

# OPTIMIZED INDUSTRIAL SOLUTIONS

Pumps and systems for today's  
process and water challenges

be  
think  
innovate

GRUNDFOS 

# OPTIMIZED SOLUTIONS FOR THE ENTIRE INDUSTRIAL PLANT

Grundfos provides a comprehensive range of optimized solutions for the North American process and industrial markets. Grundfos is a full-line supplier of reliable products and robust service offerings for an array of applications, including the following:

## APPLICATIONS:



### WATER TREATMENT

#### WATER TREATMENT:

The process of water treatment is vital to us all. With the shift toward decentralized water treatment, Grundfos' extensive product portfolio empowers industrial customers to move and treat water efficiently and effectively across every type of building and industry. In Grundfos, you gain more than a pump supplier, you gain a partner focused on solving the challenges of your operations and delivering higher accuracy, efficiency, and reliability than you thought possible. Additionally, as businesses and industries become more water conscious, Grundfos is a leader in optimized sustainable solutions to treat water for reuse in a range of applications.



### BOILER FEED

#### TEMPERATURE CONTROL:

Grundfos' thoroughly tested, variable frequency drive pumps optimize the boiler feed process. Designed with low NPSH, these solutions cater to systems with poor inlet conditions. This ensures cavitation-free operation even outside the pump's normal duty range. Grundfos' air-cooled top shaft seal solution eliminates the need for external cooling in high-temperature applications.



### INDUSTRIAL COOLING

As the demand for industrial production grows globally, so too does the demand for cooling. In almost every industrial facility, ensuring the right temperature for machines and processes is essential to production efficiency, reliability and quality. Grundfos offers a number of pumps and solutions equipped with variable frequency drive motors and sensors to create a complete solution that can improve operational efficiency, and achieve greater OPEX savings.



### WASHING & CLEANING

#### INDUSTRIAL PROCESS:

Grundfos' reliable, compact pumps are suitable for pumping corrosive media at high pressures where space is limited. Additionally, their ability to operate across a wide temperature range makes them ideal for pressure boosting in washing and cleaning applications. High-efficiency VFDs perfectly control the process with low energy consumption.



### MACHINE TOOL

When you choose a Grundfos immersible pump, you get a pump that has proven its worth throughout decades of use in the metal processing industry. In addition, the Grundfos range of MTR, MTA, MTC and MTS immersible pumps include size and material variants that fit general industry applications, so an even wider number of applications can benefit from their reliability and precision.

## GRUNDFOS PUMPS AND SERVICES ARE LEVERAGED ACROSS ALL INDUSTRIES WITH A FOCUS ON THE ABOVE APPLICATIONS FOR THE FOLLOWING MARKETS:

- Automotive
- Biofuels
- Chemicals
- Energy
- Food and Beverage
- General Industry
- Mining
- Pharmaceutical
- Power
- Washers and Coolers





# PIONEERING THE FUTURE OF INDUSTRY

## GRUNDFOS iSOLUTIONS

Pumps do not exist in isolation, so optimizing the entire pump system is key to maximizing efficiency. Grundfos iSOLUTIONS provide a holistic approach. Through integrating pumps, VFDs and sensors, Grundfos iSOLUTIONS are able to adapt precisely to system demands and deliver optimal energy efficiency and reliability for every application. With Grundfos iSOLUTIONS, you can be certain you always get the optimal solution for your specific application.

## GRUNDFOS ENGINEERED SYSTEMS

With no two projects exactly the same, you deserve a pumping solution as unique as your project. At Grundfos, we leverage our experience and pumping expertise to design and engineer your perfect fit, plug-and-pump Grundfos Engineered System (GES).

Systems begin with any number and combination of Grundfos pumps to best suit the operating conditions. Then, controls and monitoring components are integrated. All GES packages are constructed on a steel base and can be enclosed in a fiberglass or steel structure. GES packages arrive on site pre-wired, pre-piped and pre-commissioned, eliminating the scheduling challenges and cost overruns of a site-built system.



