POWER PROFILE: CLEAN ENERGY COMPRESSION UNPLUGGEDCNO

FUELING GROWTH



A Clean Energy Company

REGION: Chilliwack, British Columbia, Canada

SCOPE OF ENGINE USE: Cat[®] Natural Gas Engines

CAT® DEALER: Finning

WEBSITE: cleanenergyfuels.com/compression



FEATURED TOPIC: Industrial Engines

NO GRID? NO PROBLEM.

Globally abundant, easily transported, less expensive than gas or diesel, fewer greenhouse gas emissions —it's no surprise natural gas is becoming more popular as a fuel source. But industrial operations looking to take advantage of its economic and environmental benefits typically must be close to a pipeline or other compressed natural gas (CNG and RNG, Renewable Natural Gas) fueling system. That's a challenge for companies operating in remote locations or those who don't want to wait for infrastructure to be built.

Enter IMW Industries, which got its start in 1912 as a blacksmith's shop in British Columbia, Canada. Known then as Ironsides Machining & Welding (IMW), the company was an early adopter of CNG and built its first fueling station in 1984. In 2020, IMW joined Clean Energy Fuels Corporation, North America's top provider of natural gas for vehicle fleets and took on the name IMW Industries.

In addition to a lineup of CNG compressors, dispensers, gas control and storage systems for vehicle applications and bulk gas transportation, IMW Industries makes a product called UnpluggedCNG. Like the name suggests, it requires no connection to the power grid. Instead, a compressor block is paired with a Cat[®] natural gas engine, ranging between 205-325 horsepower, that generates all the power necessary for natural gas compression. That makes the UnpluggedCNG ideal for mine sites, pulp and paper operations, roll-on/roll-off cargo ships — really, any application where access to electricity is limited or unreliable.

PULLING THE PLUG

IMW Industries isn't the only manufacturer to offer a bulk gas transportation solution like the UnpluggedCNG. But several features set the product apart from the competition: a non-lubricated compressor block produces cleaner CNG, requiring fewer oil changes, reducing maintenance, extending engine life and lowering operating costs. Low vibration, less noise and a modular design cut down on site preparation and commissioning time. And advanced remote monitoring options improve reliability, increase uptime and help ensure the gas keeps flowing without interruption. **The best deserves the best.** A natural gas engine is the logical choice for the UnpluggedCNG, since the goal is to eliminate dependence on the power grid. Customers involved in the first projects more than 15 years ago requested Caterpillar, and IMW Industries has seen no reason to make a change. With more than two billion operating hours across industries, Cat gas compression engines are known for their uptime and reliability. They're also easy to integrate into a compressor package — one that delivers maximum efficiency and minimal vibration in a small footprint. "Caterpillar is a worldwide leader in high-quality engines, and that aligns with our brand. We want to be associated with the best products, because we produce the best products," says Mauricio Gonzalez, director of business development for IMW Industries.

Custom solutions for every customer. Winning bids for bulk CNG transportation projects requires flexibility, as no two customers have the same needs. IMW Industries works closely with Cat dealer Finning to configure Cat natural gas engines for each project's unique specifications. "Sometimes a project requires a turbocharger; sometimes natural aspiration. Cat natural gas engines are very configurable, so we can accommodate whatever the customer is looking for," says Kevin Reimer, industrial engine account manager for Finning.

No location too remote for support. IMW Industries will take on bulk gas transportation projects anywhere in the world — Afghanistan, Bangladesh, Egypt, Mexico and Vietnam are just a few places where the UnpluggedCNG has been deployed. That makes a worldwide support network critical, particularly one with the ability to reach into remote locations. "Service availability is one of the main reasons we chose Caterpillar. We can put our product into any location and know that there is world-class support available for our clients through the Cat dealer network," Gonzalez says.



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LET'S DO THE WORK."

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