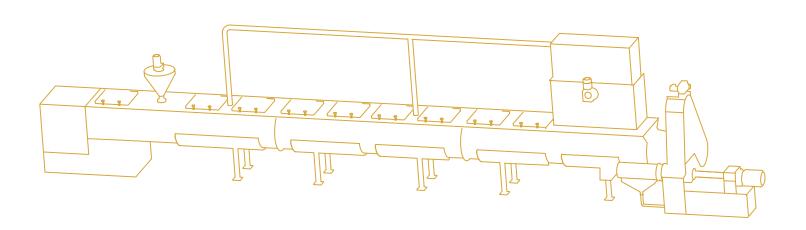
事业承前启后 企业一脉相承 原国营丹阳市制药机械厂



# HUATAI

**Heavy Industries** 

华泰重工装备 Pharmaceutical machinery series 制药机械系列



江苏华泰重工装备有限公司

# **Establish brand** with quality

以 品 质 打 造 品 牌

JiangSu Huatai Heavy Industries Co..Ltd

Jiangsu Huatai Heavy Lndustries Co., ltd. namely original Danyang Huatai Pharmaceutical Machinery Co., Ltd. is a technology-oriented enterprise which specializes in R & D and manufacture of pharmaceutical machinery and food machinery. With twenty years of experience in production of pharmaceutical machinery, the company owns strong product development, design capacity and rich production experience as well as the capacity of producing third grade pressure vessels by means of complete processing equipments, perfect technological process and strong technical force.

Regarding scientific and technological innovation as the development impetus and core competitiveness, our company has owned many proprietary intellectual property rights and has cooperated with many scientific institutions, universities and research centers, and has absorbed advanced technology and experience from abroad. We make continuous innovation and reform in the research and development of pharmaceutical machinery to have designed and manufactured a series of products with advanced technology. Our company was the first enterprise to produce ultrasonic continual dynamic countercurrent extraction

equipments. In 1992, in order to meet the market demands our company developed continual dynamic countercurrent extraction equipments independently which has won many national patents and reached international advanced level through experts' appraisal. They have been repeatedly recognized as superior pharmaceutical machinery by many domestic companies such as Huabei Pharmaceutical, Changchun Haiwang, Damin Food, Chifeng Danlong, Guilin Sanjin etc. Besides domestic application, these equipments have also been sold far to USA, Uzbekistan and other countries. Our company takes the lead in production of updated products of modernized Chinese herbal medicine, having achieved good social benefits.

Our company adheres to the quality policy of "good faith foremost, scientific management, innovative development and excellent service" and will welcome friends from various industries to visit us for sincere cooperation and common progress by relying on best quality and first-rate service.



企业概况 -



江苏华泰重工装备有限公司专业从事制药、食品、化工等行业机械设备研发及制造的国家高新技术企业(证书编号:GR201832001696)。公司位于江苏省丹阳市经济技术开发区,占地25亩,注册资金2500万。

公司继承了原国营丹阳市制药机械厂雄厚的技术基础,拥有经验丰富的相关技术人员和制造技工。制药机械生产经验丰富,加工设备齐全,工艺流程完善,技术力量雄厚,具备优良的产品开发设计能力和丰富的生产经验,具有压力容器制造能力(编号:TS2232E24-2026),属中国制药装备行业协会成员单位。

公司以科技创新为发展的推动力和核心竞争力,拥有多项自主知识产权。与多家科技院校、研究中心合作,并吸收国外的先进技术与经验。在公司发展的近三十年过程中,先后获取各种专利50余件。公司是超声波连续动态逆流提取设备创始企业,1992年根据市场的需要自主研制了连续动态逆流提取设备,并获多项国家专利。通过专家鉴定,达到了国际先进水平。在国内多次被国药集团广东一方、华北制药、桂林莱茵、湖北诺克特、长春海王、大闽食品、赤峰丹龙、桂林三金等公司被评为优秀制药设备。除在国内应用外,远销美国、乌兹别克等国。公司引领中药现代化潮流的更新换代产品,取得了良好的社会效益。

公司以"诚信为本、科学管理、创新发展、卓越服务"为质量方针。公司 将以最佳的质量,一流的服务,恭候各界友人的光临指导,真诚合作,携手 共进。 JiangSu Huatai Heavy Industries Co.,Ltd

# **Qualifications** and honors

资质及荣誉

荣誉的取得,归功于每一位默默奉献的华泰人,也 是对华泰追求品质、追求完美工程的鼓舞和鞭策, 不满足于现状、不断向新的台阶迈进,是华泰人锐 意进取、永不停歇的信念。

Honors that have been achieved are due to the dedication of every Huatai member, encourage and urge everyone to seek for high quality and perfect projects. Being unsatisfied with the present and stepping into new stage continuously is the the long lasting faith for Huatai members to forging ahead with determination.



























# 装备国际化是提升国际竞争力的重要保证

Internationalization of equipments is the important guarantee of enhancing international competitiveness.

# **Production** and Equipment

生产与装备・

先进的自动化生产设备,精良的流水线制作,尽显一流品质。技术专家直接参与生产,保证产品的稳定和可靠万无一失。与日俱增的精品意识和源源不断的工业精品令华泰制药机械日新月异。不管世界如何变化,华泰人精益求精的执着精神不变。

First-rate quality is embodied by advanced automatic production equipments and superior production line. Direct involvement of technical experts in the production ensures the stability and reliability of products. Steadily increasing awareness of quality products and constant flow of industrial quality products make Huatai Pharmaceutical advance with each passing day. No matter how the world changes, Huatai members will insist on the spirit of seeking for greater perfection continuously.

JiangSu Huatai Heavy Industries Co.,Ltd

# Project cases

・工程实例

我们是只专注于一个行业的专家,由于华泰在国内外市场拥有丰富的经验,并且对各国文化有着深刻的理解,因此,在设计制造方面华泰有着独特的优势,从设计到工艺制造,能为您提供创新的方案。

We are only dedicated to one industry on a professional basis. Rich experience in domestic and overseas markets as well as deep understanding upon the cultural differences of various countries ensures the unique advantages of Huatai in aspects of design and manufacture, with the ability of offering innovative solutions for you from design to manufacturing process.







近年来, 我公司生产的制药机械产品得到广大用户的肯定 和选购,市场份额每年稳定上升,占领全国30多个省市自治区 300多个城市的制药、植物、生物生产企业。

#### 国外客户:

limited partnership (美国)

Sunrider Manufacturing, L.P. a California 3000吨/年的保健康食品添加剂提取生产线

Faravardehave Tame Tabiate Dana (伊朗) 3000吨/年的甜叶菊总体项目工程

华北、东北地区 中国农科院畜牧所 长春海王生物制药有限责任公司 1500吨/年的丹参提取生产线 内蒙古伊泰丹龙药业有限责任公司 720吨/年的复方羊角胶囊生产线

720吨/年的中药提取生产线

#### 西北地区

新疆阜丰生物科技有限公司 陇西一方制药有限公司

新疆阿拉尔新农甘草产业有限责任公司 6000吨/年的甘草浸膏、甘草酸生产线 2.4万吨/年的氨基酸发酵结晶生产线 1.2万吨/年的中药配方颗粒生产线

#### 华中地区

谱赛科(江西)生物技术有限公司 2万吨/年的甜菊糖甙提取生产线 湖北诺克特药业有限公司 湖南省茶业有限公司 河南白云牧港生物科技有限公司 900吨/年的中药提取生产线 真奥金银花药业

