



Taking care  
of the world's water

**SIEMENS**

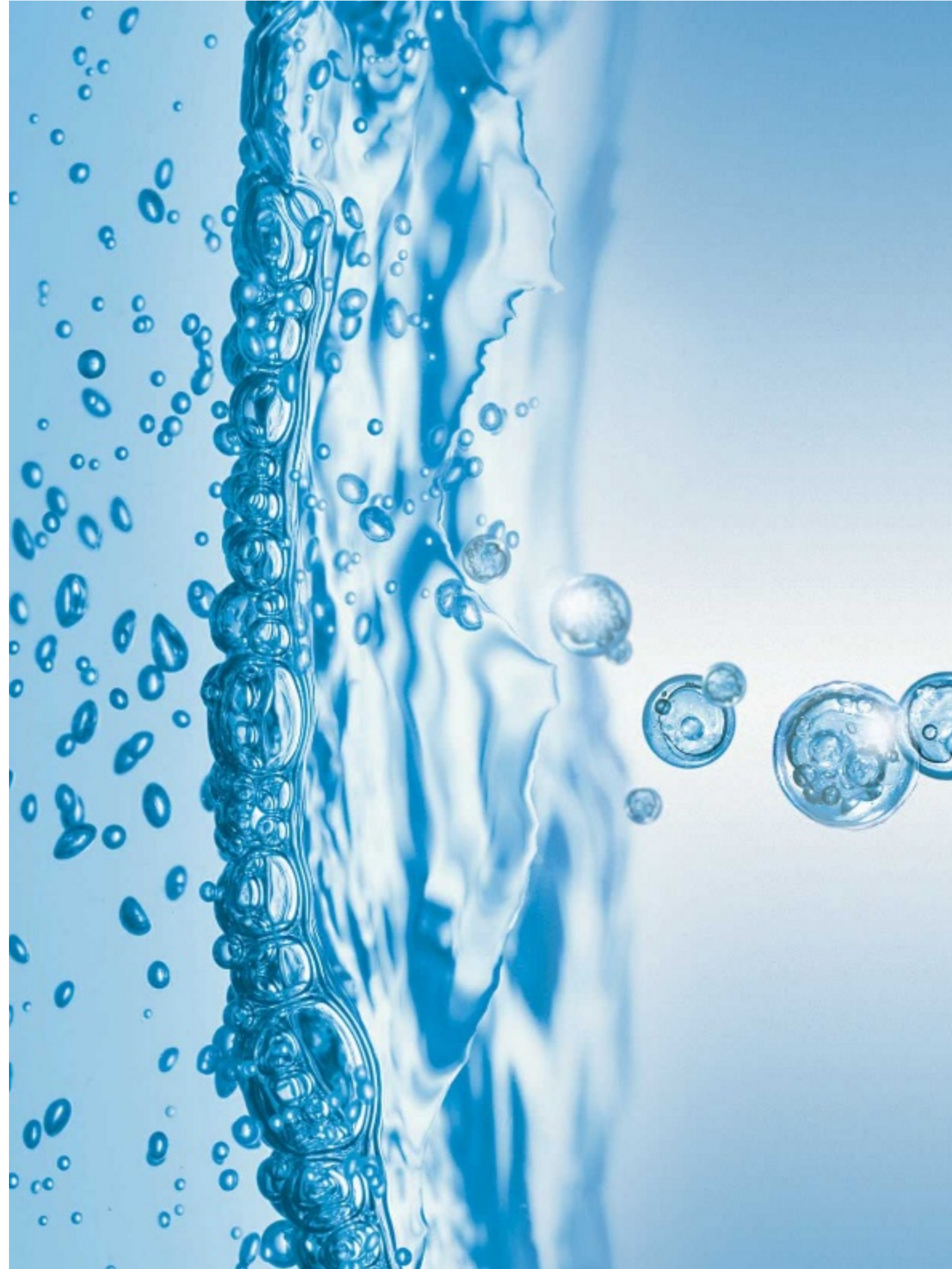
Water Technologies  
for Municipalities

Complete peace of  
mind. With sustain-  
able answers for  
drinking water and  
wastewater.

***Water is our resource number 1.***

*All of us as water professionals have an obligation to manage it sustainably, securing its supply while protecting public health and the environment. We are deeply committed to this obligation, which is why municipalities choose to work with Siemens Water Technologies.*





Our mission:  
Taking care of the  
world's water.