# OVERVIEW OF APPLICATIONS



## WATER TREATMENT

## BOILER FEED



## INDUSTRIAL COOLING

### BOOSTER PUMPS



#### BM, BMS

Booster module with directly coupled pump and variable frequency drive



#### CM, CME

Non-self-priming, horizontal, multistage, end-suction centrifugal pumps with magnetic drive

### INLINE PUMPS



#### CR, CRE

Vertical inline multistage pumps offering industry-leading performance, efficiency and reliability

### DOSING PUMPS



#### DME

Dosing pumps that combine perfect precision with user-friendliness for large dosing quantities from 15.9 to 248 gph



#### DMH

Robust dosing pumps for reliable and high-pressure applications up to 2900 psi.



#### SMART Digital

Intelligent dosing pumps offering unparalleled precision, accuracy and reliability



#### DMX

Mechanical diaphragm metering pumps



#### OXIPERM PRO

Chlorine dioxide production systems for fighting Legionella and other germs in drinking water



#### Dosing Skid Systems

Complete chemical-feed packaged systems featuring the latest technology from Grundfos Dosing



#### DID

Digital sensor and controller for dosing pumps, dosing systems, and systems for the generation or dosing of chlorine dioxide and hypochlorite

### SEWAGE PUMPS



#### SL Range

Submersible pumps designed to handle sewage, effluent and large volumes of surface and process water



#### SE

Pumps designed to handle sewage, effluent and large volumes of surface and process water in dry and submerged applications



#### S Range

Designed for pumping raw water, unscreened raw sewage, water containing sludge and industrial effluent



#### SEG

Submersible grinder pump for pumping effluent and sewage in small communities or areas without sewer systems



#### SMD, SMG, SFG

Mixers and flowmakers prevent sedimentation and support processes in a variety of applications



#### SRG

Created to handle large flows against low head

### PUMP SYSTEMS



#### Hydro MPC BoosterpaQ

Our premier fully integrated pre-engineered packaged pumping system with advanced control capability and energy efficient vertical inline multistage pumps



#### Grundfos Engineered Systems

Complete, custom plug-and-pump systems solutions designed to include any combination of Grundfos pumps, motors, controls and monitoring equipment on a steel base or in a custom enclosure.

### BOOSTER PUMPS



#### BM, BMS

Booster module with directly coupled pump and variable frequency drive



#### CM, CME

Non-self-priming, horizontal, multistage, end-suction centrifugal pumps with magnetic drive

### INLINE PUMPS



#### CR, CRE

Vertical inline multistage pumps offering industry-leading performance, efficiency and reliability



#### CRE Plus

A simplex energy efficient vertical inline multistage plug-and-pump system with control capability through an integrated VFD



#### CR-H, CRN-H, CRE-H, CRNE-H

Inline multistage pumps for an ANSI dimensional solution



#### CRN MAGdrive

Vertical inline multistage pump with magnetic drive for aggressive liquids



#### VL, VLS

Space-saving inline pumps with integrated motor, variable frequency drive and control with Grundfos sensor technology



#### TP, TPE

Single-stage, inline centrifugal pumps

### CIRCULATORS



#### MAGNA3

Most efficient commerial circulator on the market with intelligent controls

## WASHING & CLEANING



## MACHINE TOOL

### END-SUCTION PUMPS



#### LCS, LCSE

Compact single-stage, end-suction, split-coupled pump with integrated Grundfos MLE motor, drive and control



#### LF, LFE

Frame mounted end-suction pumps available with integrated MLE variable speed motor to optimize energy efficiency

### SPLIT-CASE PUMPS



#### KP, KPV, KPVS

Horizontal and vertical split-case pumps. KPVS offers vertical split-coupled design in a small footprint.

### CONTROLS & MONITORING



#### Control MPC

Advanced controller for monitoring and control of up to 6 pumps

### DOSING PUMPS



#### SMART Digital

Intelligent dosing pumps offering unparalleled precision, accuracy and reliability



#### Dosing Skid Systems

Complete chemical-feed packaged systems featuring the latest technology from Grundfos Dosing



#### Dosing Tank Station

Intended for storing and dosing liquid chemicals. Many different configurations can be selected and applied flexibly to fulfill various dosing tasks

### PUMP SYSTEMS



#### Hydro MPC BoosterpaQ

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#### Grundfos Engineered Systems

Complete, custom plug-and pump systems solutions designed to include any combination of Grundfos pumps, motors, controls and monitoring equipment on a steel base or in a custom enclosure.

