

# Alfa Laval ORCA Offshore and AQUA Blue Offshore Computer-Based Training (CBT)

Fresh Water Generator self-study, 3D simulator and self-assessment



Alfa Laval ORCA Offshore and AQUA Blue Offshore Computer-Based Training (CBT) are online/offline training tools that offer an introduction to the Fresh Water Generator (FWG) system layout, and provide an overall understanding of how to navigate the control system. It combines self-study in the FWG desalination system alongside general 3D simulations of the Alfa Laval ORCA Offshore and AQUA Blue Offshore, as well as a self-assessment.

As a computer-based resource, this CBT is available for your operators and other staff 24/7. It is intended as a complement to face-to-face training, which is always recommended for in-depth FWG operator training.

CBT helps address the challenge of keeping the operators and staff on duty fully updated and trained, no matter where or when.

# Benefits

- Confidence
- Development and assessment of staff FWG skills
- Training availability 24/7
- Training availability regardless of location

#### **Content overview**

- General knowledge of FWG
- Introduction to ORCA Offshore and AQUA Blue Offshore
  and its components
- Simulated basics of ORCA Offshore and AQUA Blue Offshore operation.

#### **3D Simulator**

The computer simulation provides a practical way to become more familiar with the components, flow-chart and control system as a whole. It presents a typical installation of the system in 3D, showing its form and functions. By creating an understanding of how everything works together, it can increase preparedness for actual operation on board.

### Self-assessment

The final part of this CBT is a self-assessment, with questions covering FWG system in general and ORCA Offshore and AQUA Blue Offshore. The self-assessment will:

- Generate random questions each time
- Test staff skills to discover what has been learned
- Document results in a printed training report

### **Recommended computer specifications**

Processor: Intel<sup>®</sup> Core<sup>™</sup> i5 | RAM: 8 GB | Hard drive: 240 Gb | Graphics card: GeForce, minimum 2 GB RAM | Monitor: Full HD (1920 x 1080)

# About ORCA Offshore

Fresh water is one of the main utilities required on board any offshore facility. Alfa Laval equipment is designed for automatic PLC-controlled operation with continuous control and monitoring of fresh water quality. Built using titanium and other seawater-resistant materials, the generators feature a simple, compact design that ensures long working life and low operation and maintenance costs. Vacuum vapor compression FWGs are a simple, efficient method of producing a constant supply of high-quality fresh water for both drinking and use in processing. Using the vacuum distillation process, they convert seawater into fresh water using electricity, but with only minimal power consumption. The process ensures fresh water with salinity levels below 5 ppm.

### About AQUA Blue Offshore

AQUA Blue Offshore is a thermal vacuum distillation unit, that converts seawater into high quality fresh water by mean of an evaporation process where it utilizes waster heat or steam. AQUA's optimized process cuts seawater needs in half, which minimizes pipework and allows the installation of smaller seawater pumps. This in turn reduces installation costs, fuel consumption and CO2 emissions. AQUA Blue Offshore makes use of 3-in-1 plate technology, which enables desalination in a single plate pack with one type of titanium plate.





Since the plate pack also contains the process vacuum, AQUA Blue Offshore has no outer shell and is smaller than other fresh water generators. The plate pack slides open for easy access to the interior without an additional service area. The use of corrosion- and erosion resistant titanium, combined with an optimized process that inhibits natural scaling, ensures that AQUA Blue Offshore needs little maintenance. The system has been fully tested and proven for offshore installation and is designed to last the lifetime of the platform or installation.

#### How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com.