1.2万吨/年的银杏黄酮提取生产线 3000吨/年的速溶茶粉生产线 2000吨/年的金银花提取生产线

#### 西南地区

四川省金桑庄园农业发展股份有限公司 1500吨/年的冬桑凉茶生产线

#### 华南地区

国药集团广东一方制药有限公司 广西五和博澳桑源生物科技有限公司 1.2万吨/年的桑枝碱生产线 桂林三金药业股份有限公司 桂林市吉福思生物技术有限公司 桂林莱茵生物科技股份有限公司

36吨/年的中药配方颗粒试验样机 720吨/年的中药提取生产线 6万吨/年的罗汉果甜甙提取生产线 4.5万吨/年的罗汉果甜甙提取生产线

#### 华东地区

可口可乐饮料(上海)有限公司 国药集团山东一方制药有限公司 湖州方路茶业有限公司 江苏康缘药业股份有限公司 浙江海正药业股份有限公司 上海爱普植物科技有限公司 可口可乐饮料(上海)有限公司 浙江茗皇天然食品开发有限公司 2100吨/年的速溶茶粉生产线 娃哈哈集团恒枫食品科技有限公司 2000吨/年的茶叶提取生产线

36吨/年的带超声波的试验机 2000吨/年的中药配方颗粒生产线 1.2万吨/年的速溶茶粉生产线 36吨/年的试验样机 1500吨/年的茶叶提取生产线 1500吨/年的烟叶香精生产线 36吨/年的带超声波的试验机

# Process flowchart and small equipment picture

# 流程图及小设备图

蒸汽Vapour 真空Vacuum 冷却水Cooling water 回收水Recycled water

Stainless Steel Tank Double-effect Evaporator



Alcohol Deposition Tank Vacuum Decompression Concentrator Alcohol Recovery Tower Alcohol Tank

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# 超声波逆流提取机组

# Ultrasonic Counter-current Extractor

## 产品用途

本机组是一种对天然产物(尤其对中药材)中有效成分进行浸出的全新动态 提取设备,已获国家专利,与冷凝器等辅助设备配用,可同时满足溶媒回收 等工艺要求。

## 产品特点

本机组是按照现代天然产物(尤其是中药)的生产理论和规律,经过多年研 制时间而发明设计的。

本机组由一定数量的有特殊装置、外设加热夹套的浸出单罐与输料、输液管 道连接而成(加大行程是为创造最大的浓度差)。提取温度可根据物料特性 合适选择,载热体一般为蒸汽,也可为热水或导热油(便于低温时自控), 按中药提取理论,一般药材浸出时最佳温度约80摄氏度,以保持热敏性成分 不被破坏,淀粉等不易浸出,减轻下道过滤工序的难度。

本机组为连续逆流工艺,药材自投料口自动定量投入,溶剂则由进液口控量 注入,在特殊装置推动下,浸出液和药材形成相反的连续逆流浸出过程。从 最前面流出的是有效成分得到充分浸出的提取液,从最后面排出的是几乎不 含有有效成分的药渣,进而进入挤汁机或溶媒回收器处理干净,既节省又不 污染环境。整套装置属封闭系统,既适宜挥发性有机溶媒浸出,亦适合水为 溶媒浸出,洁净卫生,加料和排渣都自动完成,操作方便。清洗时打开上部 门盖即可进行,符合GMP要求。

设备已成功应用于中药、甜菊糖甙、茶粉、罗汉果糖甙、烟叶薄片等产品的 提取。提取效率高,运行成本低。得到广大客户的一致好评。

#### 连续逆流超声提取设备配套系统

- 1、药材物料输送及控制系统
- 2、超声波发生系统
- 3、提取溶媒流量及温度控制系统
- 4、提取过程加热和保温系统
- 5、提取药液渣液分离系统
- 6、药渣处理系统:由药渣挤干机、烘干机、有机溶剂回收冷凝器、药渣输 送机等组成
- 7、在线清洗系统
- 8、电气操作控制系统:整套系统采取PLC电脑操作控制

# Purpose

The unit is a kind of brand new dynamic extracting equipment that extracts the effective components in natural products (esp. TCM materials). It has been granted the national patent. Used with other auxiliary equipment such as condenser, it can also meet technological requirements of solvent recovery and etc.

#### **Features**

According to modern production theories and principles of natural products (esp. TCM materials), the unit is designed and developed through many years of research and development.

The unit is composed of certain amounts of extraction single tanks provided with special devices and equipped with the heating jacket outside, which connect with material and liquid conveying pipes (the enhanced travel aims to create the maximum strength difference). The extracting temperature can be appropriately selected according to material natures. Generally the steam is adopted as the heat carrier, or hot water or heat transfer oil (to facilitate automatic control under low temperature) can also be adopted. According to TCM extraction theories, generally the optimal temperature during medicine extraction is about 80°C, so as to avoid damaging the heat sensitive components, make starch not easily to be lixiviated and reduce the difficulty of the next filtering procedure.

The unit adopts the continuous countercurrent technology. The medicine materials are fed automatically in fixed quantity from the feeding inlet, the solvent is filled in controlled quantity from the liquid inlet. Under the driving of the special devices, the leaching solution and medicine materials form reverse continuous countercurrent leaching process. Those flowing out from the beginning are the extraction liquids that contain effective components, and those discharged finally are medicine residues that contain no effective components. The residues will enter the extruding machine or solvent recovery machine for disposal and cleaning, which is cost saving and does not pollute the environment. The whole unit is a closed system, which makes it suitable for both extraction of organic solvents and water solvents. It is clean and sanitary. The feeding and residue discharging are automatically completed with convenient operation. During the cleaning, just open the upper door cover. It conforms to GMP requirements.

The equipment has been successfully applied to extraction of TCM, steviol glycosides, tea powder, momordica glycosides, tobacco sheets, etc. With high extracting efficiency and low running cost, it has been received good comment from

# 技术参数 Technical Parameters

3.	12/1/22 reclinical rataffectors											
	项目\型号 Item\Model	ND-50	ND-100	ND-150	ND-200	ND-300	ND-400	ND-1000				
	生产能力(L/h) Capacity	125	250	275	500	625	750	2500				
夹套内压力(MPa) Pressure in Jacket <0.09												
	罐内压力(MPa) Tank Pressure	常压 Normal atmospheric pressure 0 ~ 100℃										
	罐内温度(℃) Tank Temperature											
	功率(Kw) Power		3	3 ~ 4		4~6						
	物料运行时间(min) Material Running Time				30 ~ 120							
	出液系数 Filtration Coefficient				8 ~ 15							
	药材粒度 Granularity of Material	φ 5左右粗或饮片、粗粉 Around φ mm, decoction pieces or rough powder										
_	外形尺寸(m)L×W×h Outline Dimension	15×2×3	15×2×3	15×2×3	15×2×3	16×3×3	16×3×3	17×3×3				

注:因物料特性、生产工艺的不同,设备的功率和外形尺寸参数存在较大差异,具体请咨询我公司。

# Ultrasonic Counter-current Extractor

# 超声波逆流提取机组

Auxiliary system of ultrasonic continuous countercurrent extracting equipment

- 1. Medicine materials conveying and control system
- 2. Ultrasonic generation system
- 3. Extracting solvent flow and temperature control system
- 4. Heating and heat preservation system during the extraction process
- 5. Medicine liquid and residue separation system
- 6. Medicine residue disposal system: composed of medicine residue extruding machine, drying machine, organic solvent recovery condenser, medicine residue conveyor, etc. Online cleaning system
- 8. Electric operation and control system: The whole system adopts PLC computer operation and control.



