



DOW FILMTEC™ at World's Largest SWRO Plant in Hadera, Israel



Since June 2010, the world's largest desalination plant has been operating in Hadera, Israel relying on Dow's reverse osmosis (RO) technology. The plant, located on the Mediterranean coast of Israel, 50 km north of Tel Aviv, is designed to supply about 20 percent of Israel's domestic potable water requirement. More than 53,000 DOW FILMTEC™ reverse osmosis elements are installed to produce up to 456,000 cubic meters of potable water per day from seawater (including the capacity extension of 88,000 cbm/d).

IDE selected DOW FILMTEC™ elements to meet the demanding needs of the SWRO process based on extensive pilot testing of new lower energy elements and also on the experience gained from the long-term performance of the more than 40,000 DOW FILMTEC™ reverse osmosis elements installed at the 365,000 m³/day SWRO desalination plant in Ashkelon, taken into service 2005.

Fast Facts

Country:	Israel
End-User:	H2ID
Membrane Type:	DOW FILMTEC™
End-user:	Cogeneration Power Plant
Total # of Elements:	53,000
Plant Capacity:	456,000 m³/day
Start-Up Date:	January 2010
Feed Water Quality:	42,000 ppm TDS, SDI 3
Product Water Quality:	<20 ppm Cl, <0.3 ppm B
Temperature Range:	15-32°C
Feed Pressure:	70 bar
Product Quality:	Potable water
Pretreatment:	Dual media gravity filters

Performance

Since the start up, the plant operates as per specification at an overall recovery of 42%.