Choongnam City Gas, Daejeon, South Korea

Choongnam City Gas maximizes engine efficiency by reducing downtime after switching to SENTRON™ LD 5000

"We switched to Petro-Canada Lubricants as our stationary gas engine oil provider and increased our drain intervals from 1,000 hours to 2,000 hours. We're now able to keep our machines up and running longer, which has helped us to reduce our downtime and lower maintenance costs. All of this has contributed to impressive cost savings across the board."

Young Min Lee, Manager, Choongnam City Gas, Daejeon, South Korea

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Choongnam City Gas, Daejeon, South Korea

Choongnam City Gas Co. Ltd. provides natural and liquefied gas to citizens and household customers in the cities of Daejeon and Gyeryong, South Korea. The plant is equipped with six GE Jenbacher J624 GS stationary gas engines that are lean burn, turbo charged, 24 cylinders, steel pistons and 1,500 rpm speed, with an electrical output of 4 MW per unit. Choongnam City Gas has been providing energy for its customers since 1985, with its headquarters in Daejeon, South Korea.

The Challenge

Finding ways to reduce operational costs can be a challenge for gas plants, especially when supporting multiple cities. In the case of Choongnam City Gas, their six stationary gas engine units were a significant part of their operational expenses. The standard drain interval for each engine was previously set at only 1,000 hours, which was costing Choongnam City Gas in increased downtime and maintenance costs.

"The success of our plant depends on getting the most out of our machines and optimizing our operations wherever we can," says manager Young Min Lee. "Any opportunity to extend our drain intervals and avoid downtime without compromising our stringent contamination controls warranted serious consideration."

The Solution

Choongnam City Gas agreed to test SENTRON LD 5000 in their six stationary gas engines in hopes of finding more innovative ways to reduce operational costs, without sacrificing engine reliability and durability. Test results were remarkable for SENTRON LD 5000. After an impressive 2,000 hours of operation, SENTRON LD 5000 maintained its viscosity grade, as well as Acid Number control. SENTRON LD 5000 showed on average 52% nitration reserve and 27% oxidation reserve when tested at the 2,000 hour mark, a testament to the prolonged life of the oil. Beyond this, wear metals, including iron, copper, aluminum, tin and lead, all remained extremely low for the six engines trialed.

"The testing we did with SENTRON LD 5000 was an eye opener for us. There was no question we needed to make a change," explained Lee. "We appreciated the help we received in not only executing our trials, but also making the complete switch in our plant."

The Result

Choongnam City Gas increased their drain interval to 2,000 hours after making the switch to SENTRON LD 5000. The plant was able to significantly reduce engine downtime and maintenance costs, while maximizing their efficiency by aligning scheduled downtime with other maintenance activities.

"We didn't expect our stationary gas engine oil selection to have such a significant impact on the efficiency and productivity of our operation," said Lee. "We're very impressed with the quality of test results from SENTRON LD 5000, and the long-term effects the product will have on the longevity of our equipment and operational expenses."

SENTRON

Combined with an effective maintenance program, SENTRON LD 5000 can extend drain intervals by up to 200% and help minimize wear and deposits on crucial gas engine components. Petro-Canada Lubricants' SENTRON LD 5000 is a premium-performance, long-life, low-ash stationary gas engine oil. Formulated with Petro-Canada Lubricants' ultra-pure HT Severely Hydrotreated base oils, SENTRON LD 5000 delivers extended drain intervals and excellent anti-wear protection – even under the most severe operating conditions.

To learn more about how Petro-Canada Lubricants can help your business visit:
lubricants.petro-canada.com
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