WATER TREATMENT SOLUTIONS
Founded in 1945 in Bjerringbro, Denmark, Grundfos is a global pump and pumping systems provider with an annual production of more than 16 million units. To support plans for strategic growth in North America, Grundfos acquired Paco, Peerless and Yeomans Chicago Corporation, which have added valuable resources and competencies to the region.

The acquisitions enable Grundfos to offer a wide range of solutions for both water and wastewater applications. From multistage industrial and submersible pumps, to disinfection systems and chemical feed systems, the Grundfos portfolio offers solutions to your individual needs.

Along with our full product range, Grundfos has decades of pumping knowledge that drives advanced pumping solutions. Our dedicated water treatment team has years of water treatment application experience, to ensure the perfect match of component and sub-system to application and treatment solutions. With a global network of professionals we can meet demands in every geography and for different water conditions.

Grundfos is a world-class provider of Service, from specification and designing, to installation, operation including maintenance, repair, optimization and contingent replacement, building enduring customer relations and satisfaction.
Grundfos offers total pumping solutions; on any scale.

The right solution for every step of the cycle
With products as diverse as submersible pumps for raw water intake, complete disinfection systems for water treatment and boosters for filtration systems, Grundfos can provide solutions.

Innovation
To Grundfos, the objective is not only the development of advanced technologies, but also what the technologies can do to provide customers and users with the best possible operating economy, quality, reliability and functionality.

Anticipating the future
Grundfos invests 5% of its annual revenue into research and development, with nearly 18,000 employees in 45 countries dedicated to addressing the challenges of tomorrow, today.

Custom Designs
Engineered designs for unusual applications have always been a specialty for Grundfos. From vertical turbines to chemical feed systems, no application is beyond our technical expertise.

A dedicated mission
Grundfos is committed to making a positive contribution to the world. Innovation goes hand in hand with responsibility - and we take pride in constantly pushing the boundaries to offer increasingly energy-efficient and sustainable solutions.

Connecting business and operations in a smarter way
Global Customer Reach adds value to our customers through:
• Consistently high standards
• On-going improvements
• Strategic and tactical cooperation

People and organization
Global customer core team:
• Sales Executive
develops strategies and relations

- Global Account Manager
  single point of global contact
- Local Sales
  points of contact for local operations
- Relevant Experts
  pumps, applications, production and logistics

Operations
- Global Customer Plan
to guide all initiatives and establish consistency
- Comprehensive and uniform business support
To ensure quality water for your process, Grundfos Water Treatment offers a strong portfolio of products and services. Let our team of water treatment professionals help you find the right component or system for your project or application.
Demanding applications require reliable solutions. When one of our partners approached us with a new pressure system design they were going to build in-house as part of a streamlined system for dialysis centers, we took the challenge personally. Our membrane manufacturing customers turn to Grundfos to provide reliable, easy-to-use and efficient pumps as a key component for their water treatment systems. Our CR vertical multi-stage pump has set a standard for membrane treatment.

Most applications require reliability, but few are as demanding as water treatment for dialysis patients. Our partner in dialysis membrane systems has long used our integrated drive pumps, the CRE-plus, as a core to their treatment solutions. But new requirements moved them to design a more compact pressure system they were going to build. Our key account and engineering teams approached our customer with a solution to completely manage this sub-system.

Grundfos matched our partner’s design and offered a cost-effective, engineering and manufacturing solution. With a reliable and advanced Grundfos sub-system as part of their treatment system, our partner was able to continue to focus on what matters most – reliable, clean water treatment for a demanding application.

“Our partner was able to continue to focus on what matters most.”
“It is life, I think, to watch the water. A man can learn so many things.”
– Nicholas Sparks

MEMBRANE FILTRATION
PRODUCT HIGHLIGHT

[A] CR/CRE Vertical Multistage pumps
A versatile, modular and reliable standard for membrane boosting, including options for an integrated drive.

[B] BM/BMS Booster Modules
Compact boosting solutions for membrane systems including high flow and high pressure applications, and pressure exchange.

[C] CUE Variable Frequency Drives
Wide selection of frequency drives designed specifically for Grundfos pumps for easy set-up and energy optimization.

[D] VFI Flow Sensors
Industrial, vortex flow sensors for accurate measurements.

[E] SMART Digital Chemical Feed Pumps
With 3000:1 turn down the SMART pumps offer precise dosing for anti-scalant, CIP and disinfection chemical feed.

[F] CONEX DIA Analyzer and Controller
Measure and control water disinfectants for membrane pre- and post-treatment.

