

CleanFlo™ SludgeScreen™

Pressurized In-line Sludge Screen



WESTECH

SludgeScreen™ Technology



The **WesTech CleanFlo™ SludgeScreen™** is a pressurized in-line screen designed to remove and dewater screenings from sludge even when the headworks facility may contain fine screen equipment. The SludgeScreen™ will improve the operation efficiency of the digester while reducing operating and maintenance costs.

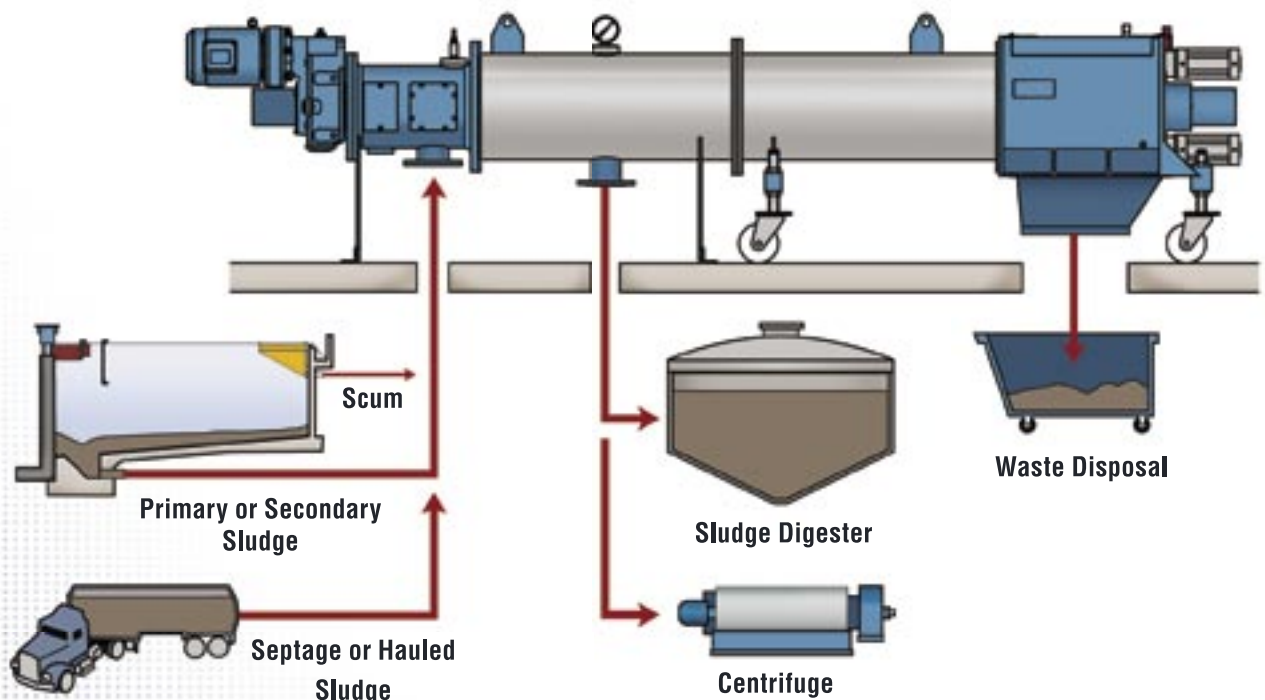
Fine screening (as low as 3 mm) is accomplished automatically in a completely closed system as sludge is pumped. The retained solids are discharged as a compacted solid (35 to 45% DS) ready for landfill.

The SludgeScreen™ removes plastics, hair, rags, and trash that accumulate in digesters requiring routine cleaning. It will also protect re-circulation pumps and heat exchangers from blockages. Subsequent processes such as centrifuges, belt presses or chamber filter presses benefit from improved reliability by the removal of coarse material that can impair dewatering or cause additional maintenance.

If you are land applying sludge, converting to a Class A biosolids process, drying or pelletizing sludge, or collecting or handling primary scum you should contact WesTech to learn about the CleanFlo™ SludgeScreen™.



