

CASE STUDY

Containerized Water Desalination Plant

Peerless

END USER: Hospital

INDUSTRY of PURCHASER:
Oil & Gas

LOCATION: Libya

PROJECT DESCRIPTION:
Containerized water desalination
plant with Seawater Reverse
Osmosis Technology

SITUATION: The customer, an Italian multinational oil and gas company headquartered in Rome with operations in 66 countries, requested a water desalination plant solution to provide potable water to a specialist hospital in Libya.

CHALLENGE: The hospital's utility system is very old and deteriorated. Our customer was looking for a continuous potable water source to replace the interrupted potable water provided by the national network that is currently in place.

SOLUTION: Peerless provided a containerized water desalination plant to reduce the beach well water salinity to the desired level. Seawater Reverse Osmosis Membrane technology has been selected for this application, in addition to a remineralization chemical to adjust RO permeate water pH level.

PACKAGE:

- Multimedia & Micron Filtration
- Chemical Dosing Stations
- Reverse Osmosis Plant
- Remineralization

ENVIRONMENTAL BENEFITS:

- Peerless used reverse osmosis technology because it is one of the greenest solutions to treat contaminated water.
- SWRO brine water shall be routed to the sea without causing any environmental impact.

CECO ADVANTAGE: Peerless optimized the design of the potable water package using reverse osmosis simulation software before construction. A Seawater Membrane was selected to achieve the required potable water quality.