CATERPILLAR HELPS ANTAEUS BE A PILLAR IN PILE DRIVING



CUSTOMER: Antaeus

PRODUCT: Model 600 Zeus

LOCATION: Seattle, Washington

SCOPE OF ENGINE USE: Cat® C18 ACERT IPU Engine EU Stage V

CAT[®] DEALER: N C Machinery



Almost all the convenient geological sites to build in this world are taken. For massive construction undertakings, companies and municipalities must go outside of the city. Antaeus helps operations go further out to sea and further up mountains to build treatment plants, bridges, power lines and military projects.

A TRADITION OF PILE DRIVING INNOVATION.

Antaeus is a global operation providing pile driving equipment in mostly coastal areas around the world. Before it was formed, owner John White co-founded the company Pile Driving Equipment in 1992. White took all the best international features of pile drivers and combined them into one machine, collecting 45 patents related to pile driving, deep foundation and manufacturing innovation in the process. In 2016, White launched Antaeus—a company focused on the development of next generation vibratory pile drivers and manufacturing process.

ZEUS UNLEASHES IMPRESSIVE POWER

The Antaeus Model 600 pile driver, nicknamed "Zeus," is one of the largest vibratory pile drivers in the world. There's a broad range of applications for Zeus, from setting foundations for large scale developments to upgrading shorelines for reclaimed land. The machine is so large that it is usually deployed with a crane or a forklift.

THE ENGINE BEHIND THE MACHINE

Antaeus relies on the Cat[®] C18 ACERT IPU EU Stage V engine to run the drill and the hydraulic pump of the Model 600 pile driver. Typically, the engine will perform in short, high-powered intervals due to the size and scope of the applications.

"When it comes to pile driving, Caterpillar is always the number one engine," says Garret White, Antaeus Operations Manager. "I've personally been on projects where I was out at sea, one hundred miles off the coast of North Korea for two months. Those are the times that you're glad you're not using some obscure engine that's trying to do something it wasn't designed to do. The Cat C18 is so much more reliable and much easier to maintain and repair." Because customers of Antaeus have completely different goals, each Model 600 sold is customized for specific applications. The Cat C18 supplements personalization. Some pile drivers are designed for use in water. Some equipment might need to be lighter in weight. Antaeus must provide engineering to help their customers solve problems, and they can rely on their Cat Dealer, N C Machinery, for help in planning for every situation.

N C MACHINERY IS A TRUSTED COLLABORATOR

There is a process of certifying that an engine delivers on Tier IV, Stage V specifications and ensures Antaeus equipment can be used in places like Europe and California where there are strict regulations. N C Machinery is heavily involved in designing the right engine for potential customer applications.

"The process is so involved, says White. "The engine might have sound requirements because it can't be over so many decibels. There might be environmental requirements or protection in place if oil drips, or the air flow has to be directed in a specific way. N C Machinery has to get involved in so many different ways to make sure the engine functions the way it's supposed to function."

KEEPING CUSTOMERS PRODUCTIVE

Engine telematics are another reason why Antaeus chooses to work almost exclusively with Caterpillar for power. Features like Remote Fleet Vision let operators know immediately if there's an engine fault. "We can even detect a failing injector before it's about to fail and start prepping parts and repair in between cycles to avoid downtime," says White.

THE MANY BENEFITS OF THE CAT Dealer Network

Antaeus operates around the globe, and there will always be a need for service and repairs from businesses that can't afford downtime. The network of Cat Dealers stretches far and wide, allowing them to better service their clients. "We had an engine injector problem in Texas, and we were able to, in a few phone calls, get someone out to that jobsite



to fix it. I don't know what we would have done without the Cat Dealer network," says White. "Everywhere there's a Cat branch, we have an Antaeus support location."

WORKING WITH CATERPILLAR TO BUILD A RENEWABLE FUTURE

Antaeus is continually innovating new products and features to push the pile driving industry further. With a focus on renewable energy sources, Antaeus has collaborated with Caterpillar on developing alternative engine fuels. The company engineers and produces their own readily biodegradable, vegetable-based oil called Ichore. This renewable oil will dissolve into the earth in fewer than ten days. Antaeus is also developing a renewable diesel fuel to be used in their products.

Because N C Machinery team is so experienced and easy to work with, Garret White says that they'd never consider using any other engine than a Caterpillar. "With the support we get from Caterpillar, I wouldn't even try different engines," says White. "I don't care about support when an engine's working. I care about when it's not working. I would not go one hundred miles off the coast of North Korea if I didn't have a Cat engine."





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LET'S DO THE WORK."

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