



CLEAN OIL
BRIGHT IDEAS

Hydraulic Oil Siemens 501F Gas Turbine, Control Oil

CJC™ Application Study

Application Study
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CUSTOMER

Major Power Plant, Florida

THE SYSTEM

System: Rexroth Hydraulic
Gas Turbine Control System
Oil Type: SHELL TURBO CC ISO 32
Oil Volume: 100 gal / 380 L

THE PROBLEM

A high level of varnish promoting soft contaminants due to oil degradation.
Varnish contaminated oil leads to sticky hydraulic valves causing the turbine control to malfunction. Consequently, the oil needed to be changed every 3 months to prevent turbine trips.

THE SOLUTION

CJC™ Fine Filter HDU 15/25 PV-E1 with a PV4 -18-4 pump, flow rate 0.65 gpm / 2.5 L per minute using **CJC™ Filter Insert BG 15/25** with a filtration ratio of 3 µm absolute and a dirt holding capacity of 1.5 L.

THE TEST

Since May 2009 the filter is connected to the sump of the hydraulic with inlet connection at the bottom of the sump and the outlet at a higher point, as far away as possible from the inlet connection. The filter is running continuously 24 hours a day.

THE RESULT

The customer is very impressed with the results and has installed CJC™ Filters for all of his 6 501F gas turbine control units.

COMMENTS

OEP (Operations Excellence Program) Specialist:
"After installing the CJC™ Oil Filter System on our control oil systems, we have seen Varnish Potential numbers drop to single digit values. Your system has performed well and is reasonably priced for the application."



Major Power Plant, Florida



The CJC™
Fine Filter
HDU 15/25 PV

OIL SAMPLE

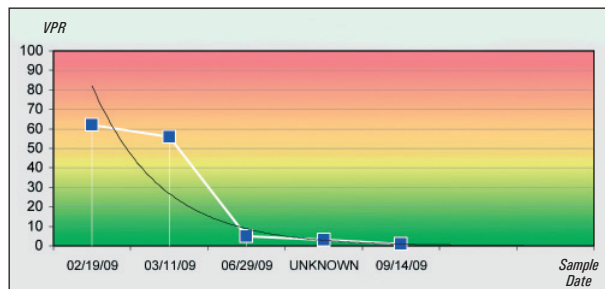


Membrane **BEFORE**
CJC™ Filtration



Membrane **AFTER**
CJC™ Filtration

VARNISH POTENTIAL RATING - VPR



THE RESULT

	Febr. 19, 2009	Sept. 14, 2009
Varnish Potential Rating, VPR	62	1