CleanFlo™ SludgeScreen™



The diagram above shows the process route for either direct tankard or pumped supply.

Applications

Coarse material separation from:

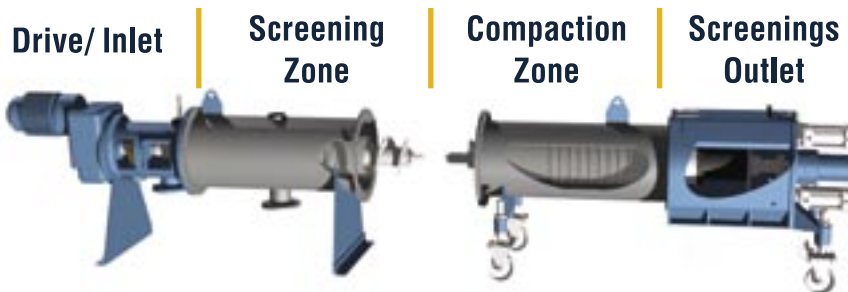
- Primary/Raw sludge
- Secondary sludge / Waste sludge
- Floating sludge (scum)
- Digested sludge
- Septage

Benefits

- Lower plant O&M costs
- Reduce digester cleaning
- Protect down-stream equipment
- Integrated fine screening in a closed pipe system
- Sludge free of identifiable solids
- Removal of hair and fibers that cause problems with pelletizers and dryers
- No second pumping of screened sludge

Features

- Fully automatic, continuous or intermittent operation
- Small footprint
- Installs easily into new or existing sludge pipelines
- Minimal operator attention
- Self-cleaning screen that requires no wash water or back flushing
- Continuous screening, compaction and dewatering with sludge pumping



The machine is comprised of an inlet screening zone, a compaction zone, and an enlarged discharge outlet for removal of the solid matter captured.

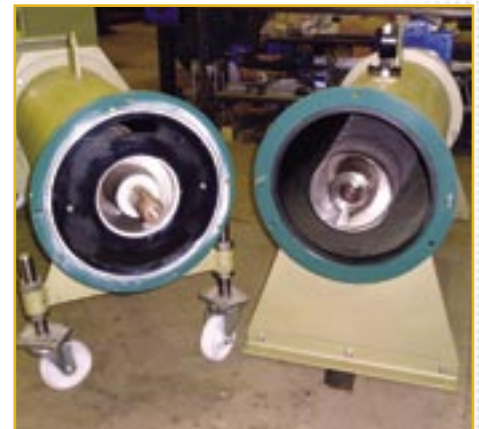
The main elements of the machine are the integral archemerial screws, pre-determined perforated mesh screens and retention cone, which regulates the discharge of solid matter.

The screw is made in two parts and is directly driven by a highly efficient motor/gearbox arrangement. The first section of the screw is located in the screening zone and the second section is in the compaction zone.

A Programmable Logic Controller (PLC) and Human Machine Interface (HMI) based panel provides “real time” information to the operator and allows key parameters to be easily changed.