# 多功能提取罐

# Multi-Functional Extractor

## 产品用途:

本设备可用于中药、食品、化工行业的常压、微压、水煎、温浸、热回流、强制循环渗漉作用、芳香油提取及有机溶媒回收等多种工艺操作。具有效率高、操作方便等优点,罐内配备CIP清洗系统,符合GMP标准。

#### 产品特点:

- 1、出渣门采用普通双气缸启闭式或三气缸旋转式安全门式。双气缸旋转推动锁紧圈锁紧,斜面楔块自锁,彻底解决了因压缩空气气源压力不稳引起的渗漏或脱钩事故,实现安全生产。
- 2、改变进液方式和增加搅拌装置后可应用于动态提取系统。
- 3、罐内底部增设环形过滤网,增加了过滤网面积,过滤网面积为原老式 提取罐的数倍。
- 4、用泵喷射向上强制逆流循环,起到了搅拌作用。
- 5、采用了新型泡沫捕集器,防止泡沫中夹带细小轻浮药材进入冷凝器列管内 形成管内堵。

# Purpose

The equipment is applicable to the multiple technology operations of normal pressure, micro pressure, water frying, warm soaking, thermal reflux, compulsory circulation, filtration, redolent oil extraction and organic solvent recycling in traditional Chinese medicine, food and chemical industry. It has the advantages such as high efficiency, simple operation and etc. The CIP cleaning system is set inside the tank, conforming to GMP standard.

#### Features

- The residue discharging door adopts ordinary double-cylinder starting and closing type or three-cylinder rotary safe door type. The double-cylinder rotate to push the clamp ring for fastening and the bevel wedge locks itself, so as to solve leakage or disengagement caused by unstable pressure of the compressed air supply and realize safe production.
- 2. It can be applied in the dynamic extraction system after the liquid feeding mode is changed and the blending device is added.
- 3. The annular filter screen is additionally provided at the bottom of the tank to enhance the area of the filter screen. The area of the filter screen is several times higher than that of the old style extraction tank.

- 4. The pump jetting forms upward forced countercurrent circulation, playing the function of blending.
- 5. The new type foam collector is adopted to prevent the blocking formed by the small and light medicine materials in the foam that enter the cooler lined tube.

项目\型号 Item\Model	TQ-1.0		TQ-3.0	TQ-4.0	TQ-5.0	TQ-6.0
容积L Volume	1200	2300	3200	6300	8500	11000
罐内设计压力MPa Design pressure in the tank			0.09			
夹层设计压力MPa Design pressure in the jacke	et .		0.3			
压缩空气压力MPa Compressed air pressure			0.6-0.7			
加料口直径mm Diameter of feeding inlet		400		500		
加热面积m² Heating area	3.0	4.7	6.0	7.5	9.5	12
冷凝面积m² Condensing area	4	4	5	5	8	10
冷却面积m² Cooling area		1		2		
过滤面积m² Filtering area		3		5		
排渣门直径mm Slagging door diameter		800		1000		
能耗Kg/h Consumption	245	325	345	645	720	850
搅拌转速prm/min Blending rotation speed			25			
电机功率Kw Motor power	2	3	4	5.5	5.5	7.5
设备净重Kg Equipment net weight	1800	2050	2400	3025	4030	6500

# Multi-Functional Extractor

# 多功能提取罐









TQ-M 蘑菇型 TQ-M Mushroom type

TQ-Z 直筒型 TQ-Z Barrel type

TQ-D直锥型 TQ-D Straight taper type

# 实验室微型提取浓缩机组

# Lab Multi-Functional Extractor and Evaporator Set

## 产品用途:

本设备适用于中药和各种天然植物提取,是医院、药厂实验室、科研单位、高等院校进行科学研究、生化实验、新药开发、新产品开发、放大试验、科研成果实现现代化工业生产前工艺技术参数确定的理想的设备。

该成套设备功能齐全,可获得全系统真空,可满足水提、醇提、分次提取、温浸热回流提取、渗漉提取。提取液淬取,层析,过滤、浓缩、烘干。也可收膏,有机溶媒回收等。实现多种工艺优化组合操作。该系统有蒸汽加热、电加热两种方式供用户选择,特别适用没有蒸汽的单位。

#### Purpose:

The equipment is suitable for extraction of TCM and various natural plants. It is the ideal device for determination of technological parameters before modernized industrial production

The whole set of equipment has complete functions, and the whole system vacuum can be achieved. It can meet various extraction requirements such as water extraction, alcohol extraction, extraction in batches, warm soaking and heat reflux extraction, percolation extraction, etc. Extraction, chromatography, filtration, concentration, drying, ointment collection, organic solvent recovery, etc. can be carried out in the extraction solution. The optimal combination of various technologies can be realized. The system has two modes such as steam heating and electric heating for users to select, so it is especially suitable for units without steam.

项目\型号 Item\Model		E	提取罐 xtracting tank			罐 ting tank	真空泵 Vacuum pump	
		夹套工作压力 Working pressure in the jacket	罐内工作压力 Working pressure tank	加热面积 Heating area	工作压力 Working pressure	真空度 Vacuum	电压 Voltage	功率 Power
	(∟)	( Mpa)	( Mpa )	( m² )	(Mpa)	(Mpa)	(∨)	( KW )
TN50	50	0.2	0.09	0.5	常压	-0.08	380	1.5
TN100	100	0.2	0.09	1	常压	-0.08	380	2.2
TN200	200	0.2	0.09	1.5	常压	-0.08	380	3
TN300	300	0.2	0.09	2	常压	-0.08	380	3
TN400	400	0.2	0.09	2.5	常压	-0.08	380	4
Tn500	500	0.2	0.09	3	常压	-0.08	380	5.5



# 索式提取罐组

# Soxhlet Reflux Extractor

#### 产品用途:

索氏提取罐符合药厂GMP标准,工艺适应性好。能采用常压、负压、正压工艺操作的水提和醇提,特别是热敏性物料的低温提取、浓缩。水提低温可在45℃以上进行。浓缩液比重可达1.1-1.35。特殊物料(易结垢、结焦物料)可改自然循环为强制循环系统。以满足客户特殊物料需要。

自动化程度高。温度、压力、流量、液面、浓度均能设定、自控,操作方便,性能稳定。仪器仪表、执行元件、PLC均是精选的国内外知名品牌产品,可靠性高。

#### Purpose:

The Soxhlet extracting tank conforms to GMP standard and has good technological adaptability. It is suitable for water extraction and alcohol extraction under conditions of normal pressure, negative pressure and positive pressure, especially suitable for low-temperature extraction and concentration of heat sensitive materials. Low-temperature water extraction can be carried out with temperature above 45 °C . The specific gravity of concentration liquid can reach 1.1-1.35. For special materials (likely to agglomerate and solidify), natural cycling can be changed into compelled cycling to meet customer requirements.

