

ENGINEERING TOMORROW

Case story | HP Watermakers

HP Watermakers innovates reliable SWRO solutions with Danfoss APP pumps

Zero-worry SWRO with Danfoss APP pumps

Highlights

- Automated reliability and efficiency
- Smart integration with onboard navigational systems

Based in Milan, HP Watermakers designs and manufactures an innovative range of SWRO plants for marine and onshore applications. The Italian company has developed a number of pioneering solutions that increase automation and integrate with their own and third-party applications to optimize performance and simplify maintenance – all with the goal of delivering fresh water on demand. Danfoss APP pumps are HP Watermakers' first choice for pumping water at high pressure. hpp.danfoss.com

The challenge:

Design **efficient SWRO systems** with don't-make-me-think reliability and support

HP Watermakers serves the marine, military, offshore and onshore segments, and not least the high-end yacht market. The third-generation company is owned by a family of problem solvers who are willing to try new ways of solving old challenges.

Most of the Milanese firm's innovative energy goes into making SWRO as reliable and efficient as possible – and it is here that Danfoss APP pumps play an essential role in their continuing success.



"All of our customers want the same thing, fresh water with no worries," explains co-owner and sales manager Gianni Zucco. "That's why we invest heavily in R&D and are very selective about the components we choose. And that's why we needed to find a better solution than the triplex pumps that many of our competitors still specify for SWRO. They might be cheaper initially, but they require maintenance after just 500 hours, lots of spare parts, and far too much loving care."

The solution:

A range of groundbreaking, connected, and extremely reliable systems powered by Danfoss APP high-pressure pumps

Back in 2003, HP Watermakers took a major step forward with fully automated SWRO systems that quickly proved popular with customers.

"On a ship or yacht, there are many systems that need attention and maintenance. By automating the SWRO water maker, we made things much simpler for operators. All they needed to do was start or stop the system. The Danfoss APP pumps were ideal for these automated systems. In addition to their unmatched reliability and compact footprint, they are well suited for remote flow control and require very little maintenance."

But HP Watermakers was not done innovating yet. In 2019 they made another technological breakthrough when they became the first SWRO system to integrate with the navigational systems that dominate marine markets.

"Our Part-NET interface was a game-changer," says Mr. Zucco. "Now, for the first time, captains and crews can get complete insight into all important operational parameters for their SWRO system on multi-functional navigation systems from all the majors like Garmin and Raymarine."

"Danfoss APP pumps work exceptionally well with these smart systems," continues Mr. Zucco, "because you always know that the flow of your pump is proportional to its speed. So, it's simple to control pumps and flow - also from afar."

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The result:

Growing market share in key segments – and worry-free fresh water for demanding customers

Innovation has paid good dividends for HP Watermakers. Its automated, connected SWRO plants are especially popular in the high-end yacht market, but sales to hotels and homes in remote locations have also grown steadily.

"The last thing owners who have paid millions of euros for their yachts want to worry about is fresh water," says Mr. Zucco. "Our smart systems combined with Danfoss reliability make desalination simple. Owners and operators get the water they need with the convenience they are used to and expect. That's the spirit of our business model.





Based in Milan, HP Watermakers designs and manufactures an innovative range of reliable, compact, highperformance SWRO systems for marine, military, offshore, and land-based applications. The third-generation, family-owned firm invests heavily in R&D to provide users with highly reliable solutions that integrate with leading navigational systems and can be monitored and controlled through cloud-based applications.

For more information, visit https://hpwatermaker.it/en/

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