

ProSTEP™

Effluent Pumping Systems



for
Onsite
Wastewater
Collection
and
Treatment



Ideal for:

- Effluent sewers
- Drainfields
- Textile filters
- Sand filters
- Peat filters
- Mounds
- Trickling filters
- Aerobic units
- Wetlands
- Lagoons
- Effluent irrigation
- Other applications



Orenco
SYSTEMS
Changing the Way the World Does Wastewater®

1-800-348-9843 • +1 541-459-4449

orenco.com • vericomm.net

PROSTEP™ Protects, Transports, Filters

Thirty years ago, Orenco Systems®, Inc. pioneered and packaged the modern filtering pump vault for onsite wastewater collection and treatment. Today, more than 185,000 of Orenco's filtering vaults — including its patented Biotube® Pump Vault — are in service all over the world. They transport and filter wastewater from watertight septic tanks and dosing tanks, protecting “downstream” lines, drainfields, and other treatment systems. The Biotube® Pump Vault's patented* Biotube filter has several times the capacity of other filters and removes about two-thirds of suspended solids, on average.

“Easy-Access” Design Aids Maintenance

The Biotube Pump Vault's “easy-access” design allows service providers to remove the Biotube filter cartridge without pulling the pump or vault. And the float assembly's quick-release float stem and adjustable float collars make it easy to remove and adjust.

Easy access design

Quality Components Outlast Others

ProSTEP™ Effluent Pumping Systems are superior in quality⁵ and outlast other brands.⁶ Constructed of stainless steel, thermoplastic, and fiberglass, they're corrosion-resistant and durable, reducing lifetime system costs.

Advanced Controls Available

For a modest incremental cost, advanced control panels are available . . . control panels that give peace of mind to property owners, system designers, contractors, service providers, and regulators. MVP digital programmable panels allow easy, accurate setting of multiple parameters and the use of one type of float for all functions. VeriComm® remote telemetry panels are coupled with the web-based VeriComm® Monitoring System, which verifies, monitors, records, and communicates system operation round-the-clock, while remaining invisible to the homeowner.



* Covered by U.S. patents
4,439,323 and 5,492,635.
Foreign patents pending.

*simple,
dependable,
“We've had more than 500 Orenco ProSTEP Effluent
Pumping Systems in operation since 1987. They're
simple, dependable, and easy to maintain.”*

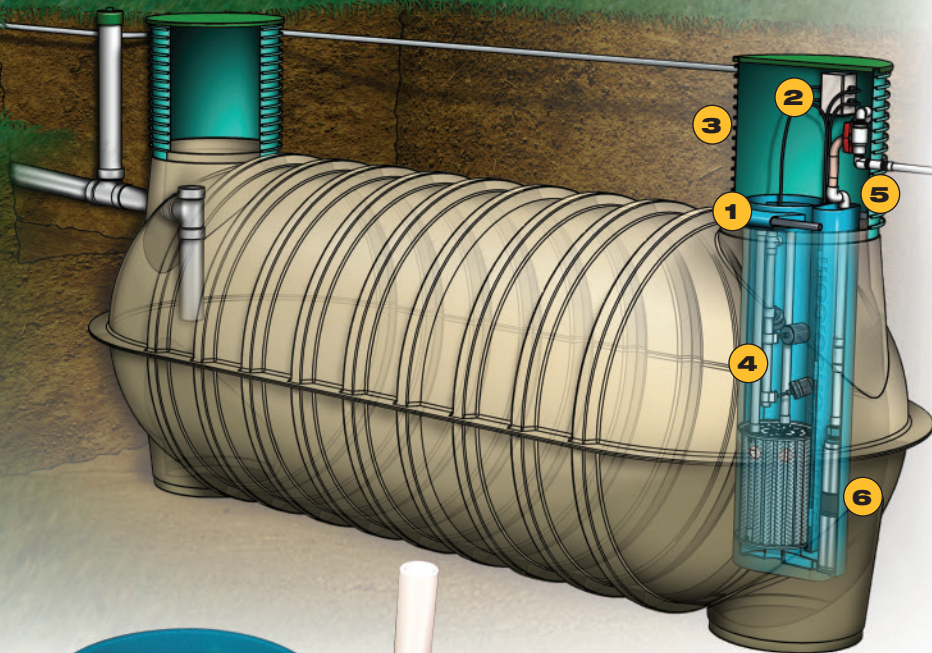
⁵ Orenco Product Fact Sheet, AFL-FT-2, 07/13.

