



# Prime Power

## > Case History

Nor-Tech Fabrication, United States



## Power Generation

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### **Where:**

Kelso, Washington

### **What:**

Two Cummins Power Generation diesel generator sets retrofitted and installed on top of the chassis of two separate rock crushers

### **Purpose:**

To provide prime power for two portable rock crushers in a remote and harsh location

### **Primary choice factors:**

Cummins Power Generation's reputation for reliable, specialized power solutions that meet strict EPA emissions standards, and the ability of Cummins Northwest LLC to facilitate the quick delivery of two diesel generator sets to meet a tight construction schedule

## **Cummins Power Generation helps rock crusher manufacturer crack challenging prime power needs in harsh environment**

KELSO, WASHINGTON, USA—When Nor-Tech Fabrication needed to find a reliable way to power two portable rock crushers in a harsh environment, the Kelso, Wash.-based company pressed Cummins Power Generation Inc. into action with a specialized power solution.

For years, customers have relied on Nor-Tech, a steel fabrication company that specializes in the creation of both portable and stationary rock crushers, feeders and conveyors, to build equipment that can withstand rough conditions—high temperatures, severe dust and isolated locations.

Trying to meet the needs of a Tacoma customer faced with a quick construction schedule, Nor-Tech worked with Miller Machinery Company, a Metso Minerals dealer in Longview, Wash., to design two portable rock crushers that required prime power in a remote location. Cummins Northwest LLC in Portland, Ore., was able to facilitate the quick delivery of two Cummins Power Generation generator sets—the DSGAB (125 kW) and DFEH (400 kW) diesel generator sets, which provided optimal power



Two Cummins Power Generation diesel generator sets were retrofitted and installed on top of the chassis of two separate crushers.



Cummins Northwest LLC facilitated the quick delivery of two diesel generator sets to meet a tight construction schedule.

solutions once each was retrofitted and installed on top of the chassis of the two separate crushers.

“The larger (DFEH 400 kW) generator unit was readily available, and the quick turnaround on this project was vital to our end customer,” said Greg Badger of Nor-Tech Fabrication. “The mounting of the generators was turnkey, which made the installation not nearly as complex as it might have been.”

The 400 kW diesel generator set’s QSX15 series engine meets stringent Environmental Protection Agency Tier 2 emissions standards for the mobile off-highway applications Nor-Tech requires. In addition to fuel efficiency, the rugged four-cycle heavy-duty industrial diesel engine manufactured by Cummins Inc. delivers reliable power, low emissions and fast response to load changes. The PowerCommand® electronic control provides total generator set system integration, including automatic remote starting and stopping, precise frequency and voltage regulation, alarm and status message display, AmpSentry™ protection, output metering and auto-shutdown at fault detection. The generator set’s cooling system also is proving key for Nor-Tech due to its standard integral set-mounted radiator system, which is designed and tested for high rated ambient temperatures.

The Cummins Power Generation DSGAB (125 kW) diesel generator meets EPA Tier 3 emission standards with the six-cylinder QSB7 turbocharged charge-air-cooled (CAC) diesel engine. The diesel engine features optimized air- and fuel-handling systems for high-duty cycles and variable loads at constant speed that are required in Nor-Tech’s rugged applications.

Generator sets powered by the QSB7 engine include a mounted cooling system that enables the product to perform at high ambient air temperatures, saving Nor-Tech installation costs due to simplified design requirements for rejected heat. Cummins Power Generation specifies ambient temperature rating measured at the cooling air inlet of the enclosure, an important distinction between the way some manufacturers rate power for their products, according to Jim Stalnaker, sales manager with Cummins Northwest LLC.

“When selecting these Cummins engines and generator sets, Nor-Tech considered the advantages they offered over a typical diesel-powered hydraulic system,” Stalnaker said. “When you’re dealing with engines, rocks and conveyor belts, you need reliable power solutions that are going to work when the conditions are tough.”

Because the last thing you need in a harsh environment is leaving a customer stuck between a rock and a hard place.

For more information about integrated prime power systems, contact your local Cummins Power Generation distributor or visit [www.cumminspower.com](http://www.cumminspower.com)

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