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# 浙江镇田机械有限公司 ZHEJIANG JHENTEN MACHINERY CO., LTD

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# 工艺罐体和模块化系统 专业服务洁净工程

PROCESS VESSEL AND MODULE SYSTEM Professional Service For Sanitary Project 2023



## 关于镇田 About Jhenten

(SO9001

浙江镇田机械有限公司成立于1986年,拥有超过30年的设计、 制造和服务特殊不锈钢罐和容器的经验。在镇田,我们的工程技 术和专业知识始终专注于存储容器、工艺罐和定制不锈钢制造的 创新和复杂的卫生级设计。我们的客户认识到镇田正在为所在行 业中最具挑战性的存储、混合和处理应用程序获得最高价值的产 品和技术提供解决方案。镇田机械背后的技术能力确保了高质量 的产品在混合、搅拌、加工和储存的广泛应用。

- ●制药工程
- ●食品饮料
- ●日化
- ●精细化工
- ●新能源

●新能源

镇田设计产品采用优质的原材料和最先进的制造工艺,在广泛的 不锈钢容器(包括搅拌容器、压力容器、水平和立式储罐)应用中 实现客户对产品的期望。 镇田可以根据特定容器体积、设计和使用的要求为客户提供合适 的搅拌技术、传热解决方案和清洗方案。

我们为各类立式及卧式储罐制造独特的垂直和水平搅拌。
 我们制造全系列搅拌器-推进式、涡轮式、桨叶式、锚框式、螺带式等-用于加工、混合和混合容器。
 我们设计不同的传热表面形式,包括蜂窝板、盘管和半管夹套,用于几乎任何容器的加热和冷却。

●我们选择各种清洁方式——CIP、喷淋球——有助各类容器的 清洁,降低能耗,降低清洁周期的需水量。

镇田可以满足您所有特殊行业的应用,使用更高级的合金(如 Hastalloy和钛等材料)定制不锈钢设备容器。如果压力容器需要 美国机械工程师协会(ASME)认证,我们可以将其与其他规范一 起提供,包括加拿大CRN和取盟PED。

镇田机械制造的产品已经被认为不锈钢制造行业的一个标杆,我 们始终秉承传统的价值观,对工作不懈努力和对产品可靠性保 证。我们的员工始终以质量为导向,并不断利用创新的设计和简 化流程。这显示了镇田在与客户分享我们的工程技术、设计能力 和制造经验方面的优势。



Zhejiang Jhenten Machinery found on 1986, have more than 30 years experience on designs, builds, and services exceptional stainless steel vessels. We focus our engineering skills and expertise on the innovative and sophisticated sanitary design of storage vessels, process tanks, and custom stainless steel fabrications. Our customers recognize that they are getting the highest value products and technology solutions for the most challenging storage, mixing and processing applications in their industries. The technology behind Jhenten Engineered Products ensures quality in a wide range of markets that mix, blend, process and store.

Personal Care
Food & Beverage
Pharmaceuticals
Fine Chemicals
New energy

Jhenten Engineered Products uses leading edge materials and state of the art fabrication to deliver on our customers' expectations across a broad range of stainless steel tanks for storage, mixing and processing, including agitated vessels, pressure vessels, horizontals and vertical storage tanks.

The agitation technologies, heat transfer solutions and cleaning options Jhenten provides to customers are designed for the demands of specific vessel content, design and use.

•We manufacture unique vertical and horizontal agitation for different tanks.

 We fabricate a full line of agitators-Propeller ,turbine, paddle, anchor, ribbon and more-for processing, mixing, and blending vessels.

 We engineer heat transfer surfaces including dimple, channel and half pipe for heating and cooling of virtually any vessel.
 Various cleaning options-CIP, spray ball- facilitate the cleanability of vessels, reduce energy consumption, and lower water demand in the cleaning cycle.

Jhenten can meet the specifications of all your specialized applications with custom stainless steel fabrication using higher alloys such as Hastalloy and Titanium and so on. And if a pressure vessel requires ASME certification, we can provide that along with other codes, including CRN and PED.

Jhenten Engineered Products is perceived as a quality organization in stainless steel manufacturing, held in high regard for its traditional values of hard work and reliability. Our employees are quality driven, always ready to take advantage of new ideas and streamline processes. And this shows in the pride they take in sharing our engineering know–how, design capabilities and fabrication experience with our customers.







专业服务洁净工程 Professional Service For Sanitary Project



# 设计研发 Design and R&D



镇田全面的创新技术,拥有国内领先的硬件、软件设施、专业的 技术研发队伍,在项目开发阶段,项目小组承建工艺、工程设 计,通过大量使用工业工程电脑辅助设计及工艺模拟系统,通过 CAD电脑辅助设计,三维的模拟效果,镇田能够优化整个生产过 程的效果,使客户对整个项目一目了然。 Jhenten has a comprehensive range of innovative technologies, with leading hardware, software facilities, and professional technical R&D teams. In the project development stage, the project team has built process and engineering designs. Through the use of industrial engineering computer-aided design and process simulation systems, CAD Computer-aided design, three-dimensional simulation results, Jhenten can optimize the effect of the entire production process, allowing customers to see the entire project at a glance.









科学技术是第一生产力,科学技术也是企业的核心竞争力。不断 加强核心技术的研发和创新,不断追求卓越,精益求精,以先进 的生产设备,严格的质量管理,精密的生产检测流程,保证每一 款产品的优良性能。

生产工具是生产力发展水平的标志,先进的生产设备代表了先进 的生产力。公司积极引进先进的技术和生产设备,使产品内在品 质与外在个性化紧密结合,完全满足并引领工业现代化的需求。

高品质产品要求

精心设计、精心制造、精益求精 High quality products require elaborate design, well-creafted manufacturing and

continuous improvement.

Science and technology are the primary productive forces, and science and technology are also the core competitiveness of enterprises. Continuously strengthen the research and development of core technologies, innovate continuously, strive for excellence, keep improving, use advanced production equipment, strict quality control, and precise production testing procedures to ensure the excellent performance of each product.

Production tools are a sign of the level of productivity development. Advanced production equipment represents advanced productivity. The company actively introduces advanced technology and production equipment to closely integrate the intrinsic quality of the product with the external personalization, fully satisfying and leading the needs of industrial modernization.

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**HIFKAL** 



# 合作伙伴 **Cooperative Partner**



ASME

CE ISO9001







08 www.jhenten.com

JHEN STEN 09









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## JTRPG 浓/稀配液罐 Mixing Tank

食品/饮料/生物制药设备

推进式搅拌桨 Propeller

液/稀配液罐(搅拌罐)严格遵循《药品生产质量管理规范》 GMP & 成別(2010年修订)第三十一、三十二条要求,并按《压力 容器》(GB150-2011)、(初制焊接常压容器(附标准释义)》(NB/T 47003.1-2009)要求进行设计、制造及验收。

浓/稀配料罐(调配罐/搅拌罐)一般是立式混料罐,主要是通过配料罐的搅拌操作将物料混合达到工艺生产的要求。

"镇田"浓/稀配液罐(搅拌罐)采用立式圆罐体,罐体可设有夹 套、盘管、保温(可加热、冷却、保温);不锈物的材质采用 3161或304制作,内壁采用电解镜面抛光或机械抛光,外壁采用 304全焊接保温结构,外表面采用镜面或亚光处理;各进出管口工 艺开孔与内罐体焊接处均采用翻边工艺圆弧过渡,光滑易清洗无死 角,外表美观。

JTRPG Mixing Tank is designed, manufactured and inspected in accordance with the pressure vessel standard (GB150-2011) and the steel welded atmospheric pressure vessel standard (NB/T 47003.1-2009), strictly meeting GMP certificate requirements.

