

HOW INTELLIGENT IS YOUR BUILDING?

Join the fight for intelligence
in commercial buildings

THINKING BEYOND THE PUMP

Modern buildings are living, breathing organisms, powered by interconnected systems. Most of these are directly dependent on pumps to transport water efficiently and precisely. Pick the wrong pump solution and the comfort of the residents, along with the overall performance and energy efficiency, suffers greatly.

At Grundfos, we have a holistic approach to commercial buildings. Through intelligent technologies, we create system synergies that effectively boost performance and reduce energy consumption.

We understand all application areas in the building – from water supply to wastewater discharge. With your exact demand as our starting point, we can tailor-make solutions that will raise the overall IQ of your building significantly.

Welcome to Grundfos Commercial Buildings.

*Grundfos GO
– mobile pump control*



Grundfos iSOLUTIONS

The cornerstone in our work for pump intelligence is Grundfos iSOLUTIONS – a range of integrated pump solutions, variable frequency drives, control units, communication modules and remote monitoring systems.

Built on highly intelligent technology, the solutions allow your system to adapt to changes immediately, offering you the highest possible energy efficiency and reliability.

With Grundfos iSOLUTIONS we ensure full compatibility between drives, monitoring and control units. To provide you with full control, the pump system connects easily to external control systems like the Building Management System.

Easy to install and commission, Grundfos iSOLUTIONS truly is the intelligent choice.



**WATER
DISINFECTION**



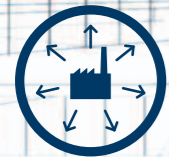
**HEATING
SYSTEM**



**WATER
DISINFECTION**



**WATER
BOOSTING**



**DISTRICT
ENERGY**



**CHILLED
WATER SYSTEM**



WASTEWATER



WATER DISINFECTION

HEATING SYSTEM

WATER DISINFECTION

WATER BOOSTING

DISTRICT ENERGY

CHILLED WATER SYSTEM

WASTEWATER

Breathing life into buildings

Whether you need a complete pumping system for a new build project or you are looking to replace existing pumps, we have a solution that will boost the comfort and energy efficiency of your building. How may we help you?

- — — — — Domestic cold water
- — — — — Domestic hot water
- — — — — Domestic water, circulation
- — — — — District Energy/heating, flow
- - - - - District Energy/heating, return
- — — — — Drainage water, discharge pipe
- — — — — Sub-building drainwater pipe
- — — — — Chilled water/condenser water, flow
- - - - - Chilled water/condenser water, return
- - - - - Fire sprinkler system
- - - - - Reclaimed rain water
- - - - - Rain water collection pipe
- — — — — Car park dewatering
- — — — — Wastewater stack

FIRE FIGHTING

RAINFALL HARVESTING

WASTEWATER



HVAC SYSTEMS

Your challenge

Accurately controlled hydronic systems are paramount in maintaining the right indoor climate, but to achieve this level of accuracy you need sophisticated technology to monitor performance at all times.

Our solution

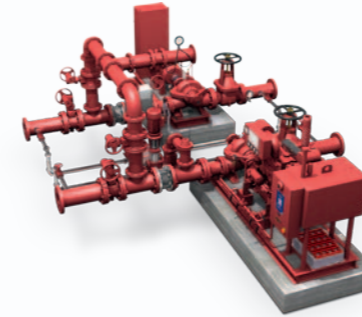
We have a long history of supplying intelligent high quality circulator pumps that guarantee performance and reliability. With our integrated or external frequency converters your pump system

will adapt continuously to system demands, resulting in low life-cycle costs, improved overall system efficiency, excellent indoor climate and significant CO₂ reductions.

Your benefits

- High comfort levels in all seasons and climates
- Increased system performance
- Low life-cycle costs through intelligent operations
- Unparalleled reliability
- Reduced CO₂ emissions
- Control modes for any type of HVAC system

FIRE FIGHTING



Inefficient fire protection can be fatal. Without total reliability of every link of the chain, a stationary fire protection system is worthless. At Grundfos, we offer solutions that match even the most complicated tasks.

We design and deliver fire systems ranging from simple pump-driven systems to highly innovative engineered and packaged systems in compliance with almost all relevant fire standards. Our dedicated competence centres around the world allow us to stay on top of your safety challenges at all times.

