





Wastewater treatment is demanding. Capital investments, operating costs, growing populations and environmental legislation are big concerns. Choosing the most cost-effective solution from one of many equipment suppliers is not easy. But is there anything easy about your job?

# Where has your water been?

Fresh water doesn't always start out fresh. If you're lucky, your water has been on a long journey through the earth's natural filters straight to your own personal use. More likely, the water you need has been used before. What's more, it'll be used again. It has to be. There's not enough clean water to go around.

It's no secret water makes everything grow. People, plants, animals, factories, and economies depend on it. Expanding water and sanitation systems to meet demand with today's world water crisis is a gigantic endeavour. Of course, maintaining and upgrading existing water treatment systems is no small task either. However, these missions are critical to protect a growing population and a limited resource.

Choosing a water technology partner with the experience and expertise in handling virtually any circumstance can be most advantageous.



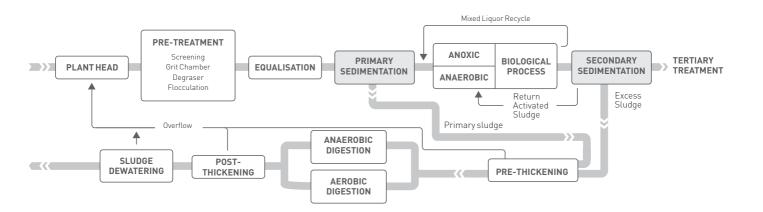
Bring your boots.

It takes more than pumps to treat wastewater and bring fresh water to millions of people. At ABS, we provide more water processing equipment, technology, and expertise than any other pump manufacturer. Our full range of dry and submersible pumps, mixers, agitators, aerators, compressors, and control & monitoring equipment is unmatched in the industry.

At ABS, we know the process. We don't just supply the best parts. We have the hands-on know-how to provide comprehensive solutions for municipal and industrial wastewater treatment.

Removing pollutants and recovering clean water also demands expertise that can't be manufactured. At ABS, hands-on field work and R&D are continuous. In fact, we've been building our knowledge base for over 140 years. But we face new challenges every day.

Our investment into research, development and strategic partnerships helps us find better ways to help you do the job. A job that is certainly no day at the beach, but in many cases, a job that makes a nice day at the beach possible for millions of people.



The wastewater treatment process quickly filters out any supplier not equipped for all the challenges of this job. ABS stands alone with over 140 years of hands-on experience, process knowledge and the widest product range in the industry for wastewater treatment applications. That's the ABS advantage.



Under the right conditions, Mother Nature is the most cost-effective catalyst you can employ for wastewater treatment. But providing the perfect conditions for nature to work in a man-made environment with controlled processes, calls for the masterful coordination of technology and biology. ABS gets more and more of these calls. No other company is better equipped to handle this job.

ABS helps you treat wastewater in the most natural and effective way to make more water available for reuse. ABS process knowledge in combination with the most complete range of equipment in the market provides the expertise necessary to increase plant productivity while reducing costs.

For example, the ABS NOPON aeration systems just use compressed air to enhance the natural biological process. Clever aeration and mixing solutions decrease reaction times. This way we can boost the air-to-liquid interaction and we are able to help you obtain top efficiency at the lowest cost while minimizing the environmental impact.

What's more, you can further improve treatment efficiencies while shrinking basin surfaces. Existing or new plants with space limitations can increase the depth of basins up to 15 m (liquid depth) with ABS solutions.

# Putting waste to work.

Treatment of highly polluted water or other biodegradable masses with high organic

pollutants can produce biogas and energy via ABS SCABA agitators for anaerobic reactors. ABS technology turns sludge and biomass into power and saves our environment by limiting the use of landfills.

ABS SCABA agitators are also best suited for flocculation and neutralization. These highly efficient two-stage mixing solutions include a flash-mixer at high speed and a reaction chamber at low speed. This way, chemical savings are achieved through optimal mixing and reactions.

Sequencing Batch Reactors (SBR) save money and space by combining biological treatment and final sedimentation in the same tank. ABS NOPON O.K.I. technology (a combined aerator and mixer) is key to this process as it improves uptime and decreases operational and maintenance costs. Conventional aeration systems just don't compare to this ABS NOPON solution.

ABS submersible aerator TA are self-aspirating and key to shallow basin aeration and effluent neutralization. By using the flue gases, the neutral-ization can be made cost-effectively. Process solutions like this illustrate how ABS technology and Mother Nature are finding better ways to work together.

ABS High Speed Turbocompressors are the state-of-the-art solution for pressurizing air into the ABS aeration systems. No mechanical wearing parts or lubricants are used in these high-tech, noiseless machines. These unique features are achieved by electronically-controlled levitating technology based on magnetic bearings manufactured in the ABS laboratories.

Furthermore, ABS offers process control throughout the high-tech range of control and monitoring equipment. The control and monitoring product range features userfriendly control systems that support costeffective plant automation. ABS engineers help facilities plan and execute optimal treatment solutions to reduce operating costs and increase effluent standards. Naturally, more plants are finding this a winning combination.



ABS modular control system



**ABS Sensor** 



**ABS NOPON** disc diffuser system HKL215



**ABS NOPON** disc diffuser system **PIK 300** 



ABS disc diffuser system **SUCOFLOW DS** 



ABS NOPON submersible aerator mixer 0.K.I.



