
Chadormalu Mining Project - Desalination Plant

Project Aim:

Desalination of hyper-saline underground water (i.e. one of the most challenging water recourses in Iran) by means of Iran's biggest mine Independency from pure water body sources belong to cites sounding it close to central desert.

Owner / Client:

Chadormalu Mining & Industrial Complex / Chadormalu Mining & Industrial Co.

Location / Completion Year / Duration:

Chadormalu - Yazd Province – Iran / 2012 / 6 month

Contract Type:

EPC

Represented Solution in This Project:

Main Solution:

- ◆ Desalination Plant (Delivering advance SWRO Technology - Employing High-Tech Pretreatment Unit)
- ◆ Industrial Waste Water Reuse (Desalination Brine Recovery)

Supplementary Solutions:

- ◆ Building and Infrastructure /Building and Shed
- ◆ Hydraulic Structure /Concrete Reservoir and Basins
- ◆ Pipe Line / 65 km Length, DN 500, GREV & PE, By means of Treated Water Transportation
- ◆ Pump Station /3 Huge Pump Station for Pumping 20,000 m³/day Pure Water to 130m Upper Level
- ◆ El and Inc. / all Electrical Panel (LV,MV,MCC), Represented by ABSUN MADAR CO.

Complementary Services:

- ◆ O&M Operation and Maintenance, representing more than 4 years O&M Services
- ◆ Procurement / Directly from 8 different country including 15 International Company
- ◆ Laboratory Testing Services / Over 15 time sampling for more than 25 Parameters

Employed Process and Technology:

- ◆ SCF - Self Cleaning Filter
- ◆ SWRO – Sea Water Reverse Osmosis



Fluid Characteristic:

	Influent	Effluent
	Raw Water	Desalinated Water
Capacity	40,000 m ³ /day	20,000 m ³ /day
TDS	18,200 and 43,500 mg/L	<500 mg/L

Strategic view:

	Current Situation	Future Development Plan
	Desalination Plant Effluent	Desalination Plant Effluent
Capacity	20,000 m ³ /day	25,000 m ³ /day
Recovery	50%	70%

Process Flow Diagram:

