

DESALINATION PLANT: “ANTONIO LEON MARTÍNEZ CAMPOS-SAN PEDRO DEL PINATAR I” (2005)

Located at “El Mojón”, nearby “Salinas y Arenales de San Pedro del Pinatar” (Natural Park).

The output water is conveyed to the Cartagena Canal and to a connection with the “Vega Baja” area, implemented at a later time.

The desalination plant consists of: Seawater inlet, desalination facilities, desalinated water pumping, regulation tank, connections with both the Cartagena Canal and the “Vega Baja”, and reject brine effluent discharge.

Water processing at the plant is common to all MCT desalination plants and consists of:

- **PRE-TREATMENT.** Disinfectant, anti-clogging and acidifier dosage, pressure filtering on sand bed, dispersing agent dosage, residual chlorine reduction, and safety filtration prior to the actual desalination process.
- **DESALINATION.** The technology used is Reverse Osmosis, in which water flows through high pressure membranes, thus separating dissolved salts.
- **POST-TREATMENT.** Re-mineralization with Calcium Hydroxide and CO₂, and Sodium Hypochlorine dosage to achieve adequate levels of residual disinfectant.

Main features:

DAILY PRODUCTION	65.000 m ³
DESALINATION PROCESS	Reverse osmosis
PROCESSING LINES	9 units
INLET TYPE	20 horizontal drains
REJECT BRINE DISCHARGE	5.800 m pipe (1.400 mm Ø)
TOTAL INSTALLED POWER	15 Mva
ENERGY CONSUMPTION	4,22 Kwh/m ³
PUMPING OUTLET PIPE	7.500 m (800 mm Ø)
REGULATION TANK	65.000 m ³





DESALINATION PLANT: “SAN PEDRO DEL PINATAR II” (2006)

Located at “El Mojón”, nearby “Salinas y Arenales de San Pedro del Pinatar”, just by “Antonio León Martínez Campos” desalination plant.

The output water is conveyed to the Cartagena Canal and to a connection with the “Vega Baja” area.

The desalination plant consists of: Seawater inlet, desalination facilities, desalinated water pumping, regulation tank, connection with the Cartagena Canal, and reject brine effluent discharge.

Water processing at the plant is similar to that described for “San Pedro I” plant.

Main features:

DAILY PRODUCTION	65.000 m ³
DESALINATION PROCESS	Reverse osmosis
PROCESSING LINES	9 units
INLET TYPE	Open sea water intake
REJECT BRINE DISCHARGE	5.800 m pipe (1.400 mm Ø)
TOTAL INSTALLED POWER	15 Mva
ENERGY CONSUMPTION	3,75 Kwh/m ³
PUMPING OUTLET PIPE	8.000 m (1.100 mm Ø)
REGULATION TANK	65.000 m ³

