/S (PL)

CJC ™ Application Study

Fishing Vessel - Central Hydraulic System

CUSTOMER

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

THE SYSTEM

Central hydraulic system 3.500 ltr. Castrol HYSPIN 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

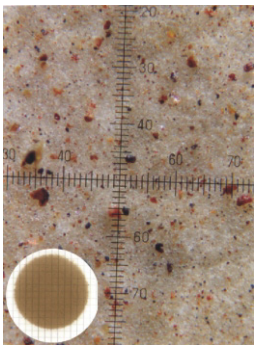
A **CJC ™ Fine Filter HDU 27/54 MZ** with pump flow rate 590 ltr/hr using **CJC ™ Filter Insert type B 2x27/27** (3μm absolute).

THE RESULT

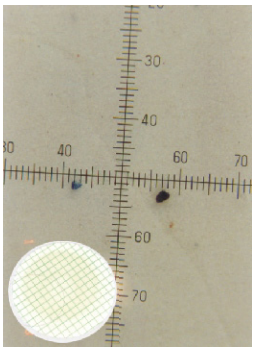
Since the installation the CJC ™ Fine Filter has run continuously 24 hours a day in order to effectively retain both particles and resin. The resin has been effectively removed by absorption into the filter insert.

During 10 months of filtration the oil has been cleaned from ISO 4406 21/20/17 til 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 "Atria" in Gdynia Port.



Before Filtration



After Filtration

THE RESULT

Sample date	9.11.00	11.11.00	23.11.00	7.12.00	22.10.01
Particle > 5μm	559240	357814	147592	132098	11073
Particles >15μm	76928	20747	24413	14278	351
ISO 4406 Code	21/20/17	21/19/15	20/18/15	15/18/14	15/14/9
Colour membrane	Brown	l. Brown	l. Brown	l. Brown	White
T.A.N. Mg KOH/g.	0,871	0,757	0,717	0,737	0,548

C.C.Jensen A/S * Løvholmen 13 * DK-5700 Svendborg * Denmark
Phone: +45 63 21 20 14 * Fax: +45 62 22 46 15
E-mail: filter@cjc.dk * Web: www.cjc.dk