

Standing by: INNIO Waukesha to release new VGF engine

P48SE produces 1 MW of power for standby duty. By DJ Slater

INNIO Waukesha Gas Engines is releasing a higher-output, standby version of its VGF engine, known as the P48SE, in early 2021. The 16-cylinder, rich-burn engine is part of the company's plans to refresh its VGF product line, designated for gas compression and power generation applications.

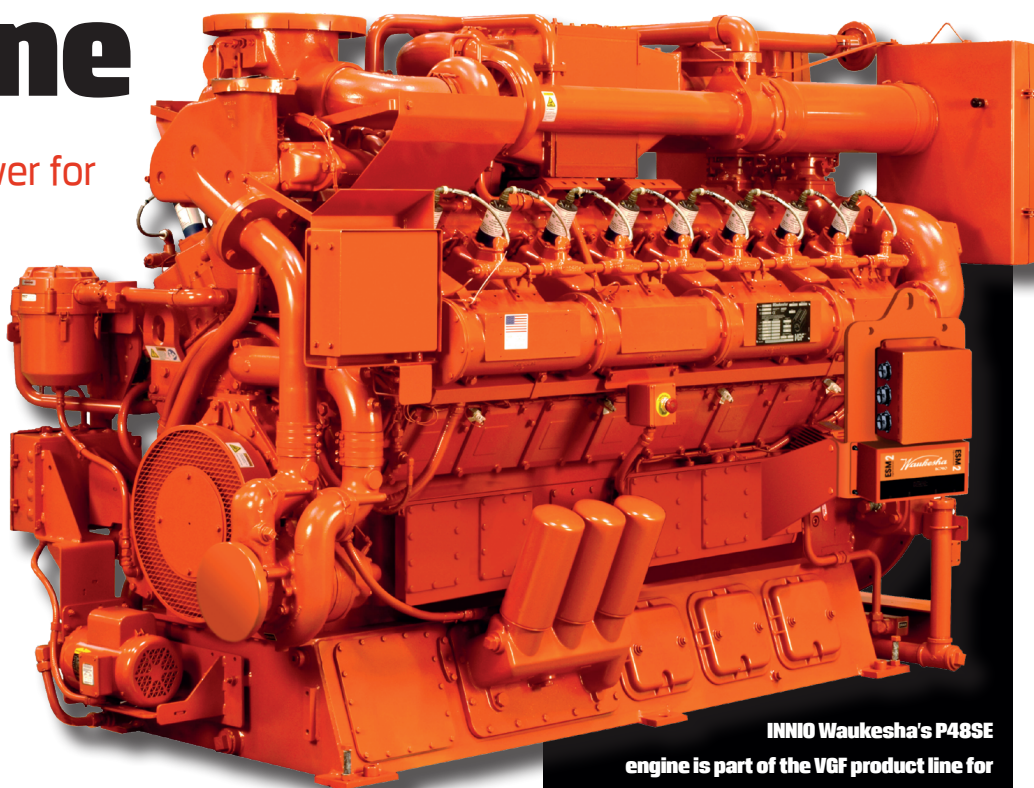
The 48 L P48SE engine is rated 1460 bhp (1100 kW) at 1800 rpm for up to 200 hours per year at 70% load factor. It has an emergency standby power rating of 1460 bhp (1100 kWb) per ISO 8528-1, which allows for a net electrical power rating of 1 MW.

The new engine comes with INNIO Waukesha's updated ESM2 controls system, which consists of an enhanced electronic control unit, a 12 in. (304.8 mm) touchscreen human machine interface (HMI), ignition module (IPMD2), flange mounted ignition coils, electronic fuel valve, pre-catalyst wide-band oxygen sensor and an electric starter.

When equipped with the dual start option, the P48SE can start in 10 seconds or less. It also has a wide load acceptance capability due to its rich-burn combustion system and twin-turbo design.

"Customers were looking for solutions with low emissions

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INNIO Waukesha's P48SE engine is part of the VGF product line for gas compression and power gen applications.

capability without compromising fast-start performance requirements and the P48SE fulfills that need," said Jason Padilla, vice president of product management and marketing for INNIO Waukesha.

Rich-burn history

INNIO Waukesha has served the gas compression and power generation industries for three decades, providing a variety of rich-burn engines across its portfolio. The VGF line, first produced in 1988, features engines known for their long lifecycle intervals, clocking in at 8760 hours a year for continuous duty, the company said.

With the P48SE, however, INNIO Waukesha

took a slightly different approach. As the company learned over the decades, some applications don't require continuous duty rated equipment.

With grid resilience on the rise, the need for an engine that can produce 1 MW of power for standby duty became more relevant, the company said.

The P48SE will initially be available for 60 Hz applications, running on commercial quality natural gas (80-95 WKI) with fuel pressures ranging from 1 to 5 psig (0.07 to 0.3 bar[g]). Initial engine shipments will be available in early 2021, followed by open gen-set and radiator-mounted gen-set offerings.

The P48SE won't be a singular engine offering either. INNIO Waukesha expects to add additional variations of the engine in the coming years.

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