

# SETTING NEW STANDARDS FOR **ENERGY EFFICIENCY**

Meet your treatment targets  
with our complete range  
of mixers, flowmakers and  
recirculation pumps

# ENSURING EFFICIENCY AND RELIABILITY FOR YOUR PROCESSES

Mixing is extremely important in wastewater treatment and is one of the key operations for the achievement of treatment targets. Grundfos has released a range of **SMD/SMG mixers**, **SFG flowmakers** and **SRG recirculation pumps** that meets your treatment targets with a lower energy consumption for a wide range of applications, where adjustable and efficient operation is required with limited space requirements.

## Our mixers and flowmakers offer:

- Superior Thrust-to-Power (T/P) ratio from the best-in-class hydraulic design combined with energy efficient motors built from IE3 components
- Many quality features supplied as standard, ensuring optimised operation and energy savings
- Together with recirculation pumps, a complete product range with minimal performance gaps, for energy efficient product selections

## What you get:

- Savings on energy and operations with a short payback time for your investment
- No over-dimensioning of treatment plants and reduced power consumption
- Extended lifetime for the mixer or flowmaker installation

## Optimising your system

Grundfos supplies a range of complementary products that optimise and increase the efficiency of your system.

- Grundfos Remote Management (GRM) for remote monitoring and control
- Variable frequency drives (CUE) for speed control

Our mixers, flowmakers and recirculation pumps are supplied as standard with many design, material and product enhancements that:

- Prolong product lifetime
- Increase efficiency
- Ensure easy installation, service and maintenance



# LONG LIFETIME AND OPERATIONAL BENEFITS, DELIVERED AS STANDARD

The full range of mixers, flowmakers and recirculation pumps covers all applications in wastewater treatment plants as well as agricultural and industrial applications and copes with fluid environments with varying concentrations of solids and levels of density and viscosity.

Key features supplied as standard for SMG mixers, SFG flowmakers and SRG recirculation pumps are shown below. SMD has similar features, but no gear.

## Tapered roller bearings

– absorbs axial and radial forces and prevents heavy load on gear wheels and motor bearings

## Planetary gear

– slim design and optimal hydro dynamic performance

## Thermal protection

– PTC or PTO in each phase winding

## Cable bending protection

– supplied as standard, for protecting the cable

## Double sealed cable inlet

– prevents leakage through the cable entry

## Galvanic protection

– for minimal corrosive wear

## Multistage sealing system

– prevents solids and wastewater entering gearbox

## Optimised propeller

– optimised propeller blade shape for efficient thrust creation and self cleaning effect

## Water in oil sensor

– protection against damages caused by leakage

## Corrosion protection

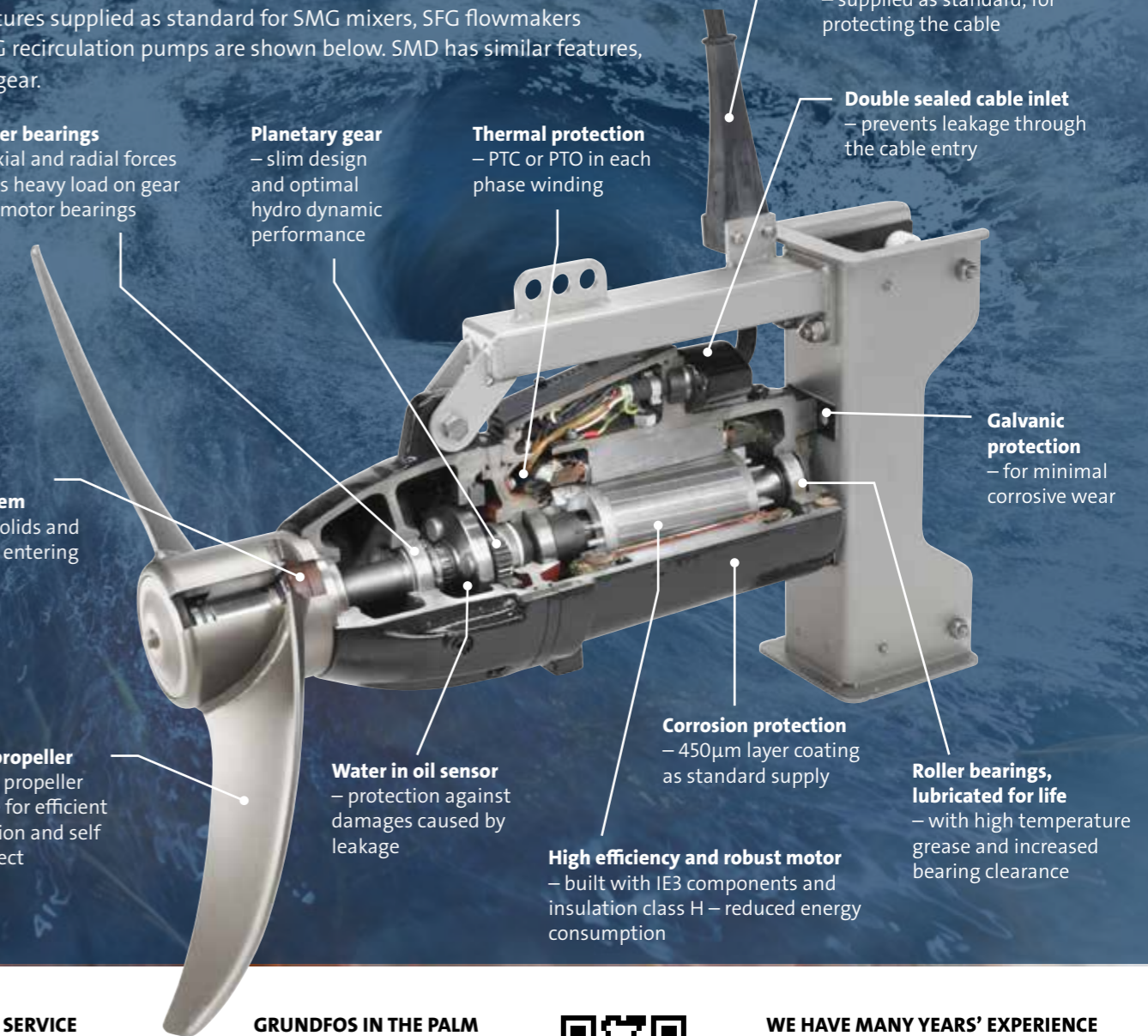
– 450µm layer coating as standard supply

