CASE STUDY

SILVERHORN, CALGARY, ALBERTA

Custom Control Panel Handles Wastewater System at Upscale Development

Silverhorn is a luxury community in a country setting. The development's wastewater is treated by four AdvanTex® AX100 Treatment Systems, operated through a custom TCOM™ control panel by Orenco Controls™. Photo courtesy of Silverhorn Inc.

Just thirty minutes northwest of downtown Calgary, Silverhorn is an exclusive community that provides a luxury lifestyle in a country setting. It boasts large lots and offers clients a choice of five master homebuilders to design their custom home. Amenities include over four miles of walking trails and high-speed fiber optic internet availability.

Silverhorn is far enough outside the city that no gravity sewer service is available, so the developer worked with Onsite Specialties to design an AdvanTex® Wastewater Treatment System for the community. Onsite Specialties is an Orenco Systems® dealer with more than thirty years' experience in the Calgary area.

The treatment system currently consists of four Orenco AdvanTex AX100 units. At full build-out, a total of twelve AX100s will be in place to handle the wastewater from ninety-six homes.

An essential component of the system is a custom TCOM™ control panel, manufactured by Orenco Controls™, a division of Orenco Systems.

Controls Market

Project Overview

CALGARY, ALBERTA, CANADA

This TeleComm (TCOM)™ custom control panel installed at the Silverhorn community is a cost-effective, digital, integrated telemetry panel that features data logging, remote access, and control – all in real time.

This development's wastewater treatment system "is of exceptional caliber and sets a new standard in Alberta. Using advanced technologies, the system provides an ecologically sensitive alternative to traditional systems."

~ www.silverhorn.ca/discover/amenities

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Throughout the wastewater treatment process, this telemetry panel controls several pumps of varying sizes. It monitors multiple inputs from a variety of sensors and responds to each by turning pumps on or off, based on pre-programmed parameters. The panel also monitors the operation of the aerator fan motors and a chemical feed system.

An important feature of the TCOM panel is that it allows an operator to control the system remotely. The panel continuously monitors conditions in the treatment process and alerts an operator immediately via email and/or text if any alarm condition arises. The local visual and audible alarms can be delayed for a chosen amount of time to allow an operator to correct the situation before residents are disturbed.

One important function of the controls at Silverhorn is that they log all necessary data to provide process information about the wastewater system. That data is available in real time and also stored monthly in an exportable file. And for peace of mind, Orenco Controls offers a three-year limited warranty on the panel and tech support for the life of the wastewater treatment system.

According to the Silverhorn website, the development's wastewater treatment system "is of exceptional caliber and sets a new standard in Alberta. Using advanced technologies, the system provides an ecologically sensitive alternative to traditional systems."[1] A custom TCOM control panel by Orenco Controls, combined with AdvanTex wastewater treatment technology, makes it all possible.

Orenco Controls designs and manufactures control and monitoring panels for customers all over the world and in multiple markets, including residential, municipal, commercial, industrial, and OEM. These panels are used in diverse applications such as water, wastewater, and industrial processes.

Products range from simple alarms to custom-built control systems with programmable logic controllers, telemetry, and graphical interfaces. Orenco Controls' large production volume allows it to partner directly with leading manufacturers to install the very best components at significant cost savings for customers.

[1] *"Superior Infrastructure," Silverhorn Inc., accessed April 25, 2017, https://www.silverhorn.ca/discover/amenities.*

Controls Market

Components
Orenco Controls uses touchsafe components from leaders in the electronics industry: Siemens®, GE®, IDEC®, Square D®, ABB®, Cutler-Hammer®, Rockwell Automation®, and Danfoss®.

Support
Each panel from Orenco Controls comes with detailed wiring diagrams, complete installation and operating instructions, and toll-free technical support during installation.

Pricing
Because of the high volume of panels produced by Orenco Controls, it has a direct relationship with component manufacturers. This allows the company to produce small orders of custom panels at high-volume prices.

Limited Warranty
Every Orenco Controls panel is backed by a three-year limited warranty.

For more information on TCOM™ Remote Telemetry Control Panels, contact Orenco Controls™.

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Data used by Orenco to derive the representations and conclusions contained within this Case Study were current as of August 2017.