



## Rotary solid liquid separator

### Purpose and introduction

HC rotary solid-liquid separator is one of the main products of water supply and drainage pretreatment and decontamination equipment. The device can continuously and automatically remove sundries of various shapes in the liquid, and is a device for the purpose of solid-state separation.

HC rotary solid-liquid separator is widely used in the pretreatment of rain and sewage in cities and towns and planned communities; Removal of floating objects at surface water intakes such as waterworks, power plants and steel mills; Separation of sundries from industrial wastewater such as slaughtering, medicine, papermaking, chemical fiber, textile, printing and dyeing; Screening of raw wool and wool washing industry recycling; Water washing or residue separation in aquatic fruit and grain processing technology.



### Structure and working principle

HC rotary solid-liquid separator is a special rake tooth made of ABS engineering plastic, nylon 66, nylon 1010 or stainless steel. It is assembled on the rake tooth in a certain order to form a closed rake tooth chain. Its lower part is installed in the inlet channel. Driven by the transmission system, the whole rake tooth chain (water facing working face) moves from bottom to top and carries solid debris to separate from the liquid, The liquid flows through the grid gap of the rake teeth, and the whole working process is continuous.

Due to the reasonable design of the rake tooth structure, when the debris carried by the rake tooth chain reaches the upper end and moves reversely, there is a relative self-cleaning movement between the two rows of rake teeth connected in front and back, which promotes the debris to fall off by gravity; At the same time, a pair of nylon brushes opposite to the moving direction of the rake tooth chain are set at the rear of the equipment to ensure that each row of rake teeth can be completely brushed when they move to this position.





**Main features:**

- Compact and integrated structure and high degree of automation (the operation of the equipment can be controlled by PLC microcomputer control system).
- Low energy consumption, low noise and high separation efficiency.
- Continuous decontamination without blockage and clean slag discharge.
- Good corrosion resistance (all moving parts are stainless steel and nylon).
- The transmission system is equipped with double protection of mechanical overload protection and overload limiter.

**Specifications and main technical parameters:**

Model		HC-300	HC-400	HC-500	HC-600	HC-700	HC-800	HC-900	HC-1000	HC-1100	HC-1200	HC-1300	HC-1400	HC-1500	
Rake pitch (mm)		100 or 150													
Rake tooth linear		~2m/min													
Motor power (kw)		0. 37~0. 75						1. 1-2. 2							
Water depth in front		1. 0													
Liquid velocity		0. 8													
Grid gap (mm)	1	1780	3090	4390	5650	6960	8270	9470	10830	12140	13390	14700	16010	17260	
	3	3650	6030	8510	11290	13770	16240	18710	23140	23820	26290	28920	31400	34030	
	5	4450	7850	10720	14120	17260	20600	23800	26940	30080	33480	36620	40020	42900	
	10	5230	8890	12560	16220	19880	23020	27200	30870	34530	38190	41850	45510	49180	
	15	6975	12290	17615	22935	26750	33310	38015	43335	48425	53970	59290	64605	69060	
	20	8720	15690	22670	29640	36620	43600	48830	55800	62780	69750	76730	83700	88940	
	25						45340	51880	57980	65395	72805	80215	86320	92860	
	30						47080	54930	60160	68010	75860	83700	88940	96780	
	35						47955	55365	61470	68880	72290	85450	59810	98960	
	40						48830	55800	62780	69750	76730	87200	90680	101140	
50						52320	56670	65390	74110	78470	91550	95910	104630		

**Note:**

- This equipment is a non-standard series product. The standard type is calculated according to the channel depth of 1500mm, slag discharge height of 400mm and installation angle of 60 °.
- If the equipment width is more than 1500mm, it can be used as parallel on-line, and the water flow of parallel on-line is calculated as twice that of single machine.