The mixing tank is a vertical tank in which the agitator mixes the material to meet to the technical standard.

The mixing tank adopts vertical circular tanks, both of top and bottom are standard oval and torispherical head. Transition section in tank uses circular arc transition, without dead corner, easy to clean. Single layer, double layer(insulation for tank and bottom head) or Jacket(tank and bottom head have jacket and insulation) is equipped with mechanical stirring according to customers' requirement.

#### 产品特色

- ●容积有100L~5000L等多种规格,可根据客户实际需求进行设计、制造。
- ●接口采用快装卡盘式(卡接),罐体内胆选用304或316L,内表面 镜面抛光Ra≤0.28µm~0.6µm,外表面可根据客户要求进行 抛光、拉丝、喷砂等。
- ●根据生产及工艺的要求,可设计有加热、冷却、低高速搅拌系统,密封承压系统,真空系统,计量系统等。
- ●针对不同的搅拌物料及要求达到的搅拌效果对搅拌桨的结构可以 调整设计涡轮式、桨式、锚式、框式、螺带式等等。



#### 罐体可选配置

浓稀配液罐的罐体可选配置无菌空气过滤器、温度计(数显式或表 盘式)、PH计、压力表、蒸汽灭菌口、视镜、卫生级入孔、进出液 孔、CIP方向旋转清洗球、液位计及液位自控系统(承重模块、无触 点超声波、静压变迭式器等,或根据客户要求进行配置。

#### Tank Optional Configuration

The mixing tank can configure aseptic air filter, thermometer(Digital display or Dial type), PH meter, pressure gauge, steam sterilization hole, sight glasses, sanitary manhole, liquid in–outlet, CIP cleaning ball, liquidometer and Liquid level control system(Bearing module, non–contact ultrasonic, static pressure transmitting device) and so on, also can be configured as customers' requirement.

#### 典型的应用

可作储液罐、混料罐、暂存罐、调配罐等,用于中药、食品、果汁 饮料、乳制品、佐料、酿造、啤酒、制药、化工及生物工程等行业 的液体物料搅拌贮存。

#### Application

Can be used as Storage Tank, mixing tank, temporary Storage Tank, mixing tank, etc., Used in liquid materials' mixing and storage such as medicine, food, fruit juice beverage, dairy products, seasoning, brewing, beer, pharmaceutical, chemical and biological engineering.

#### 常规设计参数 Design Parameter

设计压力 Design pressure	罐体按客户要求(-0.1MPa~1.0MPa) 夹套按客户要求(ATM~0.5MPa)
设计温度 Design temperature	罐体、夹套按客户要求(0℃~160℃)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
保温层 Insulation	岩棉或聚氨酯 Rock wool or PU
支腿等 Legs	304

常规结构 Structure



#### 连接 Connection

进出口 In-outlet	快装卡接、法兰、螺纹 Tri-clamp, Flange, Thread
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#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling
抛光精度 Polishing precision	内璧0.4µm, 外璧0.6µm Inner surface Ra≤ 0.4µm, Outside surface Ra≤ 0.6µm

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#### 配液罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Paramete	rs 型号 Model	JTRPG-100	JTRPG-300	JTRPG-600	JTRPG-1000	JTRPG-2000
有效容积 Effec	tive volume (L)	100	300	600	600	2000
	直径 Diameter (mm)	Φ 500	Φ800	Φ900	Φ1100	Φ1300
罐体 Tank	高度 Height (mm)	500	700	900	1000	1500
	电机功率 Power (kW)	0.37	0.75	1.1	1.5	2.2
搅拌 Mixing	搅拌工作转速 RPM (r/min)		, 轮式)或200(推进式) h turbine impellers)/200(		进行调整设计) ie design according to t	he customer's usage
72503117			(			
参数 Paramete	rs 퓊号 Model	JTRPG-3000	JTRPG-4000	JTRPG-5000	JTRPG-8000	JTRPG-10000
	rs 型号 Model tive volume (L)	JTRPG-3000 3000	JTRPG-4000 4000	JTRPG-5000 5000	JTRPG-8000 8000	JTRPG-10000 10000
有效容积 Effec						
有效容积 Effec	tive volume (L)	3000	4000	5000	8000	10000
	tive volume (L) 直径 Diameter (mm)	3000 Φ 1800	4000 Φ 1700	5000 Φ 1800	8000 Ф 2000	10000 Φ2200

工农就活力的准定,区民学生,可以指有广学不足间; The above-mentioned data is the standard, it can customize according to customer's requirements.

#### Feature

- Volume:100L~5000L and multiple specification, also can design and manufacture according to customers' requirement.
   The connection adopts Tri-clamp, and the tanks' inner layer use
- 304 or 316L. The inner surface mirror polishing Ra  $\leq 0.28 \,\mu$  m ~ 0.6  $\mu$  m. Outer surface can be polished, wire drawn and sand blasted according to customers' requirement.
- According to the requirements of production and processing, it can be designed with low heating, cooling, high-speed mixing system, sealing pressure system, vacuum system, measuring system and so on.
- According to different mixing materials and requirements to the mixing effect, the structure of impeller can be the turbine type, paddle, anchor type, frame type, screw conveyor and so on.

## (E ISO9001

## **JTRCL** 磁力搅拌罐 **Magnetic Agitator Mixing Tank**

全夹套式磁力搅拌罐 Full jacket type magnetic agitator mixing tank

磁力搅拌罐严格遵循《药品生产质量管理规范》GMP总则(2010年 修订)第三十一、三十二条要求,并按《压力容器》 (GB150—2011)、《钢制焊接常压容器(附标准释义)》(NB/T 47003.1-2009)要求进行设计、制造及验收。

磁力搅拌罐具有无泄漏,全封闭,耐腐蚀,节能等特点。由于其无 接触传递力矩,以静密封取代了动密封,解决了其他轴密封无法克 服泄漏的问题,整个物料和搅拌部件处于无菌卫生状态进行运作, 是制药,精细化工,化妆品,生物工程等行业理想更新换代产品。

"镇田"磁力搅拌罐,配置磁力底搅拌装置于罐体底部,属于无菌 配液罐。磁力搅拌罐与贮罐配液罐一样可以不同封头结构形式,夹 套形式或单层根椐不同的要求组合; 配置底入式或者侧入式磁力搅 拌,能够实现CIP和SIP。

Magnetic Agitator Mixing Tank be designed, manufactured and inspected in accordance with the pressure vessel standard (GB150-2011) and the steel welded atmospheric pressure vessel standard (NB/T 47003.1-2009), strictly meet to GMP certificate requirements.

