



Rotary drum grille machine

Purpose and introduction (HZG-I)

HZG-I rotary drum grille is one of the newly developed complete sets of water supply and drainage pretreatment equipment products of our company. Parameters: imported equipment, self-designed. The equipment is widely used in urban sewage, industrial wastewater, food processing industry, paper industry and other sewage treatment projects. The equipment will



fish and remove the floating objects and sediments at the water intake, squeeze the grid slag dry and drain it after dehydration.

The equipment is fully enclosed and suitable for fecal treatment in urban sanitation station.

main features

- a. All stainless steel, compact structure, almost no maintenance.
- b. Complete structure, easy installation and automatic control.
- c. Low power, low speed, energy saving, no wear and low noise.
- d. Fully enclosed operation, no odor and no leakage.
- e. High operation efficiency, optimal comprehensive performance price ratio and fastest investment recovery.

Structure and working principle

The equipment is a new product integrating the functions of fine grid decontamination machine, conveyor and screw press. It can be directly installed in the canal or in the container box. The sewage flows in from the front end of the grid frame, leaves the grid frame after filtration, and the filter residue is filtered and retained in the grid frame. The filter residue accumulated on the grid can further improve the filtration efficiency. When the water level difference before and after the grid frame reaches the set value, when the rotary slag cleaning rake installed on the central shaft turns to the vertical position (12 o'clock), the filter slag is thrown into the hopper located in the center of the lower end of the screw and sent out of the channel through the central hinge dragon. In order to clean the filter residue on the teeth, the slag cleaning rake will automatically turn back 15 degrees and automatically clean when passing through a slag cleaning tooth plate.

The filter residue is pressed and dehydrated during transportation, and the solid content can reach 35% ~ 45% DS. The dry residue has small volume, less pollution and is easy to store and transport.



Main technical parameters:

HZG-I	600	800	1000	12	1400	1600	1800	2000	2200	2400	2600	2800	3000
Grid tube diameter D(mm)	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000
Grid tube length L(mm)	500	620	700	800	1000	1150	1250	1350	1450	1650	1950	2150	2400
Delivery pipe diameter d (mm)	219	273	273	300	300	360	360	500	500	500	500	700	700
Canal width SB (mm)	650	850	1050	1250	1450	1650	1850	2070	2270	2470	2670	2870	3070
Maximum water level in front of grid H4(mm)	350	450	540	620	750	860	960	1050	1150	1280	1490	1630	1800
Installation angle	35°												
Channel depth H1(mm)	H1 = 600~3000												
Slag discharge height H2(mm)	Design according to user requirements												
H3(mm)	Determined according to the type of reducer												
Total height of equipment installation H2(mm)	$H = H1 + H2 + H3$												
Installation length A(mm)	$A = H \times 1.43 - 0.48D$												
Total length of equipment L(mm)	$L = H \times 1.743 - 0.75D$												



Structure and working principle (HZG-II)

The HZG-II rotary drum grid removes garbage through the rotation of the outer drum. The equipment is installed in the canal at a 35 degree angle to the water surface. The sewage flows into the drum from the end of the drum, and the water flows out through the grid gap on the side of the drum. The grid keeps the suspended solids and floating solids in the water in the drum. The drum rotates at a certain speed, and there are nylon brushes and flushing water nozzles above the drum, The grid slag is removed, dried and dehydrated by screw conveying operation, transported to the upper discharge hopper and transported away by conveyor.



Main features:

- The grid and water flow form an angle of about 35 degrees. Because of the formation of baffle, many dirt with a thickness less than the grid gap can be separated.
- The grid is equipped with flushing device and has self purification function.
- The cylindrical structure increases the overflow of the grid compared with the traditional grid, reduces the head loss, and reduces the stacking plane in front of the grid.
- All parts in contact with water are made of stainless steel and undergo pickling and passivation treatment. In all civil sewage and most industrial water, it has strong anti-corrosion performance and long service life.
- Through the integrated fishing, transportation and pressing treatment of the grid, not only the floor area is saved, but also the subsequent treatment cost of garbage is reduced.
- Almost no maintenance is required, no oil is required at the rotating point, and the oil filling times of the driving device are less

Main technical parameters:

HZG- II		600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	3000	
Liquid velocity (m/s)		1.0												
Overflow flow (m ³ /h)	Grid spacing (mm)	0.5	80	135	237	310	450	586	745	920	1130	1380	2080	2410
		1	125	219	370	507	723	954	1209	1494	1803	2150	3280	4120
		2	190	330	558	765	1095	1443	1832	2260	2732	3254	4530	5600
		3	230	400	684	936	1340	1760	2235	2756	3334	3968	5450	6780
		4	237	432	720	1010	1440	2050	2700	3340	4032	4680	6230	7560
		5	252	468	795	1108	1576	2200	2934	3600	4356	5220	6750	8220