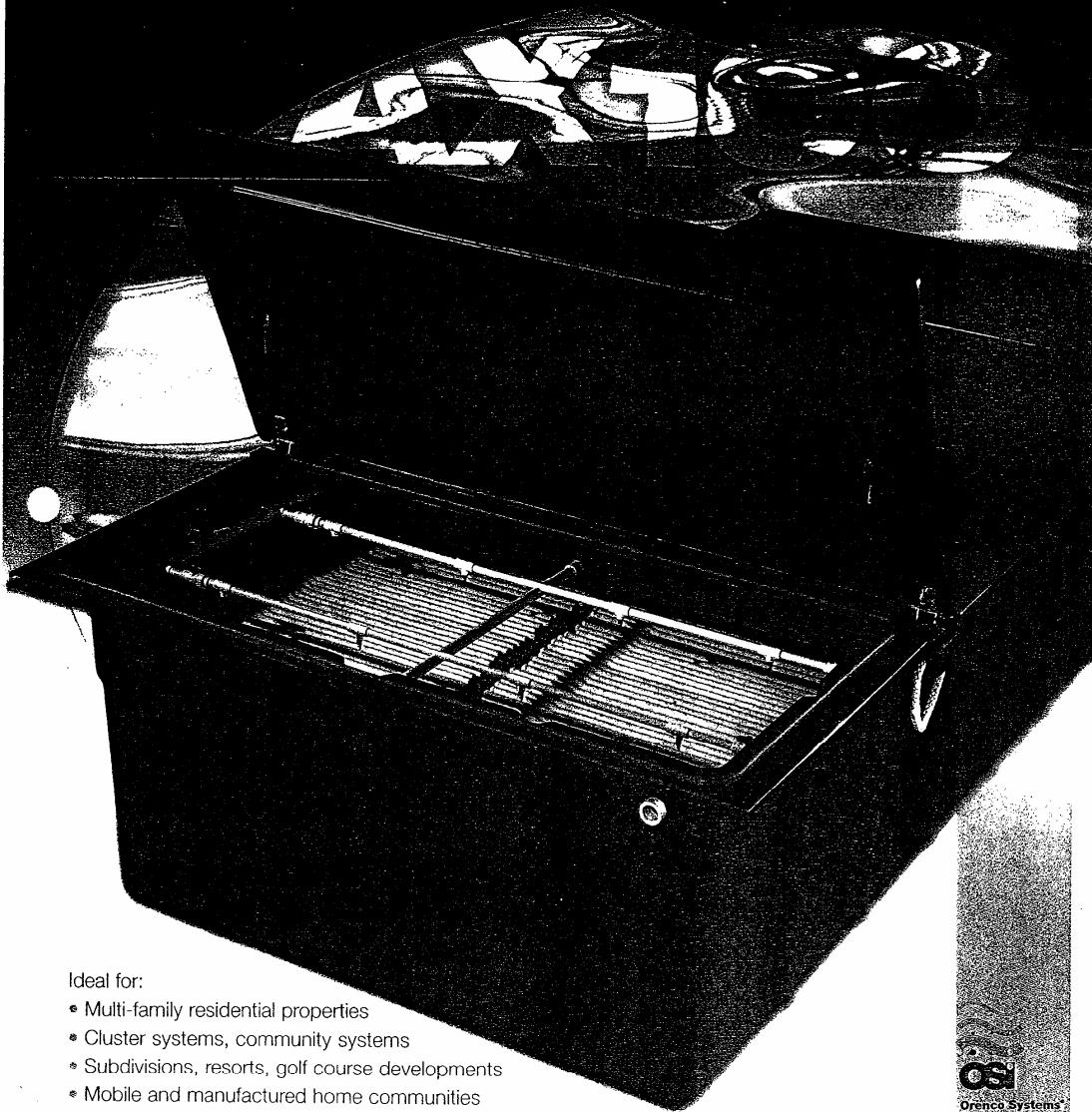


# AdvanTex<sup>®</sup> AX100 Treatment Systems

For Onsite Treatment of Commercial and Multi-Family Wastewater



Ideal for:

- Multi-family residential properties
- Cluster systems, community systems
- Subdivisions, resorts, golf course developments
- Mobile and manufactured home communities
- Parks, RV Parks, rest areas
- Truck stops, restaurants, casinos
- Schools, office buildings

