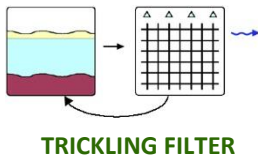


Firm: Orenco Systems Incorporated
www.orenco.com

System: **AdvanTex AX20 Mode 3**

Category:



Process: Wastewater enters a two-chambered septic tank for primary treatment and sedimentation. A pump in the second chamber of the septic tank pumps the effluent to the AX20 treatment pod, where it is sprayed over synthetic textile sheets. The textile is dosed so that it does not become saturated. The textile media maximizes the surface area supporting aerobic microbes, which nitrify the effluent. The effluent then drains to a splitter valve where the effluent is either recirculated to the first chamber of the septic tank or dispersed by gravity (30 inches below grade) to the dispersal component.



System: A two-chamber septic tank is required for pretreatment and for the anoxic treatment of nitrified effluent. The system does not replace the discharge components.

Flow Range: 500-1,500 gpd



Tests: NSF/ANSI 245 for denitrification
Suffolk County Pilot 1

Cost: \$12,000 - \$15,000 for septic tank and treatment equipment. Cost does not include dispersal system.



Energy: Pumps are normally no more than ½ hp and run 30 minutes/day. Estimated use is 14.4-30 kWh/month at an estimated cost of \$2.60 to \$5.00 per month.

Tanks: Concrete (Fiberglass option is available)

Venting: A 2-inch diameter vent is needed.



Footprint: The treatment pod is 20 SF . It can sit over a portion of the septic tank for a tighter fit.

Orenco Systems Inc.

814 Airway Avenue
Sutherlin, OR 97479

Telephone:

1 800 348 9843

1 541 459 4449

Local Distributor:

http://orenco.com/corporate/distributor_locator/



Depth: Unit is 31" high. Typical excavation depth needed is 8.33ft. Optional raised configurations allow for shallower installations.

Life Cycle: Pumps, 15 years with repairable part (Cost: \$200-\$600)
Float switch: 5-10 years (Cost: \$35+ labor)

Warranty: 3 years

Maintenance: Annually; pump-outs as needed.

- Notes:**
- Timer operation for surge control.
 - Seasonal use can be accommodated.
 - Optional telemetry and UV packages are available.
 - Uses a large septic tank, which allows longer residence time and reduces energy costs.
 - When electricity is cut, the system has storage for one day's additional use. A receptacle at the control panel for generator hook-up is recommended. Untreated effluent does not pass through the system.

Installations: Widespread usage throughout the USA.

Treatment:

| | TN /aver 50% | cBOD 25 mg/L aver/mon | TSS 30 mg/L aver/mon |
|---------------------|--------------------|--------------------------------|----------------------------|
| Performance mg/L | 15-25 | 2-9 | 3-10 |
| % | 50-70% | 97% | 99% |

Advantages:

- Small footprint
- Low energy use / maintenance
- Options for Ultraviolet disinfectant increasing reuse options
- Remote telemetry can enhance operations/maintenance
- Can be raised above ground level
- Simple maintenance

Disadvantages:

- Large composite fiberglass cover visible at ground levels
- Needs anti-floatation device where water tables are high
- Needs a generator for long electric blackouts