



Membrane feed application with Floway Pumps

Vertical Turbine Pumps for the Desalination Market

Floway Pumps are designed for superior quality, reliable hydraulic performance, and extended operational life. Superior technical expertise and experience allows us to offer a wide range of highly corrosion resistant materials for a wide variety of applications in the reverse osmosis and multi-effect/flash distillation desalination process. With more than 80 years of experience, we are committed to providing a highly engineered, dependable product.

Trillium Desalination Process Pump — Specifications

Capacity	up to 35,000 USGPM (8,000 m ³ /hr)
Pressure Limit	1,500 psi (100 barg)
HP Range	up to 3,400 hp (2,535 kw)
Liquid Handled	various liquids up to 175° F (80° C)
Available Materials	bronze alloys, nickel alloys, Ni-Resist metals, austenitic stainless steels, duplex/super duplex stainless steels, titanium
Available Drivers	NEMA or IEC electric motor (with or without thrust pot), VFD capable, engine driven with right angle gear drive



Floway Pumps - desalination process pump

Typical Applications

- Membrane feed
- Brackish water well pumps
- Finished water boosters
- Raw water intake
- Distillate extraction
- Brine blowdown
- Brine circulation
- Aquifer storage recharge



The Vertical Turbine Pump (VTP) of Choice for Desalination Process

Floway Pumps are offered in a wide range of corrosive resistant materials, from austenitic stainless steels to duplex and super duplex stainless steel alloys. These materials provide excellent resistance to the typical challenges posed by stress corrosion cracking; pitting and crevice corrosion. We pride ourselves in providing industry leading low vibration levels.

Excellent Engineering Solutions

- In house hydraulic design
- Computational Fluid Dynamics (CFD) analysis
- Lateral and torsional rotor dynamic analysis

Extensive Testing Options

- Three test pits (max 45,000 GPM, hydro max 5,000 PSI, 3,400 HP)
- Various Non-Destructive Exams [NDE] (liquid penetrant, magnetic particle, ultrasonic)
- Positive Material Identification (PMI)
- Hardness testing (rockwell and brinell)

Global Certifications/Standards

- Construction standards (Hydraulic Institute, NSF61, CE Marking, DIN, ASTM, welding to ASME, and API 610)
- Electrical standards (NEMA, IEC, IEEE)

Coating Capabilities

- Two-part epoxy (NSF61 certified)
- Fusion bonded epoxy (NSF61 certified)

Benefits of the VTP

- The VTP is a popular choice for the many advantages it offers.
- Requires a small footprint
- Multistage options provide hydraulic flexibility
- High efficiencies on high head applications
- Low NPSHr
- No need to prime
- Simple piping system
- High bearing and shaft life

Manufactured and Designed in the USA

At Trillium Pumps USA we take ownership of our product and we understand the importance of quality and availability. Trillium Pumps are manufactured under one roof at our facility in Fresno, California, USA. This means that every step of the pump manufacturing process — from engineering and design, to fabrication and assembly — guarantees the highest quality product.

For access to pump curves and performance information visit the Trillium Pumps online selector program at: select.floway.com



Drinking Water System Component
ANSI/NSF 61
ALSO CLASSIFIED TO NSF/ANSI 372
MH61408

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Desalination Flyer
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