



The Situation

The maker of a gas turbine power generation system was mounting a plant with four natural gas turbines with a capacity of 40 megawatts each. When they started up the first unit they found serious operational problems and rapid clogging of the oil filters.

The Challenge

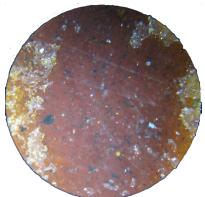
The company did not want to import another 9200 liters of oil, but could not commission them in this condition. To eliminate the problem they asked Widman International SRL to purify the oil to a cleanliness of 20/17/14 on the ISO 4406:99 scale. Widman International withdrew a sample of the existing oil and determined that it was contaminated above the ISO chart.

The Solution

Widman International assembled two gear pumps of 2 hp each with their respective P568583 heads and

P568666 filters. At the plant they emptied the 9200 liters of dirty oil into 1000 liter totes, filtering the oil as it drained. After draining the oil, personal from Widman International put on protective gear and cleaned the oil sump of any residual contamination.

Then the 9200 liters was filtered again as it was pumped into the turbine. At the end of the process another sample was taken





and observed in the microscope, demonstrating a cleanliness level of 14/13/11: Much cleaner than requested.

The Result

The oil ended up cleaner than what was originally delivered. The plant is functioning correctly and the company hired Widman International to clean the coolers on the next two units before they are connected to the turbines for commissioning or circulating contaminates through the turbine section. Each cooler has a capacity of 2600 liters

Widman International SRL is dedicated to finding solutions for maintenance problems. For more details, visit our Web page: www.widman.biz

