GKH

系列全自动虹吸型卧式刮刀卸料离心机

GKH Automatic Siphon Centrifuge

GKH系列全自动卧式刮刀离心机
GKH series automatic Horizontal siphon scraper centrifuge

● 性能与用途

GKH系列全自动虹吸型卧式刮刀卸料离心机是一种连续运转间歇卸料的固液分离设备，与GK(F)型离心机相比具有更高的生产能力和分离效果。

该型离心机采用PLC程序控制，通过变频调速，制动系统采用能耗制动或回馈制动，全自动循环作业，手动操作模式与全自动操作模式可以自由切换。

GKH系列全自动虹吸型卧式刮刀卸料离心机使用普通物料外更适用于固相粒度小、难分离的物料，普遍使用在制药、化工、食品行业(如淀粉、磷酸钙、小苏打等)。

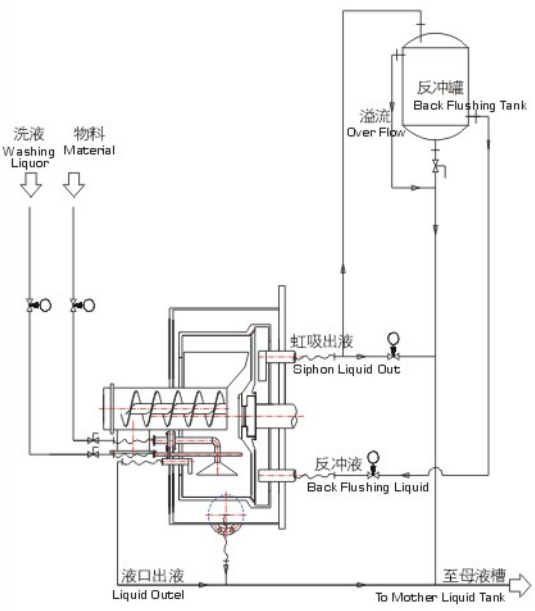
● Properties and Uses

GKH Series automatic siphon centrifuge is a solid-liquid separation equipment which adopts continuous operation and intermittent discharging. Its production capacity and separation effect is better than GK(F) centrifuge.

This machine is controlled by PLC and regulates speed by frequency convertor,braking system applies dynamic braking and regenerative braking. the whole separation process is automatic circulative process and manual operation mode is applicable to be changed over from automatic operation mode.

GKH Series automatic siphon centrifuge is more suitable for separating such product as small solid phase granularity and which is hard to be separated. It is widely used in pharmaceutical, chemical and foodstuff industry (e.g. starch, calcium phosphate, sodum bicarbonate)

● GKH系统布置示意图
GKH System Layout Diagram



● GKH工作原理

卧式虹吸刮刀离心机，除具有普通刮刀卸料离心机的推动力外，还有类似于真空管的虹吸抽力。

离心机空载时，由反冲管向虹吸室内灌液，液体由虹吸室经转鼓的通孔压向外转鼓间隙内，一面排除虹吸管的空气，一面又在过滤介质上形成一层液体. 以使进料分布均匀。然后开始进料，同时虹吸管旋转到某一位置，一定时间后再旋转到要求的较低位置，进料结束后，将虹吸管转到最低位置(虹吸室最大直径位置)。悬浮液进入转鼓后，固体颗粒被截留在滤布上，而液
体则穿过滤布和过滤内转鼓，汇集在内外转鼓的间隙内，经转鼓和虹吸室的通孔进入虹吸室，再由虹吸管抽走，沉积的固体继续甩干后，油缸推动刮刀旋转开始刮料。再经料斗滑出机外，卸料完后进行洗网，虹吸刮刀离心机不仅在转鼓内对滤布进行冲洗，还可由反冲管向虹吸室加入冲洗水。控制虹吸管的上下旋转，使液体从内转鼓下面脉动式反冲洗滤网. 可根据物料特性决定冲洗时间和次数，洗网完成后自动进入下一个循环工作周期。

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● GKH Working principle

Except centrifugal force like the other common centrifuges, siphon centrifuge also has a kind of siphon draught force similar to vacuum pipe.

When the centrifuge is of no load, the counter-pulse pipe feeds the liquid to siphon chamber and the liquid is forced to the clearance through the via hole on the drum of siphon chamber. Then air of siphon pipe is eliminated and a layer of liquid forms on the filtering media,so as to make the feeding more even.Then feeding starts, the siphon pipe rotates to a certain position and it turns to a lower position required after a certain period.When the feeding is finished, the siphon pipe turns to the lowest position (Max. diameter place of siphon chamber). After the suspension liquid comes into the drum, solid products are left on the filter cloth while the liquid is forced to go through the filter cloth and internal drum and collected in the clearance between internal and external drum, then it flows into the siphon chamber through drum and via hole. Next, the liquid will be draught by siphon pipe and the deposited solid will be dewatered and scraped by scraper which is driven by oil cylinder. And then the solid falls out through hopper. When discharging is finished, centrifuge begins to clean the mesh, The siphon centrifuge not only washes the filter cloth in the drum, but also feeds the washing water to siphon chamber. By controlling the upper and lower rotation of siphon pipe, liquid can counter-pulse wash the filter mesh from the internal drum, The washing duration and times are decided by product characteristic and when the washing is finished, carry out the next circulative processing cycle.

