



CLEAN OIL
BRIGHT IDEAS

Application Study
written by:

Lars Bo Andersen
C.C.JENSEN A/S
Denmark

In close collaboration
with:
Lauritzen Reefers A/S

2000

CJC™ Application Study

CUSTOMER

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

THE SYSTEM

4 Liebherr cranes, 2 of BW 36 and 2 of BW 8,
each containing max. 800 ltrs. BP Bartran HV-X
46 hydraulic oil.

THE PROBLEM

Lauritzen Reefers were experiencing increased
maintenance costs on these cranes, primarily due
to expensive hydraulic pump and motor failures.

Hydraulic Oil Reefer Vessel - Marine Cranes



THE SOLUTION

CJC™ Fine Filter HDU 15/25 PM with pump
flow rate of 45 L/h, and with **CJC™ Filter In-**
sert A 15/25 (3 µm absolute).

THE RESULT

After the installation of the CJC™ filters there
has been no hydraulic breakdowns on the cranes.
Consequently, costly repairs and down time have
been saved.

The oil contamination level has been continuously
reduced since installing the filters. On crane no.
4 the number of > 5 µm particles was reduced
from > 100,000 to < 8,000 per 100 mL of oil.

During the test period hydraulic hoses were re-
placed on cranes nos. 1 and 3, which immediate-
ly caused a deterioration of the oil cleanliness.

This proves how planned maintenance may lead
to problems rather than preventing them, if the
system is not equipped with an efficient filtration
equipment.



THE RESULT

Date	Crane No 1	Crane No 2	Crane No 3	Crane No 4
27.01.99	16/13	16/14	17/14	18/14
27.05.99	17/14	18/14	17/14	16/12
06.06.99	14/11	15/12	15/12	14/12
25.11.99	16/13*)	14/10	15/12*)	13/10
14.12.99	13/12	-	13/10	-

*) Hydraulic hoses changed