The magnetic Agitator Mixing tank features no leakage, full sealing, corrosion-resistance and energy-saving. Because of the no-contact carryover moment and the static seal, there is leakage problem. All materials and Agitator are in the sterile sanitary condition, the ideal product for pharmaceutic, chemistry, cosmetics and bio-engineering.

JHENTEN magnetic agitation tank, the bottom of the magnetic stirring device in the bottom of the tank belong to the aseptic tank. Magnetic stirring tank and tank can equip with different head structure. The types and layers of jackets can combine under different requirements. Both bottom and side type of Configuration magnetic stirring can achieve the CIP and SIP

#### 产品特色

 用焊接隔离套静态死封密取代动态机械密封,完全解决动态机械密封泄漏 问题,所以无泄漏、无外界污染、安全性强且结构简单,易拆御,易清 洗,无死角。

Feature

material mixing.

needs of customers

- ●底部装置搅拌,在物料少的情况下可以搅拌,搅拌叶设计独特,搅拌工作 转速宜为20r/min~400 r/min范围内,可以适应各种不同物料搅拌、混 合;同时搅拌安装在罐的底部于罐体成10°的夹角,在搅动时,物料被与 罐体成10°夹角翻腾,并不是沿罐壁做周向旋转达到紊流效果。
- ●搅拌转速由变频器进行无级调速,在最大转速以下能进行最佳的搅拌转速 的调节,以满足各种工艺对搅拌转速的要求。
- ●容积有50L~20000L等多种规格,可根据客户实际需求进行设计、制造。



•Welding die static sealing of sleeve to replace dynamic mechanical seal completely solve the problem of dynamic mechanical seal leakage, so

there is no leakage, no external pollution, safety and simple structure,

work speed of 20 r/min to 400 r/min can adapt to all kinds of different

● Volume 50L~ 20000L, and other specifications, according to the actual

Stirring speed is adjusted by frequency converter to meet the

requirements of the various process of stirring speed.

 Even there is little material left to process, the stirring device at the bottom still works well. Mixing blade design is unique, and appropriate mixing

easy disassembly, easy to clean, no dead corner.

#### 罐体可选配置

磁力搅拌罐的罐体可选配置无菌空气过滤器、温度计(数显式或表盘式)、 PH计、蒸汽灭菌口、射灯视镜、卫生级人孔、进出液孔、CIP万向旋转清洗 球、压力表、无菌取样阀(不锈钢罐底)、液位计及液位自控系统(承重模 块、无触点超声波、静压变送式器)等,或根据客户要求进行配置。

#### Tank Optional Configuration

Magnetic agitator mixing tank can configure aseptic air filter, thermometer(Digital display or Dial type), PH meter, pressure gauge, steam sterilization hole, sight glasses, sanitary manhole, liquid in-outlet, CIP cleaning ball, liquidometer and Liquid level control system(Bearing module, non-contact ultrasonic, static pressure transmitting device) and so on, also can be configured as customers' requirement.

#### 曲型的应用

可作储液罐、混料罐、暂存罐、储水罐等,适用于食品、乳制品、果汁饮 料、医药化工、生物工程及半导体电子等领域行业的液体物料无菌搅拌贮 存。

#### Application

Can be used as storage Tank, mixing tank, temporary Storage Tank, mixing tank, etc., Used in liquid materials' mixing and storage such as food, dairy products, fruit juice beverage, pharmaceutical, chemical, biological engineering and semiconductor electronics.

#### 常规设计参数 Design Parameter

设计压力 Design pressure	罐体按客户要求(-0.1MPa~1.0MPa) 夹套按客户要求(ATM~0.5MPa)
设计温度 Design temperature	罐体、夹套按客户要求(0℃~160℃)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
保温层 Insulation	岩棉或聚氨酯 Rock wool or PU
支腿等 Legs	304

#### 常规结构 Structure



#### 连接 Connection

进出口 In-outlet
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#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling		
抛光精度 Polishing precision	内壁0.4μm, 外壁0.6μm Inner surface Ra≤ 0.4μm, Outside surface Ra≼ 0.6μm		

#### 磁力搅拌罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Paramete	rs 켚号 Model	JTRCL-100	JTRCL-150	JTRCL-300	JTRCL-500	
有效容积 Effec	tive volume (L)	100	150	300	300	
	直径 Diameter (mm)	Φ500	Φ 550	Φ750	Φ 900	
罐体 Tank	高度 Height (mm)	500	650	700	650	
	电机功率 Power (kW)	0.25	025	0.37	0.75	
搅拌 Mixing	搅拌工作转速 RPM (r/min)	20 - 400(可根据客户使用情况进行调整设计) 20 ~ 400 (Can adjust the design according to the customer's usage)				
参数 Paramete	ers 코号 Model	JTRCL-800	JTRCL-1000	JTRCL-1500	JTRCL-2000	
有效容积 Effective volume (L)		800	1000	1500	2000	
有双谷积 Effec					2000	
	直径 Diameter (mm)	Φ 1000	Φ1100	Φ1300	Φ 1300	
有效容积 Ettec 罐体 Tank		Φ 1000 1000	Φ1100 1000	Φ 1300 1000		
	直径 Diameter (mm)				Φ 1300	

上表数据为标准型,仅供参考,可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.

www.jhenten.com



(E ISO9001

## JTRFY 反应釜 Reactor

反应釜严格遵循《药品生产质量管理规范》GMP总则(2010年修订)第三 十一、三十二条要求,并按《压力容器》(GB150—2011 要求进行设计、 制造及验收。

不锈钢反应釜广泛应用于石油、化工、橡胶、农药、染料、医药、食品等生 产型用户和各种科研实验项目的研究,用来完成水解、中和、结晶、蒸馏、 蒸发、储存、氢化、烃化、聚合、缩合、加热混配、恒温反应等工艺过程的 容器。

"镇田"反应釜采用立式圆罐体、罐体可制作成蜂窝夹套、盘管夹套或整体 夹套,可加热,冷却;采用3161。或3047锈锅材质制作,内罂采用电解镜面 抛光或机械抛光,外壁采用304 全焊接保温结构,外表面采用镜面或亚光处 理;各进出管口工艺开孔与内罐体焊接处均采用翻边工艺圆弧过渡,光滑易 清洗无死角,外表美观。

JTRFY reactor be designed, manufactured and inspected in accordance with the pressure vessel standard (GB150–2011) and the steel welded atmospheric pressure vessel standard (NB/T 47003.1–2009), strictly meet to GMP certificate requirements.

The stainless reactor is widely used in producing and researching areas of petrochemical, fine chemicals, rubber industry, agricultural chemicals, colourants, pharmaceutics and food. It is a tank that is used to hydrolysis, Neutralization and crystallization Distillation, evaporation, storage, hydrogenation, ally(failon, polymerization, condensation, Heating mixing and constant temperature reaction

"Jhenten" reactor using vertical circular tanks, jacket can be made into a dimple jacket, coli jacket or the whole jacket, can heating or cooling, made of 316L or 304 stanless steel, inside surface electrolytic miror polishing or mechanical polishing, the outer surface adopts 304, all welded surface miror or inferior smooth processing. Tanks welds adopt flanging process arc transition, smooth and easy to clean no dead corner, beautilul appearance.