● GKH主要特点

1. 与相同规格的卧式刮刀离心机相比，生产能力高40%–60%，且滤饼含湿量低。

2. 变动虹吸管吸液口位置可调节过滤速度，实现进料、分离、滤饼洗涤和滤饼脱水时具有不同的过滤速度，使离心机始终在最佳状态下工作，设备运转平稳，振动和噪音均较小。

3. 在刮料循环结束后。通过虹吸进料管加入再生液体对残余滤饼进行再生再悬浮，反冲洗及清除残余滤饼。

4.可选配残余滤饼自动清除装置(获国家专利)。

● GKH Main characteristics

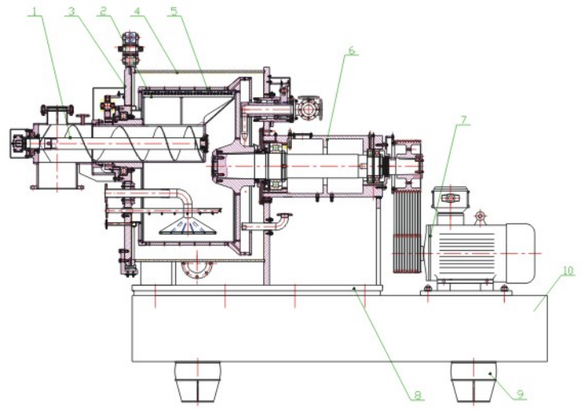
1.Comparing with common horizontal centrifuges with the same specification,the production capacity can be raised by 40% to 60% and the moisture content of filter cake is lower.
2.Changing the position of siphon pipe port can regulate the filter speed, thus, different filter speed can be realized during different process as feeding, separation, filtering, washing and dehydration. The centrifuge will be always under best working condition and the equipment operates stably and the vibration and noise are rather low.
3.When the scraper is finished, the regenerate liquid will be fed from the siphon feeding pipe to regenerate and resuspension the filter cake, back flush and remove the left filter cake.
4.The automatic residual cakes removing device is optional (have owned the national patent).

出口印度尼西亚用于淀粉项目
Export to Indonesia on the starch project

● GKH系列离心机主要技术参数 GKH Model and Main Parameters

项目Item \ 型号 Model	GKH-800	GKH-1000	GKH-1050	GKH-1250	GKH-1600	GKH-1800
转鼓直径 Drum diameter(mm)	800	1000	1050	1250	1600	1800
转鼓高度 Drum Height(mm)	450	500	500	630	1000	1250
转鼓容积 Drum volume(L)	110	200	210	380	879	1390
装料限量 Loading capacity(Kg)	140	250	260	500	1100	1800
最高转速 Max. Speed (r/min)	1500	1400	1400	1200	950	900
最大分离因素 Maximum separating factor	1007	1095	1150	1006	808	815
电机功率 Motor power (Kw)	37	45	45	75/90	132	160
外形尺寸(含减震器 Decelerating Shock absorber) (mm)	2439x1900x2150	3050x2400x2192	3050x2400x2192	3875x2500x2612	5620x3200x3930	5862x3600x3910
机器重量 Weight(Kg)	4000	6200	7800	8000	20000	24500
含平台重量 Weight Including Platform(Kg)	6800	13200	15000	16000	39000	52500

● GKH结构示意图 GKH Structure Sketch Map



1螺旋卸料装置	Spiral Discharging Device
2刮刀组	Scraper Group
3机盖	Machine Lid
4外壳	Outer Shell
5转鼓	Drum
6轴承座	Bearing Seat
7传动部件	Transmission Parts
8底板	Base Plate
9减振器	Shock Absorber
10浮动平台	Floating Platform

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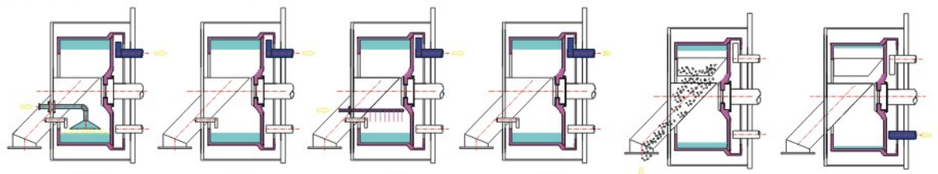
GKH Series Automatic Horizontal Siphon Scraper Centrifuge

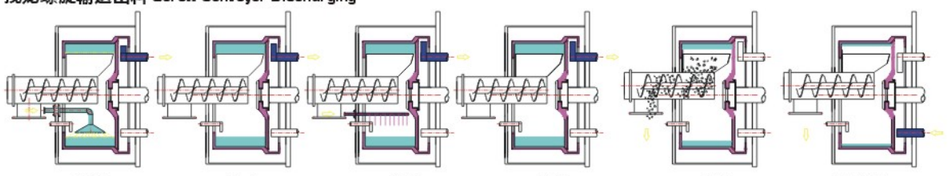
● GKH工作过程示意图 GKH Working Process Sketch Map

斜斗式出料 Slant Hopper Discharging



进料 Feeding　脱水 Dehydration　洗涤 Washing　甩干 Dry　刮料 Scraping　滤布再生 Filter Cloth Regeneration

搅笼螺旋输送出料 Screw Conveyor Discharging



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