A SPACE-SAVING SOLUTION WITH MAJOR POWER.

Hydrauvision

CUSTOMER:

Hydrauvision www.hydrauvision.com/en/

PRODUCT:

Hydrauvision P-Series Powerpacks (P300/P400/P600/P800)

LOCATION: The Netherlands

SCOPE OF ENGINE USE:

Cat[®] C4.4 through to C32 Industrial Engines Industrial Diesel Engine

CAT DEALER:

Pon Power www.pon-cat.com/en-nl



Offshore wind farms are a growing renewable energy source, but establishing one is no easy feat. The base of a windmill, known as the monopile, must be driven into the seabed by a hydraulic hammer. Fifty years ago, the piles were small, measuring 20 centimeters in diameter. Today, piles may be a staggering 10 to 12 meters in diameter, requiring hydraulic hammers with a flow of 3,200 l/min at 350 bar to set them. Getting reliable hydraulic power – sometimes miles from land to run massive impact hammers – creates challenges for the industry. That's where Hydrauvision comes in.

Established in 1973, the company has developed a broad product portfolio, from custom hydraulic systems to water transport solutions. Hydrauvision offers specialised drive technology solutions, such as Powerpacks, to the company's sector-spanning, global customer base. Powerpacks include multiple engines and hydraulic pumps enclosed in a 20- or 40-foot steel container — engineered for use in harsh environments.

POWER PACKED IN WITH CAT° ENGINES

"We put a lot of power in a small volume to save deck space, and that makes it convenient for the customers — to not have so much equipment on their ship," says Rogier Geleijn, Head of Sales at Hydrauvision. A single Powerpack can house several engines and has an installed power up to 2.4 megawatts.

"We are quite demanding regarding the power that it should deliver," Geleijn explains. For the company's Powerpacks, Hydrauvision counts on Cat[®] industrial engines, ranging from the C4.4 to the C32, to deliver reliable, powerful performance.

During the engineering process, the company connects Cat engines to multiple high-pressure industrial pumps. In some instances, additional functionalities are fitted to the hydraulic power unit. Hydraulic pumps have electric displacement types controlled by PLC's to deliver the required flow. The hydraulic power units use seawater to control the system's temperature, enabling the delivery of maximal power at all times.

RELIABLE DEALER SUPPORT AT SEA

Many Hydrauvision customers specifically request Cat industrial engines — end-users citing positive past experiences working with Cat engines and dealer support. Customer demand for the iconic yellow engine bolsters the collaboration between Hydrauvision and dealer Pon Cat.

"Caterpillar is well-known for their widely spread dealer network. It is quite common for Hydrauvision's customers to know their local Cat representative. They can ask questions, or if something's wrong, they can be helped quickly," says Geleijn. "And, if something onboard fails, or if they need a filter, the biggest advantage is that support and service is readily available to customers. The distribution of parts is good."

A PARTNER IN POWER

Changes are often made to the configuration of each Powerpack to comply with varying project standards and emission requirements, while effectively utilising the small container space. "There's a lot of preparation and a lot of communication between the engineering department of Hydrauvision and the application and installation engineer of our team. We create 3D models showing the righthanded service version and left-handed service version and how that can be done," said Jan Nederlof, Industrial Power Account Manager at Pon Cat.

"When we need technical information, Pon delivers timely and accurate answers. Often, they're questions regarding delivery times and prices because we are in a project-based business. We have opportunities that pop up quickly. To respond to those project opportunities, we need a reliable partner who can give us that information quite fast."

DRIVING INNOVATION

Currently, Hydrauvision is developing high-capacity 1150 kW Rental Units for a variety of offshore applications, including wind farm installations. The new units will be equipped with air-cooled, Cat EU Stage V engines to meet emissions criteria. This latest product development is another way Hydrauvision and Caterpillar are working together to deliver innovative power where it needs to be — how it needs to be.



"Caterpillar is wellknown for their widely spread dealer network. It is quite common for Hydrauvision's customers to know their local Cat representative. They can ask questions, or if something's wrong, they can be helped quickly."



LET'S DO THE WORK."

© 2022 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow," the "Power Edge" and Cat "Modern Hex" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.