



NEXT-LEVEL SAFETY & EFFICIENCY



REGION:

Pella, Iowa

SCOPE OF ENGINE USE:

Cat® C18 U.S. EPA Tier 3 Engines

CAT® DEALER:

Ziegler Cat

WEBSITE:

vermeer.com



FEATURED TOPIC:

Industrial Engines

FROM VINES TO MINES

Innovative solutions to niche problems — that's the foundation of Vermeer's business. It started in 1943, when farmer Gary Vermeer found it difficult to unload corn from his wagons. He invented a hoist to do it, and a company was born. Fast forward to the early 2000s, when an Italian customer approached the company looking to transform rocky ground into a vineyard. Vermeer's answer? A surface excavation machine that could "chew up" boulders with no need for drilling and blasting.

It didn't take long before mines began putting these Terrain Leveler® machines to work as well, mechanically excavating ore and minerals in areas where drill and blast is restricted or unsafe — near power lines, gas pipelines, high water tables, residential areas or wildlife. Doing so opens opportunities to extract valuable products in areas that weren't previously accessible. In some mines, it also eliminates the need for a primary crusher and other processing equipment, saving time and money.

"It's a safer way to mine without blast noise, dust clouds and seismic waves," says Mike Selover, Vermeer's corporate accounts manager. "It's also more efficient at mines where material runs in veins. When you blast, unwanted material gets mixed in with the valuable product. With our machine, you can just cut out the valuable product. It doesn't get diluted."

Vermeer manufactures seven Terrain Leveler models used both in place of and in tandem with traditional drill and blast techniques. The largest in the lineup, the T1655III, is powered by a pair of Cat C18 engines.

NONSTOP PRODUCTIVITY

There are 8,760 hours in a year, and many Terrain Levelers work 8,000 of them. Mines count on equipment that runs practically 24/7, with only planned breaks for maintenance and service. Vermeer builds machines to meet those high expectations and requires the same reliability from the engines that power them. "Having Cat engines in our products removes some barriers to purchase, because miners know they're reliable and that you can find a Cat technician anywhere in the world to keep them running," Selover says.

A dynamic duo. The T1655III weighs 440,000 pounds and ships in five separate loads to the world's largest mines. At that size, it requires a powerful engine — or in this case, engines. The machine's unique twin-engine design required close collaboration between Vermeer, Cat dealer Ziegler and the Caterpillar engineering team. "If we'd have gone with a larger C27 or C32, the T1655III would have been longer than we wanted," says Jason Morgan, Vermeer Infrastructure Engineering Manager. "The twin C18s got us the overall machine envelope we desired."

History repeats itself. Another reason Vermeer chose the C18 was past performance. The same model powers the second-largest Terrain Leveler, the T1255III, giving the company confidence not just in the engine's power and reliability but also in its service life. "Miners are willing to do planned maintenance, but they don't want any unplanned downtime. Predictive life is a big deal in mining," Jason says. "The C18 makes it to our published service intervals and then some."

Onsite for uptime. To keep its Terrain Levelers and other mining machines running 24/7, Vermeer dealers often work on site at the biggest mining operations. So do Cat dealers, who are there to support the mine's fleet of Cat equipment. That makes it convenient for miners to get parts, service and support for the T1655III. "Vermeer excels at dealer support around the world, and so does Caterpillar," Selover says. "With Cat engines in our products, it just makes everything easier for miners."



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LET'S DO THE WORK.™

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