Highly automatic degree. The temperature, pressure, flow, liquid level and concentration can be set and kept under automatic control with convenient operation and stable performance. All instruments, meters, executive elements and PLC are made of famous brand products from home and abroad. Therefore, they are highly reliable.

项目\型号 Item\Model	THN1-250	THN2-500	THN3-750	THN4-1000	THN6-1500		
提取罐容积(M³) Extractor volume	1	2	3	4	6		
蒸发能力(Kg/h) Evaporation	250	500	750	1000	1500		
提取罐内工作压力(MPa) Extraction of the tank working press	sure		常压				
提取罐夹套工作压力(MPa Working pressure extraction tank ja	a) oket	<sub>₹</sub> ≤0.15					
提取罐内工作温度(℃) Extraction tank temperature			60~80				
循环蒸发器内工作温度(%Cycle evaporator temperature		55-80					
浓缩比重(%) Concentration ratio			1.1–1.35				





# 双效浓缩收膏罐

# Double-Effect Evaporator

#### 产品用途:

本设备广泛用于中西药、轻化工、食品等行业液体物料蒸发浓缩和收膏工艺需要,尤其适用于热敏性物料的低温真空减压浓缩,可制作比重达1.4的浸膏。专利号:ZL92218691.X

#### 产品特点:

- 1、采用二效同时蒸发,充分利用二次蒸汽作为第二效蒸发器的热源,有效 节约能源二分之一,以ENS-1000为例,一年相较单效浓缩可节省约 3500吨蒸汽和9万吨水,折合人民币60-80万元。
- 2、在浓缩过程中,因蒸发器处于真空状态,蒸发温度低,一效80-90度, 二效50-60度,可有效保证热敏性物质在蒸发过程中不被破坏。并且蒸 发速度相较单效蒸发提高约1.5倍。
- 3、第二效蒸发室采用刮壁装置,有效地防止浓缩过程中结焦,浓缩比可到1.4
- 4、采用外循环加热强流工艺,蒸发速度快,受热时间短
- 5、设备采用优质不锈钢制造,符合GMP要求,达到医药食品卫生要求
- 6、采用全自动化PLC控制,实现冷凝溶剂真空状态自动放液

#### Purpose:

This equipment is widely used in medicine, light industry, food industry and the evaporation of liquid material mixing process needs income, especially for low-temperature vacuum heat-sensitive materials, vacuum concentration, can produce up to 1.4 weight extract. Patent number: ZL92218691.X.

#### Features:

- using two effect evaporator while making full use of secondary steam.
   evaporation chamber to reduce the evaporation temperature for heat-sensitive drugs
- 2, 2-effect evaporation chamber wall by scraping device, to prevent theprocess of coking, enrichment up to 1.4 specific gravity
- 3, PLC control, and achieve automatic condensate discharge
- 4, by external heating cycle of intense heating process, evaporation speed, is short
- 5, all of high quality stainless steel equipment, comply with food hygieneof Traditional Chinese Medicine, to GMP requirements

<u>'</u>											
项目\型号 Item\Model		ENS-400	ENS-700	ENS-1000	ENS-1500	ENS-2000	ENS-2500				
总加热面积 The total heati		10	17	23	34	45	55				
蒸发量(Kg, Evaporation ra		40	700	1000	1500	2000	2500				
蒸发温度(℃)	一效 First effe	ot		80-90							
Evaporation temperature	二效 Second e	effect		50-60							
真空度(MPa) Vacuum degree	一效 First effer	ot	0	.03-0.04							
vacuum degree	二效 Second	effect	0	.07-0.08							
浓缩比重	一效 First effe	ot	1.2								
specific gravity	二效 Second										
蒸汽压力(MF Steam pressur			0	0.05-0.09							
蒸汽耗量(k Steam consur	(g/h) mption	220	380	550	800	1100	1400				
循环耗水量 CirculatingWater consumption	r	5	8.5	12	18	24	30				
二效搅拌功育 Second effect motor power	も(Kw)	1.5	2.2	3	4	5.5	5.5				
外形尺寸(n Outline dimen (长×宽×高 (L×W×H)	sions	5.1x1.2 x3.8	5.8x1.4 x4.2	6.0x1.5 x4.4	6.4x1.6 x5.0	6.8x1.7 x5.4	7.3x1.8 x5.8				

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华泰重工装备 Huatal Heavy Industries

# Double-Effect Evaporator

双效浓缩收膏罐



# 三效浓缩器

# Triple Effect Evaporator

# 产品用途:

本浓缩器适应于中药、西药、葡萄糖、淀粉、味精、食乳品、化工等液料的浓缩,尤其适用于热敏性物料的低温真空浓缩。我公司经过精心计算,周密设计改进后,比原来的特点效益更多。可根据浓缩量大小,来选用合适的浓缩器。

#### Purpose:

This concentrator is applicable to the concentration for liquid material of Chinese traditional medicine, Western medicine, glurmet powder, dairy food, chemical engineering, especially suitable for concenteation of heat sensitive materials in vacuum under low temperature. It has more advantages than previous products after careful calculation and elaborative improvements in design. Appropriate concentrator can be selected in accordance with its concentration capacity.

项目\型号 Item\Model		SNS-500	SNS-1000	SNS-1500	SNS-2000			
蒸发量(Kg/h) Steam consumption	蒸发量(Kg/h) Steam consumption		1000	1500	2000			
蒸汽压力(MPa Steam pressure	)		0.05 ~	0.09				
蒸发温度(℃)	一效 First effect		90					
無及/画浸( C) Evaporation temperature	二效 Second effect	75						
	三效 Third effect	60						
真空度(MPa)	一效 First effect	0.04						
Vacuum degree	二效 Second effect	0.062						
	三效 Third effect	0.085						
蒸汽耗量(Kg/h Steam consumption	)	200	400	600	800			
耗循环水量T/h Water consumption		6	12.2	17	22			
外形尺寸(m) Outline dimensions (长×宽×高) (L×W×H)	Outline dimensions (长×宽×高)		8 × 1.5 × 4	9 × 1.7 × 4.1	9.5 × 1.9 × 4.2			



# 单效浓缩器

# Single-effect Evaporator

# 产品用途:

本设备适应于中药、西、淀粉糖、食乳品等物料浓缩与工业有机溶剂(如酒精)的回收,适用于批量小、品种多的热敏性物料的低温真空浓缩。

酒精回收:回收能力大,采用真空浓缩流程。比老型同类设备提高生产率5-10倍,降低能耗30%,具有投资小,回收效益高的特点。

浓缩液料:本设备采用外加热自然循环与真空负压蒸发相结合的方式,蒸发速度快,浓缩比重可达1.3。

#### Purpose:

This equipment is applicable to the concentration for materials of Chinese traditional mendicine, starch sugar etc. and recovery for industrial organic solcent (like alcohol), and is suitable for low temperature vacuum concentration of heat sensitive materials with small quantity and great categoy.

Alcohol recovery: recovery capacity, vacuum concentration process. Than the old type of similar equipment to improve productivity 5-10 times and reduce energy consumption 30%, with investment, recovery efficiency is high.

Concentrate feed: This equipment is used outside the natural cycle of heating and vacuum evaporation of a combination, evaporation speed, concentration ratio up to 1.3.

