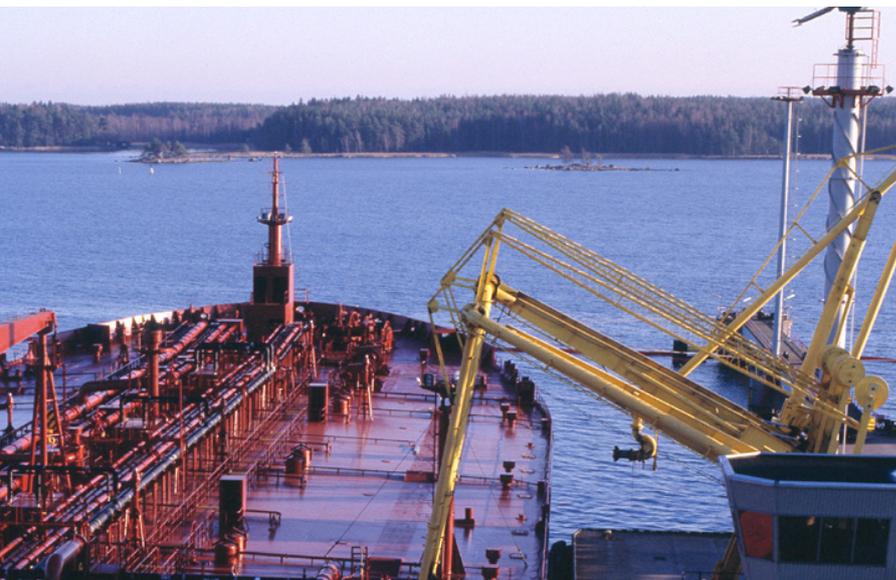


CASE STUDY

Qingdao Headway Technology — China

Taming the oceans



Thanks to ABB, Qingdao Headway Technology has been able to increase their orders by 15%

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01 Qingdao Headway Technology — China

The client

Qingdao Headway Technology is a high-tech enterprise focused on supplying innovative, technological marine equipment on a global market. This involves research and development, production and sales on international level, as well as providing its customers with after-sales service. Qingdao Headway Technology has independently developed a product called OceanGuard BWMS (Ballast Water Management System). A system designed to help ships maintain balance while at sea by distributing ballast weight throughout the hull of the ship. OceanGuard is the first BWMS in the world to hold both CCS and DNV type approvals. However, there were issues with the starting solution that still had to be solved. Qingdao Headway Technology contacted ABB, knowing that ABB had significant experience in the area of motor control.

The challenge

Ships navigating the waters of the world are up against the extraordinary forces of the ocean. Reliable equipment onboard is crucial to make the voyages safe for both crew and cargo. Qingdao Headway Technology has delivered and installed BWMS in many ships on a global scale, yet the personnel seemed to encounter the same issues with every installment. When installing the BWMS, the company had trouble fitting it into the different ships, due to lack of

space. Also, there were issues with the behavior of the motor control center that manages the starts and stops of the motors running the pumps of the BWMS. Using older starting solutions such as star delta and direct online led to excessive starting torque, causing damage to the motors and pumps.

The ABB solution

Qingdao Headway Technology was right to seek out the advice of ABB. With technical expertise in the area of motor control ABB had the perfect solution to improve the BWMS developed by Qingdao Headway Technology. The name of the solution was ABB's softstarters. Switching to the PSE softstarter from ABB meant using a significantly more compact motor control center than before. This solved the crucial issue of space for installation. The starting characteristics of the motors in Qingdao Headway Technology's BWMS also benefitted from ABB's softstarters. The ability to soft start motors and avoid excessive starting torque and current spikes, meant longer lifespan of the system. Thanks to ABB, Qingdao Headway Technology has been able to increase their orders by 15 percent.



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For more information, please contact your local ABB representative or visit www.new.abb.com/low-voltage/products/softstarters