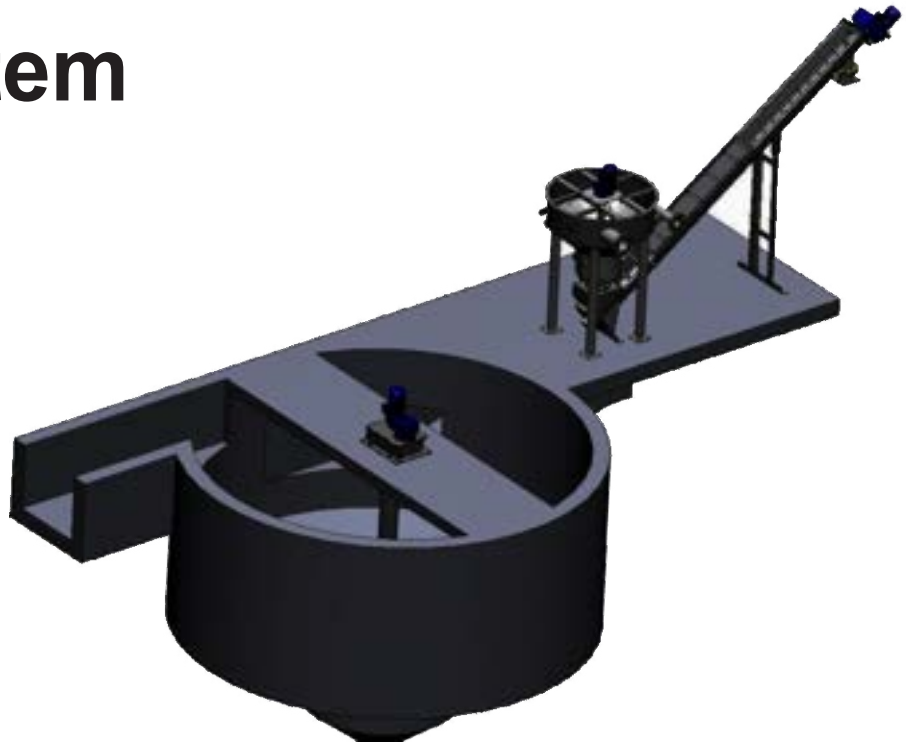


Vortex Type Grit Removal System

Description

Grit consists of sand, gravel, cinders, or other heavy materials that have specific gravities or settling velocities considerably greater than those of organic particles. In addition to these materials, grit includes eggshells, bone chips, seeds, coffee grounds, and large organic particles.



Construction



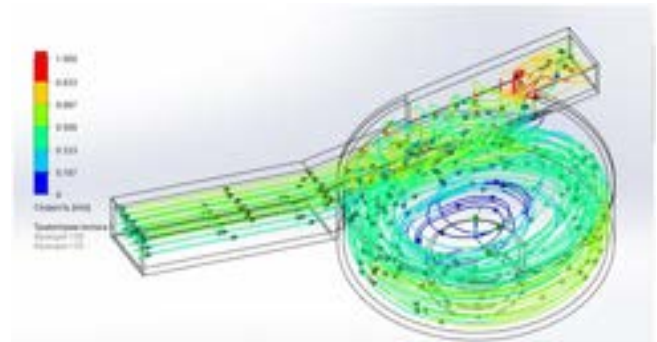
Vortex Grit basins have been used since the early twentieth century for grit removal from wastewater.

Some of the advantages of vortex grit basins include low power requirements and odor potential (especially compared to aerated grit chambers), low head loss and compactness. As a result, vortex grit basins are often favored, especially for large installations.

The spiral of the screw transporter with the angle of 35° is made of wear-resisting carbon steel; other parts are made of stainless steel SS304 or SS316 on customers demand. The grit chamber is a cone-shaped tank with inclined transporter for removal of the precipitated grit.

Working

- The Grit Chamber operates on the vortex principle.
- The stirrer maintain rotational velocity allowing grit to settle while holding organics in suspension.
- Sloped transition between upper chamber section(s) and grit well promotes grit settling to well.
- Grit transferred from grit well to tangential grit conveyor via pump where the grit is washed intermittently.
- Grit is agitated by the mixing device to improve grit washing process.
- The grit is discharged into the storage container or onto the transporter.



Flows in chamber to achieve almost or complete deposition of 150 μ m sand grains and there are a significant removal of particles of 105 microns.

Advantages

- Construction is ideal for wastewater treatment plants with lesser footprints
- Does not require high capital costs low capacity STPs
- Increased efficiency by using tangential motion of the fluid
- Casing manufactured from stainless steel is reliable and durable



Euroteck Environmental Pvt. Ltd. 504,
Modern Profound Tech Park, Opp.
Ramalayam, White Field Road,
Kondapur, Hyderabad,

Phone: +91 96876 93899 | E-mail : marketing@euroteckindia.com

"Providing You tthe World's Best Water and Wastewater Treatment Solutions"