



MARINE

Application Study written by Lars Bo Andersen C.C. Jensen A/S (DK), in close collaboration with Lauritzen Reefers A/S

CJCTM Application Study

Reduction gear on Lauritzen Reefers A/S

CUSTOMER Shipowner: Lauritzen Reefers A/S. Vessel: M/S Chilean Reefer. Contact person: Peter M. Petersen.

THE SYSTEM

Reduction gear type ULSTEIN 6000 AG-KP for main engine MAN B&W 9L 58/64. Gear oil: BP Energol GRXP 150.

THE PROBLEM

The oil in the gearbox was contaminated with resin formations, making it impossible to carry out a proper particle count on the oil. The ISO code was estimated to 21/18 which is considerably above the required cleanliness level of ISO 18/15 as recommended by ULSTEIN.

THE SOLUTION

CJCTM Fine Filter HDU 27/54 MZ with **pump** flow rate = 590 ltr./hour and **CJCTM Filter Insert** 2 x B 27/27, 3μ m (micron) absolute.

TESTING PERIOD

Oil samples were taken before the filter start up and 27 days of filtration. The results are illustrated to the right.

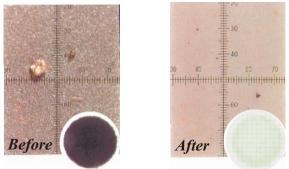
THE RESULT

Installing the CJCTM filter has resulted in a considerable contamination reduction. The ISO code was reduced from 21/18 to 13/10.

On a yearly basis with 7,600 running hours this reduces the amount of dirt passing the lubricating pump from 371 kilos to 45 kilos, increasing pump life by a factor 4.



 CJC^{TM} Fine Filter type HDU 27/54 MZ installed on the reduction gear of M/S Chilean Reefer.



Particles	Before filtration	After filtration
>5 µm	> 1,000,000	< 8,000
>15 µm	> 130,000	< 1,000
ISO 4406 CODE	21/18	13/10
Colour of membranes	Dark	White



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