#### 罐体可选配置

反应釜的的端体可选配置无菌空气过滤器、温度计(数显式或表盘式)、 Prift、射灯视镜、卫生级人孔、进出液孔、CIP方向旋转清洗球、压力表、 无菌取样阀、液位计及液位自控系统(系重模块、无触点超声波、静压变送 式器)等,或根据客户要求进行配置。

#### 产品特色

- ●反应釜采用316L或304制作,具有优良的机械性能,可承受较高压力,也可承受块状固体物料加料时的冲击;同时具有加热迅速、耐高温、耐腐蚀(无生锈现象)、卫生、无污染等特点。
- •搅拌器有锚式、框式、浆式、涡轮式;转动机构采用摆线针轮减 速机、齿轮减速机,多采用变频调速;密封装置可采用卫生级机 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;均可根据用户的工艺需要任意适配。
- ●反应釜容积有600L~20000L等多种规格,可根据客户实际需求进行设计、制造。



#### 典型的应用 Application

用于石适用于油、化工、橡胶、农药、染料、医药、食品,用来完成硫化、 氢化、烃化、聚合、缩合等工艺过程。

Apply to petrochemical, fine chemicals, rubber industry, agricultural chemicals, colourants, pharmaceutics, food and beverage, to complete the vulcanization, hydrogenation, alkylation, polymerization, condensation process.

#### Tank Optional Configuration

Reactor can configure aseptic air filter, thermometer (Digital display or Dial type). PH meter, pressure gauge, steam sterilization hole, sight galasse, sanitary marhole, liquid in-outlet, CIP cleaning ball, liquidometer and Liquid level control system(Bearing module, non-condicat ultrasonic, static pressure transmitting device) and so on, also can configure as customers' requirement.

#### Feature

- Reactor made of 316L or 304 has excellent mechanical properties, bearing high pressure, also it can withstand the force of the massive solid materials during feeding process. It features rapid heating, high temperature resistant, corrosion resistance, no rust, sanitary, no pollution,
- Agilator with anchor type, frame type, impeller or turbine, using cycloidal reducer, gear reducer, and frequency control/Mechanical seal sealing device meeting sanitary standard, full jacket, half pipe coil. cooling / heating coil structure available, heating mode with steam, electric heating, heat conduction oil. Can be arbitrarily selected according to the user's technicue.
- Reactor has 600L and 20000L, and other specifications, according to the actual requirement of customers.









内盘管式反应釜(推进式搅拌桨) Inside Pipe coil Jacket Reactor (propeller Agitator)

全夹套式反应釜(锚框式搅拌桨) Full Jacket Type Reactor (anchor type Agitator)

盘管夹套式反应釜(锚框式搅拌桨) Coil Jacket Type Reactor (anchor type Agitator)

快装卡接、法兰、螺纹

Tri-clamp, Flange, Thread

#### 常规设计参数 Design Parameter

设计压力 Design pressure	罐体按客户要求(-0.1MPa~1.0MPa) 夹套按客户要求(ATM~0.5MPa)
设计温度 Design temperature	罐体、夹套按客户要求(0℃~160℃)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
保温层 Insulation	岩棉或聚氨酯 Rock wool or PU
支腿等 Legs	304

## 进出口 In-outlet

#### 表面处理 Surface Finish

连接 Connection

近理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling		
地光精度 Polishing precision	内璧0.4µm, 外璧0.6µm Inner surface Ra≤ 0.4µm, Outside surface Ra≤ 0.6µm		

#### 反应釜常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Paramete	rs 型号 Model	JTRFY-600	JTRFY-1000	JTRFY-2000	JTRFY-3000	JTRFY-4000	JTRFY-5000
有效容积 Effec	tive volume (L)	600	1000	2000	3000	4000	5000
	直径 Diameter (mm)	Φ900	Φ1100	Φ1300	Φ 1600	Φ1700	Φ 1800
罐体 Tank	高度 Height (mm)	900	1000	1500	1500	1800	1800
	电机功率 Power (kW)	1.1	1.5	2.2	2.2	3	4
搅拌 Mixing	搅拌工作转速 RPM (r/min)	200 (推进式)或60 (貓框式) (可根据客户使用情况进行调整设计) 200 (propeller)/60(anchor type) (Can adjust the design according to the customer's usage)					
参数 Paramete	rs 型号 Model	JTRFY-6000	JTRFY-8000	JTRFY-10000	JTRFY-12000	JTRFY-15000	JTRFY-20000
有效容积 Effec	tive volume (L)	6000	8000	10000	12000	15000	20000
	直径 Diameter (mm)	Φ 1900	Φ2000	Φ2200	Φ2400	Φ2600	Φ2800
罐体 Tank	高度 Height (mm)	2000	2200	2400	2500	2700	3000
	电机功率 Power (kW)	4	5.5	7.5	7.5	11	11
搅拌 Mixing	搅拌工作转速 RPM (r/min)	200(推进式)或60(锚框式)(可根据客户使用情况进行调整设计) 200 (propeller)/60(anchor type) (Can adjust the design according to the customer's usage)					

上表数据为标准型, 仅供参考, 可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.



(E ISO9001

## **JTRJJ** 结晶罐 **Crystallizing Tank**

全夹套式结晶罐(曲边叶桨式搅拌桨) Full jacket type Crystallizing Tank (curved blade paddle Agitator)

结晶罐严格遵循《药品生产质量管理规范》GMP总则(2010年修 订)第三十一、三十二条要求,并按《压力容器》 (GB150-2011)、《钢制焊接常压容器(附标准释义)》(NB/T 47003.1-2009)要求进行设计、制造及验收。

结晶罐是物料混合反应后, 夹层内需冷冻水或冷媒水急剧降温的结 晶设备,其关键环节在于夹层面积的大小,搅拌器的结构形式和物 料出口形式, 罐体内高精度抛光, 以及罐体内清洗无死角的要求来 满足工艺使用条件。

"镇田"不锈钢结晶罐根据用途不同,罐体可设有夹套、盘管、保 温(可加热、冷却、保温);不锈钢的材质采用316L或304制 作,内壁采用电解镜面抛光或机械抛光,外壁采用304 全焊接保温 结构,外表面采用镜面或亚光处理;全封闭的设计确保物料始终处 在无污染的状态下操作。

Crystallizing Tank be designed, manufactured and inspected in accordance with the pressure vessel standard (GB150-2011) and the steel welded atmospheric pressure vessel standard (NB/T 47003.1-2009), strictly meet to GMP certificate requirements.

The crystallizing tank is a crystallizing device in which the chilled water cools sharply in the jacket. The key are the size of the jacket, the structure of agitator and the form of outlet. High precision polishing and no dead corner meet the technical requirements.

Jhenten reactor using vertical circular tanks, jacket can be made into a dimple jacket, coil jacket or the whole jacket, can heating or cooling, made of 316L or 304 stainless steel, inside surface electrolytic mirror polishing or mechanical polishing. The outer surface adopts 304, all welded surface mirror or inferior smooth processing. Tanks welds adopt flange process arc transition, smooth and easy to clean no dead corner, beautiful appearance.