Feed zone inspection and access hatch

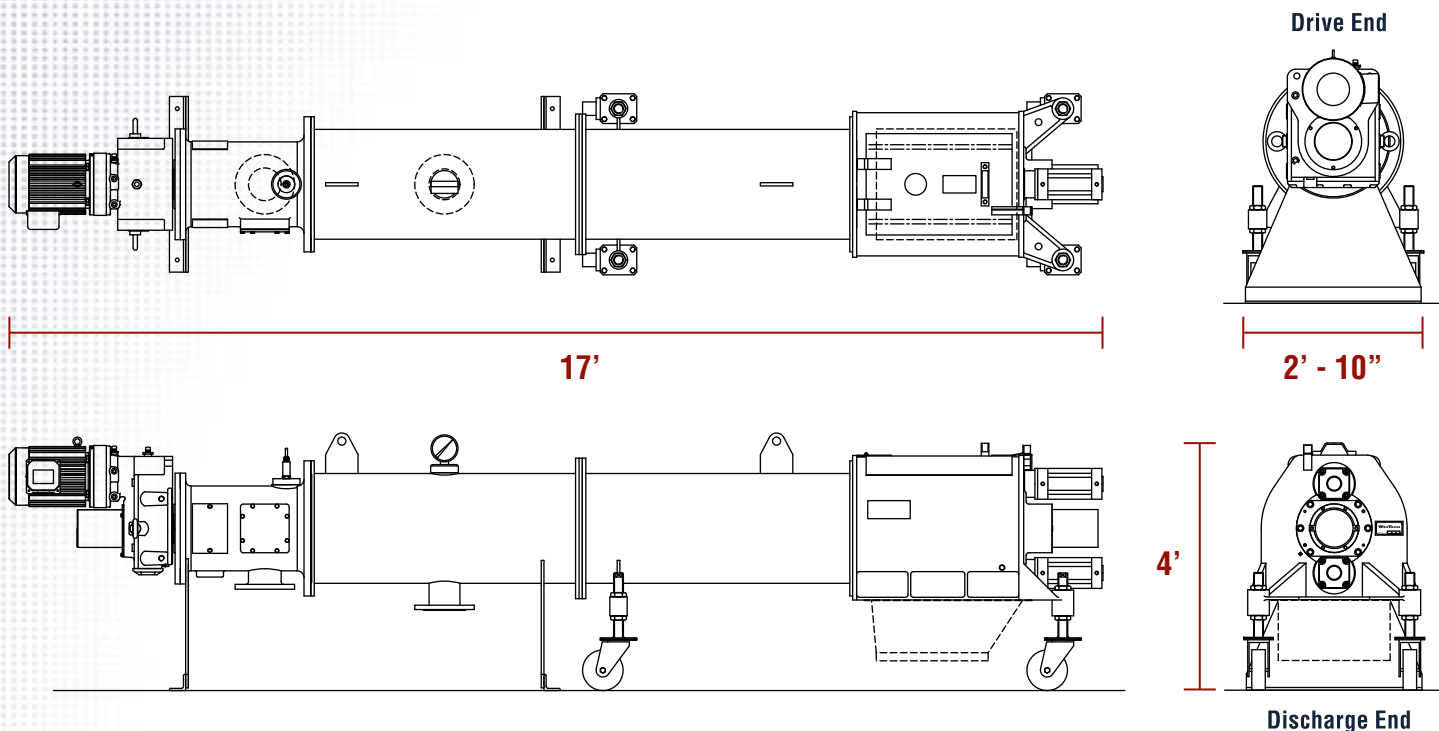


SludgeScreen™ shown split for maintenance



PLC based with HMI display

SludgeScreen™ Equipment Details



Capacity*:	525 gpm	@	0-1% d.s.
	400 gpm	@	2 % d.s.
	350 gpm	@	3 % d.s.
	300 gpm	@	4 % d.s.
	260 gpm	@	5 % d.s.
	225 gpm	@	6 % d.s.

Weight Empty:	2,200 lbs
Weight Full:	3,300 lbs
Inlet/Outlet Flange:	4"
Heat Tracing:	30 ft at 3 watt/ft Self Regulating

Final Moisture of Screenings:	35 – 45% d.s.
Motor:	3 HP (460/3/60)
Type of Drive unit:	Direct Drive
Maximum Pressure at Inlet:	14 psi
Headloss:	3 – 6 psi
Screening Zone Perforation Size (3 – 10 mm Optional)	5 mm Std
Compacting Zone Perforation Size	3 mm

Protection Devices: Electronic Pressure Sensor, Moisture Sensor, EM Stop, Motor Anti-condensation heaters, Cover Guard Switch

*Figures are based on 5 mm dia. screening zone screen and should only be used as a guide, as site specific factors will influence performance.

WesTech is a Exclusive Distributor of Hydro International

WESTECH
an employee-owned company

P.O. Box 65068 • Salt Lake City, Utah 84165-0068
Phone: (801) 265-1000 • Fax: (801) 265-1080
e-mail: info@westech-inc.com • www.westech-inc.com

Represented by: