



CLEAN OIL
BRIGHT IDEAS

Diesel Oil

Diesel Backup Storage Tank, Gas Turbine

CJC™ Application Study

Application Study
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CUSTOMER

Power Station

THE SYSTEM

Diesel backup storage tank.

Tank volume: 10,000,000 litres

THE PROBLEM

3 times every year the power station run their gas turbine for 3-5 days on diesel to test their gas supply failure plan. Unfortunately, the diesel quality was not up to standard level for use in the turbine. The power station had no choice but to clean the oil. Large amounts of water, diesel bugs (microbial contamination) and particles were detected in the diesel oil, plus high levels of sodium and potassium.

THE SOLUTION

A CJC™ Filter Separator PTU3 2x27/108 MZ-E2PTWXY with a pump flow of 1,680 L/h was installed, using CJC™ Filter Inserts F 27/27.

THE TEST

Due to the large amounts of water and sludge, some filter insert changes were expected in the beginning. 3 sets of filter inserts were used to remove the worst of the dirt and water.

THE RESULT

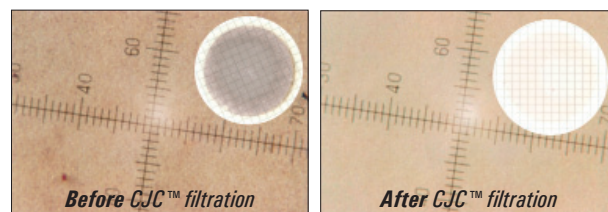
In only one pass through the filter, the water level was reduced from 702 ppm to 71 ppm. Approx. 1,500 litres of water were removed from the diesel oil.

The 2 micron particle contamination was reduced from 28,860 to 17,041. Sodium and potassium levels decreased to below recommended levels.



CJC™ Filter Separator
PTU3 2x27/108 MZ

OIL SAMPLES



THE RESULT

	BEFORE	AFTER
ISO Code	15/14/11	15/13/10
Particles, 2 µm	28860	17041
Particles, 5 µm	13468	7696
Particles, 15 µm	1040	650
Water, ppm	702	71

WATER DEVELOPMENT