#### 产品特色

●结晶罐容积有600L~20000L等多种规格,可根据客户实际需求进行设 计、制造。

Feature

convenient operation.

widely used).

equipped with health pressure gauge.

- ●结晶罐选用曲边叶桨式搅拌桨可增大换热面积,提高换热效率,提升结晶 产能,且进料出料方便。
- ●结晶罐夹套内可通入蒸汽或冷媒以使物料处于最佳温度下,具有效率高, 操作方便等优点。
- ●结晶罐上安装0.2 µm 疏水性通气过滤器, 罐内能承受高温蒸汽灭菌消 毒,配备卫生压力表。
- ●结晶罐罐体外采用卫生级快开接口。配备有温度计,2个视镜,清洗球及 **氮气讲口等接口**
- ●结晶罐密封采用特殊的卫生级机械密封,确保物料不受污染。
- ●结晶罐采用变频调速,搅拌轴转速调节范围大,搅拌均匀,结晶体均匀。



●Volume: 600L~20000L and multiple specifications, also we can design and manufacture according to customers' requirement.

process the material under optimum temperature, with high efficiency and

Crystallizing tank is installed with 0.2 um hydrophobic ventilation filter, also

tank can withstand the high temperature steam sterilization disinfection,

The sealing of agitating shaft adopts sanitary mechanical seal. The mixing motor can use Cycloidal reducer, gearmotor reducer. These items can be selected according to customers' requirement. (Frequency control is

Crystallization can choose curved blade paddle, can increase heat

exchange area, increase in thermal efficiency, and enhance the crystallization capacity. The material discharging is convenient.
 Crystallizing tank jacket can be bubbled into steam or cold media to

## 罐体可选配置

结晶罐的罐体可选配置0.2 µ m疏水性无菌空气过滤器、温度计(数 显式或表盘式)、2个视镜、蒸汽灭菌口、卫生级人孔、进出液 孔、CIP万向旋转清洗球、无菌取样阀(不锈钢罐底)、液位计及液 位自控系统(承重模块、无触点超声波、静压变送式器)等,或根 据客户要求进行配置。

#### Tank Optional Configuration

Crystallizing Tank can configure 0.2 µ m hydrophobic sterile air filter, thermometer (Digital display or Dial type), 2 sight glasses, steam sterilization hole, sanitary manhole, liquid in-outlet, CIP rotating cleaning ball, liquidometer and Liquid level control system(Bearing module, non-contact ultrasonic, static pressure transmitting device) and so on, also can configure as customers' requirement.

#### 典型的应用

适用于制药、乳品、食品、化工、饮料等工业的物料搅拌混合,降 温冷冻,成品结晶等作用。

#### Application

Applied for such as pharmaceutical, dairy products, food, chemical, beverage and other industrial materials, mixing temperature and freezing, product crystallization, and so on.

#### 常规设计参数 Design Parameter

设计压力 Design pressure	罐体按客户要求(-0.1MPa~1.0MPa) 夹套按客户要求(ATM~0.5MPa)
设计温度 Design temperature	罐体、夹套按客户要求(0℃~160℃)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
保温层 Insulation	岩棉或聚氨酯 Rock wool or PU
支腿等 Legs	304

# 连接 Connection

常规结构 Structure

Tri-clamp, Flange, Thread

快装卡接、法兰、螺纹

#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling		
抛光精度 Polishing precision	内璧0.4µm, 外璧0.6µm Inner surface Ra≤ 0.4µm, Outside surface Ra≤ 0.6µm		

#### 结晶罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Paramete	rs 켚号 Model	JTRJJ-600	JTRJJ-1000	JTRJJ-2000	JTRJJ-3000	JTRJJ-4000	JTRJJ-5000		
有效容积 Effective volume (L)		600	1000	2000	3000	4000	5000		
	直径 Diameter (mm)	Φ900	Φ1100	Φ 1300	Φ 1600	Φ1700	Φ 1800		
罐体 Tank	高度 Height (mm)	900	1000	1500	1500	1800	1800		
	电机功率 Power (kW)	1.1	2.2	2.2	3	3	4		
搅拌 Mixing	搅拌工作转速 RPM (r/min)	速 RPM (r/min) 60(曲边叶桨式)(可根据客户使用情况进行调整设计) 60 (curved blade paddle) (Can adjust the design according to the customer's usage)							
参数 Paramete	ers 퓊号 Model	JTRJJ-6000	JTRJJ-8000	JTRJJ-10000	JTRJJ-12000	JTRJJ-15000	JTRJJ-20000		
		JTRJJ-6000 6000	JTRJJ-8000 8000	JTRJJ-10000 10000	JTRJJ-12000 12000	JTRJJ-15000 15000	JTRJJ-20000 20000		
有效容积 Effec							JTRJJ-20000 20000 Φ2800		
	tive volume (L)	6000	8000	10000	12000	15000	20000		
有效容积 Effec	tive volume (L) 直径 Diameter (mm)	6000 Φ 1900	8000 Φ2000	10000 Φ2200	12000 Φ2400	15000 Φ 2600	20000 Φ2800		

上表数据为标准型,仅供参考,可根据客户要求定制; 'he above-mentioned data is the standard, it can customize according to customer's requirements.

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(E ISO9001

## **JTRRG** 乳化罐 **Emulsification Tank**

乳化罐严格遵循《药品生产质量管理规范》GMP总则(2010年修 订)第三十一、三十二条要求,并按《压力容器》 (GB150-2011)、《钢制焊接常压容器(附标准释义)》(NB/T 47003.1-2009)要求进行设计、制造及验收。

乳化罐是将一种或多种物料(水溶性固相、液相或胶状物等)溶于 另一种液相,并使其水合成为相对稳定的乳化液。

"镇田"乳化罐的均质搅拌器,可与中心叶片搅拌,刮壁搅拌等配 合使用,组合成最佳的搅拌方式;罐体采用立式圆罐体,可制作成 蜂窝夹套、盘管夹套或整体夹套,可加热,冷却; 罐底可采用斜 度,便于放空;不锈钢的材质采用316L或304制作。

Emulsification Tank be designed, manufactured and inspected in accordance with the pressure vessel standard (GB150-2011) and the steel welded atmospheric pressure vessel standard (NB/T 47003.1 -2009), strictly meet to GMP certificate requirements.

Emulsification tank is used to mix one or several materials (water soluble solid, liquid or jelly) with a other liquid and then to hydrate it into Emulsion liquid

"Jhenten" homogenization agitator can apply together with Center blade agitator and scraped suface agitator. That is the best agitator combination. The Emulsification Tank adopts Vertical circular design with dimple jacket, coil jacket and full jacket both for cooling and heating. The tilting bottom design is well for emptying. There are 316L and 304 stainless material for choosing.

#### 产品特色

●乳化罐结构紧凑、体积小、重量轻、易操作、噪音低、运转平 稳,其最大的特点是在生产中不研磨物料,集高速剪切、混合、 分散、均质于一体。

Feature

homogenization.

