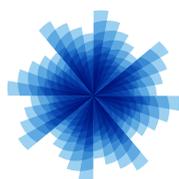


# YOUR PARTNERS IN THERMAL DESALINATION (MED/MVC) SUCCESS STORIES

Proven Expertise | Leading Technology | High Reliability



**IDE**  
Technologies

Your  
Water  
Partners

[www.ide-tech.com](http://www.ide-tech.com)

## About IDE

A world leader in water treatment solutions, IDE specializes in the development, engineering, construction and operation of enhanced desalination and industrial water treatment plants.

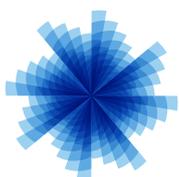
IDE leads the water industry with some of the world's most advanced thermal and membrane desalination plants. It has an especially well-proven track record in large-scale desalination, including some of the largest plants worldwide, (e.g. in China, India, US, Australia and Israel). IDE also provides modular solutions that allow for growth and IDE PRO GREENTM, a chemical-free reverse osmosis 'plant in a box'. In addition IDE has proven experience in ground-breaking industrial water treatment plants.

Working in partnership with a wide range of customers – municipalities, oil & gas, mining, refineries and power stations – on all aspects of water projects, IDE delivers approximately 3 million m<sup>3</sup>/day of high quality water worldwide.

IDE listens first to create the best solutions for your needs. We then bring 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.

IDE has teams in the US, China, India and Chile, as well as the Israel head office, enabling full customer partnership anywhere in the world.

IDE is jointly owned by the Delek Group (50%), a leading international energy and infrastructure group, and Alfa Partners (50%), a private strategic water fund controlled by Avshalom Felber, IDE Executive Chairman, and Amir Lang, former EVP of the Delek Group.



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400 plants. 40 countries. 5 decades



## Puerto Coronel, Nueva Ventanas, Tocopilla

A remarkable record for simple and economical operation with low energy consumption.

### Highlights

- **Reliability track record** - successful uninterrupted operation for decades
- **High availability** - >98%
- **Technological leadership** - optimized design for cost-effective, reliable operation

### Overview

Plant	Capacity	Customer	Project type	Location & Commission Date	Footprint	Technology	Product
Puerto Coronel	1,920 m <sup>3</sup> /day (22.2 l/sec)	Calbun Central Santa Maria Puerto Coronel	Engineering, Procurement Supervision (EPS)	Chile, 2010	10x20 m	Mechanical Vapor Compression (MVC)	Highly pure processed water (<5 ppm)
Nueva Ventanas	2x1,200 m <sup>3</sup> /day (27.8 l/sec)	Empresa Electrica Nueva Ventanas S.A.	Engineering, Procurement Supervision (EPS)	Chile, 2009	30x20 m		
Tocopilla	1x600 m <sup>3</sup> /day (6.9 l/sec)	AES Norgener	Engineering, Procurement Supervision (EPS)	Chile, 2013	7.5x17 m		
	1x360 m <sup>3</sup> /day (4.2 l/sec)		Engineering, Procurement Supervision (EPS)	Chile, 1996	9x12 m		

## Sarlux

A showcase MVC plant for the desalination industry

### Highlights

- **Optimized design** - highly cost-effective, reliable operation with low energy consumption
- **Option for use of steam power** - to further supplement electricity
- **Recognized by the global water industry** - a leading example of MVC desalination

### Overview

- **Capacity:** 17,280 m<sup>3</sup>/day
- **Project Type:** Engineering-Procurement-Construction (EPC)
- **Location:** Sardinia, Italy
- **Footprint:** 35m x 70m



IDE understands that what really counts is developing plants that reliably and consistently hit performance targets and delivering on the promises we make. To achieve this, we work in close partnership with our customers to deliver success and growth.

Here are some examples of IDE's leading MVC/MED plants:

## Gujarat Reliance Project

India's largest desalination plant

### Highlights

- **Technological leadership**
  - Low energy consumption
  - Low temperature process for high safety and low maintenance
  - Minimal pretreatment required
  - Overall high efficiency and reduced costs
- **Reliability** - continuous successful operation for more than a decade
- **Easy operation with low operating costs** - inherent stability and automatic control reduce the need for labor and maintenance while maintaining high availability
- **Trusted long-term partnership** - After several successful installations, Reliance has selected IDE again to expand the desalination plant and reach a total capacity of 400,000 m<sup>3</sup>/day

### Overview

- **Capacity:** 160,000 m<sup>3</sup>/day
- **Technology:** Multi-Effect Distillation (MED)
- **Project Type:** Engineering-Procurement-Construction (EPC)
- **Location:** Jamnagar, Gujarat, India
- **Footprint:** 45m x 200m (4 units), 60m x 120m (4 units), 45m x 45m (1 unit)

## Tianjin SDIC Project

China's largest desalination plant

### Highlights

- **Waste heat utilization system** - 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
- **Co-production of table salt** - using a new technology, the waste saline brine is transferred to evaporator ponds for production of pure table salt
- **Closed seawater circulation mode** - a unique 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 m<sup>3</sup>/day

### Overview

- **Capacity:** 200,000 m<sup>3</sup>/day
- **Technology:** Multi-Effect Distillation (MED)
- **Project Type:** Engineering-Procurement-Construction (EPC)
- **Location:** Hangu, Tianjin, China
- **Footprint:** 125m x 160m

