

## APPLICATION PROFILE

### CHALLENGE:

Provide versatile and reliable power to an international customer with varying fuel quality.

### SOLUTION:

Partner with the customer to design and integrate customized generators.

### RESULT:

Provide dependable power in a variety of global applications and environments.



## Global Needs. Customized Power.

### *Global Engineering and Design Makes the Difference*

Multinational companies require a partner that can provide a global approach, especially when dealing with power generation. Due to variances in electrical and engine requirements, what works in one part of the world may not work elsewhere. This global approach was vital for meeting the needs of one of Generac's largest customers. This international power rental company needed over 400 generators for use in North America, as well as Europe, Asia, the Middle East and South America. As generator and electrical needs differ around the world, Generac worked with this customer to tailor two natural gas fuel generator models to meet their global needs - the MGG210 and the MGG280.

The process began when Generac's engineering team met with the customer to understand the requirements needed for their fleet. For their mobile oilfield application, they required generators that were durable and versatile and could handle varying methane volume and quality in various shale formations. The client had created a proprietary separation system that

had to be connected to every generator. By designing and integrating a connector adaptable to their system, and rigorously testing engines to determine exact gas quality derates, varying methane quality was no longer a problem.

Additionally, due to differing regional standards for engine speed, they required a generator with adjustable frequency, or hertz (Hz). A solution came in an integrated control that gave the user the ability to change between 60Hz and 50Hz power output seamlessly by simply changing a setting. This modification standardized all the engines in the customer's fleet and allowed them to deploy the generators more quickly, as well as improved the technicians' serviceability.

Another modification was to the engine oil maintainer tank. This internal tank makes it more challenging to transport internationally because it must be disconnected from the unit if there is residue left in the tank, which is typically the case after testing the unit before shipping. It can take hours to disconnect one



**APPLICATION:**  
Global Power

**MODELS:**  
MGG210 Gas Generator  
MGG280 Gas Generator

tank, delaying the shipping process. By modifying the generator to make transportation easier, it can be used globally and shipped expediently.

Accessible parts and ease of service are of particular importance to Generac's international customers. To make these generators globally serviceable, Generac used a battery that is readily found all over the world.

This partnership has proven to be mutually beneficial. While working with the client, Generac identified the need for a generator that was not available on the market, yet would significantly increase the addressable market and profit potential for this customer.

Through collaboration in design, the MGG450, Generac's largest mobile gas generator, was created, allowing oilfield users to reliably and cheaply tap into inexpensive, and often unused, wellhead gas. This specially designed generator was created for artificial lift and mini-grid paralleling applications, with all the durability and ease of service required in today's oilfield.

By partnering with and leveraging Generac's engineering expertise, this customer was able to substantially grow their product offering and respected position in the rental industry. Generac continues to build partnerships that make each other's businesses grow and thrive.

