SUCCESS STORY

CUSTOMER

- CADAGUA
- Prime contractor: Preditec
- Amount: 67.000 €
- Implementation: 2013

PROJECT AND SOLUTION

On the back of its population growth and economic development, Oman's daily water demand has been growing by 2%- 3% per year. Demand has been notably increasing in the metropolitan area centered on Muscat, and the Government of Oman launched multiple IWPs to address the situation.

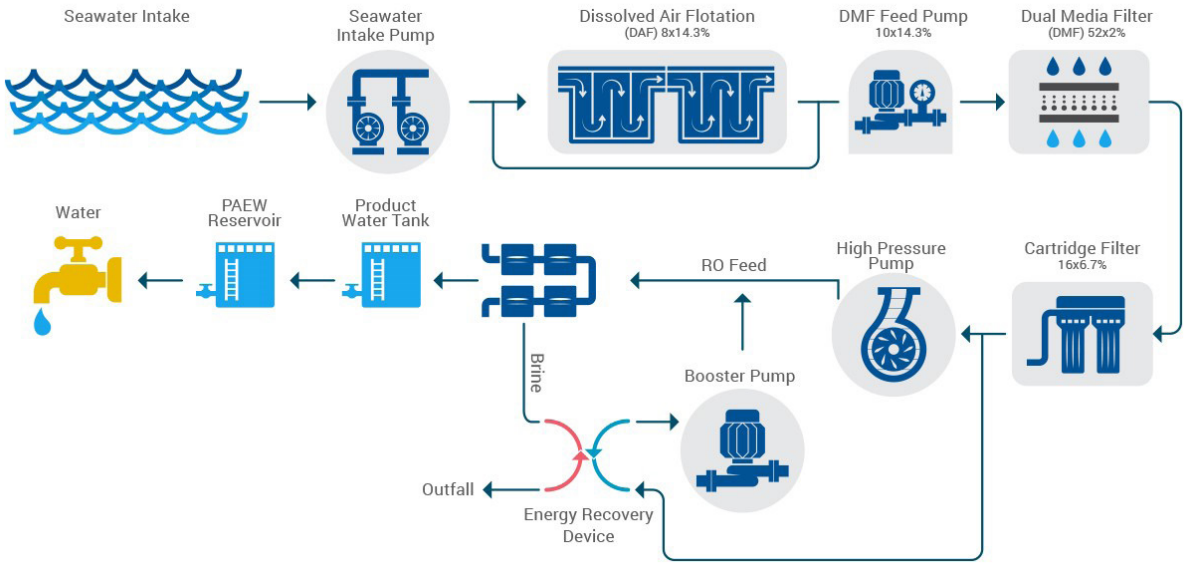
Ghubrah IWP being the first large-scale IWP in the stream, Oman Power & Water Procurement Co (OPWP) initiated a competitive bidding process in 2012. The shareholders were awarded the contract to build the Plant and hence Muscat City Desalination Company (MCDC) was established to undertake the Project. The plant has been established under a Build, Own, Operate (BOO) scheme, which enables it to be operated beyond the Water Purchase Agreement (WPA) term of 20 years, either by extending the WPA (if agreed by OPWP), or by selling the water into the market which may exist by that time.

The Plant is based on SWRO technology and one of the largest operational desalination plant in Oman. The SWRO technology employed at the Plant is a proven technology that has been implemented globally on numerous projects. SWRO process extracts water from the incoming seawater by pushing it under pressure through semipermeable RO membranes to produce pure and high quality water.

The solution put forward by Grupo Álava was a continuous monitoring system of equipment critical (either due to its size or because of the type of plant) to the continuous operation of the desalination plant. The system includes equipment such as seawater pumps and high-pressure pumps. In addition to full machinery diagnostic capabilities, the chosen system includes the integration of vibration processing parameters into the distributed control systems (DCS) and motor

control systems (MCS) to monitor and, where necessary, trip machinery.

The scope of the solution included: validating and integrating sensors supplied by equipment manufactures; supplying monitoring modules built into cabinets ready to be installed in the plant; engineering services for the monitoring project; configuring monitoring and communication systems; performing FAT, validation checks of the facility and wiring (installed by other suppliers) and SAT; providing training in managing the system; and, lastly, installing alarms in order to deliver a fully functional system to the client. Furthermore, remote diagnostic services of the monitored machinery are being provided from the Grupo Álava CMDT center, a benchmark for the whole of Europe.



Think Big

We aim to be a **leader**: providing clients with the latest technologies and accompanying them throughout their projects to deliver **value-added** products, backed up by experienced professionals and **excellent** service.

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