*A mission we take seriously. What do we do? We help you manage your water safely and economically. So consumers can be absolutely sure about their drinking water and wastewater treatment. Day after day. Year after year. We'd love to show you how.*







Water is simple:  
 $H_2O$ .

But managing it is  
highly complex.

*It's good to know that in us you have a strong technology partner with a unique portfolio of capabilities: Trendsetting technologies, excellence in engineering and service support. All over the world.*

**Managing water** means one thing: responsibility. To meet the high expectations of citizens, municipal boards, regulators and those you set for yourself as a responsible water manager, you need not only reliable technology designed to meet your exacting requirements – you need partners you can rely on to deliver. Responding to your needs. At your side when problems occur. With you on the job when it's time to upgrade systems, integrate new components and technology, meet new environmental standards and cope with budgetary constraints.

Siemens is the answer: Your proactive partner for every task at hand. A multitude of technological possibilities and answers backed by highly experienced process engineering and effective service support. All focused on your needs and giving you the choices that provide complete peace of mind.

We understand the requirements of the water industry, because we are water people ourselves. Part of the worldwide water and wastewater community that rises to the challenges of safety, quality, economics and corporate responsibility for sustainable development. We know what you need to get the job done. To ensure safe water quality and reliable supply. To operate your plants efficiently and economically. And to ensure sustainable water management. And we deliver. With a clear focus on innovation and technological change we offer a complete portfolio of innovative products, systems, solutions and services, providing answers for water transport and distribution, water treatment and reuse, residuals management and process automation.

One reliable source for all your technological requirements from individual products to entire systems and services. Where each part of the solution is designed, built with and characterized by the capabilities of Siemens Water Technologies. We have integrated the world's industry leaders within the Siemens water family – including USFilter – building a complete portfolio designed to meet your most rigorous demands and give you access to both the latest advances and widest range of proven technologies. So whatever your needs and requirements are, we can supply the answers: New water treatment technology like advanced membrane filtration and cost-saving biological treatment processes, state-of-the-art odor control units, high-end dewatering and disinfection systems, next generation automation, drive, instrumentation, monitoring and IT technology. Completely Integrated Solutions for pump stations, water pipelines and networks. Life-cycle services from design, financing, construction, commissioning, maintenance to modernization. And much more. For your job well done. It's Siemens Water Technologies. Taking care of the world's water with you.

*Meeting the demands for a safe water supply and reliable wastewater treatment in a sustainable and economically viable way can be a challenging task. Our proven track record in thousands of installations worldwide means you can trust Siemens to meet it. We provide the technology you need to succeed.*





Our services  
can do more:

Ensure safety.  
Make your job  
easier. Cut costs.



*Trendsetting water technologies are only as good as the expertise used to employ them. It's our service that makes the difference: at your side with great ideas and sound support. Everywhere. Always.*



*We help you keep the water flowing with a new level of service addressing every aspect of safe and sustainable plant performance – from inception and planning to maintenance, migration and emergency assistance. Your customers depend on you. And we're here to help.*

*What can we do for you?* A lot, actually. Because we not only provide the world's most complete portfolio of innovative systems, components and technologies – we support you with a wide range of services that help you meet your responsibilities in a difficult and constantly changing environment. An environment where responsive, totally integrated service is not an option that's nice to have – it's absolutely essential. So we help to take care of it – with a new level of service solutions that seamlessly integrate systems, technologies and services.