## High efficiency and robust motor

– built with IE3 components and insulation class H – reduced energy consumption

## Roller bearings, lubricated for life

– with high temperature grease and increased bearing clearance



## MIXING HANDBOOK

The Grundfos handbook “Design recommendations for mixing” covers mixing issues and mixing applications.

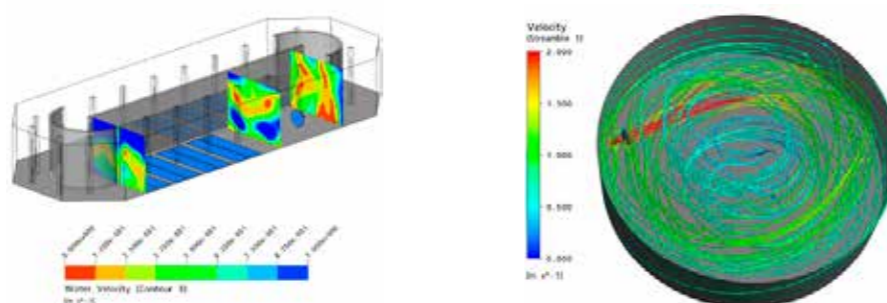
Contact Grundfos to order



## SIZING TOOLS AND RESOURCES

We make it easy for you to size and install our solutions. Your Grundfos representative can advise about design using CFD simulations and help you find and use Grundfos tools, technical articles and documentation that meet precisely your requirements.

Contact your Grundfos sales representative



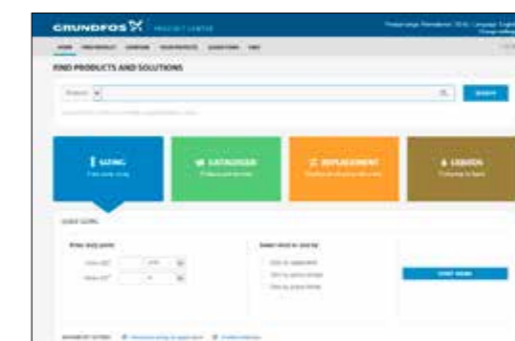
## EASY TO SERVICE

As part of our delivery, our robust and reliable quality products are easy to work with, offer easy access to spare parts and long service intervals. We make available commissioning and service agreements, technical information and installation, commissioning and service reports.

Contact your Grundfos sales representative

## GRUNDFOS IN THE PALM OF YOUR HAND

The Grundfos Product Center makes it easy for you to find and order spare parts.



## WE HAVE MANY YEARS' EXPERIENCE

Read about our success with installations in wastewater treatment plants around the world

Find cases and additional information on [www.grundfos.com](http://www.grundfos.com)



## ABOUT GRUNDFOS

Since 1945, Grundfos has developed and delivered pump solutions that serve the critical applications of our customers and partners. With an annual production of more than 16 million pump units, turnover of EUR 3.2 billion in 2014 and more than 18,000 employees worldwide, Grundfos develops and implements technologies that meet the challenges facing industry, building services, water supply and wastewater.

## SOLUTIONS FOR WASTEWATER

Grundfos Water Utility offers one point of contact for all phases of projects at the wastewater treatment plant. We are a trusted partner for design, verification, installation, operation and maintenance, saving you time, energy and costs.

For process tanks at the wastewater treatment plant, Grundfos ensures low lifecycle costs and hydraulic stability. Our contribution includes Computational Fluid Dynamics (CFD) flow simulations at the design and specification phase. Our pumping, mixing, dosing and aeration systems are optimised for each other.