- ●适宜的径高比设计,节能,物料混合快,乳化、均质效率高。
- ●内壁采用电解镜面抛光或机械抛光,外壁采用304 全焊接保温结 构,外表面采用镜面或亚光处理;各进出管口、视镜、人孔等工 艺开孔与内罐体焊接处均采用翻边工艺圆弧过渡,光滑易清洗无 死角,保证生产过程的可靠性、稳定性,符合GMP等规范要求。
- ●乳化罐容积有600L~20000L等多种规格,可根据客户实际需求 进行设计、制造。



Impact structure, small volume, Light weight, easy operation, low noise, stable operation. The biggest features: no grinding materials and

Reasonable ratio of diameter to height, energy-saving, fast mixing of

The inside wall is processed by electrolytic mirror polishing or mechanical polishing, and the outside wall adopts 304 full welded insulation structure.

The outside surface is processed by mirror polishing or matting polishing.

Opening techniques of all inlets outlets, sight glass and man hole and

● Volume: 600L~20000L and multiple specification, also can design and

combination of shearing at high speed, mixing, dispersion and

materials, high efficacy of emulsification and homogenization.

welding joints in tank use the flanging process of arc transition. Easy to clean, stable in production, meeting the GMP standard.

manufacture according to customers' requirement.

#### 常规结构 Structure







A 搅拌乳化双头型拱底乳化罐 Mixing and emulsification double head type

#### **Tank Optional Configuration**

Emulsification Tank can configure 0.2 µ m hydrophobic sterile air filter, thermometer (Digital display or Dial type). 2 sight glasses, steam sterilization hole, sanitary manhole, liquid in-outlet, CIP rotating cleaning ball, liquidometer and Liquid level control system(Bearing module, non-contact ultrasonic, static pressure transmitting device) and so on, also can configure as customers' requirement.

#### Application

Suitable for cosmetic, medicine, food, chemical, dyeing, printing ink and other industrial production, especially for high matrix viscosity, solid material content higher material preparation emulsion will be more efficacy.

#### 连接 Connection

进出口 In-outlet	快装卡接、法兰、螺纹 Tri-clamp, Flange, Thread
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#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling
抛光精度 Polishing precision	内壁0.4µm, 外壁0.6µm Inner surface Ra≤ 0.4µm, Outside surface Ra≤ 0.6µm

#### 乳化罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Parameters	s 型号 Model	JTRRG-600	JTRRG-1000	JTRRG-2000	JTRRG-3000	JTRRG-4000	JTRRG-5000	
有效容积 Effective volume (L)		600	1000	2000	3000	4000	5000	
	直径 Diameter (mm)	Φ900	Φ1100	Φ 1300	Φ1600	Φ1700	Φ 1800	
罐体 Tank	高度 Height (mm)	900	1000	1500	1500	1800	1800	
乳化 Emulsification	电机功率 Power (kW)	4	7.5	7.5	11	11	15	
	乳化转速 RPM (r/min)	4P(可根据客户使用情况进行调整设计)4P(Can adjust the design according to the customer's usage)						
搅拌 Mixing	电机功率 Power (kW)	1.1	1.5	2.2	2.2	3	4	
1921+ MIXING	搅拌工作转速 RPM (r/min)	22(可根据	22(可根据客户使用情况进行调整设计)22(Can adjust the design according to the customer's usage)					

上表数据为标准型,仅供参考,可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.



Mixing and emulsification double head type

#### 罐体可选配置

乳化罐的罐体可选配置无菌空气过滤器、温度计(数显式或表盘 式)、视镜、卫生级人孔、进出液孔、CIP万向旋转清洗球、无菌 取样阀(不锈钢罐底)、液位计及液位自控系统(承重模块、无触点 超声波、静压变送式器)等,或根据客户要求进行配置。

#### 典型的应用

适用于化妆、医药、食品、化学、染色、印刷油墨等工业品的生产,尤其对 基质粘度大, 固料含量比较高的物料配制乳化更显功效。

#### 常规设计参数 Design Parameter

设计压力 Design pressure	罐体按客户要求(-0.1MPa~1.0MPa) 夹套按客户要求(ATM~0.5MPa)
设计温度 Design temperature	罐体、夹套按客户要求(0℃~160℃)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
保温层 Insulation	岩棉或聚氨酯 Rock wool or PU
支腿等 Legs	304

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## **JTRGR** 方形高剪切乳化罐 **Square High Shear Emulsification Tank**



方形高剪切乳化罐采用高速叶轮底部搅拌装置, 对生产中的糖、奶粉、胶类添加剂具有良好的溶 解乳化作用,是目前乳化罐产品中生产效率最高 的产品。

方形高剪切乳化罐采用方形单层罐体, 罐体内壁 过渡段均采用圆弧过渡,无卫生死角,易清洗。

方形高剪切乳化罐的罐体和下封头根据客户要求 可设有保温层。

JTRGR Square High Shear Emulsification Tank is designed, manufactured and inspected in accordance with the pressure vessel standard (GB150-2011) and the steel welded atmospheric pressure vessel standard(NB/T 47003.1-2009), strictly meeting to GMP certificate requirements.

The square High Emulsification Tank is the most efficient product. Using the high speed Agitator at the bottom, it can completely dissolve and emulsify the sugar, milk powder, and gummy additives

Square High Shear Emulsification Tank use square single layer stainless steel, and the inner wall of the tank body is made of circular transition, no dead corner, easy to clean, and the bottom with mechanical emulsification.

Tank body and bottom head of Square High Shear Emulsification Tank can be equiped with an insulation layer according to the customers' requirements.

High Shear Emulsification Tank has 600L and 5000L, and other

Connector use fast installation chuck (clamp), inner tank use SS304 or

surface can be polishing, wiredrawing, sandblasting according to

SS316L, the inner surface mirror polishing Ra  ${\leqslant}\,0.28\,\mu$  m  ${\sim}\,0.6\,\mu$  m, outer

• Square High Shear Emulsification Tank use mechanical emulsification at

bottom, adopting claw type occlusion, double suck material structure

High speed mixing and emulsification is suitable for different mixture, mixing, dispersion, emulsification, homogenization.

Emulsification shaft seal uses sanitary mechanical seal, emulsification

motor can use planet-cycloid retarder, stepless reducer according to the

specifications, according to the requirement of customers.

Feature

customer's requirement.

customers' requirements

#### 罐体可选配置

方形高剪切乳化罐的罐体可选配置无菌空气过滤器、温度计(数显 式或表盘式)、视镜、卫生级人孔、进出液孔、CIP万向旋转清洗 球、无菌取样阀(不锈钢罐底)、液位计及液位自控系统(承重模块、 无触点超声波、静压变送式器)等,或根据客户要求进行配置。

#### **Tank Optional Configuration**

Square High Shear Emulsification Tank optional configuration: sterile air filter, thermometer (digital display type or dial), sight glasses, sanitary manhole, in-outlet, CIP universal rotating cleaning ball, sterile sampling valve (stainless steel tank bottom), the liquid level meter and liquid level self-control system (bearing module, non-contact ultrasonic, static pressure transmitting device), etc., or configured according to customers' requirements.

#### 典型的应用

适用于食(乳)品、饮料、生物工程、制药、精细化工、颜料等行 业,混合液和混合物在罐内进行充分迅速混合、分散、乳化、均 质。

#### Application

Suitable for food (milk), beverage, biotechnology, pharmaceutical, fine chemicals, pigment etc. mixed liquid and mixture in the tank is full and rapid mixing, dispersion, emulsification, homogenization.

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设i	†压力 Design pressure	常压 ( ATM )
设i	十温度 Design temperature	罐体、夹套按客户要求(0℃~160℃)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
保温层 Insulation	岩棉或聚氨酯 Rock wool or PU
支腿等 Legs	304

接Co	nnec	tion
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常规结构 Structure

进出口 In-outlet	快装卡接、法兰、螺纹 Tri-clamp, Flange, Thread
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#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光、喷砂 Mechanical/electrolytic polishing sand blasting
抛光精度 Polishing precision	内壁0.4μm, 外壁0.6μm Inner surface Ra≤ 0.4μm, Outside surface Ra≤ 0.6μm

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#### 产品特色

- ●容积有600L~5000L等多种规格,可根据客户实际需求进行设计、制 浩
- ●接口采用快装卡盘式(卡接), 罐体内胆选用304或316L, 内表面镜 面抛光Ra≤0.28µm~0.6µm,外表面可根据客户要求进行抛光、 拉丝、喷砂等。
- ●方形高剪切乳化罐采用底部机械乳化,采用爪式咬合、双和吸料结 构,避免了上部物料难以吸入造成的死角和漩涡现象; 高速搅拌乳 化,可适合不同混合液和混合物的混合、分散、乳化、均质。
- 乳化轴的密封采用卫生级机械密封,乳化电机可采用摆线针轮减速
- 机、无级变速减速机,根据客户要求进行选择,多采用变频调速。

## 方形高剪切乳化罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Parameter	s 코号 Model	JTRGR-1000	JTRGR-2000	JTRGR-3000	JTRGR-4000
有效容积 Effecti	ive volume (L)	1000	2000	3000	4000
	直径 Diameter (mm)	1100	1300	1450	1600
罐体 Tank	高度 Height (mm)	800	1200	1400	1500
乳化	电机功率 Power (kW)	18.5	22	30	37
Emulsification	乳化转速 RPM (r/min)	1500			

上表数据为标准型,仅供参考,可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.

## **JTRRJ** 卧式融化溶解槽 Horizontal Melting Dissolving Tank

卧式融化溶解槽(特殊锚框式搅拌桨) Horizontal Melting Dissolving Tank (Special anchor frame agitator)

卧式融化溶解槽严格遵循《药品生产质量管理规范》 GMP总则(2010年修订)第三十一、三十二条要求, 并按《压力容器》(GB150-2011)、《钢制焊接常 压容器(附标准释义)》(NB/T 47003.1-2009)要求 进行设计、制造及验收。

卧式融化溶解槽通常采用卧式圆槽体, 左右均为标准 的平面封头, 槽体内壁均采用圆弧过渡, 无卫生死 角,易清洗;夹套形式(槽体和左右封头设有夹套和 保温层), 槽体内镜面抛光处理, 符合卫生规范要 求; 配置机械式搅拌。

Horizontal Melting Dissolving Tank be designed, manufactured and inspected in accordance with the pressure vessel standard (GB150-2011) and the steel welded atmospheric pressure vessel standard (NB/T 47003.1-2009), strictly meet to GMP certificate requirements.

Horizontal Melting Dissolving Tank usually adopts horizontal round tank, left and right sides are standard flat head, the inner wall use circular arc transition, no dead corner, easy to clean. Jacket type (tank body, and left, right side head are equipped with jacket and insulation layer), tank inner wall are mirror polished, meet GMP standard, configuration of mechanical stirring.

#### 典型的应用

适用于制药、乳品、食品、化工、饮料等工业的物料融化溶解。

#### Application

Suitable for Pharmaceutical, dairy products, food, chemical, beverage industries etc.

#### 产品特色

- ●容积有1000L~10000L等多种规格,可根据客户实际需求进行设 计、制造。
- ●夹套内即可通水蒸气(或热水),也可通冷却水,夹套为弥勒板 式; 夹套外覆盖有保温层, 保温材料为岩棉或聚氨酯。
- ●接口采用快装卡盘式(卡接),槽体内胆选用304或316L,内表 面镜面抛光Ra≤0.28µm~0.6µm,外表面可根据客户要求进 行抛光、拉丝、喷砂等。
- ●搅拌形式为特殊锚框式;搅拌工作转速宜为7r/min左右。
- ●搅拌轴的密封采用卫生级机械密封,搅拌电机可采用摆线针轮减速
- 机、无级变速减速机,根据客户要求进行选择,多采用变频调速。



#### 槽体可选配置

卧式融化溶解槽的槽体可选配置无菌空气过滤器、温度计(数显式 或表盘式)、视镜、卫生级人孔、进出液孔、CIP万向旋转清洗球、 无菌取样阀(不锈钢罐底)、液位计等,或根据客户要求进行配置。

#### **Tank Optional Configuration**

Horizontal Melting Dissolving Tank optional configuration : sterile air filter, thermometer (digital display type or dial), sight glasses, sanitary manhole, in-outlet, CIP universal rotating cleaning ball, sterile sampling valve (stainless steel tank bottom), level gauge etc., or configured according to customer requirements.

#### Feature

- There are 1000L ~ 10000L varietys of specifications, it can be designed and customized according to the customers' requirements. Jacket can put into steam (or hot water), also can put into cooling water, jacket is dimple jacket; Jacketed outside covered with
- insulation layer, insulation material is rock wool (keep warm) or PU (keep cold) Connector use tri-clamp, inner tank use SS304 or SS316L, the inner
- surface mirror polishing Ra≤0.28 µ m ~ 0.6 µ m, outer surface can be polishing, wiredrawing ,sandblasting according to customer's requirement
- The stiring type is a special type of anchor frame; stiring work speed should be about 7 r/min, stirring shaft seal adopts the sanitary mechanical seal, stirring motor can use planet-cycloid retarder, stepless reducer according to the customers' requirements.

#### 应用方案 Qperational Scheme







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#### 常规设计参数 Design Parameter

设计压力 Design pressure	罐体按客户要求(-0.1MPa ~ 1.0MPa) 夹套按客户要求(ATM ~ 0.5MPa)
设计温度 Design temperature	罐体、夹套按客户要求(0℃~160℃)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy	
夹套 Jacket	304	
保温层 Insulation	岩棉或聚氨酯 Rock wool or PU	
支腿等 Legs	304	

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进出口 In-outlet	快装卡接、法兰、螺纹 Tri-clamp, Flange, Thread
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#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光、喷砂 Mechanical/electrolytic polishing, sand blasting
抛光精度 Polishing precision	内壁0.4μm, 外壁0.6μm Inner surface Ra≼ 0.4μm, Outside surface Ra≼ 0.6μm

#### 卧式融化溶解槽常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Parameter	s 型号 Model	JTRRJ-1000	JTRRJ-2000	JTRRJ-5000	JTRRJ-10000
有效容积 Effecti	ive volume (L)	1000	2000	5000	10000
	直径 Diameter (mm)	Φ1100	Φ 1400	Φ 1900	Φ2400
權体 Tank	高度 Height (mm)	1100	1400	2000	2300
too took a dission of	电机功率 Power (kW)	3	4	5.5	9.2
搅拌 Mixing	搅拌工作转速 RPM (r/min)	7(特殊锚框式) 7(Anchor type)			

上表数据为标准型,仅供参考,可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.





