

Case story | Suez Water Technologies

SUEZ chooses oil-free Danfoss APP pump to power Bahamian RO plant retrofit

ZERO

contamination

The pump is lubricated with the pumped medium

hpp.danfoss.com

Avoiding environmental **risk of oil spills** in water application

When its customer, a resort in the Bahamas, needed to increase the capacity of its RO plant, it also wanted SUEZ Water Technologies & Solutions to reduce any risk of oil spills that might damage the hotel's coastal location. SUEZ replaced the existing positive displacement plunger pump with a Danfoss APP pump, whose only lubricant is the pumped medium.

SUEZ maintains hundreds of build-own-operate (BOO) plants around the world and has extensive experience in taking over much of the financial and operational risks involved in supplying fresh water for thousands of guests 24/7. When SUEZ retrofitted an existing BOO customer's RO plant in the Bahamas, it also mitigated the environmental risk of oil spills.

The challenge:

Increase plant capacity – and **eliminate** any possibility of **oils spills**

Back in 2012, one of SUEZ's BOO customers, a major resort on Paradise Island in the Bahamas, needed to increase the production capacity of its RO plant from 60,000 to 90,000 GPD.

In addition to other contract elements, the customer stated a concern that is increasingly common in environmentally sensitive coastal environments: make sure the plant is as clean as possible in general and reduce or eliminate any risk of oil spills specifically.



The solution:

Danfoss APP 24, that uses the **pumped medium for lubrication**

According to Gaddy Senatus, Field Service Manager at SUEZ, the company was familiar with Danfoss APP pumps from a variety of other installations worldwide and knew that axial piston technology eliminated the need for any lubricants.

“Reliability, long maintenance intervals, and energy efficiency are all critical to the success of our BOO contracts,” he says, “and Danfoss APP pumps and iSave ERDs perform well on all of these parameters. The fact that they need no lubrication beyond the pumped medium cinched the deal, as this completely eliminates any accidents with oil lubricants on the plant site.”

At the heart of the retrofit was the oil-free Danfoss APP 24 pump and the space- and energy-saving iSave ERD 40.



The results:

Trouble-free, **low-maintenance** operations for **more than five years**

After installation in 2012 the plant has run for over five years without interruption of service.

“Our BOO customers expect plants to run dependably. If there are any issues, they expect us to take care of them without affecting service,” explains Senatus. “Danfoss plays an important role in meeting these expectations. Their service and training are always helpful, and product reliability is outstanding. If and when maintenance is finally necessary, we can easily handle this onsite in hours, not days.”



About SUEZ Water Technologies & Solutions:

With 90,000 people on the five continents, SUEZ is a world leader in smart and sustainable resource management. We provide water and waste management solutions that enable cities and industries to optimize their resource management and strengthen their environmental and economic performances, in line with regulatory standards. To meet increasing demands to overcome resource quality and scarcity challenges, SUEZ is fully engaged in the resource revolution. With the full potential of digital technologies and innovative solutions, the Group recovers 17 million tons of waste a year, produces 3.9 million tons of secondary raw materials and 7 TWh of local renewable energy. It also secures water resources, delivering wastewater treatment services to 58 million people and reusing 882 million m³ of wastewater. SUEZ generated total revenues of 15.9 billion euros in 2017.

For more information: www.suezwatertechnologies.com

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