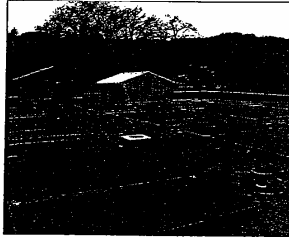
**CSI**  
Oranco Systems  
Incorporated  
*Changing the World  
One Drop at a Time*  
**1-800-349-9843**  
**oranco.com**

# AdvanTex® AX100 Treatment Systems

## Carefully Engineered by Orenco

Orenco Systems, Inc. has been recognized as a leader in the design, engineering and sales of advanced wastewater treatment systems. Our AX100 systems are designed to provide a high level of performance with minimal energy requirements and a long life span. Our systems are installed all over the world.

Orenco maintains a strong commitment to excellence in our manufacturing process. Our mechanical and electrical engineers, Orenco 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 conduct trainings.



### Oregon Riverside Community

12 AX100s are providing advanced secondary wastewater treatment in Hebo, Oregon, for a small community collection system that discharges directly into Three Rivers, after UV disinfection. The average annual design flow is 17,000 gpd with a peak daily design flow of 80,000 gpd to account for I&I contributions from the collection system. Effluent BOD<sub>5</sub> and TSS are averaging 3.1 and 5.8 mg/L, respectively.

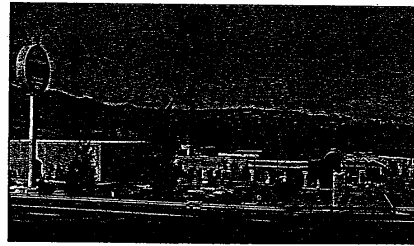


### Malibu, California Restaurant

10 AX100s at the top of a Malibu bluff are treating high-strength waste from a large (200+ seat) beachfront restaurant, 100 feet below. This high-visibility tourist destination requires reliable, odor-free operation. Visual inspection after one month confirms trouble-free start-up. Another system for an adjacent mobile home park, consisting of 20 AX100s capable of treating up to 60,000 gpd peak flows, is slated for installation.

### Canyonville, Oregon Casino, Hotel, and Convention Center

6 AX100s were added to an existing recirculating sand filter to provide an additional 30,000 gpd of treatment capacity for high periodic flows. The modification also allows the operator to rest the RSF's zones, if necessary. This fast, "plug and play" custom retrofit was accomplished without modifications to pumps, controls, or tankage. The system now accommodates the huge variance in recorded flows (as much as 50% more than the design flow) generated by this 145-room hotel, resort, and gaming center and produces effluent cBOD<sub>5</sub> and TSS of less than 10 mg/L.



**Orenco Systems®**  
Incorporated

*Changing the Way the  
World Does Wastewater®*

814 Airway Avenue  
Sutherlin, OR 97479

T • 541-459-4449  
1-800-348-9843

F • 541-459-2884

[www.orencos.com](http://www.orencos.com)

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*To order a complete, design/engineering package for Orenco's Commercial AdvanTex Treatment Systems, contact your local Commercial AdvanTex Dealer or call 1-800-348-9843 and ask for Systems Engineering.*

We've Written the Blueprint for the Decade

## The Product

Orenco's AdvanTex® Treatment Systems utilizing the commercial-sized AX100 can take raw wastewater up to 98% cleaner and meet the most stringent regulatory requirements. It can also reduce nitrogen significantly, depending on influent and configuration. And the AX100 offers all the benefits of Orenco's residential-sized AdvanTex Treatment Systems:

- Consistent, reliable treatment, even under peak flows
- Compact package, small footprint, for small sites
- Premanufactured package, including textile medium, for quality control
- Low-maintenance requirements; low life-cycle costs
- Production of clear, odorless effluent that's ideal for reuse

## The Program

It takes more than a product, however, to solve onsite wastewater problems. It takes a comprehensive program ... one that ensures a successful project every time and provides support for the life of the system. That's what Orenco Systems® has done.

We've engineered a program, not just a product.

