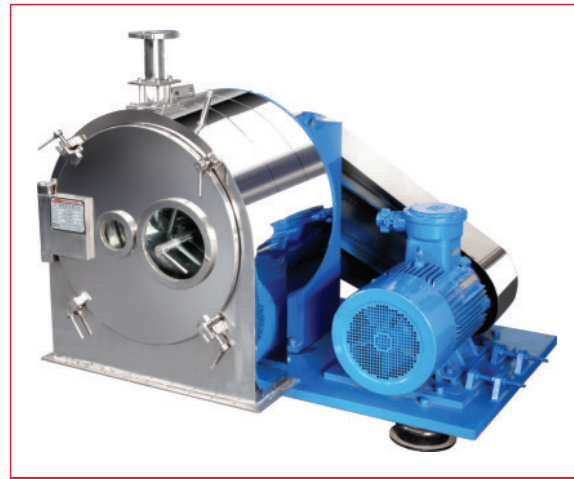


LWL

## 系列卧式螺旋/筛网式过滤离心机

LWL Screen Filtration Centrifuge



LWL系列卧式螺旋/筛网式过滤离心机  
LWL Series auLWL series spries spiral screen filtration centrifuge

## ● 结构与工作原理

LWL系列卧式螺旋筛网离心机是在全速运转下，连续地对悬浮液进行进料、脱水、洗涤、卸料等各项工艺操作的机器。机器运行时，首先接通电源，主机启动并自动升速，当达到预定值时，进料阀打开，被分离物料(悬浮液)沿进料管连续进入，经螺旋轮小端壁上的若干进料孔分散到转鼓壁，在离心力的作用下，悬浮液中的液相通过滤网和转鼓壁上的孔被甩出，并经机壳的滤液出口排出机外，固相则截留在滤网上，形成薄薄的滤渣层。在离心力场中，由于滤渣有一个沿着转鼓母线指向大端的离心分力，再加螺旋叶片转动时产生指向大端的推力，这两个力将滤渣不断地从转鼓小端被推向大端，滤渣在推移中不断地被螺旋叶翻动，从而大大强化了分离过程。被推出转鼓大端的滤渣经机壳排渣口排出机外，实现了固液分离。

## ● LWL系列螺旋/筛网式离心机已成功应用于 LWL Series Sprial Screen Filtration Centration Centrifuge has been successfully used in the following

己二酸adipic acid	硫代硫酸铵ammonium thiosulphate	赛洛瑞羊毛celluloid Wool	果核Date stones	菌丝hypha
芒硝salt cake	离子交换树脂Ion Exchange Resin	氨基环烷磺酸钠Naphionate	聚苯乙烯Polystyrene	一络酸钾Potassium Monochromate
吡唑pyrazolene	氯化钠sodium chloride	纳硝石Sodium Nitre	大苏打Sodium Thiosulphate	塑料颗粒plastic granules
AH-盐AH-salt	萘Anthracene	纤维素羊毛cellulose wool	硫酸铜Copper Sulphate	冰醋酸Glacial, Acetic Acid
金属渣greaves	七水硫酸铁	胡桃碎粒broken walnut	钾碱(碳酸钾)Potash	耐热有机玻璃颗粒
岩盐rocksalt	iron Sulphate hepta hydrate	过硼酸钠sodium perborate	酒石酸Tarteric Acid	聚氯乙烯PVC
氨基醋酸aminoacetic acid	氯酸钠sodium chlorate	巧克力碎块chocolates(broken)	结晶苏打Crystal Soda	蔬菜萃取Vegetable extracts
火药gun powder	阿司匹林aspirin	尼龙切片nylon chips	钾矾Potash Alum	二硝基甲苯DinitroMethylanilin
再生橡胶regenerated rubber	乳糖Lactose	磷酸钠sodium phosphate	硫酸锡Tin Sulphate	农药Pesticide
过硫酸铵ammonium persulphate	甲酸钠sodium formate	柠檬酸citric acid	对邻苯二甲酸二甲酯Dinitro Methylarin	钾溶液残余物Potash Solvent Residue
石膏gypsum	双酚bisphenol	草酸oxalic acid	钾溶液残余物Potash Solvent Residue	磷酸三钠Trisodium
硝酸银silver nitrate	硫酸锰manganese sulphate	硫酸铜copper sulphate	磷酸三钠Trisodium	从甲醇中提取DMT
磷酸铵ammonium phosphate	葡萄糖酸钠sodium gluconate	冷冻浓缩咖啡	DMT from Methanol	碳酸氢钾Potassium Bicarbonate
乌洛托品urotropin	硼砂borax	聚甲基丙烯酸酯polymethylacrylate	硫酸锌Zinc Sulphate	五硫化二磷Potassium Pensulphate
醋酸sodium acetate	偏硼酸钠sodium metaborate	亚硫酸钠Sodium Sulphite	精切洋葱片finely chopped onions	磷酸钾Potassium Phosphate
硫酸铵ammonium sulphate	甲酸钙calcium formiate	咖啡碎块coffee broken kernel	重铬酸钾Potassium Bichromate	硫酸钾Potassium Sulphate
二氯甲烷dichloro methaRe	磷酸一钠Monosodium phosphate	聚苯乙烯Polystyrene	季戊四醇Pentaerythrite	聚乙烯产品Polyethylene
碳酸钠sodium carbonate	硝酸钠Sodium Nitrate	四硼酸钠Sodium tetraborate		