项目\型号 Item\Model	WZ-300	WZ-500	WZ-750	WZ-1000	WZ-2000	WZ-3000
蒸发能力(Kg/h) Evaporation capacity	300	500	750	1000	2000	3000
加热面积 ( m² ) Heating area	5.2	8	12	16	32	51
冷凝面积 ( m² ) Condensing area	6	11	15	20	40	65
蒸汽用量(Kg/h) Steam consumption	330	550	820	1100	2200	3300
冷却水量(t/h) Cooling water consumption	6	10	15	20	40	60
外形尺寸 ( m ) Outline dimensions	2.5x1x3.2	2.7x1x3.5	3x1.2x3.7	3.2x1.2x4	4x1.2x4.7	5x1.4x5





# 超低温旋转薄膜蒸发器

# Ultralow-temperature Rotary Film Evaporator

# 产品用途:

本设备适用于植物提取液、中药、生物制品、果汁、奶制品、速溶茶等要求在低 温条件下浓缩回收的工艺,并要求设备能便捷地彻底清洗。

# 产品特点:

- 1、真空条件下实现连续进料,连续出料;
- 2、浓缩工艺实现管道化、连续化、自动化全封闭操作;
- 3、超低温(30℃-50℃)可调,保证有效成分不受破坏;
- 4、根据物料的特性,即可CIP在线清洗,也可内加热器移动器外彻底清洗,无死 角、盲点,符合GMP规范要求;
- 5、运行过程中可回收溶剂;
- 6、另具有适应低矮车间的低高度机型。

The equipment is suitable for plant extract, traditional Chinese medicine, biological products, fruit juice, milk products, instant tea, which needs to be concentrated and recovered under Ultra-low temperature conditions, and requires that the equipment can be cleaned thoroughly and conveniently Features:

- 1. Continuous feeding and continuous discharging under vacuum condition;
- 2. Evaporate process achieved on the pipeline, continuous, automatic closed operation; 3. Ultra-low temperature (30 -50 C) can be adjusted to ensure that the heat sensitive ingredients are not damaged;
- 4. According to the characteristics of the material, the evaporator can be CIP online cleaning, and can also move the heater outside for cleaning, no dead corners, blind spots, in line with the requirements of GMP specification;
- 5. Recoverable solvent in operation;
- 6. It also has the low altitude model adapted to the low workshop

型号/型号 Items/Model	BZ <b>–</b> 50	BZ-100	BZ <b>–</b> 200	BZ <b>–</b> 300	BZ <b>–</b> 400				
换热面积(m2) Heating area	3	5	10	15	20				
蒸发能力(kg/h) Evaporation Capacity	40~80	60~120	130~250	250~380	260~500				
真空度(MPa) Vacuum degree	-0.098								
蒸发温度 ( ℃ ) Evaporation temperature			30~50						
主机功率(Kw) Power	3.9	5.2	6	8.5	11				
外形尺寸 ( m ) Outlet dimensions	3.8 × 1.2 × 3.6	5.2 × 1.3 × 4.2	6.3 × 1.5 × 4.2	6.5 × 1.6 × 4.2	6.5 × 1.7 × 4.6				









# 低温纯电浓缩器

# Low temperature pure electric concentrator

# 产品用途:

纯电浓缩机通过模仿制冷原理,采用载能介质在封闭的循环系统中进行气态与液态的反复循环,从而实现放热和吸热的热量交换。该过程中,释放的热能用于加热料液并促使其蒸发,而吸收的热能来自料液蒸发过程中产生的二次蒸汽冷凝。通过冷热能量的双重利用,纯电浓缩机能够实现料液的浓缩、溶剂的蒸发以及溶剂的回收。与传统的加热方式相比,能耗显著降低、温控精度高、自动化程度高、模块化设计易于维护、安全性能高。

#### Product Usage:

Pure electric concentrator imitates the refrigeration principle and uses a carrier medium to repeatedly circulate gas and liquid in a closed cycle system, thereby achieving heat exchange for heat release and absorption. During this process, the released heat energy is used to heat the liquid and promote its evaporation, while the absorbed heat energy comes from the condensation of secondary steam generated during the evaporation of the liquid. Through the dual utilization of cold and hot energy, pure electric concentrator can achieve the concentration of feed liquid, evaporation of solvent, and recovery of solvent. Compared with traditional heating methods, the energy consumption is significantly reduced, the temperature control accuracy is high, the degree of automation is high, the modular design is easy to maintain, and the safety performance is high.

项目\型号 Item\Model	蒸发能力 Evaporation Capacity (kg/h)	真空度 Vacuum degree (Mpa)	蒸发温度 Evaporation Temperature (°C)	主机功率 Power (Kw)	外形尺寸 Overall Dimension (m)
PVZ-100	100	-0.095		9	1.8× 1.2× 1.8
PVZ-500	500		40~80	45	3.2× 1.3× 2.8
PVZ-1000	1000			90	6.3× 1.5× 4.2
PVZ-2000	2000			170	6.5× 1.6× 4.2
PVZ-3000	3000			250	6.5× 1.7× 4.6





# 喷雾干燥塔

Spray Dryer

# 产品用途:

OZR系列离心造粒喷雾干燥机适用于陶瓷行业、医药行业、化工、染料等干燥。和特殊物料的离心造粒,粒度分布要求可任意调整至最佳分布曲线值(100目-350目),其主要技术性能,指标均能达到世界先进水平。

#### 产品特点:

干燥速度快,料液经雾化后表面积大大增加,在热风气流中,瞬间就可蒸发95%-98%的水份,完成干燥时间仅需数秒,特别适用于热敏性物料的干燥。产品具有良好的均匀度、流动性和溶解性,产品纯度高,质量好。生产过程简化,操作控制方便。对于含水量40-60%特殊物料可达90%的液体能一次干燥成粉粒产品,干燥后不需粉碎和筛选,减少生产工序,提高产品纯度。对产品粒径,松密度,水份,在一定范围内可通过改变操作条件进行调整,采用PLC电脑自动化控制,操作方便。

#### Purpose:

OZR series centrifugal granulator dryer suitable for ceramic industry, pharmaceutical industry, chemical industry, dye and other special materials, centrifugal granulation, particle size distribution requirements can be adjusted to the optimum distribution curve of values (100 mesh -350 mesh), its The main technical performance, indicators can reach the world advanced level.

#### Features:

Fast drying, material after atomization surface area increased significantly in the hot air flow, the moment could evaporate 95% -98% of the water, only a few seconds to complete the drying time, especially suitable for drying heat sensitive materials. Products with good uniformity, mobility, and solubility, high purity and good quality. Production process is simplified, convenient control. 4060% moisture content for special materials, 90% of liquid can be dried into a powder product, after drying without crushing and screening to reduce the production processes, improve product purity. Product particle size, bulk density, moisture, in a certain range can be adjusted by changing the operating conditions, control and management are very convenient.

