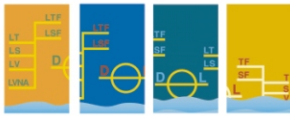




OIL FILTRATION SYSTEMS

# CJC™ Application Study

## Lubrication Oil - Coaster, Diesel Engine



### MARINE

*Application Study  
written by:  
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2001

### CUSTOMER

**Vessel:** M/S Monsunen.  
**Shipowner:** Rederiet Monsunen.  
**Type:** Coaster.  
**Contact person:**  
Carl E.L. Andersen.

### THE SYSTEM

**Engine:** Volvo Penta TAMD 162.  
**Oil system:** 65 litres oil sump.  
**Consumption:** 2 ltr./day.  
**Oil:** Elf Trophy Performance.

### THE PROBLEM

The oil was highly contaminated with blow-by debris, combustion particles, soot and wear metals. Leading to changes of oil and spin-on filters every 500 hours.

Due to the high running cost and abnormal wear of bearings etc. caused by the heavy contamination of the oil, the owner decided to install a fine filter on the engine lube oil sump.

### THE SOLUTION

A **CJC™ FineFilter HDU 27/54 PV** with pump flow rate of 45 ltr. / hour and with **CJC™ FilterInsert A2x27/27** (3µm absolute).  
Dirt holding capacity: 8 litres of dirt and 4 litres of water.

### THE TEST

The filter was installed in an off-line circuit, and samples were taken periodically approximately every 500 hours.

### THE RESULT

Contamination was reduced immediately and TBN number was kept stable during the test period of 3,125 hours in which no oil nor oil filters were changed.

This engine has had a history of abnormal wear but after 500 hours with the CJC™ FineFilter it was characterized as good.



*M/S Monsunen.*



*The CJC™ Fine Filter installed in the engine room.*

### THE RESULT

Hous run	0	800	1525	2000	3125
<b>Particles &gt;5µm:</b>	269,360	128,370	96,630	59,630	68,260
<b>ISO Code 4406:</b>	19/17	17/14	17/14	16/13	17/13
<b>Insolubles, g/ltr:</b>	0.421	0.437	0.221	0.306	0.194
<b>Water Content, %:</b>	0.1195	0.0916	0.0892	0.1676	0.0516
<b>TBN:</b>	11.92	11.15	9.68	9.53	11.17