ABS submersible





**ABS NOPON online** 



ABS submersible propeller pump VUP



cleaning system



**ABS** submersible sewage pump AFP



**ABS High Speed** Turbocompressor



**ABS HYPOMIX** submersible hyperboloid mixer



ABS submersible recirculation pimp RCP



ABS submersible mixer RW



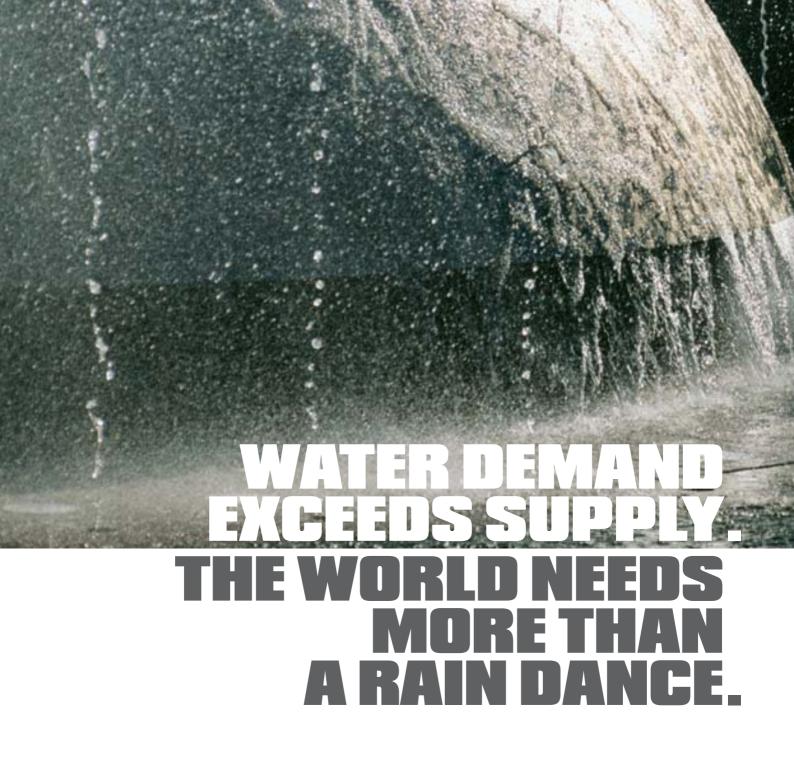
ABS dry installed sewage pump FR



**ABS flow booster SB** 



ABS SCABA agitator



We have a world water crisis. More than 2.2 million people die each year from drinking contaminated water and poor sanitation. And in the next 20 years, the U.N. reports that the average water supply per person will be cut by a third.

Industries are adapting to this water shortage by decreasing water consumption. For example, a denim producer has been able to reduce their water consumption from 1.2 cubic metres per pair of jeans to 300 litres.

Less is more. In some industrial processes using less water actually increases the concentration of pollutants in the wastewater. This puts more demands on wastewater treatment plants to upgrade to newer, highly efficient technology.

Improving water standards and preserving water resources are mandates for all concerned. Wastewater professionals are work-ing with ABS solutions to remove organic pollutants, phosphates and nitrates,



to protect surface and underground water, to ensure safe coastal and bathing water qualities, and to process sludge for energy.

ABS cost-effective pumping. And more. Cost-effective pumping has been synonymous with ABS for many years. For us, it means offering the optimal solution for every application in the water cycle. With our long-term commitment to cost-effective pumping, we focus on bringing a lower Life Cycle Cost to our customers worldwide.

Above all, our long-term perspective for cost-effective solutions is a commitment to partnership: to be a partner through the whole life cycle of your ABS solutions.

ABS has the most comprehensive product programmes on the market for municipal or industrial water and wastewater handling and process applications. Our wide range of pumps, mixers, agitators, aerators, compressors and control instrumentation offers the best choice for your plant. Our service

organization can also help you with the most cost-effective maintenance planning.

# Worldwide network.

With our presence in more than 100 countries the world over, we are able to supply cost-effective solutions and service for new plants or refurbishment of existing installations, wherever you are.

The ABS Service Programme covers all aspects of operation and maintenance of pumps, mixers, aerators and automated controls from initial pumping station design to complete treatment facility management – and everything in between.

Our worldwide network of sales and service companies, representatives, agents and distributors demonstrates our local dedication in combination with a strong global presence.

Your job will never be a day at the beach, but with a partner like ABS, you may be able to enjoy a few.

# THE WORKS.

ABS has everything a water and wastewater treatment plant needs. In fact, we have the most comprehensive product programme in this field. Here are a few examples. To see our complete range of equipment, please contact your ABS representative or visit our website, www.absgroup.com.



### Wastewater Pumps

The range of wastewater pumps covers both submersible and dry-installed products, making it easy to find the optimal solution for every application.





## **Mixers and Agitators**

Characterized by low operating costs and high effciency and a wide range of applications, ABS offers a complete submersible mixer programme and top and side entry dry-pit agitators for digester applica-tions and other industrial processes.





# **Aerators and Compressors**

ABS aerators for municipal and industrial treatment plants provide a reliable process with high oxygen transfer. ABS aeration solutions include the innovative High Speed Turbocompressor which is both low noise and compact. Furthermore, ABS solutions are well known for being cost-effective, easy to install and operate.



# THE ABS SOLUTIONS.