⁶ North Carolina State University Cooperative Extension. “Pump Longevity and Troubleshooting,” accessed September 6, 2016, <http://www.ces.ncsu.edu/plymouth/septic/BO5Bannister.pdf>.

Larry Garwood
Diamond Lake Water & Sewer District
Newport, Washington

Complete, Lightweight Package

ProSTEP™ Effluent Pumping Systems are fully integrated packages with seven compatible components. No need to shop for parts and pieces. In-tank equipment is lightweight, comes preassembled, and installs neatly into our tanks and most others, saving time and money.



Orenco's Injection-Molded Fiberglass Tanks

are designed to be 100% watertight and each is water-tested. They're also designed to withstand 4-foot (1.2-meter) burial, empty, with groundwater to grade. Available in 1000-gal and 1500-gal sizes (3800-L and 5700-L).



1 Biotube® Pump Vault

- Pump vault comes in standard and custom heights
- Handle assembly aids removal of filter cartridge
- Filter goes longer between cleanings than other brands¹
- External flow inducer accommodates one or two pumps
- Removable float stem keeps floats in proper positions

2 Splice Box

- Two kinds available:
 - ~ Internal (see drawing)
 - ~ External (see photo)
- Advantages of the External Splice Box:
 - ~ Mounts outside riser, flush-to-ground
 - ~ Protects external wiring
 - ~ Easy to access, install, maintain
 - ~ Designed to be completely watertight; UL listed, NEMA 6p rated



¹. Orenco Product Fact Sheet, AFL-FT-2, 07/13.

ProSTEP™ Effluent Pumping Systems



4 Float Switch Assembly

- Provides level control
- Quick-release stem
- Adjustable float collars
- Variety of floats (including mercury-free) and float arrangements



6 Effluent Pump

- Life of 25+ years with routine cleaning²
- Lasts 3-4 times longer than conventional effluent pumps³
- Minimum 24-hour run-dry capability⁴
- Lightweight — about 25 lb (11 kg)
- Easy to service in the field
- Low power costs
- Noncorroding stainless steel construction
- UL and CSA listing for wastewater applications
- A variety of models available
- Five-year limited warranty



7 Control Panel

- Engineered specifically for wastewater applications
- Uses highest quality “touch-safe” components, NEMA 4X-rated enclosures
- “Smart” digital programmable panels and telemetry panels available
- UL and UL-C listed; standard configurations available to meet requirements of NEC Class I, Division 1 or 2
- Three-year limited warranty

3 Risers, Lids, and Accessories

- Allow easy access to tank
- Strong and lightweight
- Tamper-resistant
- Green and brown non-skid lids
- Photographic “Landscape Lids” also available
- Custom lid imprinting available for 24 in. (600 mm) and 30 in. (760 mm) sizes



5 Discharge Assembly

- Flexible design eliminates “hard plumbing”
- Typically includes quick disconnect (union or cam-style), ball valve, check valve
- Available for special situations (cold weather, deep bury, etc.)
- Provides easy access

² Elkton, Oregon.

³ North Carolina State University Cooperative Extension. “Pump Longevity and Troubleshooting,” accessed September 6, 2016, <http://www.ces.ncsu.edu/plymouth/septic/BO5Bannister.pdf>.

⁴ Internal tests.

