



Complete septage receiving station



The Combi® System automatically screens and dewateres septage



Combi®

Packaged pretreatment system for sewage and septage receiving

The Combi® pretreatment system is a totally self-contained, fully enclosed, headworks system that is designed for wastewater treatment plants. It integrates fine screening, screenings dewatering and grit handling in a single, pre-fabricated, stainless steel unit. Solids and grit are moved through multiple zones of operation via Parkson's proven, highly effective shaftless spiral technology.

All components are engineered for proper interface, low maintenance, optimal throughput and simple, reliable operation. The system is designed for sewage or septage pretreatment. A variety of options are available to meet site specific requirements.

Fine Screening

As the influent passes into the screening area, a perforated screen separates the solids from the flow. The screen is kept clean by rugged brushes mounted on the conveying spiral.

The screened liquid flows into the grit chamber for further treatment and the screenings are conveyed out of the tank to the dewatering zone.

Solids Dewatering

In the dewatering zone, the screened solids are dewatered by compression. The result is drip-free solids, significantly reduced in weight and volume for easy storage and fewer trips to landfill.

Grit Management

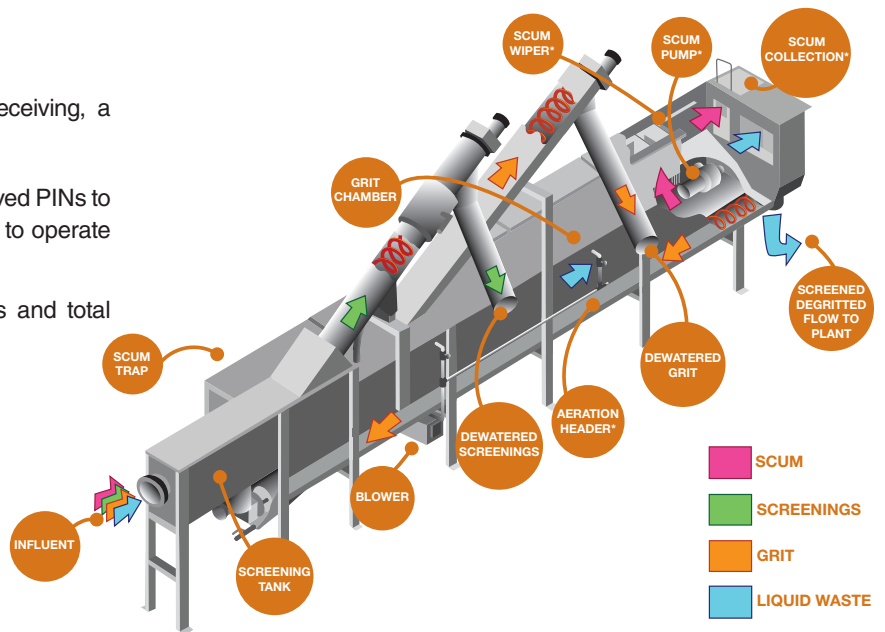
The pre-screened liquid then flows to the system's grit chamber where grit is allowed to settle. The settled grit is conveyed to dewatering via a spiral which runs the length of the chamber.

The dewatering spiral conveys the grit upward, moving slowly and intermittently to allow maximum drainage before discharge. The dewatered grit is then ready for disposal. The screened, degritt liquid flows over a weir to the plant for further treatment.

Special options for automated septage handling

When the Combi® System is used for septage receiving, a number of special options are available, including:

- Security system: allows only haulers with approved PINs to discharge into the unit, thus enabling the plant to operate the unit unmanned, 24-hours a day
- Magnetic flow meter: measures instantaneous and total flow. Data can be used for billing purposes
- pH and conductivity sensors: monitors loads and prevents undesirable materials from contaminating the treatment plant



Flexible options

While the basic components of the Combi® system are pre-packaged, there are several options that let you customize it to the particular needs of your plant.

Screen opening sizes

Opening sizes in the fine screen are available in 1/8" or 1/4" diameters to meet your requirements.

Aeration

Cleaner grit can be achieved by incorporating aeration into the grit chamber.

Scum removal

If scum and floatables are a major problem, the system can be fitted with a special scum trap mounted on the side of the grit chamber. Manual or automatic skimmers are available (optional).

Bagger cassette

For further odor containment and ease of screenings/grit handling, a bagging system is available.

Both designs can be equipped with a flash mixing and flocculation tank upstream of the inlet pipe. The chemical flocculant is added in a separate flash mixing compartment.

One source reliability from Parkson

The Combi® system is a modular headworks system, complete with controls that are ideal for pretreating sewage or septage. The system is delivered ready to run as soon as it is anchored in place, influent/effluent and power lines are connected, and the screenings and grit dewatering assemblies are mounted. Features include:

- Fabricated of stainless steel with rugged, abrasion resistant carbon steel spirals
- Up-front serviceability. The entire unit is accessible for easy inspection and maintenance. No underwater bearings
- System is completely enclosed to minimize offensive odors
- Unit can be installed above ground, below ground or partially below ground



Fort Lauderdale
Chicago
Montreal
Kansas City
Dubai

1.888.PARKSON
technology@parkson.com
www.parkson.com