Siemens Water Solutions

Here where it matters most

siemens.com/water-solutions
Water is a resource and a byproduct of all that we do, a critical element in offshore, onshore, upstream, and downstream activities. The treatment and management of this water is becoming increasingly complex as you work to keep pace with global standards, energy demands, and environmental regulations.

At Siemens Water Solutions, we understand the challenges you face. Our core business is processing and treating water and wastewater for companies like yours. Our oil and gas business includes water treatment technologies, total water treatment solutions, and water treatment services. We address your specific needs, from simple products to complex, fully integrated solutions, from beginning to end.

What’s important to you is important to us. Our environment—clean water and environmental health and safety—and your bottom line—greater efficiencies and a lower total cost of ownership—matter most to today’s stakeholders. Rely on us to be your water solutions partner. Together, we’ll make real what matters most.

Where water and oil do mix

Whether we’re developing an integrated water treatment solution for the Reficar refinery in Cartagena, Colombia that treats both process water and wastewater, or delivering a Zimpro® wet air oxidation system to treat high-strength wastewater for Sinopec in the People’s Republic of China, Siemens Water Solutions has the experience and expertise to deliver the right water solution for you.

Dedicated to research and development, we test new technology and pilot studies in the field—like a new biological treatment system for oily wastewater reuse at a refinery in Saudi Arabia—and examine the success of new processes, such as a walnut shell filter’s success in raising flux rate both onshore and offshore. This allows us to continue to develop the next wave of technologies that will address the industry’s water issues.
Where it matters most to you

We address your water and wastewater treatment needs where it matters most to you, with environmentally responsible, reliable, and innovative solutions.

Siemens water solutions technologies

**Upstream Production**
- Offshore water injection solutions
- Offshore produced water treatment for discharge/reuse
- Onshore water injection
- Onshore produced water treatment for discharge/reuse

**Downstream Refinery & Petrochemical Operations**
- Wastewater treatment for discharge/reuse
- Process water treatment for refinery operations
- Spent caustic treatment

**Ethylene & Chemical Plant Operations**
- Spent caustic treatment
- Ethylene quench water treatment

**Produced Water Treatment**
- **Primary**
  - Corrugated Plate Separators/Interceptors (CPS/CPI)
  - Hydrocyclones (Liquid/Liquid; Solid/Liquid)
- **Secondary**
  - Dissolved Air/Gas Flotation (DAF/DGF)
  - Brise™ Pump
  - Spinsep™, Veirsep™, Combosel™ Systems
  - Induced Air/Gas Flotation (IAF/IGF)
  - Hydrocell™, Quadricell™ Systems
  - PerforMedia™ Oil Removal Media
  - Revive™ Oily Water Membrane Systems
- **Tertiary**
  - Monosep™ Walnut Shell Filters

**Hydrothermal Treatment**
- Zimpro® Wet Air Oxidation (WAO)
- Wet Air Regeneration (WAR)
- Zimpro® Electro-oxidization (ZEO)
- Thermal Hydrolysis

**Oil/Water Separation**
- **Primary**
  - API Separators
  - Corrugated Plate Separators (CPS)
- **Secondary**
  - Dissolved Air/Gas Flotation (DAF/DGF)
  - Brise™ Pump
  - Spinsep™, Veirsep™, Combosel™ Systems
  - Induced Air/Gas Flotation (IAF/IGF)
  - Hydrocell™, Quadricell™ Systems
  - PerforMedia™ Oil Removal Media
- **Tertiary**
  - Monosep™ Walnut Shell Filters

**Biological Treatment**
- Petro® Membrane Bioreactors (MBR)
- PACT® MBR Systems
- PACT® Systems
- EcoRight™ Systems
Total cost of ownership

You know there's more—a lot more—to consider about water treatment and management than simple, upfront cost determination. So do we.

We'll assess the complete life cycle of your project and design and build features for operational savings. We're application-driven, so rather than generic answers, you'll get solutions that are tailored to you and your project specifications. The result is lower total cost of ownership and greater value over the operational life of your assets.

Risk management

By prioritizing water management, you're already mitigating risk. We'll take care of the rest. When you partner with Siemens Water Solutions, you ensure a proactive, cohesive system of risk management and prevention.

All of our products are risk assessed for safety, and our sales and execution teams proactively anticipate, identify, and analyze all types of risk and oversee initiatives to decrease those risks. If you're faced with the unexpected, we work closely with you to develop plans to tackle the challenge. Together, we'll reduce operational risk and liabilities.

“It's very conceivable that in the very near future, oil production could be a net provider of water.”

Tupper Hull, Western States Petroleum Association
Shared values

The oil and gas industry has very real, very specific water solutions needs. We understand those needs—and your business. Even more than that, we share your values.

Safety
With a proven track record of safety and reliability, we ensure that all employees are protected against occupational risks. Our field technicians are fully trained to meet every operating, safety, and environmental requirement within the oil and gas industry. "Safety first" is not just a slogan—it is the way we operate at every function and every level.

Innovation
Siemens Water Solutions stands committed to more efficient water management and advancing technological progress in the field. With a research and development team whose sole focus is on oil and gas applications, we work tirelessly to develop new ways to reduce life cycle costs, decrease energy consumption, minimize waste, and reuse water.

Environment
Our goal is cleaner water—water that gets used, rather than wasted. With expertise in environmental regulations and user requirements, we’re able to guarantee regulatory compliance and provide the most efficient and reliable treatment processes to achieve maximum reuse potential. Our efforts ensure better business for you, and a better environment for us all.

Where today meets tomorrow
With a shortage of fresh water around the world, wastewater treatment and reuse are becoming even more critical. Siemens Water Solutions is dedicated to making advancements in this area, spearheading research efforts and pursuing new technologies that will reduce energy consumption and minimize water loss.
Service matters

Providing peace of mind to the oil and gas industry

Our Life Cycle Management services are aimed at the entire life cycle of a project from front-end engineering and EPC support to post-commissioning services during plant operations.

With Siemens as your long-term, day-to-day partner providing local service and global support, you reduce critical risk elements—especially unplanned downtime, life safety, and environmental impacts—providing your operations with a significantly smaller risk profile.

Siemens Water Solutions addresses the water management needs of the oil and gas production, refining, and petrochemical industries with the latest innovations in physiochemical, biological, and hydrothermal technologies.

Backed by more than 75 years of experience and expertise, hundreds of installations worldwide, and an active technology research and development program, we provide the technologies to meet our customers’ needs of performance, reliability, and environmental compliance. Our mission is to partner with customers to bring innovation, value, and management of risk from concept to delivery, and continue to meet customer expectations long after delivery, with the best range of service options available.