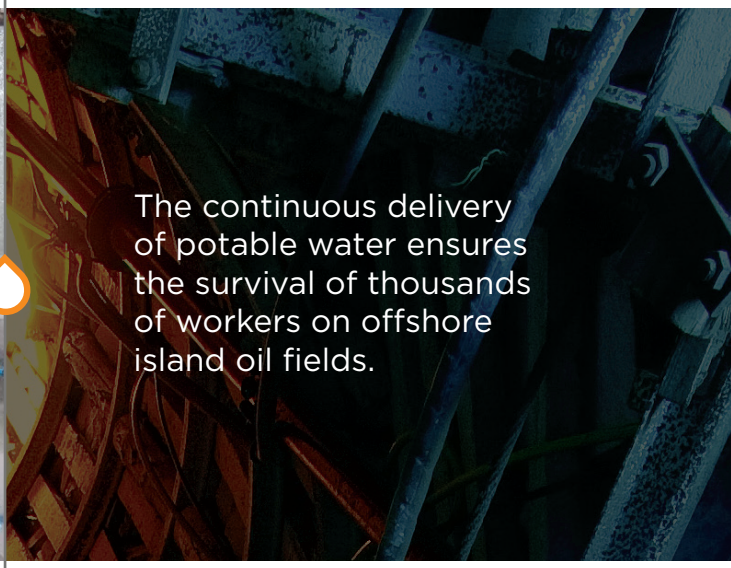
ZADCO - ADNOC, UNITED ARAB EMIRATES

C-PACK SEA WATER DESALINATION PLANTS



The continuous delivery of potable water ensures the survival of thousands of workers on offshore island oil fields.

THE CHALLENGE

The critical and continuous supply of potable water on the man-made offshore oil field of Zakum Islands in the Gulf Sea required advanced technical skills and well developed support infrastructure.

OUR SOLUTION

Given the remote nature of the sites, PROXA designed, built, installed and commissioned a number of advanced C-Pack sea water reverse osmosis (SWRO) desalination plants of various capacities – ranging from 30 to 640 m^3 per day. These robust and energy efficient packaged SWRO plants are designed to withstand the harsh weather and adverse environmental conditions.

HOW PROXA ADDED VALUE

Given the critical importance of securing potable water for the thousands of people living and working on the offshore oil fields, PROXA designed, manufactured and installed robust, harsh-weather-resistant and reliable C-PACK SWRO Plants.

The limited electrical power on the man-made islands further meant that we had to consider the most efficient equipment to minimise power consumption. While the limited site space made the packaged SWRO plants an obvious solution. What' more, PROXA added the intake system of the raw seawater to manage the risk and reliability of the overall system.

FEED WATER

Sea water

PRODUCT WATER

Potable water

PERFORMANCE TARGET

Drinking water meeting World Health Organisation (WHO) quality standards as well as Abu Dhabi National Oil Company (ADNOC) standards and regulations.

PROCESS

- Sea water intake system
- Filtration
- Chemical conditioning
- High pressure pumping
- Membrane desalination
- Energy recovery system
- Potabilisation

PROCESS RELIABILITY

Continuous operation and reliable production lead to repeat orders from the same client.

Client: ZADCO – ADNOC
(Abu Dhabi National Oil Company)