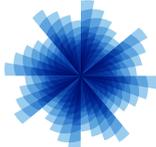


Water Treatment for the Power Industry

Providing reliable desalination and water treatment solutions to ensure optimal operation



IDE
Technologies

Your
Water
Partners





The Challenge

Water consumption by the power industry is forecast to double by 2035 due to the increasing global consumer demand for energy. On the one hand, the power industry is in need of a reliable and sustainable source of water, and on the other - reuse and water treatment solutions are required to meet the strictest effluent discharge regulations, as well as prove environmental sustainability.

The Solution

Reliable. Sustainable. Economical.

IDE has been delivering outstanding desalination and water treatment solutions for the power generation sector for over 50 years. Our solutions include SWRO and thermal desalination solutions for boiler feed and cooling tower make-up water, as well as advanced high-recovery RO and MVC treatment for Flue Gas Desulfurization (FGD) and cooling tower blow-down, up to ZLD. **Our end-to-end solutions meet the high availability requirements for mission critical water systems.**

The Results

- ✓ Sustainable, reliable and robust water treatment solutions
- ✓ Proven track record of providing high quality water for over 5 decades
- ✓ Complying with stringent environmental regulations

The Bottom Line

- **Reliable.** IDE is an industry leader in providing a dependable water source for boiler feed and cooling tower make-up water, using proven thermal and membrane technologies. Our design approach and state-of-the-art technology ensure continuous operation of mission critical water treatment plants at the lowest OPEX. Many of our clients have been with us for over 20 years, providing a living testimony to our uncompromising professionalism and exceptional customer care.
- **Sustainable.** IDE has a unique and viable approach to wastewater effluent treatment and offers Zero Liquid Discharge solutions, designed to meet increasingly stringent regulations.
- **Economical.** IDE's solutions deliver superior performance with low energy and chemical consumption. Our plants are designed to deliver high quality water at the lowest life-cycle cost to the owner.

References

SDIC Tianjin

Location: Tianjin, China
Capacity: MED 200,000m³/day
Commissioned: 2010, 2013

Sarlux Desalination Plant

Location: Sardinia, Italy
Capacity: MVC 17,280 m³/day
Commissioned: 1999

Tutuka Power Station

Location: South Africa
Capacity: MVC 1,200 m³/day
Commissioned: 1987

Guacolda Energia

Location: Huasco, Chile
Capacity: MVC 840 m³/day
Commissioned: 2015

Numerous Chilean Energy Companies

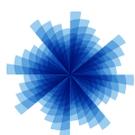
Location: Chile
Capacity: MVC 600-1,920 m³/day
Commissioned: 1999-2015

The Tianjin SDIC project - China's largest desalination plant

China's State Development and Investment Corporation needed a reliable and sustainable supply of clean water near the Tianjin power plant, 200km northeast of Beijing. The plant provides high quality drinking water for the local population, as well as industrial boiler make-up and process water for the power plant. The Tianjin Power Plant is a mega-size engineering system composed of a power plant, seawater desalination plant and salt production from brine, and is managed as an integrated system in which all three parts are interdependent on one another.

Highlights

- Reduced atmospheric heat discharge - the system is powered by waste heat generated by the Tianjin SDIC electricity plant, thereby reducing costs and minimizing the discharge of heat from the plant to the atmosphere
- Table salt production - using a new technology, the system recycles post-desalination waste brine to evaporation ponds for production of pure table salt
- Reduced environmental impact - a unique closed seawater circulation technology eliminates dependence on external water resources
- Trusted long-term partnership - after the successful installation of the first 4 units, SDIC selected IDE to expand the desalination plant to reach a total capacity of 200,000 m³/day



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IDE - Over 50 Years of Experience

A world leader in desalination and water treatment solutions, IDE is at the forefront of the development, engineering, construction and operation of enhanced desalination, industrial water treatment and water reuse facilities. IDE's headquarters are in Israel, with offices in the USA, China, India, Chile and Australia, facilitating client partnerships across the globe.

- Innovative water treatment technologies that provide our clients with end-to-end solutions
- Developed some of the most advanced membrane-based and thermal solutions
- Designed, built and operates some of the world's largest desalination plants
- Successful implementations in more than 400 plants in over 40 countries



**MIT Technology
Review 2015 -16**

50 Smartest Companies



**2016 Fortune
Change the World List**

2nd place

