



Wire rope grid cleaner

Structure and working principle:

HGS-G fixed grid cleaner is mainly composed of frame, grid bar, rake bucket, lifting device, sewage collection trolley and electrical control box. The rake lifting and closing device is set on the portal frame. During operation, the motor reducer drives the winch mechanism to lower the rake bucket along the guide rails on both sides of the frame to the bottom of the grid slot through the steel wire rope. The elevation limiter and rope loosening switch of the winch mechanism command the motor to stop working and close the rake. The rake teeth are inserted into the grid strip, and the winch mechanism drives the rake bucket to pick up the garbage and dirt along the grid strip,



When going up and out of the water baffle, the dirt scraper on the upper part of the frame will automatically scrape the garbage from the rake bucket to the garbage trolley under the machine. The lifting and closing device of the rake bucket of hgs-y mobile grid trash remover is the same as that of HGS-G fixed grid trash remover. The frame of the water part is set on the parallel steel rail with steel wheels, and the frame and the transmission part are moved horizontally through the traveling mechanism. When working, the rack works at one end of the grid slot, drives the winch mechanism to drive the rake bucket to automatically position along the underwater parallel grid bar and down to the slot bottom. When the first width completes the sewage fishing treatment, the traveling mechanism moves the rack to the second working point for sewage fishing until the whole slot width is completed.

The transmission mechanism of HGS grid trash remover is equipped with mechanical overload protection device. When the intercepted dirt exceeds the rated load of the rake bucket, the overload protection device will instantly cut off the power supply and give an alarm. At the same time, the whole system of the trash remover adopts rope breaking, rope loosening, anti tipping and other devices, so the operation is safe and reliable. The electrical control can set the startup times and single working time per day according to the user's requirements, or cooperate with the front and rear liquid level difference meters of the grid for automatic control.

Purpose and introduction:

HGS grid trash remover is a kind of trash intercepting equipment pulled by steel wire rope. According to the needs of different grid slot width, it is divided into fixed type (HGS-G type) and mobile type (HGS-Y type). The grid cleaner is generally applicable to the water intake of urban, water plant, sewage treatment plant, various pump stations, urban flood control and drainage facilities, so as to intercept large and coarse sundries and garbage in the inlet, protect the pump impeller from damage and ensure the normal operation of subsequent treatment processes. When the width of the grid slot is greater than 3m and there are multiple groups arranged in parallel, HGS-Y mobile grid cleaner should be used to clean the lower grid by using a set of



combined device for catching sewage on water, so as to save investment cost and facilitate operation management and maintenance.

The installation angle of HGS grid cleaner is generally 60 ° - 90 °, and the effective clearance of grid can be selected in the range of 15 ~ 100mm as required, and the depth of grid groove is generally 4 ~ 12m.

Specifications and main technical parameters:

Model	Grid shape width B(mm)	Effective gap of gridb (m)	Mounting angle a(°)	Rated load of tooth rake (kg/m)	Applicable well depth H(m)	Lifting motor power (kw)	Rake motor power (kw)	Power of traveling motor (kw)	Grid velocity V(m/s)
HGS-1000	1000	15~100	60-90	100	2~12	0.75~3.0	0.75~2.2	0.55-0.88	≤1
HGS-1200	1200								
HGS-1400	1400								
HGS-1500	1500								
HGS-1800	1800								
HGS-2000	2000								
HGS-2400	2400								
HGS-2600	2600								
HGS-3000	3000								
HGS-3500	3500								
HGS-4000	4000								
HGS-4500	4500								
HGS-5000	5000								

Note: mobile grid cleaner can be used for more than 3500mm.