



Petro-Canada Increases Orion Pharma's Productivity by Keeping Their Heat Transfer System Clean



Few pieces of manufacturing equipment are taken for granted as often as the heat transfer system. Typically, the equipment is purchased, installed, turned on and then forgotten. But how a heat transfer system is maintained can have a great impact on the quality and cost of the product it is being used to manufacture.

Orion Pharma, the leading pharmaceutical company in Finland, knows first-hand the importance of properly maintaining their heat transfer systems. The company manufactures prescription drugs for both human and animal consumption at its six plants in Finland and Denmark. Drug manufacturing requires adherence to strict tolerance levels, including precise heating temperatures to ensure drugs are produced to specification.

As part of its ongoing preventative maintenance program, Orion Pharma reviewed its Thermasys heat transfer systems in its plant in Hanko, Finland, six years ago. They found that the heat transfer fluid they were using was unable to properly handle the wide-temperature variances of the plant's processors. They switched to Petro-Canada's CALFLO® LT heat transfer fluid, but after three years of operation they again noticed that the processors were overheating.

Orion Pharma contacted Petro-Canada to help them determine what was causing the situation and to find a solution. Two problems were discovered.

"Petro-Canada told us that there was a small leak in the system that was contributing to the fluid oxidization," said Jere Laaksonen, who has been Hanko's Maintenance Chief for the past eight years. "But more importantly, they found that the main cause of the oxidation was that old fluid had remained in the system after the change-over to CALFLO LT."



After identifying contamination from the residual oxidized fluid as the key problem, Petro-Canada worked with Orion to ensure their system was restored to optimal performance. Petro-Canada recommended cleaning the system with a Petro-Canada cleaning fluid that it had specifically designed to thoroughly clean heat transfer systems with less downtime than water-based cleaners.

Orion's experience with their heat transfer units is not uncommon. After prolonged use, thermal and oxidative degradation takes place in many heat transfer systems – a phenomenon which causes chemical deposits to form fluid on the equipment's interior, especially the heaters. This excess buildup of coke, carbon and sludge ultimately leads to a reduction in a system's thermal efficiency, which causes a gradual deterioration in productivity.

Petro-Canada's cleaning fluid helps restore heat transfer systems to their maximum potential with cleaning properties that eliminate chemical deposits and increase thermal efficiency. The new cleaning fluid is superior to conventional water-based cleansers because these cleansers typically require heat transfer systems to undergo multiple rinsings to remove any residual water out of the system.

To ensure that their system stayed clean, Orion Pharma filled its heat transfer units with Petro-Canada's CALFLO LT, a premium heat transfer fluid designed for use in non-pressurized, indirectly-heated, liquid phase heat transfer systems.

"We have not had any problems with oxidation or build-up since we cleaned the system," said Laaksonen. "We find that the system now cools faster than ever. We are very happy with the product and have no plans to try other fluids in the future."



If you would like to know more about CALFLO LT, please contact us at:

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