- Good service begins before your project is even started. In the **planning** phase. Our highly qualified industry professionals help you meet and exceed your objectives, while paying particular attention to scheduling and financial feasibility. From the beginning our objective is to enable you to run an efficient plant pre-designed to allow easy incremental optimizations across its life cycle, totally securing your investment over the whole plant life cycle.
- We help you keep the water flowing: with innovative, highly integrated, optimized **maintenance** concepts, from telemonitoring to field and online services. Our integrated plant maintenance services have proven their reliability in countless installations around the globe. Management systems seamlessly integrate into your plant systems to tailor maintenance to meet your responsibilities. And in the case of emergencies we're at your side instantly, providing quick solutions with mobile outsourcing systems that take the load off ailing plants – an essential service also for planned downtimes, because the people in your municipality depend on an uninterrupted water supply.
- Innovative, completely integrated **migration** and **modernization** services from Siemens help you perform reliably and economically. We analyze your plant, identify your upgrade and modernization needs and help you implement new systems and improved processes with minimum downtime and maximum turnaround efficiency. Always with the goal of utilizing as much as possible of your existing infrastructure and operator know-how, making for a smooth transfer and still more economic efficiency.
- To manage water efficiently you need lots of **information**. Fast. Our integrated Process Control Systems and SCADA communication systems make for a seamless flow of information from the production level to the management desktop, dovetailing easily into existing, third-party automation and control systems. From every critical flow point of your plant to a completely integrated picture of the complete process. Information that helps you make better decisions and achieve smooth performance. Innovative visualization and analysis tools make our Process Control Systems user friendly and diagnose problems before they even occur.

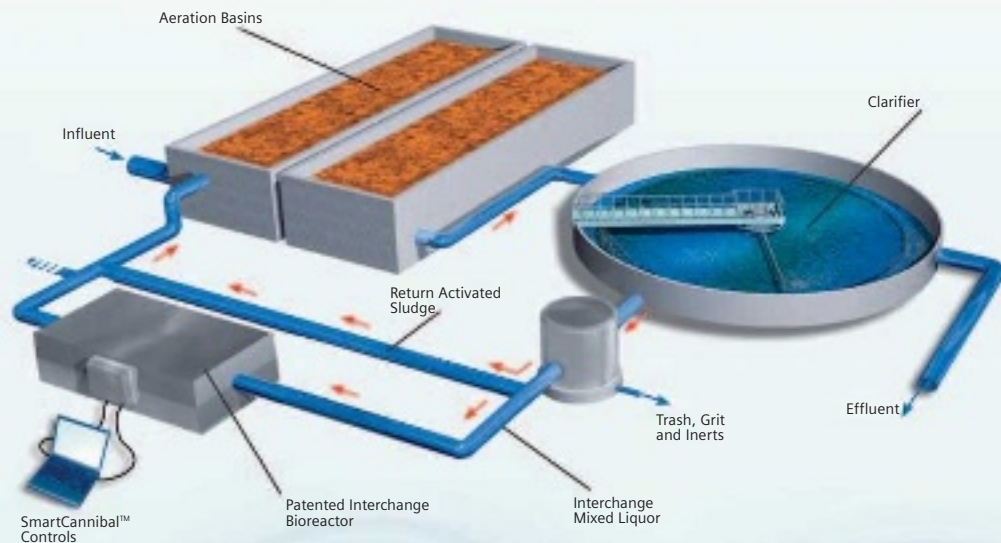
Complete integration of all mission-critical parameters along all three performance-critical dimensions: Vertically, letting information flow from the field to the management level. Horizontally, along the entire process chain, integrating not just components and software but also maintenance and monitoring. And along the life cycle, including emergency support, migration and modernization. It's not just nice to have – it's essential. Siemens Water Technologies delivers.

Giving you the  
widest array of  
technology  
choices available.

*We supply the world's water  
managers with answers.*

*From single products to entire  
systems. Coupled with integrat-  
ed services to make your plant  
operate safely, efficiently, re-  
liably. We're with you. And we  
provide you with the tools to  
succeed.*





*A revolutionary concept virtually eliminates the biological solids produced by activated sludge wastewater treatment systems – as well as the costs associated with disposal: Cannibal™ employs an interchange cycle flow between the aerobic sludge process and a specially designed sidestream bioreactor. Only trash, grit and inerts remain to be deposited. Another first – from Siemens.*

**Whatever** the task at hand, Siemens Water Technologies provides answers from a complete spectrum of solutions covering every capability and technology you might need. The integration of new members into our team puts us in an even stronger position to serve you. Take, for instance, filtration technologies such as MemJet™: immersed membrane bioreactor (MBR) systems that are useful in a wide range of municipal wastewater applications, or innovative answers for Biosolids Management like our outstanding Cannibal™ Process: it virtually eliminates the biological solids produced by activated sludge wastewater treatment systems, cutting sludge disposal costs. SIMATIC Process Control Systems and SIWA PLAN water management solutions help you operate your plant highly efficiently. These technologies are at the very forefront of the industry, as are our answers for UV disinfection and chlorination. These are just a few examples from a portfolio that gives you choices. Because where water is concerned anywhere in the world, Siemens is geared up to help you take care of it with the world's most trusted water technologies: **Control Systems, Davco, Davis Process, Dewatering Systems, Electrocatalytic, Envirex, General Filter, Jet Tech, Memcor, Microfloc, RJ Environmental, Simatic, SIWA, Stranco, Wallace & Tiernan, Zimpro.**

Some of the world's most exciting water projects.

