

Meunerie Saint-Hugues
Saint-Hugues, Québec

Case Study

AGRICULTURE

AT A GLANCE

CUSTOMER

Meunerie Saint-Hugues

LOCATION

Saint-Hugues, Québec

CHALLENGE

Provide emergency standby power for a continuous process operation to avoid unplanned outages that would otherwise affect livestock health

SOLUTIONS

- (3) KOHLER® 500REOZJB, 347/600V, 60 Hz generators with onboard paralleling
- KOHLER KCS-ANTA-3000S standard-transition transfer switch
- KOHLER 24-hour subbase fuel tanks
- KOHLER 500REOZJB weather-protective enclosures
- APM603 controller

PRIMARY CHOICE FACTORS

Quick delivery, installation, and commissioning

Meunerie Saint-Hugues' relationship with and confidence in Drumco Énergie

System's ability to meet space, cost, and redundancy needs

*KOHLER generators meet NFPA 110 requirements for critical operations including supplying power within 10 seconds of an utility outage.



The KOHLER 500REOZJB generators at the Meunerie Saint-Hugues plant in Saint-Hugues, Québec

BACKGROUND

Founded in 2010, Meunerie St-Hugues is a family-owned poultry and swine feed processing plant located in St-Hugues, Québec, Canada. The plant converts 200,000 tons of grain into duck and pig feed annually. As the largest producer of its kind in the area, the operation runs 24/7, though with lighter production on weekends. It also provides daily feed delivery service to local farms and other commercial duck and pig producers. Of the livestock, poultry is more sensitive to environmental and nutrient conditions than other agricultural livestock. Thus, the quality, freshness, and timely delivery of feed is essential in terms of

preventing morbidity. With the rapid growth of Meunerie St-Hugues as a supplier, it became necessary for them to avoid unplanned outages as a means to protect customer livestock.

CHALLENGE

Not unlike other standby system customers, Meunerie St-Hugues did some comparison shopping among the three major standby system solution suppliers. Getting the best value was paramount. Yet, the company also faced physical space and time constraints.

The ideal location for the genset was adjacent to a lower truck bay, at one end



The solution for Meunerie St-Hugues includes three 500REOZ-JB, 347/600 V, 60 Hz diesel-powered generators with onboard paralleling and integral subbase fuel tanks. The solution also includes a KCS-ANTA-3000S closed-transition transfer switch and a sound-attenuated, skintight enclosure with an automotive-grade finish to resist the elements. Kohler Power Systems has delivered energy solutions for markets worldwide since 1920. For more information, visit KohlerPower.com.

of a mechanical building. Initially, Meunerie St-Hugues considered a 1500 kW single genset solution. Yet, the size of the unit and the related equipment posed a problem that could only be rectified with additional site preparation and installation costs.

Another factor affecting Meunerie St-Hugues' choice of solution was project time. In addition to the expected minor interruptions in terms of logistics and production, they wanted to choose a supplier and installer that could complete the project in the shortest amount of time.

SOLUTION

To find the best solution that met cost, space, and time constraints, Meunerie St-Hugues turned to a trusted supplier: Drumco Énergie. Drumco's agricultural sales representative, Carrol Allen and technical director, David Vigeant, recommended a KOHLER® emergency standby solution. Kohler was the only manufacturer that could meet the quick delivery schedule—just before Christmas.

Given the space constraint (and cost of a 1500 kW genset), Drumco specified three diesel, 500REOZJB, 347/600 V, 60 Hz generators. Each genset delivers a 500 kW standby rating and features a brushless, permanent-magnet alternator for superior short-circuit capability. Drumco also noted that Meunerie St-Hugues did not operate at full capacity on weekends. The latter precluded the need for 1500 kW of power should there be a weekend outage. Conversely, the three KOHLER gensets use the KOHLER APM603 generator controller for on-board paralleling, providing enough power to cover an outage during a weekday. The other advantage of the multiple genset solution was redundancy to allow for scheduled maintenance of one generator while the others remain in service.

Given the regularity of inclement weather in Southern Quebec, each generator also features a KOHLER CSA-Listed weather enclosure and a 2500 W, 210/240, 1Ph block heater. The enclosure features multiple doors and panels to facilitate easy access for service and local operation. It also features fade-, scratch-, and corrosion-resistant KOHLER Power Armor™ automotive-grade textured finish. Air inlet louvers reduce moisture entry.

The generators also feature Kohler-manufactured subbase fuel tanks that meet ULC-S601 Code in Canada and facilitate faster installation time. The tanks feature Kohler's UV-resistant Power Armor™ textured epoxy-based rubberized coating which prevents corrosion. Both the inner and outer tanks have emergency relief vents. The subbase tank also features an environmentally friendly secondary containment tank that surrounds the primary tank.

The emergency standby system solution also includes a KOHLER KCS-ANTA-3000S transfer switch to provide fast, automatic transitions.

RESULTS

The integrated emergency standby power solution, featuring the three KOHLER 500REOZJB gensets, was delivered, installed, and commissioned very quickly. It has also functioned perfectly . . . smoothly transitioning from grid to standby operation, during several outages.

“Drumco Énergie is very sensitive to the particular needs of the agricultural market in Québec,” said Carrol Allen, Drumco Énergie's agricultural sales representative. “Reliability of the emergency generator can mean the difference between life and death of the animals. We take great pride in supplying reliable equipment and backing it up with 24/7 emergency service.” ■