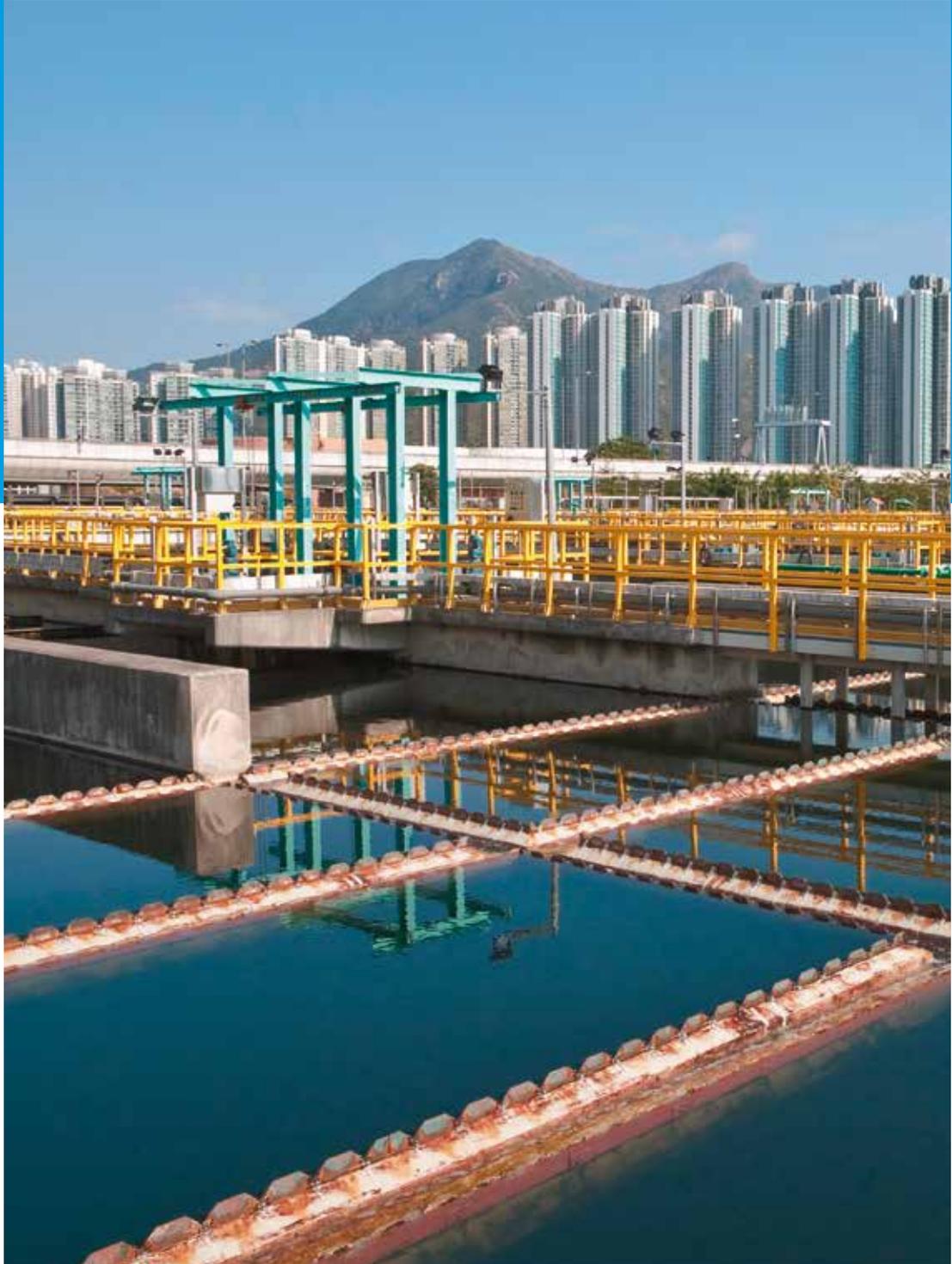


GE
Power Conversion

Electrical solutions for water industry



imagination at work



Drawing on a full understanding and in-depth knowledge of your processes and challenges, GE's Power Conversion business can help you increase the safety, efficiency, and reliability of your asset, whether you focus on desalination, on water transportation and distribution, or on wastewater treatment.



