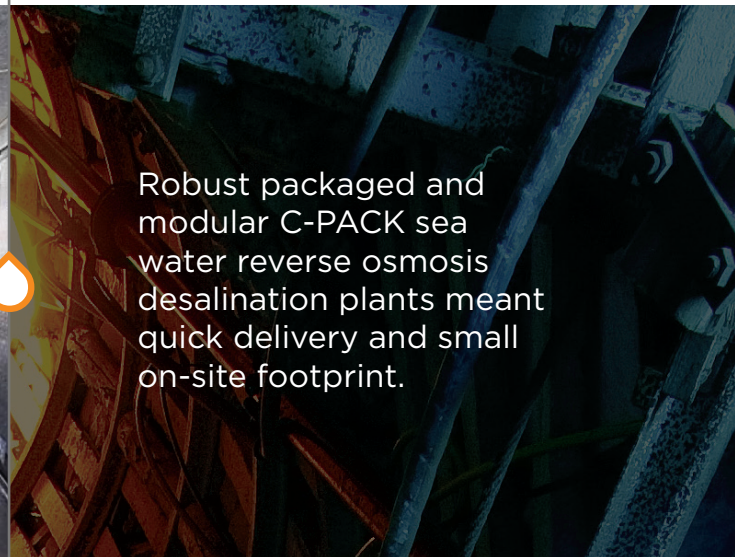


AL-DIWAN AL-AMIRI, KUWAIT

C-PACK SEA WATER DESALINATION PLANTS



Robust packaged and modular C-PACK sea water reverse osmosis desalination plants meant quick delivery and small on-site footprint.

THE CHALLENGE

PROXA was tasked to deliver potable water within a 6-week timeframe, designed to meet stringent client specifications and to occupy a limited site footprint within the hot conditions of the Arabic Gulf region.

OUR SOLUTION

PROXA designed, built, installed and commissioned a 2400 m³ per day packaged C-PACK sea water reverse osmosis (SWRO) desalination plant with pre-filtration. The plant was built in two identical streams with a daily capacity of 1200 m³ each.

HOW PROXA ADDED VALUE

Given our experience in modular and packaged solutions the C-PACK units were delivered in two 40 ft containers per stream, which required minimal on-site disruption to install.

The first sub-system of each stream is a fully integrated pre-filtration and chemical conditioning unit, while the second sub-system held the high-pressure pumps, membranes and electrical control panel. Even though our available footprint was limited, the C-PACK's compact design is economically optimised to perform all necessary operational and maintenance work safely and conveniently.

The C-PACK system builds on years of PROXA experience, resulting in a robust, fully integrated system to withstand extreme weather conditions. It comes standard within an insulated, air conditioned enclosure to protect the equipment and create favourable working conditions for the operators and maintenance personnel.

FEED WATER

Sea water

proxawater.com

PRODUCT WATER

Potable water

PERFORMANCE TARGET

Drinking water meeting World Health Organisation (WHO) quality standards

PROCESS

- ◇ Sea water intake system
- ◇ Filtration
- ◇ Conditioning
- ◇ High pressure pumping
- ◇ Membrane desalination
- ◇ Energy recovery system
- ◇ Potabilisation

PROCESS RELIABILITY

The C-PACK system maximises the lifespan and optimises the total cost of ownership of providing potable water from sea water. This is achieved through competent, proven design and high quality component selection.

Client: AL-DIWAN AL-AMIRI

