

GRUNDFOS iSOLUTIONS
INTELLIGENT HIGH PERFORMANCE
FOR WATER TREATMENT

CUSTOMISE
PROCESS PUMPS



REDUCE
SYSTEM STRESS

Reducing wear and tear with intelligent water treatment

Handling flow variation: stable flexibility

Controlling pressure and water levels precisely in all stages of a water treatment process can be a challenge, especially if the system has major flow variations. Add to that changes in the overall process or in regulations over time and it can be difficult to maintain and future-proof your system.

A system that runs accurately and efficiently, with little maintenance or downtime requires a high degree of flexibility. By connecting all your processes via measured signals that trigger variable speed pumps accordingly, you can design a system that perfectly suits the needs of the overall process. With Grundfos iSOLUTIONS for water treatment systems you can:

- Reduce system costs
- Reduce labour and operational costs
- Take advantage of design flexibility
- Reduce downtime

Expertly tailored to your needs

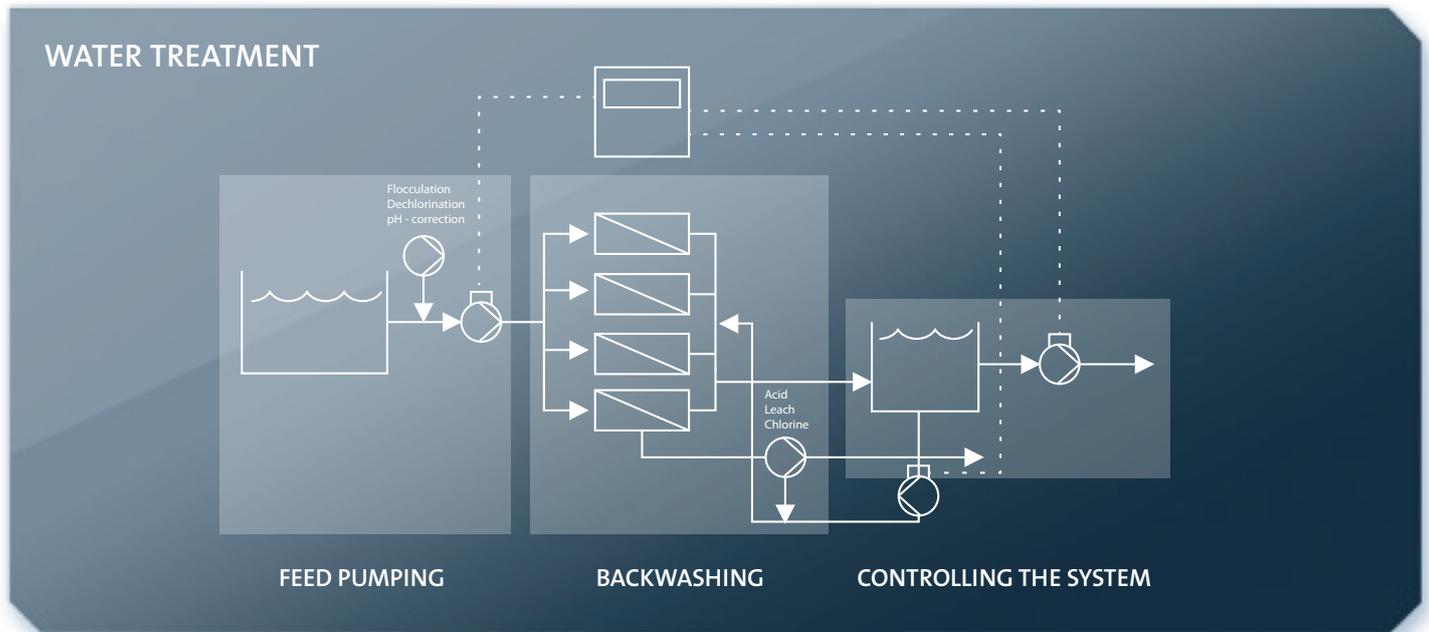
When you choose Grundfos iSOLUTIONS, our water treatment experts will work with you to tailor your feed pumps to the precise requirements of your water treatment system and your overall process. We'll ensure your system connects directly to your overall process control and that it measures all the process parameters

you need. And you get a single point of contact for the design, installation and maintenance of your pump system.

Grundfos iSOLUTIONS expertise

Grundfos iSOLUTIONS application expertise is based on many years of experience with pumps for water treatment systems. Our skilled engineers take an inquisitive approach to your installation project and work to gain a deep understanding of its goals. They work together with you to design your system and tailor your pumps to its needs.





The technology behind the intelligence

A water treatment process generally has seven stages, each of them requiring different measuring and control functions. Optimal interplay between the stages is key to ensuring successful treatment. This job is normally handled by a PLC that samples all measured signals from the different process steps and controls the process via standard data communication. But advanced process control systems such as cloud solutions and automated remote management are emerging as options.

Grundfos iSOLUTIONS deploy intelligent variable speed pumps like CRE that accurately control pressure and water levels throughout your entire water treatment system. The pumps communicate with each other and with other process components to create an extremely well regulated and reliable system.

| Intake | Aeration | Flocculation | Particle removal | Disinfection | Stabilisation | Distribution |
|---|------------------------------------|---|---|--------------------------|---|--|
| Submersible pumps that take water directly from the aquifer into the water treatment system | Intelligent aerators and diffusers | Dosing pumps and preparation systems that prepare polymer-based flocculants on site and on demand | Single and multistage pumps that deliver the right pressure for the filtration system, and digital dosing pumps that deliver precise concentrations of anti-scalants or cleaning agents | Intelligent dosing pumps | Intelligent dosing pumps in the various sizes and types suited to the environment | Pump systems such as Booster Skids that deliver the right pressure level and flow rate |

A product portfolio that does the job

Grundfos iSOLUTIONS offer a wide range of intelligent products that deliver seamless functionality and integration. Including everything from basic solutions with integrated frequency converters to advanced solutions with sensors and controls, our product range makes it possible to design high-performance systems for any application.

