

SLUDGE HANDLING SYSTEM FAIRFIELD-SUISUN WWTP, CALIFORNIA, USA







Live-Bottom Receival Bunker

Cross Collector & vert. conveyor

Live-Bottom Silo

APPLICATION DETAILS

The Fairfield-Suisun WWTP facilities have undergone major renovation and expansion to keep pace with the region's population and economic growth, as well as technological advancements in the wastewater industry.

The new Organic Material Recovery Center from Lystek has the capacity to treat 150,000 tons of waste a year. It will process 14,000 tons a year from the FairfieldSuisun Sewer District, City of Santa Rosa, Central Marin Sanitation Agency, and other surrounding operations.

All of the material that goes into the recovery center will be recycled. The end product can be sold as a fertilizer, or can also be used in biological nutrient removal systems as an alternative carbon source.



SPIRAC PRODUCTS USED

- 1. Live-Bottom Receival Bunker with four U500 Shaftless Conveyors
- 2. Cross Collector OK620
- 3. Vertical Shaftless Conveyors two OK500
- 4. Shaftless Conveyor U620
- 5. Shaftless Conveyor U620
- 6. Live Bottom Silo with four U500 shaftless conveyors
- 7. Cross Collector OK500 conveyor



SOLUTION

SPIRAC in cooperation with Lystek was asked to provide a system that can receive and store sludge. Currently one live bottom receival bunker feeds the sludge silo.

The scalable system caters for future capacity growth, therefore all the groundwork to add a second receival bunker at a later stage was put into place. The system can handle sludge typically between 15 - 30% D.S. The Live-Bottom silo can handle a maximum volumetric flow rate of 2100yd³/hr. and has a total capacity of 310yd³ (240m³).

The project included supply and installation of the equipment.

FEATURES & BENEFITS

- Unmanned operation
- Completely odour and mess contained
- Low RPM/high strength spirals ensures minimal maintenance or operator intervention
- No more landfill costs
- End product can be sold



Horizontal & Vertical Sludge Conveyors



Live-Bottom Silo & Cross Collector

