



DOW FILMTEC™ Membranes Provide High-quality Water in Alicante



Since its start-up in July 2008, the Nuevo Canal de Alicante Seawater Desalination Plant is running with DOW FILMTEC™ membranes, providing habitants in the Alicante area with high quality drinking water. The plant is located at the Spanish Mediterranean coast and is designed to produce 65,000 m³/D of drinkable desalinated water.

Fast Facts

Name of Plant:	Nuevo Canal de Alicante Desalination Plant (Alicante II)
Country:	Spain
OEM:	UTE EXPLOTACIÓN IDAM ALICANTE II (JV INIMA + CONTRUCCIONES ALPI)
End-User:	MANCOMUNIDAD CANALES DE TAIBILLA
Membrane Type:	SW30HRLE-400 & SW30XLE-400i
Total # of Elements:	5,376x SW30HRLE-400 + 896x SW30XLE-400i
Plant Design Info:	7 trains; 128 pressure vessels per train; 6x SW30HRLE-400 + 1x SW30XLE-400i each vessel
Plant Capacity:	65,000 m³/day
Start-Up Date:	July 2008
Feed Water Quality:	~58-60 mS/cm; SDI < 2 at the RO inlet.
Product Water Quality:	~250 µS/cm
Temperature Range:	14-28°C
Feed Pressure:	65-70 bar
Product Use:	Drinking water
Plant intake:	A blending of open intake and underground galleries.
Pretreatment:	Sand filters + cartridge filters + dosage of antiscalant

Energy recovery system with PX or positive displacement device.

Performance

- The plant operates at an overall recovery of 43%.
- The RO process energy consumption is < 2.5 kWh/m³
- The final boron concentration in permeate is < 1 ppm achieved with only 1 pass and no feed pH increase (Boron level in feed > 5 ppm).