

CASE STUDY

# A-Trade - St. Petersburg

## Tames the baltic sea



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01 A-Trade - St. Petersburg

### The client

A-Trade LTD, is a manufacturer of automation equipment, with key products being automation cabinets and distribution boards for the water and wastewater industry. For a recent project A-Trade specified 12 PSTX softstarters to manage pumps inside the Botoport: a dam complex designed to protect the town of St. Petersburg from floodings. By choosing ABB's softstarters A-Trade has managed to reduce costs due to mechanical wear with up to 30%.

### The challenge

Located at the bay of the Baltic Sea, St. Petersburg is no stranger to floods, having experienced many during the last three centuries. To protect the town against the threat of new floods, Botoport is designed to reduce the effects of surging floods. A recent example occurred during 2011, when a storm moving from Scandinavia reached the Baltic waters. It is estimated that Botoport saved St. Petersburg 1.3 billion roubles of damage. ABB's softstarters are used together with large pumps to transport water that happens to pass the dams, back to the sea. Even a minor stoppage or problem could cause major consequences, potentially flooding the inner parts of St. Petersburg. A-Trade needed to ensure reliability from its automation equipment, and chose ABB's.

### The ABB solution

ABB's PSTX softstarters feature many built-in features that increase the reliability of both motor and application. Thanks to the Torque control of the PSTX, which reduces the effects of a common problem in pump applications called water hammering, the pumps life cycles could be increased. Furthermore, the PSTX features motor overload protection and coated PCBs, meaning they stand their ground even in tough and moist environments. By choosing ABB's softstarters, A-Trade estimates increasing the life cycle of the pumps by up to two times. Pipeline damages can be reduced with up to 50% during start and stop. And the overall cost saving, thanks to reduced mechanical and electrical wear, is an impressive 30%.



**Cost savings by 30%.  
Reduced mechanical  
and electrical wear**

For more information, please contact your local ABB representative or visit:  
<https://new.abb.com/drives/softstarters>