Design, Engineering, and Support

Unmatched Technical Support

When you specify, purchase, install, or service Orenco products, you tap into a wide range of technical support services.

Distributor Network

Orenco's products are available from about 300 different Distributor locations. Distributors stock products, provide customer service, and help with system design, product takeoffs, ordering, shipping, and more. For a list of Distributors, go to www.orenco.com.



Orenco Technical Sales and Engineering

If there isn't a Distributor in your region, Orenco's Tech Sales and Engineering staff provide professional customer service, including plan reviews. When you call our toll-free number for information and assistance, you'll talk to a wastewater specialist with practical experience in effluent pumping system design, construction, and maintenance.



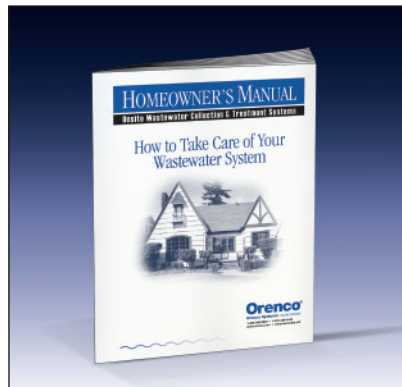
Design Aid Package

Our "Design Aid Package" and CD-ROM saves layout and drafting time. The CD-ROM includes more than 200 scaled AutoCAD® and PDF drawings, media gradation charts, and our General Specifications document. Most importantly, it includes our exclusive PumpSelect® software, which is designed to provide fast, accurate hydraulic calculations for sizing Orenco pumps. You can order a Design Aid Package from Orenco or you can quickly and easily

download the latest version of PumpSelect from the home page of our website — orenco.com — under "Technical Resources" / "Design Tools."

Supportive Literature

Each ProSTEP™ Effluent Pumping System comes with installation and maintenance instructions. There's also a "Homeowner's Manual" for the property owner (available in English and Spanish), with do's and don'ts for preventive maintenance. Spec sheets, product sheets, and additional color brochures are also available, by request.

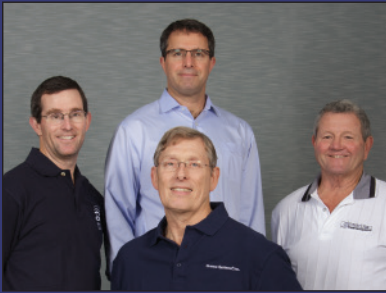


Web Sites

Orenco maintains two web sites

- www.orenco.com includes an extensive document library, allows you to submit questions, request literature, find a local distributor, and view and print product and system information round-the-clock.
- www.vericomm.net (coupled with our VeriComm® telemetry control panels), allows password-holders to manage alarms and monitor/control their onsite systems remotely. (See our online demo at www.vericomm.net/demo2/FlashDemo/demo.cfm; no password required.)

ProSTEP™ Effluent Pumping Systems



Orenco Systems is owned and managed by engineers who develop wastewater systems that work — systems based on sound science.

Clockwise from left:
Eric Ball, P.E., Jeff Ball, P.E., Hal Ball, P.E.,
(front) Terry Bounds, P.E.



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Orenco Systems®, Inc.

Carefully Engineered by Orenco

Orenco Systems has been researching, designing, manufacturing, and selling leading-edge products for small-scale wastewater treatment systems since 1981. The company has become an industry leader, with about 300 employees and with more than 300 points of distribution in North and Central America, Australasia, Europe, and Africa. Our products and technologies have been installed in more than 70 countries, all over the world.



Your health is our priority. At Orenco Systems, we are committed to "Changing the Way the World Does Wastewater®."



Orenco has a maintenance division and an environmental lab and employs dozens of scientists and civil, structural, agricultural, electrical, mechanical, and manufacturing engineers. Orenco's systems are based on sound scientific principles of chemistry, biology, mechanical structure, and hydraulics. As a result, our research appears in numerous publications and our engineers are regularly asked to give workshops and offer trainings.

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