项目\型号 Item\Model	5		50	QZR 100	150	200
入口温度(℃) Inlet temperature	5		30	≤350	150	200
出口温度(℃) Outlet temperature			<	<80~90		
水分最大 The largest water	5	25	50	100	150	200 ~ 2000
蒸发量 Evaporation						
离心喷雾头传动形式 Centrifugal spray head Transmission Type	玉缩空气i	运动	机械运动			
转速 r.p.m. Speed r.p.m.	25000	22000	21500	18000	18000	15000
喷雾盘直径 Spray plate diameter	50	102	108	108	150	180 ~ 340
热源 Heat	电	电	电+蒸气	电+蒸气	电+蒸气	由用户
电加热最大功率(Kw) Electric heating Maximum power	8	31.5	60	81	99	自行决定
外形尺寸(M) 1. Dimensions	$8 \times 0.93 \times 2.2$	$3 \times 2.7$ $\times 4.26$	$3.7 \times 3.2 \times 5.1$	4.6 × 4.2 × 6	5.5 × 4.5 × 7	根据实际情况确定
干粉回收 Dry recycling	≥95	≥95	≥95	≥95	≥95	≥95

# Spray Dryer

喷雾干燥塔





压力式 Pressure type



离心式 Centrifugaltype

# 酒精回收塔

# **Alcohol Recovery Tower**

## 产品用途:

本设备用于医药化工行业对稀酒精的回收提纯,同时适用于甲醇、丙酮及其它有机溶媒的精馏回收。产品特点:一种设备二种操作方法本设备可将30度--50度的稀酒精蒸馏到90度--95度残液排放醇度=3度,是专门回收酒精的首选设备。

## 产品特点:

本装置采用高效不锈钢波纹填料,全不锈钢制作,以确保成品酒精不被污染,塔釜采用可拆式U型管,这样,便于加热外壁及精馏釜内壁进行清洗。 本设备可采用外回加热或内回热两种形式,用户可根据实际需要选购。

#### Purpose:

The equipment used for pharmaceutical and chemical industry, the recovery of the purification of dilute alcohol, also apply to methanol, acetone and other organic solvent distillation recovery. Features: A device operation method of the two kinds of equipment can be 30  $^{\circ}$ C - 50  $^{\circ}$ C dilute alcohol distillation to 90  $^{\circ}$ C - 95  $^{\circ}$ C residue emission-grade = 3  $^{\circ}$ C, is the preferred alcohol recovery specialist equipment.

#### Features:

This device adopts high effciency stanless steel corrugated padding to ensure finished alchol will not be polluted. Tower still adopts detachable U-shaped tube, which equipment can adopt two modes, external feedback heating and internal feedback heating and users can purchase what they need according to actual demands.

项目\型号 Item\Model	W200	W300	W400	W500	W600	Zw200	Zw300
塔釜容积(L) Tower reactor volume	700	1050	1500	1700	2000		
塔身高度(mm) Tower height	6000	7000	8000	10000	10000	5600	9100
高位罐容积(L) High volume tank	500	500	800	1000	1500	500	800
冷凝面积(m²) Condensation area	7	7	19	24	35	12	20
冷却面积(m²) Cooling area	1	1	1	3	3	1	1
蒸馏面积(m²) Distillation area	4	6	8	18	25	2	4
回收能力(Kg/h) Recycling capacity	25-36	61-80	120-140	185-220	270-320	60-80	120-165
回收浓度(%) Recycling levels			90	-95			
填料形式 Form filler			波纹	填料			
外形尺寸(m) Dimensions	2300x700 x9300	2600x800 x10500	2500×1000 ×1100	3000x1200 x1300	500×1400 ×1300		





# 热风循环烘箱

# Hot Air Circulation Oven

# 产品用途:

热风循环烘箱是用于制药、化工、食品、农副产品、水产品、轻工、重工等行业物料及产品的加热固化、干燥脱水。如原材料、生药、中药饮片、浸膏、粉剂、颗粒、冲剂、水丸、包装瓶、颜料染料、脱水蔬菜、瓜果干、香肠、塑料树脂、电器元件、烘漆等。本烘箱系列的最大特点是大部分热风在箱内进行循环,从而增强了上下湿差。本设备备有电脑自控系统,实现了自动恒温控制和全封闭,全循环操作。

#### Purpose:

Hot air circle oven is used in the pharmaceutical, chemical, food, agricultural and sideline products, aquatic products, light industry, heavy industry materials and products such as heat curing, drying dehydration. Such as raw materials, crude drugs, herbs and herbal extract, powder, granule, powder, water pills, bottles, pigment dyes, dehydrated vegetables, dried fruit, sausages, plastic resin, electric elements, such as baking finish. This oven features the largest series in the box most of the hot air to circulate, thus increasing the difference between the upper and lower wet. The equipment available in computer-controlled system to realize automatic temperature control and fully enclosed, full-cycle operation.



型号 Model	RHX-14-B	RHX-27-B	RHX-41-B	RHX-54-B	RHX-5-C	RHX-14-C	RHX-27-C	RHX-41-C	RHX-54-C
型号 Model	CT-1	CT-11	CT-111	CT-IV	CT-C-O	CT-C-I	CT-C- II	CT-C- III	CT-C-IV
每次干燥量 ( Kg ) Amount of each drying	100	200	300	400	25	100	200	300	400
配用功率 (Kw) Nominal power	1.1	1.1	2.2	2.2	0.45	0.45	0.9	1.35	1.8
耗用蒸汽(Kg/h) Consumption of steam	20	40	60	80	5	18	36	54	72
散热面积 ( m² ) Cooling area	20	40	60	80	5	20	40	80	100
风量(m³/h) Wnd	1400	5200	9800	9800	3450	3450	6900	10350	13800
上下温度(℃) Upper and lower temperature	±2	±2	±2	±2	± 2	±2	±2	±2	±2
配用烘箱 Equipped with oven	48	96	144	192	16	48	96	144	192
外形尺寸(m) (宽×深×高) Dimensions (wath x depth x height)	2430 × 1200 × 2375	2430 × 2200 × 2433	3430 × 2200 × 2620	4380 × 2200 × 2620	1550 × 1000 × 2044	2300 × 1200 × 2300	2300 × 2200 × 2300	2430 × 3220 × 2000	4460 × 2200 × 2290
配套烘车 Baking cart	2	4	6	8	0	2	4	6	8





# 真空干燥箱

# Vacuum Oven

# 华泰重工装备 Huatal Heavy Industries

# 产品用途:

本机适用于医药、化工、食品、电子、中药等行业的物料干燥。

## 产品特点:

- 1.真空下物料溶液的沸点降低,使蒸发器的传热推动力增大,因此对一定的传热量,可以节省蒸发器的传热面积。
- 2.适用于在高温下易分解、聚合和变质的热敏物料的干燥。
- 3.在干燥过程中任何不纯物均无混入,物料和形体不会损坏。

#### Purpose:

This machine is suitable for pharmaceutical, chemical, food, electronics, medicine and other industries drying.

#### Features:

- Vacuum lower boiling point material solution to the evaporator heat transfer driving force increases, and therefore a certain quantity of heat, can save the evaporator heat transfer area.
- 2. Applicable to high temperatures that can decompose and polymerize and metamorphose thermal drying process
- 3. During the drying process were not mixed with any impurities, material and physical harm.