[G] Application Solutions
CAP’s selection tools and programs that communicate with your pump. We have an APP for that.

[H] DTS Dosing Tank System
The Grundfos Dosing Tank Systems offer a compact, full-supply solution for CIP chemical storage and feed.
OXIPERM PRO

*Legionella pneumophila* is a bacterium found often in domestic and utility water systems that can cause Legionnaire’s disease or Pontiac Fever. Chlorine dioxide, a strong oxidant generated on-site, can be an effective tool to manage outbreaks.

In order to implement a preventative program against Legionella outbreaks in their domestic water supply, one major central-U.S. hospital turned to a local water treatment company for help. As part of their program they installed ten chlorine dioxide generation systems from a Grundfos competitor.

After suffering frustrations with systems breaking down and difficult service, the hospital and treatment company turned to Grundfos for the Oxiperm Pro Chlorine Dioxide generators. With a simplified process and robust design, the Oxiperm Pro has provided reliable and consistent treatment at the hospital, while also saving chemicals.

**PRODUCT HIGHLIGHT**

- Simplified batch production process
- Integrated analyzer and controller
- SMART Digital pumps for precise dosing
- Safety systems
- Compact, robust design

SMART Digital Dosing

Liquid bleach, sodium hypochlorite, remains number one water disinfectant. And the issues associated with feeding it remain a frequent frustration for operators: loss of prime or gas bubbles.

The Grundfos SMART Digital dosing pumps offer a standard solution for reliable, accurate liquid bleach feed.

**Stepper Motor**: The precise stepper motor and diaphragm design ensure liquid and bubbles are evacuated.

**Auto-Degassing**: Gas bubbles are automatically detected and the dosing pump adjusts flow to degas bubbles.

**Auto-Dearation**: In stand-by mode the pump works to remove trapped bubbles during down-time.

**Improved Design**: Improved valves and dosing head design to handle trapped gasses.
A multi-national water treatment engineering company had secured a contract to build a decentralized wastewater plant in Southern California. The project scope included a variety of the company’s core treatment technologies they would integrate, but also required chemical feed systems.

Chemical feed pumps rarely are installed without necessary accessories to ensure precise, reliable treatment: calibration columns, pressure relief valves, back-pressure valves, piping, etc. Pre-engineered systems that offer a pipe-in, power-up solution makes engineering, selection and installation easier.

Our water treatment partner approached us to provide and manage multiple chemical feed systems for their project. From concept, through engineering, testing, delivery and commissioning, Grundfos managed the project. By taking responsibility, Grundfos was able to leverage our pump expertise and technology and make the most of a solution. All while our customer focused on what they do best, deliver clean water.

“From concept... to commissioning, Grundfos managed the project.”
“Combining our pump, engineering and supply chain expertise with our partners’ water treatment technology and application knowledge means end-users get the best solutions.”
– Duncan Cooper, president of Grundfos North America.

SMART Digital Dosing Highlight

SIMPLICITY
• Turn-and-push knob
• Intuitive menu
• Big LCD display with four color “traffic light” concept

MODULARITY
• Turn down ratio up to 3000:1
• Mounting plate that serves as shelf
• Moveable control cube

FLOW INTELLIGENCE
• FlowControl with fault diagnosis
• Pressure monitoring
• Flow measurement
• AutoFlowAdapt

CHEMICAL FEED
PRODUCT HIGHLIGHT

[A] SMART Digital DDA, DDC, DDE
Easy plug-n-play design, advanced control options and built around stepper motors, the SMART Digital pumps move dosing technology to the future.

[B] Suction Lances
A full line of feed accessories such as drum suction lances and injection quills.

[C] DMH Hydraulic Pumps
For robust, demanding or high-pressure applications, these hydraulic pumps offer unique features to ensure long-life and precise feed.

[D] Stepper Drives
The heart of our Digital Dosing pumps, allowing for up to 3000:1 turndown at +/- 1%.

[E] Multi-Function Valves
An all-in-one solution to provide pressure regulation, pressure relief and easy priming.

[F] Installation Kit
A full selection of chemical feed installation sets including suction and discharge accessories.

[G] Chemical Feed Systems
Pre-engineered or engineered systems that combine the best in Grundfos pumps with required accessories in a straightforward skidded design.
Behind the scenes at Sporting Park in Kansas City, a Grundfos BoosterpaQ Hydro MPC System ensures that the stadium’s plumbing is not a source of concern for fans or staff. The system provides smooth operation, as well as energy and space savings, for all the facility’s water fixtures.

