Overview

CASE STUDY:
AQUADELTA – ABATO - NETHERLANDS

PRODUCT:
Engines:
5 x Baudouin 6M26.3 SCR Hybrid Gensets

CLASSIFICATION SOCIETY:
IMO III / STAGE V

DUTY:
P2 Heavy Duty

POWER OUTPUT:
5 x 441 kW @ 1800 RPM

APPLICATION:
Dredging vessel

PARTNERS:
Distributor:
ABATO MOTOREN B.V.
Shipyard:
SCHEEPSWERF BIJLSMA, WARTENA
Customer:
DREDGING COMPANY ZWOLLE

The AquaDelta project exemplifies the integration of advanced engineering with environmentally conscious design in the marine industry. Constructed by Scheepswerf Bijlsma in Wartena, Netherlands, this state-of-the-art dredging vessel showcases the synergy between Baudouin's cutting-edge marine genset technology and Abato Motoren's expertise in advanced engineering.

The AquaDelta is a dredging vessel specifically designed for operations in inland waterways. This vessel utilizes five Baudouin 6M26.3 SCR Hybrid Gensets, each providing 441 kW of power at 1800 RPM. These engines comply with stringent IMO III/Stage V emission standards, ensuring both high performance and minimal environmental impact.

The Aqua Delta is equipped with several advanced features, including Baudouin 6M26.3 SCR Hybrid Marine Gensets, which are certified to meet IMO III, EPA Tier 4, and EU Stage V standards. These gensets offer enhanced fuel economy and compact power through a redesigned combustion cycle, featuring advanced injection systems and recalibrated parameters.

The hybrid configuration of the 6M26.3 SCR Hybrid Marine Gensets ensures seamless integration into the vessel's power system, providing reliable power for various dredging operations and enhancing fuel efficiency. The SCR (Selective Catalytic Reduction) Technology employed reduces nitrogen oxide (NOx) emissions, converting them into harmless nitrogen and water vapor, with both SCR and Diesel Particulate Filter (DPF) components meeting the latest Stage V emission standards. A keel cooling system ensures optimal genset performance by maintaining a stable operating temperature, while an electric pre-lubrication and drainage pump enhances genset longevity and reliability.

The vessel also features a modified master control cabin for optimal control and monitoring of operations, and advanced couplings and panels, such as the KTR SINULASTIC M-844240-0 Flexible Coupling and the IV5 V Bridge Panel, ensuring smooth and efficient power transmission.

The Aqua Delta's power system, driven by Baudouin marine gensets, is designed to deliver high performance while adhering to the strictest environmental standards. The gensets' SCR technology significantly reduces NOx emissions, contributing to cleaner air and a healthier aquatic ecosystem. The hybrid configuration ensures that the vessel operates efficiently across various dredging scenarios, with minimal fuel consumption and noise pollution.

Client testimonial

"Collaborating with Baudouin on the Aqua Delta project has been highly rewarding. The 6M26.3 SCR Hybrid Marine Gensets have proven to be exceptionally reliable and efficient, meeting the stringent environmental standards required for this vessel. The advanced SCR and DPF technology ensures we can operate sustainably without compromising on performance. Baudouin's support and the seamless integration of their gensets into our systems have been instrumental in the success of this project."

Daan Preijde, General Manager at Abato Motoren B.V.