



C.G.JENSEN

OIL FILTRATION SYSTEM



INDUSTRY

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CJC™ Application Study

Generating Set - Diesel Fuel System

CUSTOMER

Instituto Antartico Chileno
Contact Person: Jorge Ordenes Valenzuela
Region: Chilean Antarctic Peninsula

THE SYSTEM

Cummins 4BT3,9GZ generating set, 92 hp at 1500 rpm, 4 cylinders in line, turbo charged.

THE PROBLEM

The change interval of spin-on filters and injectors were due to high water and particle contamination in the fuel reduced to 250 hours. The spin-on filters were extremely saturated, the nozzles were locked by the water and the seal filled with particle contamination. This led to an increased number of unforeseen breakdowns.

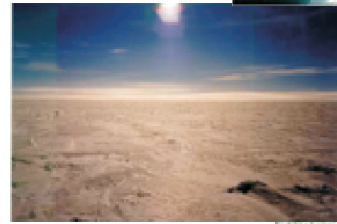
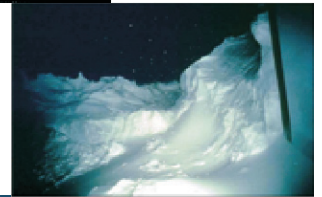
THE SOLUTION

Two **CJC™ Filter Separators, type PTU2 27/27 P-EW** with a pump flow of 200 l/h were installed off-line on the fuel tank. Both systems use **CJC™ filter element type F 27/27** (3 µm abs.) with dirt holding capacity of 4 litres.

THE RESULT

Oil samples from the tanks before installation of the CJC™ Filter Separators showed so high particle contamination that it was impossible to determine the contamination in a particle count. The samples showed up to 20% of water content in the fuel. After one pass through the CJC™ Filter Separator the particle contamination was reduced to a satisfying level and the water content was reduced to below 0,01%.

The nozzles, injectors and the fuel pump are inspected regularly but after the installation it has not been necessary to change these. The emission of black smoke from the engines has now disappeared. This proves the former combustion problems are now history. No unforeseen breakdowns have since been experienced. Due to economic benefits of the installation and the high cost of man work in the Antarctica the payback time of the CJC Filter Separators is estimated to be less than one month.



**The CJC™
Filter Separator
PTU2 27/27**



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