“As a company committed to the Kansas City community, Grundfos was proud to provide equipment for the Sporting KC facility,” said Dennis Wierzbicki, president of Grundfos USA. The 342,000 square foot stadium seats more than 18,000 fans for soccer games and 25,000 for concerts.

“We were all very impressed with the performance of the system.”
As a company committed to the Kansas City community, Grundfos is proud to provide equipment for the Sporting KC facility.”
– Dennis Wierzbicki, president of Grundfos USA.

The highest flow demand occurs at intermission or halftime and requires a “worst case” capacity of 1,200 gallons per minute.

The Grundfos BoosterpaQ Hydro MPC, consisting of three vertical multi-stage CR pumps, is designed to handle this type of volume, all while maintaining constant pressure. If flow demand drops to zero, the system is designed to switch off automatically. When demand is again required, the system automatically switches on and adjusts its capacity to meet the flow and pressure requirements. This feature saves both energy and maintenance costs.

“There are many suppliers to choose from for this type of application, but very few can provide a control system that is as smooth and energy-efficient as the Grundfos Hydro MPC system,” said Brian James, Grundfos product manager.

In addition to its energy-saving capabilities, the Grundfos BoosterpaQ Hydro MPC is virtually vibration-free compared to alternatives that require on-site adjustments to minimize vibration. It even passed the “nickel test” – a nickel placed on the edge of the pump running at full speed neither moved nor fell.

“We were all very impressed with the performance of the system,” said Michelle Land, senior product manager for the mechanical engineering firm that installed Grundfos pumps in the facility.

“The Grundfos pumps installed at Sporting Park have provided us not only with precise water pressure, but have also assisted us in becoming more efficient from an operations standpoint,” said Jamie Guin, vice president of Corporate Partnerships for Sporting Kansas City.

Pressure Boosting at Sporting Park, Kansas City

Pressure Boosting

PRODUCT HIGHLIGHT

[A] BoosterpaQ Hydro MPC
Pressure boosting systems that makes the most of Grundfos pumps, drives and controls for even the most difficult boosting jobs, with ease and accuracy.

[B] CR/CRE Pumps
A versatile, modular and reliable standard for pressure boosting, including options for an integrated drive.

[C] CM Pumps
For smallest, compact pressure boosting the CM offers the same advantages in Grundfos multi-stage pumps efficiency and technology.

[D] DPI Pressure Sensor
Rugged and robust line of accurate pressure and differential pressure sensors.

[E] VFI Flow Sensor
Industrial, vortex flow sensors for accurate measurements.

[f] Grundfos GO
Real-time connection and control of pumps using a Smart phone.
THE COMPLETE PUMP PORTFOLIO

FOR WATER TREATMENT

Product: Dosing Pumps
- **Product types:** SP
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Dosing System
- **Product types:** SP, WS, HS
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Dosing Tank System
- **Product types:** SP, WS
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Mod Drive
- **Product types:** Cull
- **Drive principle:** Simultaneous control of two pumps
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: M2 Motors
- **Product types:** M2, M2P
- **Pump principle:** Three-stage, single-impeller, axial flow pump
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: PES Fire System
- **Product types:** M2F
- **Pump principle:** Three-stage, single-impeller, axial flow pump
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Dedicated Controls
- **Product types:** HS
- **Control principle:** Programmable in a wide range of control functions in process, water and pumping systems
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Vertical In-Line Pumps
- **Product types:** VEP, VEPX
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Motor Protection
- **Product types:** M4
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Chlorine Dioxide Generators
- **Product types:** CI02 analyzer and controller
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Hydro MPC Boosterpak®
- **Product types:** MP204, MP304
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Booster Modules
- **Product types:** Hydro Multi-E
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Multi-D
- **Product types:** Multi-D
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Hydro Multi-E
- **Product types:** Hydro Multi-E
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Vertical Turbine Pumps
- **Product types:** VTP
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Industrial Pumps
- **Product types:** CR, CRI, CRN
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Motor Protection
- **Product types:** M4
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Chlorine Dioxide Generators
- **Product types:** CI02 analyzer and controller
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Hydro MPC Boosterpak®
- **Product types:** MP204, MP304
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Booster Modules
- **Product types:** Hydro Multi-E
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Multi-D
- **Product types:** Multi-D
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Hydro Multi-E
- **Product types:** Hydro Multi-E
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Vertical Turbine Pumps
- **Product types:** VTP
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)

Product: Industrial Pumps
- **Product types:** CR, CRI, CRN
- **Pump principle:** Single-stage pump with mechanical seal
- **Discharge diameters:** 1/2” to 2”
- **Flow, Q:** 2 to 25 GPM
- **Max. 125 bar (1800 psi)
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