

ABB vertical solution for desalination

Enhancing your plant operations



Keep up with transformation

Desalination plays an essential role in filling the gap between the demand and availability of the precious resource water.

To meet this specific challenge, ABB has crafted a dedicated reverse osmosis (RO)-based desalination technology solution that blends our field experience and renown ABB automation with dedicated add-ons and typical instrumentation thus helping operators deal successfully with their most pressing challenges.

ABB vertical solution for RO-based desalination combines in a single harmonized offering all necessary building blocks for an advanced and highly automated process operation suitable for new or existing medium to large systems:

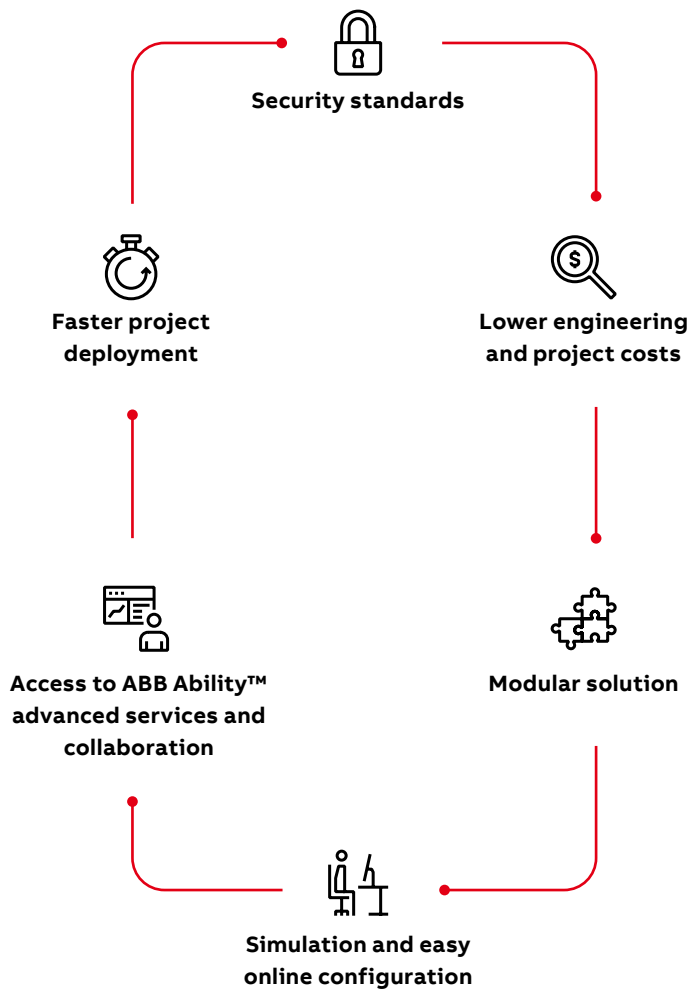
- Control (PLCs, DCS)
- Automation with high-performance graphics and dedicated libraries
- Simulation

- Key performance indicator (KPI) dashboards
- Field and soft-sensing instrumentation
- Advanced process control and optimization

The integrated configuration tool ensures a substantial reduction of engineering and configuration effort. Through automation, integration, and optimization, the solution harnesses the power of industrial data to drive continuous improvements in your plant and operations:

- Improved plant productivity by increasing energy and water efficiency, thus reducing environmental impact
- Lowered cost of ownership by simplifying troubleshooting and maintenance
- Improved engineer productivity
- Shortened startup and commissioning
- Empowerment to perform optimal control actions and take sound business decisions
- Information sharing without barriers.

Keystones of the solution



Modularity

The modular approach offers the possibility to start the journey from any point. The building blocks of the solution can be mixed and chosen depending on what is already available on-site or deployed in phases to meet the diverse investment capabilities.

Flexibility

By being able to combine ABB and third-party elements, this solution provides you with freedom to reuse your existing equipment.

Security

ABB hardware and software are always compliant with the highest security standards.

