

OIL FILTRATION SYSTEMS

Application Study written by

Rob Deurloo C.C. Jensen A/S. (NL)

# CJC<sup>TM</sup> Application Study

# Diesel Main Engine Lubricating Oil

#### **CUSTOMER**

Shipowner: Richard de Wilde

Vessel: M/S Bolivar

## THE SYSTEM

Bulk carrier with engine type: SKL 29/24, 6 cyl. AL2, 1320 kW at 1000 rpm. Lube oil: FINA Caprano S412,

Fuel: Gas oil



Units previous engines Mr. De Wilde experienced from short lube oil change intervals and liner laquering.

#### THE SOLUTION

CJC<sup>TM</sup> Fine Filter type HDU 27/108 M87, flow rate of 200 ltr./h. and with 4 CJC<sup>TM</sup> Filter Insert type A 27/27 (3  $\mu$ m absolute). Dirt holding capacity: 4 x 8 kg = 32 kg.

## THE TEST

The CJC<sup>™</sup> filter unit was installed on the SKL engine and oil samples were taken from the sump at start up and regularly between 150 and 2,500 hours.

Filter inserts were replaced twice during the observation period: after 1,000 hours of operation.

No oil changes were carried out during the test period. However, oil was added to compensate for the engine consumption (~0.7 g/kWh).

The M/S Bolivar is equipped with CJC filters for particle and water removal from both main engine lube oil and gas oil system.

### **COMMENTS**

Richard de Wilde, owner of M/S Bolivar said: "Ican only recommend the use of CJC filters - you will not believe how much dirt one element holds".



Engine room of M/S Bolivar.



THE RESULTS

Hours run	0	150	525	791	1050	2489
Particles >5 μm	514349	94130	79160	62190	39160	58140
Particles >15 μm	57742	28100	14380	9820	6150	6920
ISO	20/16	17/15	16/14	16/13	16/13	16/13
TBN	11.94	11.82	11.92	11.54	11.35	10.93
Insolubres (gr/ltr)	0.39	0.26	0.39	0.592	0.872	0.652