### DOSING PUMPS



#### DME

Dosing pumps that combine perfect precision with user-friendliness for large dosing quantities from 15.9 to 248 gph



#### DMH

Robust dosing pumps for reliable and high-pressure applications up to 2900 psi



#### SMART Digital

Intelligent dosing pumps offering unparalleled precision, accuracy and reliability



#### DMX

Mechanical diaphragm metering pumps



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#### Dosing Tank Station

Intended for storing and dosing liquid chemicals. Many different configurations can be selected and applied flexibly to fulfill various dosing tasks



#### DID

Digital sensor and controller for dosing pumps, dosing systems, and systems for the generation or dosing of chlorine dioxide and hypochlorite



#### BM, BMS

Booster module with directly coupled pump and variable frequency drive



#### CM, CME

Non-self-priming, horizontal, multistage, end-suction centrifugal pumps with magnetic drive

### INLINE PUMPS



#### CR, CRE

Vertical inline multistage pumps offering industry-leading performance, efficiency & reliability



#### CRE Plus

A simplex energy efficient vertical inline multistage plug-and-pump system with control capability through an integrated VFD

### IMMERSIBLE PUMPS



#### MTA

Low-pressure pumps specifically designed for filtering systems in the machine tool industry

#### MTR, MTRE, MTC

Vertical, multistage pumps designed for cooling lubricants and condensate transfer

### PUMP SYSTEMS



#### Hydro MPC BoosterpaQ

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#### Grundfos Engineered Systems

Complete, custom plug-and-pump systems solutions designed to include any combination of Grundfos pumps, motors, controls and monitoring equipment on a steel base or in a custom enclosure.

## EDUCATION ON DEMAND WITH GRUNDFOS TECHNICAL INSTITUTE

Register with Grundfos Technical Institute (GTI) for a wide variety of technical training at a time that's right for you. Visit [grundfos.us/training](https://grundfos.us/training) for a wealth of content, including:

- Self-paced online courses, webinars and face-to-face classes
- YouTube library of How-To pump application videos
- CEU or PDH qualifying credits on most courses
- 24/7 accessibility from any device



# OVERVIEW OF FOCUS MARKETS



## FOOD & BEVERAGE

### BOOSTER PUMPS



#### BM, BMS

Booster module with directly coupled pump and variable frequency drive



#### CM, CME

Non-self-priming, horizontal, multistage, end-suction centrifugal pumps with magnetic drive

### INLINE PUMPS



#### CR, CRE

Vertical inline multistage pumps offering industry-leading performance, efficiency and reliability



#### VL, VLS

Space-saving inline pumps with integrated motor, variable frequency drive and control with Grundfos sensor technology

### END-SUCTION PUMPS



#### LCS, LCSE

Compact single-stage, end-suction, split-coupled pump with integrated Grundfos MLE motor, drive and control



#### LF, LFE

Frame mounted end-suction pumps available with integrated MLE variable speed motor to optimize energy efficiency

### PUMP SYSTEMS



#### Hydro MPC BoosterpaQ

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#### Grundfos Engineered Systems

Complete, custom plug-and-pump systems solutions designed to include any combination of Grundfos pumps, motors, controls and monitoring equipment on a steel base or in a custom enclosure.

### SPLIT-CASE PUMPS



#### KP, KPV, KPVS

Horizontal and vertical split-case pumps. KPVS offers vertical split-coupled design in a small footprint.



#### SMART Digital

Intelligent dosing pumps offering unparalleled precision, accuracy and reliability



#### DME

Dosing pumps that combine perfect precision with user-friendliness for large dosing quantities from 15.9 to 248 gph



#### DMH

Robust dosing pumps for reliable and high-pressure applications up to 2900 psi.



#### DMX

Mechanical diaphragm metering pumps



#### Dosing Skid Systems

Complete chemical-feed packaged systems featuring the latest technology from Grundfos Dosing



#### Dosing Tank Station

Intended for storing and dosing liquid chemicals. Many different configurations can be selected and applied flexibly to fulfill various dosing tasks



#### DID

Digital sensor and controller for dosing pumps, dosing systems, and systems for the generation or dosing of chlorine dioxide and hypochlorite



## CHEMICALS

### BOOSTER PUMPS



#### CM, CME

Non-self-priming, horizontal, multistage, end-suction centrifugal pumps with magnetic drive

