CLEAN OIL
BRIGHT IDEAS

Hydraulic Oil
Siwertell Ship Unloader, Boom Lifter, Power Plant

CJC™ Application Study

Application Study written by:

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Le Price
INTERNATIONAL CORP.

CUSTOMER

AES Philippines-Masinloc Power Partners Co. Ltd., Philippines

THE SYSTEM

Siwertell Ship Unloader A & B Boom Lifter
(to unload coal from vessels to the power plant)
Oil Type: Chevron ISO VG 46
Oil Volume: 2 x 700 L

THE PROBLEM

AES took over the operation of the power plant in April, 2008, and found that the oil in the hydraulic system was heavily contaminated with water, contamination and wear particles. The oil company advised AES to change the oil, but in view of the high operation costs and maintenance requirements, they would like to have a permanent solution to the problem.

THE SOLUTION

In order to solve the problem and ensure smooth operation, a **CJC™ Filter Separator PTU2 27/27 PV-E2W** with a pump flow of 110 L/h and a **CJC™ Filter Insert BLAT 27/27** (3 micron absolute) and automatic water separation were installed.

FINANCIAL BENEFITS

- A saving of PHP 1,200,000.00 **(17,524 EUR)** downtime per day due to lubrication problems during unloading
- A saving of 700 L of hydraulic oil at a cost of PHP 191,360.00 **(2,794 EUR)**
- PHP 5,000.00 **(73 EUR)** saved in labour costs for the discard and refill of 2 x 700 L of hydraulic oil

ENVIRONMENTAL BENEFITS

Disposal cost savings due to longer oil change intervals (hidden cost).

THE RESULT

Particles and wear contaminants are now being removed from the system and no oil change is required. Water was reduced from 440 ppm to 90 ppm.
A total of 2 x CJC™ Filters were installed on both A & B ship unloaders. So far, there has been no filter insert changed since the beginning of the operation. One filter insert change per year is recommended.

Siwertell Ship Unloader at AES Philippines-Masinloc Power Partners Co., Philippines

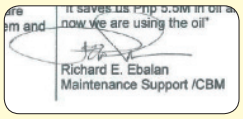
The CJC™ Filter Separator PTU2 27/27 PV, installed at AES Masinloc, Luzon

THE RESULT

	20.05.2008 BEFORE CJC™	21.08.2008 AFTER CJC™
Particles > 4 micron	26,934,500	23,000
Particles > 6 micron	7,539,800	6,500
Particles > 14 micron	1,058,400	900
ISO Code	25/23/21	15/13/10
Water, ppm	440	90

COMMENTS

Mr. Richard E. Ebalan, Maintenance Support, CBM:
"Perfect and excellent solution!"



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Power Plants
Misc.
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