- Fully pre-defined and comprehensive sales programme for fire pump sets
- Global setup for production, sales and service companies
- Minimal installation-to-operation time

WATER DISINFECTION



In commercial buildings, efficient water disinfection of domestic hot water systems, cooling towers, spas and swimming pools can be a matter of life or death. With Grundfos' chlorine dioxide disinfection systems, legionella and other potentially fatal bacteria no longer pose a threat.

On top of that, we are experts in anti-scaling, anti-fouling and anti-corrosion in air conditioning, heating and boiler systems. With Grundfos as your partner, you can rest assured that your water is safe, clean and that all pipes are corrosion free.

- Disinfection with chlorine dioxide superior to any other disinfection system
- Highly safe with solutions for continuous water quality monitoring
- Extensive know-how in the field

DISTRICT ENERGY



The idea behind district energy is simple: to produce heated or cooled water in a central location and then distribute this energy to the final consumers through a double pipe network. The sum of the energy consumed of all connected consumers in a district energy system, will typically be substantially lower than the sum of all individual consumers. Thereby, increased efficiency and CO₂ reductions are achieved. In cases where power (electricity) and district energy are combined in so-called combined heat and power systems (CHP), the overall efficiency can be increased from approximately 45% to more than 90%.

A key component in district energy is an efficient transmission system to distribute water to and from the district heating or cooling plants. At Grundfos, we deliver both the products and the expertise to get the job done.

- Large energy savings through intelligent operations and energy efficiency
- High performance pumping systems to meet all demands
- Low life-cycle costs



RAINWATER HARVESTING



Every day, vast amounts of drinking water are flushed down the toilet, putting a strain on the world's diminishing fresh water supply and your economy. With a rainwater harvesting system you can collect the water for non-potable purposes like toilet flushing, washing machines, make-up water for cooling towers and irrigation. This way you save money on your water bill and enhance the sustainability image of your building. In addition, the collection of the rainwater will reduce the strain on sewers during rainstorms, effectively reducing the risk of water backflows.

At Grundfos, we offer complete rainwater harvesting systems with integrated controls. The systems will deliver a steady flow of water, switching automatically between mains water and the rainwater tank.

- Reduce risk of water backflows into buildings
- Save up to 85% of drinking water
- Reduce lime scale
- Enhance the sustainability image of your building




WASTEWATER

When gravity alone is not enough to move wastewater, your building needs a pressurised wastewater system. But wastewater handling is a complex affair; varying solids content from different sources like domestic wastewater, storm water, drainage water and wastewater from garages puts pump systems to the test on a daily basis.

Our wastewater solutions build on decades of experience, allowing us to balance performance, reliability, cost-efficiency and serviceability. We can design the entire system or provide you with high-quality components, such as sewage pumps, drainage pumps, grinder pumps, lifting-stations, pre-fabricated pumping stations, controllers and a wide range of accessories.

- Full range of solutions to meet your specific demands
- Unparalleled reliability and efficiency for low life-cycle costs
- Reduced down time
- Plug and pump solutions




WATER BOOSTING

Your challenge

To ensure a constant pressure at all tap points, commercial buildings face two major challenges: 1) Pre-pressure in water mains is rarely high enough to cover the whole building. 2) Water demand changes constantly. This means that not only must your booster system be reliable and efficient, it must also have the intelligence to maintain the right system pressure regardless of water consumption.

Our solution

At Grundfos, we offer you efficient and noise-free booster systems designed to provide optimal water supply throughout the building. Our systems bearing

the Grundfos Blueflux® label – ensures you market-leading energy efficiency. By connecting with the Grundfos Remote Management system, you can easily monitor performance and optimise your system settings from a distance.

Your benefits

- Low life-cycle costs and complete customisation with intelligent controls
- Increased hygiene through stainless steel solutions
- Proportional pressure control modes for water systems with relatively low static height
- Plug and pump booster systems



Grundfos is one of the world's leading suppliers of solutions across the full range of pump applications – all the way from water supply to wastewater discharge.

In Grundfos Commercial Buildings, we think beyond the pump. Our goal is to understand the building as a whole in order to provide you with the most intelligent and adaptable solutions possible.

This approach has made us a preferred partner for contractors, consulting engineers and building owners looking to build the most sustainable and efficient commercial buildings in the world.

To learn more go to www.grundfos.com