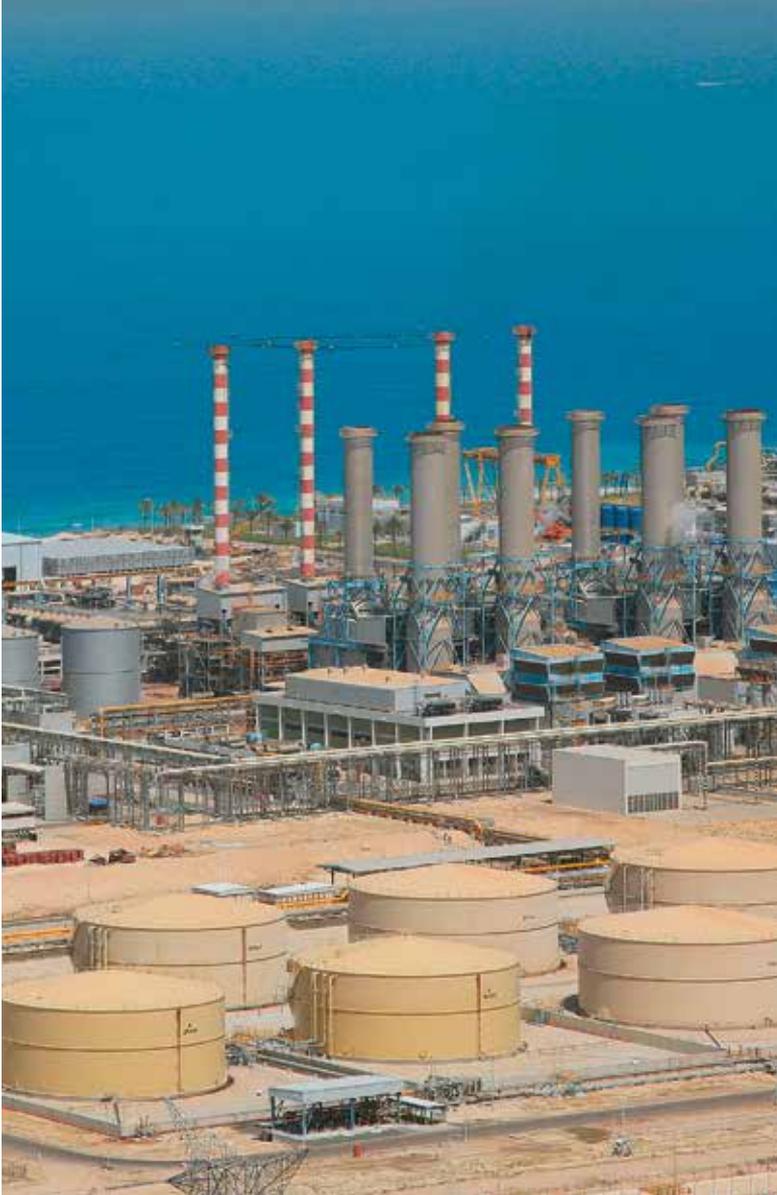
With a global population growing by some 75 million every year water is essential for sustaining life; a rise in food needs; rapid industrialization across the planet; climate change — all add up to an ever-increasing pressure on the global water resource.

Emphasis needs to be put on water conservation, water quality and new and more efficient ways to make water readily available.

Transforming salt water into fresh water through desalination; providing access to distant freshwater resources via upgraded water transportation and distribution; treating low quality wastewater to turn it into drinking water — all these solutions have one thing in common: they require energy.

Optimizing all these processes, and seeking out the most efficient solutions, are among the key challenges.

With more than a century of acknowledged industry achievements and technological breakthroughs behind it, GE offers the water industry a complete electrification package. Our solutions encompass a wide range of drives, motors, generators, automation, transformers, switchgear, medium and low voltage distribution, all designed to work together, with optimized interfaces for each solution.



Desalination

Desalination of salt water is the most energy-intensive way of producing fresh water. GE's customized solutions are designed to improve the efficiency of your processes, increasing their reliability and availability.

We offer a wide range of solutions:

- LV and MV systems, including distribution, transformers, converters and motors
- Automation and control
- SCADA system and reporting
- Grid modeling and harmonic calculations
- Grid quality solutions
- Energy recovery solutions

GE's expertise in the field of power conversion allows us to provide advanced technology to solve electrical and automation issues.



Water transportation

Water transportation encompasses pipelines that can carry water over hundreds and even thousands of kilometers. Medium and high power systems are essential to transport large quantities of water over such long distances.

GE has many years of expertise in MV drive trains, providing customers with solutions that address key needs:

- Water process control
- Improving the lifetime of the pipeline
- Preventing the “water hammer” pressure surge effect, thus reducing the sizing of mechanical parts
- Increasing availability in case of grid fault
- Raising efficiency across the transport velocity range

GE’s wide range of solutions and technical expertise allow it to help customers choose the best technical solution — one that combines reliability, availability, and efficiency, and which meets grid quality requirements.



Wastewater and sludge treatment, drinking water treatment and distribution

Wastewater and sludge treatment, drinking water treatment and distribution require a wide variety of drive train systems and automation solutions. GE addresses these market needs with a full range of converters and motors (both low voltage and medium voltage), and by designing solutions for the supervision, automation and control of the water processes.

GE supports its water customers with solutions that provide high efficiency in any flow range, as well as an improvement of availability in case of grid fault. Variable speed motors are the best solutions today to ensure energy efficient solutions and reduce the mechanical stress on waste water treatment equipment.

Technology for tomorrow's challenges

With a century of experience, GE's engineering teams are constantly working to enhance motor, drive and automation technologies to meet the industry's latest expectations. We focus on designing and implementing technologies using variable speed systems to improve reliability and efficiency and to optimize the design of each installation.

Global reach and response

Our highly skilled engineers offer broad-based experience and expertise on a vast array of strategic water resources at a global level. Our comprehensive customer support crosses the complete product life cycle, including spares and repairs, training, routine service contracts, breakdown support, and upgrade/enhancement projects.

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