### Orenco's commercial AdvanTex program includes ...

- Trained and authorized Dealers, Installers, and Service Providers
- Training and plans review for Designers
- A comprehensive project checklist for successful system design, installation, start-up, and follow-up
- Round-the-clock system supervision via Orenco's remote telemetry controls
- A commitment to ongoing O&M, signed by system owners
- Web-based tracking of site and performance data on Dealer extranet
- Ongoing manufacturer support through Orenco's Systems Engineering Department

*AX100 filter pods can be installed above ground or partially bermed, depending upon site conditions.*

\* NOTE: Covered by U.S. patent numbers  
6,540,920; 6,372,137; 5,980,748; 5,531,894; 5,492,635; 5,480,561; 5,360,556; 4,439,323.  
Additional patents pending.

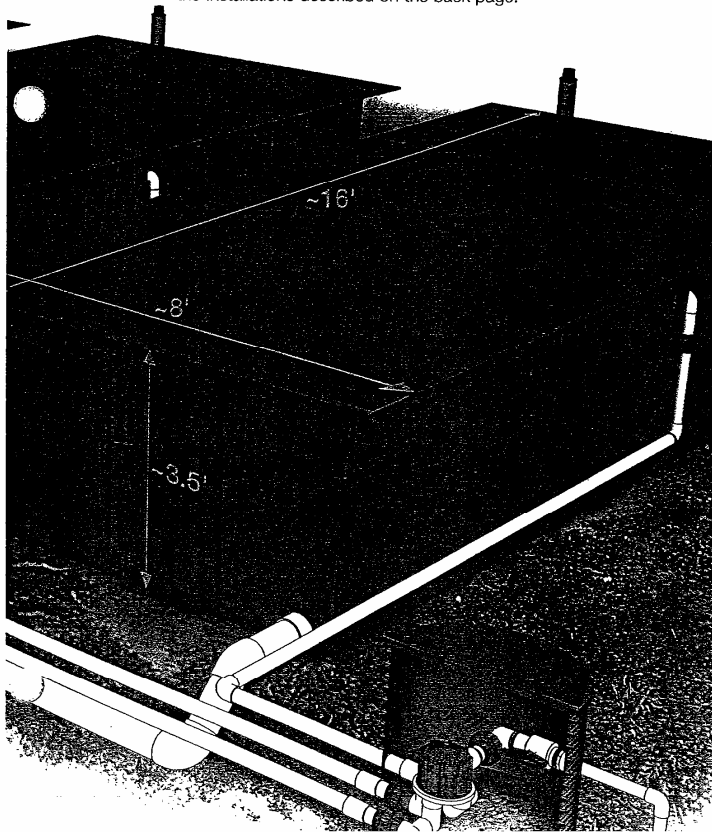
# Centralized Wastewater Treatment Industry

## Decades of Research, Thousands of Installations

Oreco's patented\* AdvanTex Treatment System is a recirculating filter that's configured like a recirculating sand filter — a packed bed filter technology that Oreco engineers have helped to perfect since the 1970's. Like recirculating sand filters, AdvanTex is reliable and low-maintenance. It is superior to other packed bed filters, however, in its serviceability and longevity.

It is also superior in its treatment media. AdvanTex uses a highly efficient, light-weight textile that has a large surface area, lots of void space, and a high degree of water-holding capacity. Consequently, AdvanTex Treatment Systems can provide treatment equivalent to that of sand filters at loading rates as high as 25-50 gpd/ft<sup>2</sup>. That means AdvanTex can treat high volume commercial and multi-family flows in a very compact space.

Our textile-based, multi-pass treatment technology has undergone third-party testing and evaluation to ANSI Standards. More than 4,500 residential-sized AdvanTex filters have been installed over the past several years. And about 200 of our new, commercial-sized AX100 units are now in operation, including the installations described on the back page.



### Textile Media

The treatment media is a highly efficient, light-weight textile that has a large surface area, lots of void space, and a high degree of water-holding capacity.



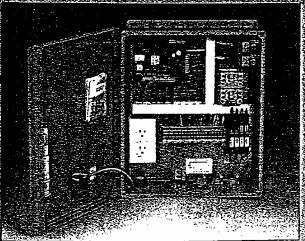
### Spray Nozzles

The treatment media is recirculated via specially designed spray nozzles.



### Laterals and Lids

Lateral access points and lids allow easy access to the media for maintenance and inspection.



### Telemetry Controls

Oreco's telemetry-enabled control panels use a dedicated phone line and ensure round-the-clock system supervision and real-time remote control.