Fast deployment

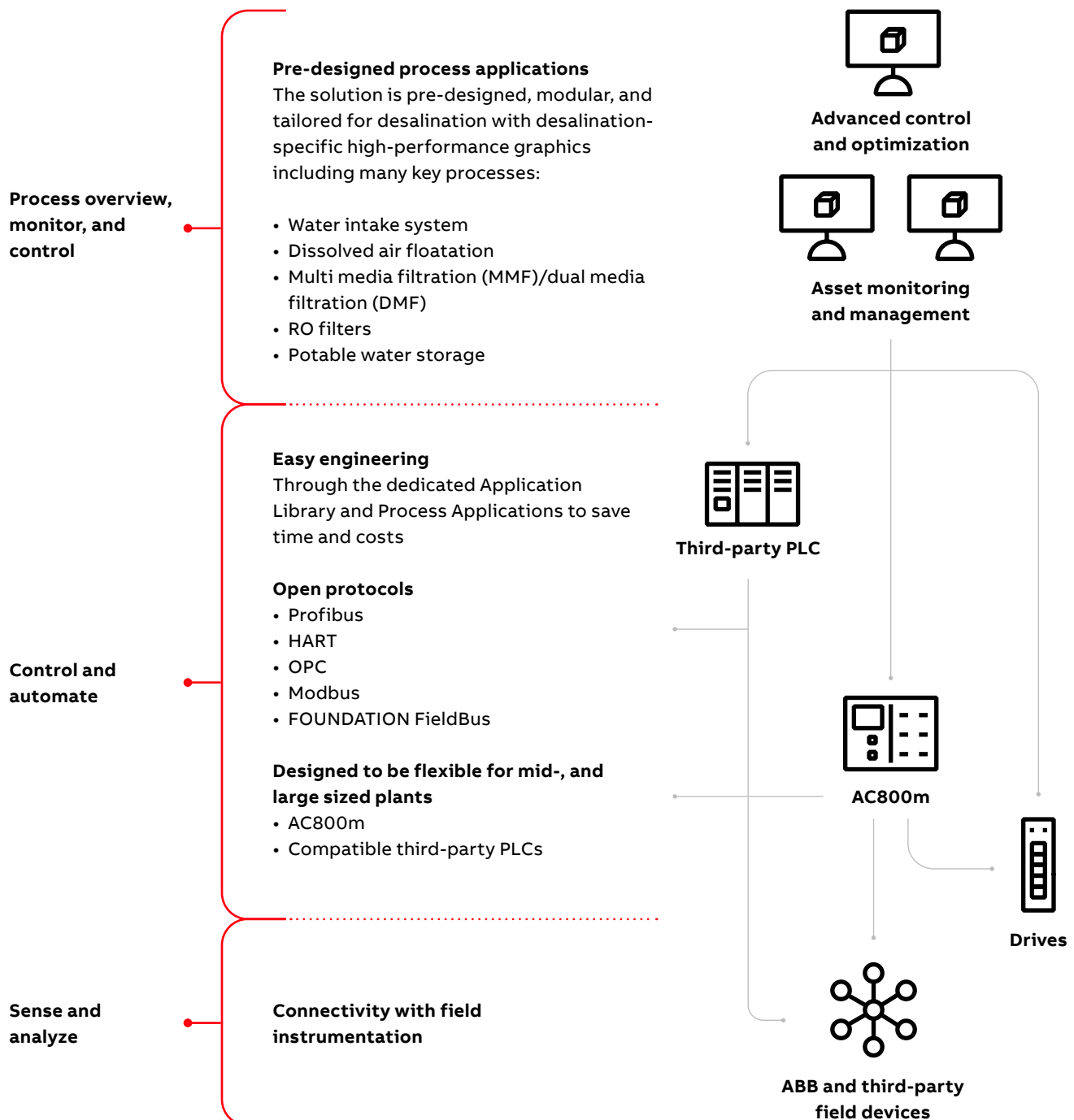
The embedded configuration tools substantially reduce the engineering effort. Through the human-machine interface (HMI), using solutions template, you can quickly add or remove some assets with no need to reengineer.

Simulation

The simulation environment enables to check modifications before being loaded in a real plant. Online configuration allows to deploy modification in a real plant without service interruption.

Vertical architecture

The vertical concept of the ABB solution for desalination overcomes the traditional boundaries of automation by combining all layers in the plant with preconfigurations that work best for the specific desalination engineering and operational needs.





Values, knowledge, and experience

Why ABB

- Safety and security as underlying value for technology and projects
- Innovation with continuity
- Global presence to support with project execution and upgrades
- World-class products.

More than 50 years in the business

- Extended capability with field-proven applications
- Expertise in integrated systems for water segments
- Large installed base with leading utilities worldwide
- Evolution and integration of automation systems
- ABB Service centers, including remote support 24/7 with collaborative operation centers globally available.