## ● 性能与用途

LWL系列螺旋/筛网式离心机是卧式，连续工作，螺旋连续卸料的过滤式离心机。主要用于固相粒径为0.05-10mm范围内的液固二相悬浮液的分离和脱水。应用于化工、食品、化纤、矿冶、制药和轻工等行业。

## ● Properties and Uses

LWL Screen Filtration Centrifuge is a horizontal with the function of Continuous working,continuous spiral discharging. It is mainly used for separating and dehydrating suspension with solid-phase grains ranging from 0.05 to 10mm. It is applied in chemical, foodstuff, chemical fiber,mining and metal melting,pharmacy and light industry.

## ● 主要特点

连续运转，螺旋卸料，生产能力大。  
固相脱水率高，洗涤效果好，分离效率高。  
结构紧凑，操作维修方便。

## ● Main Characteristics

Continuous operation,spiral discharging and large capacity.  
High dehydration rate of solid phase,good washing effect and high efficiency.  
Tight structure and convenient operation and maintenance.

## ● Structure and Working Principle

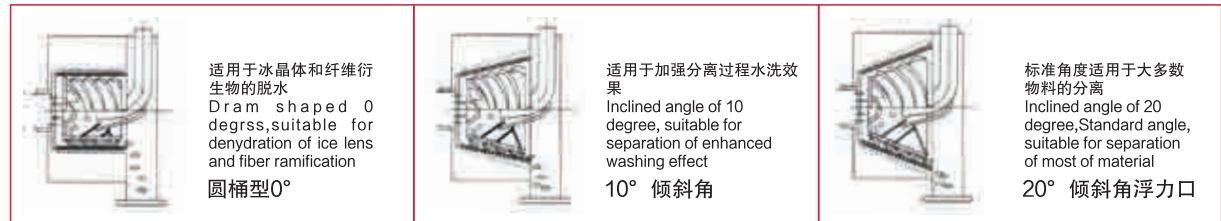
Operations such as feeding,dehydrating,washing and discharging etc. Can all be processed continuously,by LWL centrifuge on its full speed.Host machine starts with power on and speeds up automatically.Open the feeding valve when predetermined condition is met. Products to be separated enters into centrifuge along pipeline and is distributed onto drum wall through feeding holes on the smaller end of spiral wheel. Under the effect of centrifugal force,liquid phase in suspension will be thrown out through screen and holes on drum wall and discharged from centrifuge,while solid phase remains in the screen to form a thin filter residue. In the centrifugal forcefield,filter residue is gradually pushed from small end of the drum to big end by two forces:one component Of forces points to the big end paralleled with the drum generatrix,the other isthe thrust force toward the big end by spiral bar's motion. Filter residue is turned constantly by spiral bar to enhance separating effect. Filter residue pushed out of the big end is finally discharged from residue outlet, thus solid-liquid separation is finished.

## ● LWL系列螺旋/筛网离心机可特殊设计的旋转部件

LWL系列螺旋/筛网离心机可以是圆桶形或圆锥形，具有不同角度的螺旋确定出料速度及滤饼在筛网上滞留时间，该角度由生产厂家根据工艺要求来确定。

## ● LWL spiral parts can be specially designed

LWL Screen Filtration Centrifuge can be bucket or cone shaped. Discharging speed and the time of filter cake staying on screen mesh are predetermined spiral can be of different angles for determining different discharging speed and time of filter cake staying on screen mesh, which is in accordance with customer's process requirements.



