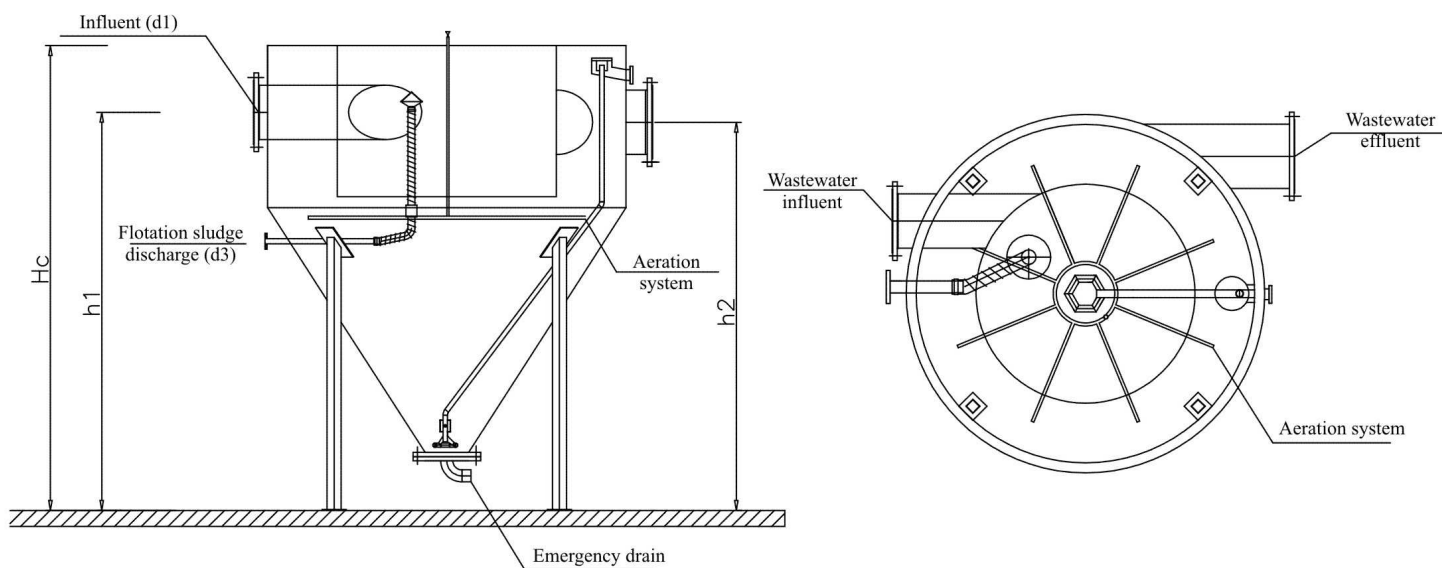


WHIRL GRIT SEPARATOR DF PSK



SPECIFICATIONS

Parameter	Unit	PSK1/60	PSK2/120	PSK 3/160	PSK4/200	PSK5/300	PSK6/400
Throughput	Q m ³ /h	60	120	160	200	300	400
Grit separator diameter	D mm	1300	1800	2200	2500	3000	3500
Total height	Hc mm	1760	2335	3280	3500	5390	4800
Influent height	h1 mm	1450	2000	2900	3150	4150	4150
Effluent height	h2 mm	1400	1950	2850	3100	4100	4100
Total length	L mm	1495	2020	2350	2915	3460	3935
Influent diameter	d1 mm	150	200	250	300	350	400
Effluent diameter	d2 mm	200	250	300	350	400	450
Flotation sludge discharge diameter	d3 mm	50	60	60	80	100	100
Grit pulp discharge diameter	d4 mm	65	80	80	100	125	125
Compressed air demand	Zp l/min	50	50	80	80	100	100
Aeration system compressed air demand	Zr l/min	100	120	130	150	200	300
Pressure	P bar	0,6	0,6	0,6	0,6	0,6	0,6
Volume	V m ³	1	2,6	7	9,54	18	23
Weight	m kg	300	700	950	1250	1900	2100

APPLICATION:

The whirl grit separator are used for separation and discharge of grit and solids from wastewater with possibility of flotation sludge discharge.

CONSTRUCTION:

The unit is designed as a non-pressure cylindrical vessel with an inner jacket and a bottom conical grit sedimentation part. The inlet of the influent is arranged tangentially to the inner jacket to impart whirling motion of the inflowing fluid. All parts are made of etched and sandblasted stainless steel. The inlet and the outlet are connected, respectively, to the inside and outer rings. An aeration system is provided in the tank. Optionally, the unit can be fitted with hermetic cover, ventilation connection and automatic discharge control of water-grit pulp and flotation sludge.

PRINCIPLE OF OPERATION

Wastewater is let in tangentially to the inner ring. Grit and heavier solids tend to spiral down to the bottom of the tank while the fluid suspension flows to the outlet on the outer ring. An aeration system incorporated in the inner and outer chambers to prevent sedimentation of the suspended matter with sand and to assist flotation of fats.

An airlift sucks the water-grit pulp from the bottom of the tank and delivers it to a separate grit classifier. Optionally, an electrically driven pump can be installed in place of the mammoth pump.