

China's Largest Desalination Plant

China's SDIC (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. IDE's Multi-Effect Distillation solution is a win-win concept. The Tianjin Beijing 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 and reach a total capacity of 200,000 m³/day





"IDE's MED technology has enabled us to realize an environmentally-friendly power-seawater-desalination-salt production model. This helps us to minimize our environmental footprint while reducing our costs. We are proud of this world-class design and believe that it will serve as a model for other power plants throughout the world."

Mr. Guo Qiqangang, General Manager of the Tianjin SDIC Jinneng Electric Power Plant

Overview

Capacity: 200,000 m³/day

Technology: Multi-Effect Distillation (MED)

Project Type: Engineering-Procurement-Construction (EPC)

Location: Hangu, Tianjin, China

• **Footprint**: 125m x 160m

• Commission date: 2010, 2013

About IDE

IDE is a world leader in water treatment solutions. We specialize in the development, engineering, construction and operation of some of the world's largest and most advanced thermal and membrane desalination and industrial water treatment plants.

IDE partners with a wide range of customers - municipalities, oil & gas, mining, refineries and power stations - on all aspects of water projects, and delivers approximately 3 million m³/day of high quality water worldwide.

IDE listens first and then brings technological leadership, proven reliability and consistent delivery to all our customers. Our highly experienced and dedicated team knows that strong partnerships lead to success and growth.



