

VORTEX DEGRITTER



Description

One of the most common degritting systems is the vortex tank or chamber system, a circular continuous flow-through vortex grit settling chamber. This chamber is sized according to peak wet weather conditions. The chamber consists of an upper separation section where, because of reduced flow velocity in the tank, the grit will settle into a lower chamber. The settled grit in the lower chamber is then removed by an airlift pump, self-priming pump or submersible grit pump. The grit is further pumped into a grit classifier where washing and water separation is carried out.

The airlift pump, mounted above the grit chamber uses a dedicated blower air, compressed air, and wash water injection to move the grit slurry through the pipeline and into a grit classifier for further processing.

The Self-priming grit pumps, mounted above grit chamber, has a hardened recessed impeller that operates periodically extracting grit from the lower chamber. The pumped grit slurry is fed through the pipeline and into a grit classifier for further processing.

Submersible grit pumps, mounted in the lower grit chamber, have a submersible tungsten coated body and impeller which operates periodically, extracting grit from the lower chamber. The pumped grit slurry is fed through a flexible pipeline to the top of the chamber for easy removal of the pump via lift davit.

Application

- Wastewater treatment plants



Features & Benefits

- Low operational costs
- Ease of maintenance



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Performance & Specification

Vortex Degritter- Estimated Flow Rates

- We manufacture to suit non-standard openings
- Table data subject to change to suit civil and flow conditions
- Inlet Speed 0.6 - 1 m/s
- Stay Time 60 seconds
- All dimensions in mm

MODEL	CAPACITY (mm ³ /h)	IMPELLER SPEED (rpm)	POWER (Kw)	GRIT FLOW DISCHARGE (mm ³ /h)	PUMP STARTING (TIME/DAY)	REMOVE PARTICALS PROPERTY	BLOWER			
							BLOWING RATE (mm ³ /min)	PRESSURE (Kpa)	POWER (Kw)	
VDG180	180	12 ~ 20	0.75 ~ 1.1	18	4 (10min per time)	Proportion > 2.65; partical diameter > 0.1mm	1.5	34.3	1.5	
VDG360	360			2					2.2	
VDG720	720			2.5			3			
VDG108	1080			2.8			4			
VDG198	1980	12 ~ 20	0.75 ~ 1.5	40			3	44.1	53.9	4
VDG317	3170			2.8						
VDG475	4750			3			58.8	7.5		
VDG630	6300									
VDG720	7200			88			11			
VDG900	9000									
VDG126	12600									
VDG144	14400									

