OPT and Danfoss Sign Cooperation Agreement

Ventura, CA and Nordborg, Denmark (February 2024) Ocean Pacific Technologies (OPT) and Danfoss High Pressure Pumps have agreed to cooperate around a new ceramic version of the advanced high-pressure axial piston pumps (APP).

Building on decades of Danfoss's successful track record in thousands of reverse osmosis desalination plants worldwide, the new ceramic axial piston pump will make this energy-saving technology available for even more SWRO use cases and extend its reach to other water industries.

According to John MacHarg, OPT's president, the new partnership has great potential. "A ceramic axial piston pump has been my dream for more than ten years. Over that time the advanced pump has come a long way and is now operating in dozens of full-scale seawater reverse osmosis plants around the world in modular parallel arrays and system capacities up to 30,000 mcd (8 mgd).

Image: 6 Danfoss APPs in Parallel

I'm looking forward to the newest version of these pumps not only to continue axial piston technology's disruption of the desal market, but also to pioneer exciting new applications in other areas."

Michael Bjorn, VP and head of High Pressure Pumps at Danfoss, agrees. "We look forward to this cooperation with OPT. With John MacHarg's exceptional expertise and our combined efforts, we are confident that we will be able to increase adoption of our axial piston pump technology within desalination and bring its energy-saving advantages to related applications in other industries that are also making progress on their decarbonization journeys."

Image: APPs and Ceramic Kits

The ceramic APP creates a more robust version of the original pump and brings the prefiltration requirements into alignment with the membrane industry standard of 5 micron nominal filtration.

For more information, please contact OPT at info@ocean-pacific-tech.com or Danfoss at jesper_bentzen@danfoss.com