We took care of them.

*To offer the best water technology, you need to constantly invent and innovate. We do – with a clear focus on our customers' requirements. The result: We're known for advanced technology, responsive service – and operational expertise. Have a look...*



**Proven capabilities.** We're partnered with municipalities all over the world to help them take full advantage of today's technological possibilities. Reliably carrying out projects that exactly fit the diverse range of requirements in the diverse world of water. Whether it's the biggest wastewater plant in the Berlin metropolis, the world's largest microfiltration plant, or the massive technological and logistic challenges that China's water experts must meet to address its exploding economy – we're helping our customers find the right solutions and make them work. Here are just some examples:

□ **Park Place Wastewater Treatment Plant, USA**

Situated in an idyllic landscape on the shore of beautiful Lake Oconee, Park Place, Georgia, has experienced a population boom in recent years. It is a popular retirement community, and luxury hotels attract guests with extensive golf courses. This meant unusual challenges when a new wastewater treatment plant was commissioned: It should be practically invisible, should spread no unpleasant smells – and it should be as small as possible, as real estate on Lake Oconee is expensive. A conventional sewage plant falls short of these requirements. So, in 2003 the town chose our cutting-edge MemJet® process. It found MemJet to be the ideal solution: The plant could go into service quickly, all reactor components are housed in an attractive structure, and the purified water is now used for irrigating the surrounding golf courses.



*All over the planet water managers and customers rely on Siemens technology for reliable, clean water supply and safe, sustainable wastewater treatment. Whether in the world's dynamic megacities or under difficult conditions in a developing country – if it is about municipal water, we're ready to take care of it.*

□ **Ruhleben Sewage Treatment Plant, Germany**


Ruhleben is one of the biggest and most indispensable treatment plants in the Berlin metropolis, processing 240,000 m<sup>3</sup> per day and serving 1.8 million people. So when it became necessary to modernize and upgrade the plant's process control technology, it was extremely important to achieve this without problems and unplanned downtimes. The solution came from Siemens: migration of the process control systems to a new state of technology, leaving proven operating practices, algorithms and software modules in place. The result: protection of investments through selective upgrades of control systems and considerable reduction of the risks inherent in restarting systems by leaving reliable software in place. Attractive reductions of testing and restarting costs, a flawlessly migrated process control without a single day of process interruption – and, most important: an extremely satisfied customer.

□ **Bendigo Water Treatment Plant, Australia**

Located in southeastern Australia and faced with a very challenging water supply, the Coliban Authority turned to Siemens to provide a unique treatment combination to meet existing and future drinking water needs: Siemens provided a submerged Memcor® membrane filtration system. Combining ozonation and biologically activated carbon, the world's largest microfiltration plant meets rigorous performance benchmarks and provides world-class water quality to the residents of Central Victoria. Performance tests established that membrane filtration reduces operating costs by 10-15% over the entire plant life cycle.

□ **Changi Water Reclamation Plant, Singapore**

Changi Water Reclamation Plant, with a capacity of 800,000 m<sup>3</sup>/day, is the first phase of Singapore's Deep Tunnel Sewerage System to meet the growing wastewater treatment needs of the island. Siemens provided highly efficient RJ odor control systems and Envirex aeration and clarification technology for primary and secondary wastewater treatment. A unique stacked clarifaction system design addresses the space constraints typical for Singapore. With 48 stacked clarifiers, it is the world's largest system of its kind.



Let's take care  
of water. Together.

[www.siemens.com/water](http://www.siemens.com/water)  
[water@siemens.com](mailto:water@siemens.com)

The information provided in this brochure contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

©Siemens 2005. All Rights Reserved

Order no. E 10001-WT1-A1-V1-7600  
Dispo-No. 21616 K-No. 3936  
FGK C-WTUF1520M02 WS 09055.  
Subject to change without prior notice