### INLINE PUMPS



#### CR, CRE

Vertical inline multistage pumps offering industry-leading performance, efficiency and reliability



#### TP, TPE

Single-stage, inline centrifugal pumps



#### CR-H, CRN-H, CRE-H, CRNE-H

Inline multistage pumps for an ANSI dimensional solution



#### CRN MAGdrive

Vertical inline multistage pump with magnetic drive for aggressive liquids

### DOSING PUMPS



#### DMH

Robust dosing pumps for reliable and high-pressure applications up to 2900 psi



#### DMX

Mechanical diaphragm metering pumps



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#### SMART Digital

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## GENERAL INDUSTRY



## ENERGY

### INLINE PUMPS



#### CR, CRE

Vertical inline multistage pumps offering industry-leading performance, efficiency and reliability



#### CRN MAGdrive

Vertical inline multistage pump with magnetic drive for aggressive liquids



#### CR-H, CRN-H, CRE-H, CRNE-H

Inline multistage pumps for an ANSI dimensional solution

### DOSING PUMPS



#### SMART Digital

Intelligent dosing pumps offering unparalleled precision, accuracy and reliability

### IMMERSIBLE PUMPS



#### MTA

Low-pressure pumps specifically designed for filtering systems in the machine tool industry



#### MTRE, MTR, MTC

Vertical, multistage pumps designed for cooling lubricants and condensate transfer

### SPLIT-CASE PUMPS



#### KP, KPV, KPVS

Horizontal and vertical split-case pumps. KPVS offers vertical split-coupled design in a small footprint.

### END-SUCTION PUMPS



#### LCS, LCSE

Compact single-stage, end-suction, split-coupled pump with integrated Grundfos MLE motor, drive and control



#### LF, LFE

Frame mounted end-suction pumps available with integrated MLE variable speed motor to optimize energy efficiency



### SUBMERSIBLE PUMPS

#### SP

Submersible pumps renowned for high efficiency and reliability

### INLINE PUMPS



#### CRN

High pressure, multistage pump



#### CR, CRE

Vertical inline multistage pumps offering industry-leading performance, efficiency and reliability



#### CR-H, CRN-H, CRE-H, CRNE-H

Inline multistage pumps for an ANSI dimensional solution

### DOSING PUMPS



#### DMH

Robust dosing pumps for reliable and high-pressure applications up to 2900 psi.



#### DMX

Mechanical diaphragm metering pumps



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#### Grundfos Engineered Systems

Complete, custom plug-and-pump systems solutions designed to include any combination of Grundfos pumps, motors, controls and monitoring equipment on a steel base or in a custom enclosure.

### SUBMERSIBLE PUMPS

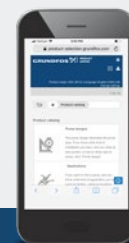


#### SP

Submersible pumps renowned for high efficiency and reliability

## GRUNDFOS SELECTION TOOLS

Need to configure, size or select a product? From performance data to submittal documents and everything in between, Grundfos can help you find the perfect-fit pumping solution. To learn more about our selection tools for standard pumps and systems, digital dosing and engineered-to-order solutions, visit: [grundfos.us/select](https://grundfos.us/select)



## WE ARE IN THE WATER BUSINESS WITH YOU

As a pioneer and global leader in water pump technology, Grundfos creates intelligent, sustainable solutions to help solve the world's water and climate challenges. Through our heritage, we have the experience and innovative capabilities to help our partners, customers and communities move water in an increasingly energy and water efficient manner. We see this as not only a great business opportunity, but as an obligation to ensure the world heads toward a more sustainable tomorrow. Our complete portfolio of pumps and solutions are designed for commercial, residential, groundwater, municipal and industrial applications with emphasis in trendsetting, energy efficient technologies such as permanent magnet motors and advanced pump controls and monitoring.

### BECAUSE WATER MATTERS, AND SO DOES YOUR BUSINESS.

As a company we will contribute by:



Cutting our water consumption in half by 2025



Providing safe drinking water to 300 million people in need by 2030



Becoming climate positive by 2030

To learn more, visit **grundfos.us** or follow us on Facebook and LinkedIn.

Visit [grundfos.us/pei](http://grundfos.us/pei) to learn more about Department of Energy (DOE) pump energy index (PEI) requirements and PEI ratings on specific Grundfos models.