项目\型号 Item\Model	YZG-600	YZG-1000	YZG-1400	FZG-15
干燥箱内尺寸mm Drying in size	976	1527	2054	1500x1400x1220
干燥箱外尺寸m Oven outside dimensions	1.14x0.81x1.02	1.7x1.2x1.5	2.4x1.67x1.9	1.5x1.9x2.11
烘架层数 Layer drying rack	4	6	8	8
层间距离mm Interlayer distance	81	102	102	102
烘盘尺寸mm Baking tray size	310x600x45	250x410x45	400x600x45	480x630x45
烘盘数 Number of baking trays	4	24	32	32
干燥箱重量kg Drying weight	250	800	1400	2100





# 真空减压浓缩器

# **Vacuum Decompression Concentrator**

# 产品用途:

本设备主要适用于制药、食品、保健品、口服液、果汁、化工等工业液体物料的浓缩蒸发,并且亦能回收酒精和简单的回流提取。

## 产品特点:

本设备主要包括浓缩液、第一冷凝器、气液分离器、冷却器、受液桶6个部件,全部采用不锈钢制造,浓缩罐为夹套结构,冷凝器为列管式,冷却器为蛇管式。

#### Purpose:

This equipment is mainly used in pharmaceutical, food, health care products, oral liquid, juice, chemical and other industrial materials, concentrated liquid evaporation, and also recovery of alcohol and simple back extraction.

#### Features:

This equipment includes concentrated solution, the first condenser, gas-liquid separator, cooler, bucket six parts by the fluid, all stainless steel tank for the concentrated jacket structure for the column tube condenser, cooler for the coil type.

规格(m²) Spec	有效长度(mm) The effective length	外径(mm) Diameter	重量(Kg) Weight
0.5	800	159	60
1	800	159	90
5	1200	300	260
10	1600	400	390
30	3200	450	1005
50	4000	500	1620
80	3500	600	2320
100	3000	700	2950



# 换热器

# Heat Exchanger

# 华泰重工装备 Huatal Heavy Industries

# 产品用途:

换热器是一种实现物料之间热量传递的过程设备,是在石油、化工、冶金、 电力、轻工、食品等行业普遍应用的一种工艺设备。

在炼油、化工装置中换热器占总设备数量的40%左右,占总投资的30%-45%。近年来随着节能技术的发展,应用领域不断扩大,利用换热器进行高温和低温热能回收带来了显著的经济效益。

#### Purpose:

Is a heat exchanger to achieve the transfer of materials between the heat energy-saving equipment, in the petroleum, chemical, petrochemical, metallurgical, power, light industry, food industry, such as the universal application of a technology equipment. In oil refineries, chemical installations in the heat exchanger of the total number of equipment about 40 percent of the total investment of 30% -45%. In recent years, with the development of energy-saving technologies, applications continue to expand, using a high-temperature heat exchanger and low-temperature heat recovery has brought significant economic benefits

项目\型号 Item\Model		100	300	500	700	1000
容积(L) Volume	50	100	300	500	700	1000
蒸汽压力(MPa) Steam pressure	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15
真空度(MPa) Vacuum	≤0.08	≤0.08	≤0.08	≤0.08	≤0.08	≤0.08
加热面积(m²) Heating area	0.4	0.59	1.1	1.45	1.8	2.3
冷凝面积(m²) Condensation area	1.2	1.7	3.0	3.2	3.6	4.5
冷却面积(m²) Cooling area	0.25	0.35	0.6	0.7	0.85	1.1
受液槽容积(L) Liquid Receiver volume	15	45	76	100	125	140
外形尺寸 (m)LxWxH Dimensions	1.2x0.6 x2.2	1.35x0.75 x2.2	1.7x1 x3.4	2.1x1.2 x3.4	2.4x1.3 x3.4	2.4x1.3 x3.72



# 中草药渣挤汁机

# Herb Slag Squueezer

# 产品用途:

本机适用于对各种草本、木本植物性药渣进行挤渣出汁,回收溶媒及有效成分,使之提高浸出率多出产品,增加经济效益。

本机适用于各中药厂、研究所、保健品厂和以中草药及蔬菜水果为原料的食品、饮料、化妆品、造酒等行业。

## Purpose:

This machine is suitable for all kinds of herbs, woody plants, residues of residue to squeeze out the juice, extract recovery solvent and the active ingredients to enhance the leaching rate of more products, increase cost effectiveness. This machine is applied to all pharmaceutical companies, research institutes, health care products with herbs and vegetable plants and fruit as raw materials for food, beverage, cosmetics, make wine and other industries.

# 技术参数 Main Tachnique Parameterz

项目\型号 Item\Model	J-200	J-300	J-400	J-500
生产能力m³/h Capacity	1 ~ 1.5	2	3	4
出汁率% Juice yield	80%	80%	80%	80%
主轴转数r/min Spindle Speed	10	10	10	10
电机功率Kw Motor capacity	3	5	6	8
外形尺寸mm (L×W×h) Dimensions	1300 × 350 × 800	1800 × 480 × 1000	2100 × 600 × 1150	2500 × 800 × 1300
整机重量Kg Machine weight	250	320	400	500





# 不锈钢贮罐

# Stainless Steel Tanks

# 产品用途:

本设备可用于中药、食品、化工行业、液体物料贮存。具有效率高,操作方便等优点,罐内配备自动旋转喷洗头,确保清场彻底。材料均采用不锈钢 SUS304或SUS316L制造,内表面抛光至Ra≤0.4μm,外表面亚光处理,符合GMP医药标准。不锈钢板制汽车运输槽车、卧式、立式贮罐、高位槽、计量槽、特殊规格可按用户需求设计、制造。

## Purpose:

This equipment can be used for medicine, food, chemical industry, the liquid material storage. High efficiency, convenient operation, the tank is equipped with auto-rotating spray head to ensure a complete cleaning. Materials are stainless steel SUS304 or SUS316L manufacturing, internal surface polishing to Ra  $\leq 0.4 \mu m$ , external surface matt treated to meet the GMP pharmaceutical standards. Stainless steel plate system for tank cars, horizontal, vertical tank, high chamfer.Its, special size according to user requirements design and manufacture.

项目\型号 Item\Model		CG- 1000	CG- 2000	CG- 3000	CG- 4000	CG- 5000	CG- 6000	CG- 10000
容积(L) capacity		1000	2000	3000	4000	5000	6000	10000
外形尺寸(mm) overall dimension	直径 Diameter	900	1200	1500	1600	1600	1800	2000
overall diffierision	高 H	2000	2800	2200	2500	2900	3000	3900





# 酒精沉淀罐 Alcohol Dposition Tank

# 产品用途:

本设备适用于中药、口服液、食品、保健品、化工等的酒精沉淀,酒精沉淀 灌系醇沉旧工艺新开发的专用设备,主要用于中药水煎液经浓缩后进行冷冻 或酒精沉淀的操作,也可用中药醇提后浓缩液进行水沉淀的操作。

#### Purpose:

This equipment is applicable to alcohol precipitation in Chinese medicine, oral solution, food, health products, chemical engineering etc. Alcohol precipitation tank is kind of newly-developed special-purpose equipment by adopting old technology, namely, depositing. It is mainly applied to cooling operation of Chinese medicine decoction after concentration or alcohol precipitation, and can also be used for water precipitation operation of concentrated solution of extracted Chinese medicine.

