

CASE STUDY

Höganäs Water purification plant — Sweden Improving pump efficiency



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01 Höganäs Water purification plant — Sweden

The client

Recently the Swedish county of Höganäs, was looking to improve the efficiency of the daily operation at the local water purification plant. An industrial facility with the important purpose of removing contaminants from Höganäs County's sewage water before pumping it back into nature. Höganäs County looked for an improvement via the wholesaler Elektroskandia and was recommended ABB as the best choice for a solution.

The challenge

Water purification plants as a rule, utilize a vast number of electrically powered pumps to transport water through their systems. The plant located in Höganäs was no exception with its 60 pump stations. Efficiency of the daily operation was hindered since the plant personnel had to physically transport themselves to each pump station when responding to warnings concerning motor protection. Even when the problem could be tended to from a distance. Another issue was the corrosive environment at the purification plant, that reduced the lifetime of the electronic equipment, making it less reliable and in need of more frequent service.

For more information, please contact your local ABB representative or visit www.new.abb.com/ low-voltage/products/ softstarters The purification plant in Höganäs had also experienced problems with water hammering when starting and stopping the motors that ran the pumps. This strained the pumps and caused damages to both motors and pump system over time.

The ABB solution

ABB's softstarters were tested on two pump stations at Höganäs purification plant. They proved to be the motor control solution that Höganäs water purification plant was looking for. The system for diagnostics and warnings, paired with the features for remote control in ABB's softstarters, allowed the plant personnel to check warnings at the pump stations regardless of their position. This allowed them to operate the pumps with a greatly improved efficiency. ABB's softstarters came with coated circuit boards preventing the corrosive environment of the plant from damaging the electronics. This reduced the amount of service and increased productivity with less downtime for maintenance. The strain on the pump system and motors was also reduced thanks to the torque control in ABB's softstarters. Höganäs water purification plant was so pleased with this motor control system that the process of switching to ABB's softstarters in all of their 60 pump stations is already set in motion.

Reduced downtime for maintenance thanks to ABB.