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System Overview

DESCRIPTION

The SuperCeptor[®] S-2750 was designed for those facilities that want to take charge of their pretreatment system to meet wastewater discharge limits, solid waste disposal requirements and reduce their risk of exposure to escalating disposal costs. You can think of it as having a pumping truck permanently stationed on site providing daily disposal service, but with an environmentally "friendly" separation operation output of recyclable fats and oils utilizing the Big Dipper[®] component of the SuperCeptor system, and removal and collection of landfillable "dry" coarse solids utilizing the dual Big Flipper[®] liquids/solids separators.

Incidental solids from kitchen flows are easily trapped and removed by the Automatic Solids Transfer System. In addition to incidental solids, heavy loadings of coarse solids are removed by the dual automatic Big Flipper liquids / solids separator in the S-2750 SuperCeptor system.

The heart of the SuperCeptor system is the Big Dipper automatic grease and oils separator. The Big Dipper removes grease and oils from wastewater streams. The super-efficient separation process removes 98% of free-floating grease and oils, and automatically places them in a container. The oil/grease recovered is virtually water free, and therefore ready to be sold to a rendering company.

The SuperCeptor utilizes low shear design diaphragm pumps to transport the grease, oils, and solids from the remote separator quickly and without emulsification of the grease and oils. The pumps also allow the specifying engineer to site the SuperCeptor in the optimum location for convenience, traffic and site aesthetics, regardless of where the separation tank (or existing grease trap) is located.

The SuperCeptor has a brain, too, that ensures the operating cycle will perform without a hitch each time the system operates. Perhaps the most important feature for engineers and customers is the ability to upgrade the SuperCeptor system to meet specific operation loads of unique applications. The SuperCeptor system is both environmentally friendly and operation friendly.

BENEFITS

- Automatically removes coarse solids
- Automatically removes free-floating fats and oils
- Helps to reduce BOD levels and associated surcharges and fines
- Reduces operation costs versus paying for pumping service
- Removed dewatered coarse solids are landfill ready
- Removed greases/oils are recycle ready for rendering
- Removes up to 900 pounds of fats/oils and 2000 pounds of solids per day

FEATURES

- Rugged corrosion resistant construction
- Easy-access solids removal units
- Reliable automatic operation
- Easy to service modular design

APPLICATIONS

- Restaurants Casinos Schools Bakeries Cafeterias Hotels Nursing Homes
- Universities Food Processing Plants Shopping Centers/Malls Manufacturing Plants
- Commissaries Airports Resorts Hospitals Institutions Correctional Facilities

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Equipment Installation

Note: This equipment must be installed to comply with all applicable national, state, and local plumbing codes for your area. Installation should only be performed by a qualified plumber.

LOCATING THE UNIT

To minimize grease build-up in piping, a SuperCeptor system should be located as close as possible to the fixture it is servicing. The system should be visible and easily accessible for maintenance and inspection. **Be sure to check the Equipment Footprint Sheet for the clearances needed for installation.**

PLUMBING CONNECTIONS

The SuperCeptor system is packaged so that it is as "bolt-on" as possible. Aside from electrical power and given that the grease and oils pickup assembly is installed in the Separator Tank, the only connections that must be made are the Reflow Pipe to the Outlet Assembly, the Hot Water Supply lines, and the Lift Pump Hoses.

The Outlet Assembly uses a "no-hub" type connector to attach to the outlet of the Grease/Oils Recovery Unit. Reflow Piping should tie in to the SuperCeptor at the Outlet Assembly. Keep reflow piping as straight as possible. Use only "sweep" connections. Don't reduce the pipe sizing on the reflow piping. Don't install "P" trap on outlet connection of system. (Note: the system already has a internal gas trap). The lift pump hoses use "quick disconnect" type connectors on both ends.

The hot water supply line attaches to the Backflush Assembly just beyond the edge of the support frame on the lower shelf at the reflow end. The Backflush Line (provided) attaches to the Backflush Assembly at the center of the lower shelf on the "controls" side of the system. The male end of the hose will connect at the SuperCeptor while the female end connects to a mating connector on the Grease/Oils side of the Grease/Oils Pickup Assembly inside the in-ground separator tank.

The 2" flexible Lift Pump lines attach to the system with "quick disconnect" type fittings. The female ends clamp to the inlet side of the pumps while the male ends clamp to their respective connection at the Grease/Oils Pickup Assembly. The pump closest to the outlet/reflow end of the SuperCeptor corresponds to the solids pickup line and the other pump corresponds to the grease/oils pickup line.

The Hot Water Backflush hose and the two Lift Pump Hoses should run through one 12" pipe conduit with 1/8" turn elbows to the separator tank.

FILL UNIT WITH WATER BEFORE APPLYING POWER

SuperCeptor systems, equipped with an electric heating element, <u>MUST be filled with</u> water before energizing the power to the system. Failure to do so will result in the destruction of the electric heating element. These elements will NOT be replaced under Thermaco's Limited Warranty.

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