项目\型号 Item\Model	JC-300	JC-500		JC-1000	JC-1500	JC-2000		
容积L Volume	300	500	700	1000	1500	2000		
换热面积m² Heat transfer area	1.8	3.0	3.6	4.5	6.5	8.2		
工作温度℃ Operating Temperature			<b>−15</b> ~	常温				
换热介质最高工作压力 Maximum working press		transfer med	dium 0.2	25				
工作介质工作压力MPa Working medium workin			常	压				
传热系数KJ/m².h.℃ Heat transfer coefficient			150 ~	200				
搅拌功率Kw Mixing power	0.75 0.75 1.5 1.5 0.0 0.0							
搅拌转速r/min Stirring speed	250	250	160	160	125	125		
总重量Kg Total weight	~ 650	~ 1250	~ 1350	~ 1480	~ 1750	~ 2000		





# 浓配罐、稀配罐

# Mixing Tank

# 产品用途:

本搅拌缸又名配料缸、拌料缸、配料桶、搅拌罐、有节能,耐腐蚀、生产能力强,清洗方便、结构简单等优点,主要用于奶品和食糖及其它元素和各种物料在配合后进行搅拌均匀作用,是制造乳品、饮料、制药厂家不可缺少的设备。

## Purpose:

This mixing tank is also called batching bowl, material stirring bowl, batching barrel, mixing tank, with advantages of energy-savingm corrosion resistance, strong production capacity, easy cleaning, simple structure etc. It is mainly used to evenly mix dairy product and sugar as well as other elements and carious materials after they are mixed. It is a kind of indispensable equipment for manufacturers of dairy products, beverage and medicine.

项目\型号 Item\Model	PI500	PL1000	PL2000	PL3000	PL4000	PL5000	PL6000
容积(L) Volume	500	1000	2000	3000	4000	5000	6000
蒸汽压力(MPa) Steam pressure	0.2	0.2	0.2	0.2	0.2	0.2	0.2
外壳直径(mm) Shell diameter	ф 1100	ф 1300	ф 1500	ф 1700	ф 1800	ф 2100	ф 2300
功率(kw) Power	0.75	1.1	1.5	2.2	2.2	3	3
高度(mm) Height	2400	2600	3100	3400	3500	4400	5000





# 结晶罐 Crystallizer



本设备应用于医药、化工、食品、轻工等行业中的水解、中和、结晶、蒸 馏、蒸发等生产过程。

## 产品特点:

搅拌型式有锚式、框式、桨式等;转动机构可采用摆线针轮减速机、无级变 速、减速机等;密封装置可采用机械密封;加热冷却可采用夹套、半管、盘 管结构;加热方式有蒸汽、电加热、导热油等;以满足耐酸碱、耐高温、耐 磨损、耐腐蚀等不同工作环境的工艺环境的工艺需要。也可根据用户工艺要 求进行设计、制造。

#### Purpose:

The equipment used in pharmaceutical, chemical, food and light industry in the hydrolysis, neutralization, crystallization, distillation, evaporation and other processes.

#### Features:

Mixing patterns have anchored, frame type, blade type, etc.; rotating body can use cycloidal reducer, stepless speed, gear, etc.; seal mechanical seal can be used; heating and cooling jacket can be used, half pipes, plates tube structure; heating methods are steam, electric heating, oil, etc.; to meet the acid and alkali, high temperature, wear, corrosion and other processes in different working environment environment technology needs. Process according to user requirements can also design and manufacture.

项目\型号 Item\Model	100L	200L	500L	1000L	2000L	5000L	10000L	20000L
直径(mm) Diameter	400	500	700	900	1200	1500	1800	2300
高度(mm) Height	2000	2300	2650	2900	3800	4480	5250	6550
罐内压力(MPa) Tank pressure	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
夹套压力(MPa) Jacket pressure	0.3	0.3	0.3	0.3	0.3	0.3	管0.3	管0.3
搅拌桨数 Impeller number	2	2	2	2	2	3	3	4
电机功率(Kw) Motor Power	0.55	0.75	1.1	1.5	3	5.5	7.5	7.5
冷却方式 Cooling		夹套	-				列管	
搅拌转速 (r/min) Stirring speed				80				





# 可倾式夹层锅

# Tilting Boiler

# 产品用途:

不锈钢夹层锅又名夹层蒸汽锅,广泛应用于糖果、制药、乳品、酒类、糕点、蜜饯、饮料、罐头、卤味等食品的加工,是食品加工提高质量、缩短时间、改善劳动条件的良好设备。

# 产品特点:

效率高,加热均匀,控制简便,能有效缩短料液沸腾时间,美观实用。

#### Purpose:

Stainless steel pan, also known as sandwich sandwich steam pot, widely used in confectionery, pharmaceutical, dairy, wine, cakes, preserves, beverages, canned, marinated and other food processing, food processing to improve quality, reduce time, improve working conditions good equipment.

#### Features:

High efficiency, uniform heating, easy control, can effectively shorten the boiling time of the material liquid, beautiful and practical.

#UD) -TD	E + + - 10 ( ) (2 )	参数 Pa	arameter		
型号\项目 Model\Item	受热面积(M²) Heating area	液料及加入量(Kg) Liquid materials and the quantity	蒸气压力(MPa) Vapor pressure	沸腾时间(min) Boiling time	
G50	0.45	50	0.3	4~5	
G100	0.58	100	0.3	5~6	
G150	0.88	150	0.3	6~7	
G200	1.13	200	0.3	8~9	
G300	1.43	300	0.3	10~15	
G400	1.75	400	0.3	11~18	
G500	2.00	500	0.3	15~20	
G600	2.30	600	0.3	15~20	





# 双锥回转真空干燥器 Double-Cone Vacuum Dryer

## 产品用途:

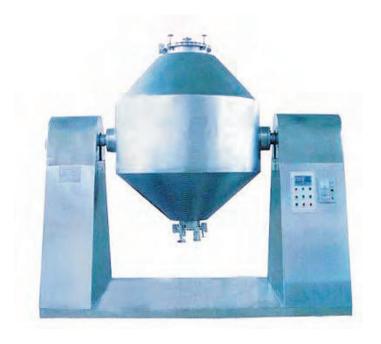
本机适用于化工、制药、食品等行业的粉状,料颗及纤维的浓缩,混合,干 燥及需低温干燥的物质(如含糖量较高、粘度大的厚料),更适用于易氧 化,易挥发、有热敏性的物料干燥和中成药的颗料干燥。本机采用机械密封 进行密封,可避免跑、冒、漏、滴及经常更换、维修填料之苦,使之符合 GMP对设备要求条件,本机有保温层,内外材料系1CR18Ni9Ti不锈钢制 造,制作简便,易清洗等优点。

#### Purpose:

This machine is suitable for chemical, pharmaceutical, food and other industries powder, satellites and fiber enrichment materials, mixing, drying and the need for lowtemperature drying of the material (such as a high sugar content, viscosity of the thick material), is more suitable the easily oxidized, volatile, heat-sensitive materials are dry and dried granule of proprietary Chinese medicines. The machine used to seal mechanical seal, can avoid the run, run, drain, drop, and frequently changed filler Zhi Wei Xiu hard to conform to GMP on equipment Yaoqiu conditions, the machine has insulation layer, Nei Wai material system 1CR18Ni9Ti stainless steel, simple, easy to clean.

项目\型号 Item\Model	SCD 30	SCD 350	SCD 500	SCD 750	SCD 1000
设计容积(L) Design capacity	30	350	500	750	1000
加热面积(m²) Heating area	0.5	2	2.2	2.4	2.6
回转数(r/min) Rotational speed	16	12	12	10	10
真空度(MPa) Vacuum	0.075	0.075	0.075	0.075	0.075
机重(Kg) Machine weight	200	2000	2300	2500	2700
机型\参数 Model\Parameter	30	350	500	750	1000









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