

The Beast

Septage-FOG-Sludge Screening System
VFA-DM

SAVI



No Grinders
or Rock Traps
Required

Patent Pending

Septage Beast Property of Devonshire Island of Bermuda

The BEAST

The Next Generation of Septage, FOG & Sludge Screening



FOG Beast Property of Frederick Winchester VA

Screening septage, FOG or sludge comes with a long list of problems. The two biggest complaints are the inability to process heavy solids and long truck unloading times. These problems are the result of not having the proper equipment for the application. The Beast has been engineered specifically for septage and heavy solids loading applications.

Unique Tank Design. Standard tank designs promote solids sedimentation. The Beast has a two-stage tank with a curved, sloped inlet section that directs the flow into the screen cylinder. The hopper trough extends beyond the cylinder opening which reduces screenings recycle. The screen is supported at the drive end which eliminates the need for support arms and solves the ragging problem.

Dual Drive System. This feature enables the screen basket and auger to operate independently. The speed of the auger is increased to provide faster solids removal while the speed of the screen basket is decreased to improve capture efficiency.

Angle of Inclination. The drum screen component sits at a 25° angle inside the tank to enhance capture even further.

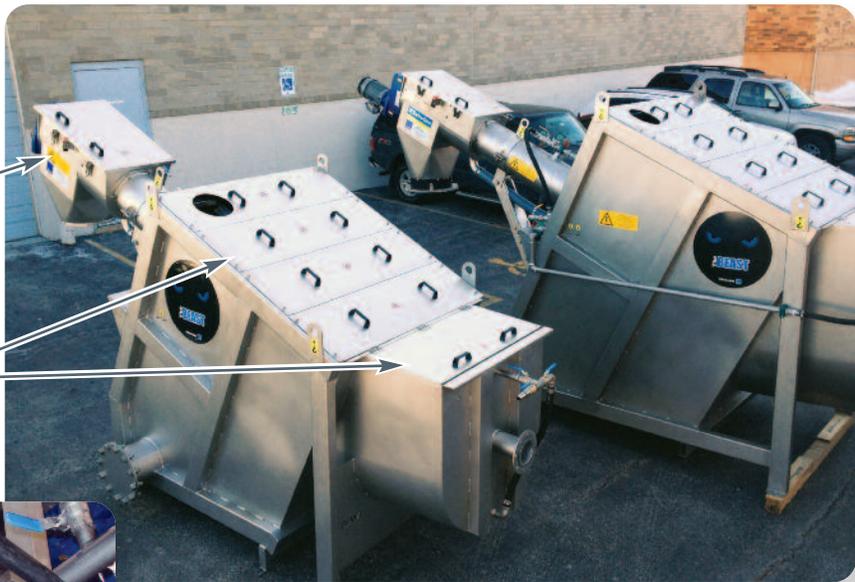
Sequence of Operation. As the pumped flow enters the tank, it is discharged directly into the rotating screen basket. As the screen rotates, solids are captured on flights or scoops that carry the solids around the basket and deposit them into the auger trough.



From the trough, solids are conveyed by the auger into the washing zone and then to dewatering. The percent of dryness achieved is dependent upon the solids concentration and the type of solids in the influent. Solids capture is 65% or greater based on the material in the flow.

Angle of inclination is 25°

Two-stage tank design narrows the inlet



Beast 1200 & 1400 side-by-side



Heavy duty industrial bearing assembly

Dual seal on the screen cylinder

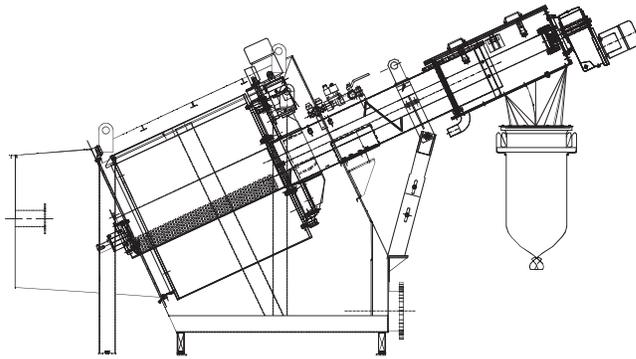
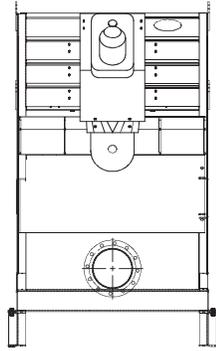


No support arms on the influent side of the screen drum

Trough extends beyond the screen opening

Features & Benefits

- 1 Engineered for large, heavy solids loading applications requiring fast processing** - Each feature solves a specific problem associated with these applications.
- 2 Proven Flo-Drum technology** - Over 300 installations worldwide.
- 3 Dual drive system** - Drum and auger are driven independently to optimize solids capture and removal.
- 4 Screen is mounted using a large diameter, single row, heavy duty industrial bearing assembly with a built in grease fitting** - Better resistance to axial and radial loading with fewer maintenance points.
- 5 Two-stage tank design narrows the inlet** - Solids are fed directly into the screen basket which prevents sedimentation.
- 6 The auger is run at a faster speed** - Removes the solid material faster.
- 7 The screen cylinder is run at a slower speed** - Produces better solids capture and cleaning of the screen.
- 8 Dual seal on the screen cylinder** - Prevents bypass and improves capture of fine material.
- 9 Angle of inclination is 25°** - Screen handles more solids and removes them faster.
- 10 Trough extends beyond the screen opening** - Reduces screenings recycle by preventing solids from dropping out of the front of the screen basket.
- 11 No support arms on the influent side of the screen drum** - Nothing to snag and accumulate long stringy solids.
- 12 Eliminates brushes inside the screen basket** - Less extrusion and manipulation of the screenings for better capture and less maintenance.
- 13 Additional monitoring options and security access may be added** - Controls can be as basic or as sophisticated as required.
- 14 Optional bagger is available** - Maintains a cleaner screenings area.



Specifications

Drum Screen OD	mm	800	1200	1400
		Septage Only	Septage-FOG-Sludge	Septage-FOG-Sludge
Capacity [at 3-4% solids content]	gpm	450	660	875
Screen type		Perforated plate	Perforated plate	Perforated plate
Openings	mm	6	6	6
Angle of inclination		25°	25°	25°
Wash water	gpm/psi	30 @ 60-70	43 @ 60-80	43 @ 60-80
Drive motor - Drum Screen	Hp	1.5	2	2
Drive motor - Shafted Screw	Hp	1.5	2	2
Controls		NEMA 4X or NEMA 7	NEMA 4X or NEMA 7	NEMA 4X or NEMA 7
Voltage	V/P/H	240/480/3/60	240/480/3/60	240/480/3/60

Materials of Construction

Screen media	AISI 304 SS (316 Optional)
Transport tube	AISI 304 SS (316 Optional)
Shafted screw	High Strength Alloy Steel (304/316 SS Optional)
Tank, piping, supports, end plates	AISI 304 SS (316 Optional)
Fasteners	AISI 304 SS (316 Optional)