## ● 材质选择

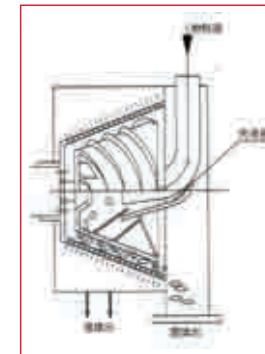
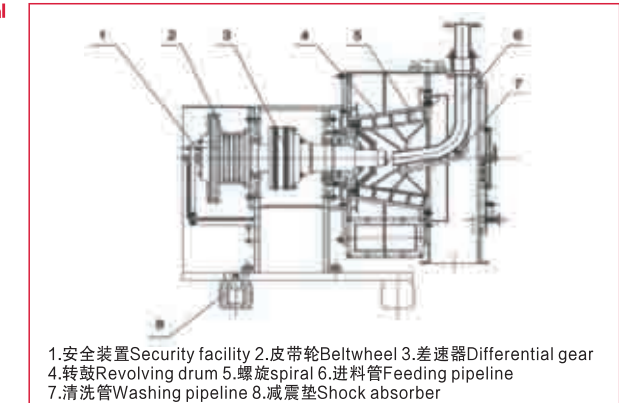
离心机接触物料部分的材质可根据用户使用物料的要求选用奥氏体不锈钢(321, 316...), 哈氏合金, 钛合金或其他耐腐材料。

## ● Material Choice

According to users' requirement, the products contact parts can be made of austenite stainless steel(321,316L...),Haynes alloy, titanic alloy or other anti-erosion materials

## ● 特殊配置

可根据客户的要求提供以下配置：  
1.变频+PLC控制  
2.振动，主轴轴承温升监测保护系统  
3.进料速度控制  
4.排液口气液分离装置  
5.用户的其他配置要求

● LWL系列螺旋筛网离心机工作示意图  
Sketch map of LWL Series Spiral Screen Filtration Centrifuge● LWL系列螺旋/筛网离心机结构示意图  
Structure indication of LWL Series Spiral Screen Filtration Centrifuge

1.安全装置Security facility 2.皮带轮Beltwheel 3.差速器Differential gear  
4.转鼓Revolving drum 5.螺旋spiral 6.进料管Feeding pipeline  
7.清洗管Washing pipeline 8.减震垫Shock absorber

该机主要由转鼓，螺旋轮，差速器，机座，机壳，油泵，电机等组成。所有的部件及驱动电机都安装在机座上，并具有与支撑结构牢固连接的橡皮支脚。  
It is mainly consisted of drum, spiral wheel, differential gear, machine base,housing,oil pump and motor etc.All of components and drive motor are installed onto machine bass which is equipped with rubber bracket, connected tightly with supporting structure.

## ● 型号及主要技术参数 Model and Main Parameters

项目Item	型号Model	LWL-200×160	LWL-320×198	LWL-350×300	LWL-450×300	LWL-530×350	LWL-630×465	LWL-750×790	LWL-800×500	LWL-1000×650
转鼓直径Drum diameter(mm)		200	320	350	450	530	630	750	800	1000
转鼓长度Drum length(mm)		160	198	300	320	350	465	790	500	650
最高转速Max speed(r/min)		4000	3000	3000	2600	2000	1850	2100	1500	1000
最大分离因素Max separating factor(N)		1790	1609	1762	1702	1185	1205	1848	1008	560
转鼓与推料差速 Speed difference between drum and spiral		18	26	24	22	23	24	23	24	24
电机功率(Motor power(KW))		3	7.5	15	22	30	37/45	75	75	90
外形尺寸Size(mm)		940×800×900	1225×1115×1040	1550×1450×1257	1650×1552×1348	1850×2022×1581	2120×2190×1660	2610×2115×2000	2700×2100×1700	3000×2170×2100
机器重量Weight (Kg)		250	660	1800	2250	3200	3800	6500	6000	7600
处理量Processing capability(m <sup>3</sup> /h)		0.5-1.5	1.5-6	3-15	3-18	6-20	8-30	15-40	15-45	15-50

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