

"SENTRON™ CG 40 proved itself as the ideal gas engine oil for our biogas facility. Following an extensive trial, it ticked all the boxes, providing excellent wear protection, demonstrating a long service life and even reducing our oil consumption. Keeping maintenance costs low was our number one priority and SENTRON CG 40 has allowed us to do that."
Ruslan Dyachenko, Director of the Biogas Ladyzhyn, MHP

MHP is a leading food & agrotech company with headquarters in Kyiv, Ukraine. Established in 1998 by current CEO Yuriy Kosiuk, the company has grown into an international powerhouse, supplying food and grain across Europe with facilities across Ukraine, Slovenia, Croatia, Serbia, and Bosnia and Herzegovina.

MHP's central operations are poultry breeding and meat processing. Owning and operating each stage of the chicken production process, the company accounts for 55% of the Ukrainian industrial chicken production market. The company runs three broiler poultry farms and two poultry farms for breeding parent stock and hatching egg production. Alongside processed meat production, MHP is also a leading grain producer, growing corn, sunflower, wheat and rapeseed in its 370,00 hectares of land across Ukraine.

But it's not just meat and poultry that MHP is known for. The company is also the leading producer of renewable energy in Ukraine. One of MHP's key priorities, its biogas projects, contribute significantly to the company's energy independence and environmental responsibility.

THE **CHALLENGE**

In 2019, MHP opened its Biogas Ladyzhyn project in Vasilyevka, Tulchinsky district, in Ukraine's Vinnytsia region. The biogas complex is Europe's largest for processing organic poultry waste. A 12-megawatt complex, Biogas Ladyzhyn produces 52 million cubic meters of biogas per year.

MHP needed to choose a robust gas engine oil for its six Caterpillar 170-20 gas generator units. Of particular importance for MHP was the oil's ability to protect equipment from wear and corrosion, minimize deposits and maximize energy efficiency to reduce maintenance costs and equipment downtime, both of which directly impact the plant's energy production and overall efficiency.

THE **SOLUTION**

MHP already had experience with Petro-Canada SENTRON CG 40 at their Oril Lider facility where they operate Jenbacher 320 biogas engines. SENTRON CG 40 lasted over 4,000 hours—30% longer than the competitive oils with all key performance indicators, such as BN, AN, viscosity and oxidation within limits recommended by Jenbacher. In fact, the trends indicated that the oil could reach up to 4,500 hours.

Based on the performance demonstrated at Oril Lider, and the service provided by Petro-Canada Lubricants, MHP chose to

fill its Caterpillar 170-20 biogas engines with SENTRON CG 40 for the launch of the Biogas Ladyzhyn facility.

Supplied by PKP-Ukraine, a local Authorized Distributor of Petro-Canada Lubricants, SENTRON CG 40 is designed specifically for 4-stroke cycle gas engines running in severe service such as co-generation, sewage or sour gas or low halogen landfill gas operations.

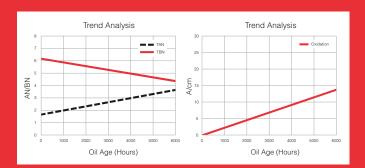
THE **RESULTS**

Following four years on the Caterpillar 170-20 gas generator units, SENTRON™ CG 40 continues perform exceptionally.

SENTRON CG 40's outstanding deposit control and wear protection meant that after operating for 28,000 hours, inspection of the engine demonstrated low level of deposits in the combustion chamber, carbon deposit build-up or scuffing on the piston rings.

MHP was impressed with how the oil protected equipment from wear and corrosion, while minimizing deposits throughout the engine. This had a direct impact on maintenance costs, the plant's ability to produce energy and its overall efficiency.

MHP continues to use SENTRON CG 40, and thanks to the ongoing use of oil monitoring services at an independent laboratory provided by PKP-Ukraine, the company is continuing to experience the benefits of the engine oil. This important service has enabled MHP to safely extend oil drain intervals and identify maintenance issues before they become too serious to repair, avoiding unnecessary downtime and maintenance costs.



Continued recommended in-service oil analysis of key performance indicators, such as BN, AN and the levels of oxidation and viscosity at Biogas Ladyzhyn shows that SENTRON CG 40 has the potential produce more than 5,000 hours per interval.

"Utilizing the oil monitoring services provided by PKP-Ukraine has been a crucial aspect of our relationship with Petro-Canada Lubricants. Through close analysis, we've been able to experience further benefits and get the most out of our equipment."

Ruslan Dyachenko, Director of Biogas Ladyzhyn

SENTRONPREMIUM GAS ENGINE OILS

SENTRON is a line of premium stationary gas engine oils highly regarded in its industry. Each SENTRON product delivers unparalleled performance through a longer-lasting oil. Its unique formulations increase reliability and reduce downtime. It offers superior anti-wear protection to extend equipment life and is engineered to tackle tough operational demands.

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Petro-Canada Lubricants has an extensive network of trusted and authorized distributors that support delivery of best practice, innovative solutions and outstanding value for customers. Driven by a collective ambition to help grow our customers' businesses, distributors play a key role in matching fundamental lubricant knowledge and the suite of services to the needs of a business.





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