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## **JTRPJ** 啤酒发酵罐 **Beer Fermentation Tank**

啤酒发酵罐严格遵循《药品生产质量管理规范》GMP总则(2010年 修订)第三十一、三十二条要求,并按《钢制焊接常压容器(附标准 释义)》(NB/T 47003.1-2009 要求进行设计、制造及验收。

啤酒发酵罐罐体为圆柱形,顶盖为碟形,底盖为采用60°~90°倾 斜度的锥形有利于罐中酒液对流强烈,发酵速度快,而且利于排放 酵母和发酵罐中杂质;在酒精发酸过程中,为了回收CO,气体及其 所带出的部分酒精,发酵罐宜采用密闭式。罐底部有手孔、与罐顶 连接的CO<sub>2</sub>、空气、CIP等的进出管、内容物容积测量装置、空罐 探头及保压装置等。

Beer Fermentation Tank be designed, manufactured and inspected in accordance with the pressure vessel standard (GB150-2011) and the steel welded atmospheric pressure vessel standard (NB/T 47003.1-2009), strictly meet to GMP certificate requirements.

Beer Fermentation Tank use vertical circular tank body, the top is standard ellipsoidal head, the bottom is 60° ~ 90° inclination of conical head. It is not only good for wine liquid to bi-directional flow fast fermentation, but also is conducive to discharge yeast and impurity. Tank body and the bottom head is equipped with the jacket and insulation layer.

#### 罐体可选配置

啤酒发酵罐的罐体可选配置温度计(数显式或表盘式)、卫生级人 孔、进出液孔、CIP万向旋转清洗球、无菌取样阀、压力表、排污 阀、液位计及液位自控系统(承重模块、无触点超声波、静压变送 式器)等,或根据客户要求进行配置。

#### Tank Optional Configuration

Beer Fermentation Tank optional configuration : thermometer (digital display type or dial), sanitary manhole, in-outlet, CIP universal rotating cleaning ball, sterile sampling valve, pressure gauge, drain valve, level gauge, and liquid level self-control system (bearing module, non-contact ultrasonic, static pressure transmitting device)etc., or configured according to customers' requirements.

#### 产品特色

- ●容积有200L~5000L等多种规格,可根据客户实际需求进行设 计、制造。
- ●锥底造型,冷却夹套采用弥勒板式;夹套外覆盖有保温层,保温 材料为聚氨酯(保冷)。
- ●接口采用快装卡盘式(卡接), 罐体内胆选用304或316L, 内表 面镜面抛光Ra≤0.28µm~0.6µm,外表面可根据客户要求进 行抛光、拉丝、暗砂等。

- Feature Beer Fermentation Tank has 200L and 5000L, and other specifications, according to the actual requirment of customers.
- Cone bottom shape, cooling jacket using dimple jacket; Jacketed outside covered with insulation, thermal insulation material for polyurethane (cold).
- Connector using tri-clamp, inner tank using SS304 or SS316L, the inner surface mirror polishing Ra≤0.28 µ m ~ 0.6 µ m. Outer surface can be polished, wiredrawn ,sandblasted according to customer's requirement.

# 常规结构 Structure



Beer Fermentation Tank

#### 典型的应用

常用来制作酒类、乳制品等发酵储存设备。 适用于食品、乳制品、果汁饮料医药化工及生物工程等领域。

#### 常规设计参数 Design Parameter

设计压力 Design pressure	0.15MPa(罐体 Tank) 0.09MPa(夹套 Jacket)
设计温度 Design temperature	100℃(罐体 Tank) / 65℃(夹套 Jacket)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
保温层 Insulation	聚氨酯(保冷) Polyurethane(cold insulation)
支腿等 Legs	304



清酒罐/贮酒罐(贮存鲜酒,型号参照储罐) Beer Storage Tank ( Model )

#### Application

Used to make wine, dairy products, such as fermentation storage devices Applicable to food, dairy, juice beverage pharmaceutical chemical and biological engineering, etc.

#### 连接 Connection

进出口 In-outlet	快装卡接、法兰、螺纹 Tri-clamp, Flange, Thread
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#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光、喷砂 Mechanical/electrolytic polishing, sand blasting
抛光精度 Polishing precision	内璧0.4μm, 外璧0.6μm Inner surface Ra≤ 0.4μm, Outside surface Ra≤ 0.6μm

#### 啤酒发酵罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Paramete	ers 코号 Model	JTRPJ-200	JTRPJ-300	JTRPJ-400	JTRPJ-500	JTRPJ-1000
有效容积 Effective volume (L)		200	300	400	500	1000
	直径 Diameter (mm)	Φ600	Φ700	Φ800	Φ900	Φ 1000
罐体 Tank	高度 Height (mm)	700	700	700	700	1000
下锥底形式 Bottom cone type		60°小锥底				
参数 Paramete	ers 型号 Model	JTRPJ-2000	JTRPJ-30	ITL 00	RPJ-4000	JTRPJ-5000
	ers 型号 Model ctive volume (L)	JTRPJ-2000 2000	JTRPJ-30 3000	ITL 00	RPJ-4000 4000	JTRPJ-5000 5000
	ctive volume (L)	2000	3000		4000	5000

- 上表数据为标准型,仅供参考,可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.



## 发酵系统

## **JTRHJ** 红酒发酵罐 Wine Fermentation Tank

红酒发酵罐(锥形下封头) **Red Wine Fermentation** Tank (conical end)

红酒发酵罐严格遵循《压力容器》(GB150-2011)、《钢制焊接常 压容器》(NB/T 47003.1-2009)要求进行设计、制造及验收。

红酒发酵罐采用立式圆罐体,上为标准的锥形封头,罐体上部设有 弥勒板夹套,可通入冷却介质来进行循环冷却; 罐体内下部设置滤 网,有利于出酒时成品过滤效果更好;下为采用60°倾斜度的锥形 封头有利于罐中酒液对流强烈,发酵速度快,而且利于排放酵母和 发酵罐中杂质;罐体底部设置搅拌排渣一体化浆,用于发酵过程 中,不停的搅拌及清洗排渣过程中,快速排渣。

Wine Fermentation Tank strictly follows the pressure vessel (GB150-2011) and "steel welding atmospheric vessel" (NB/T 47003.1-2009) requirements for the design, manufacture and acceptance.

Wine Fermentation Tank use vertical circular tank body, the top is standard conical head, and top of tank body is equipped with dimple jacket which can be pumped in the cooling medium for circulating cooling. The lower of tank set mesh, filtering effect is better, the bottom is 60 ° ~ 90 ° inclination of conical head .It is not only good for wine liquid to bi-directional flow fast fermentation, but also is conducive to discharge yeast and impurity. At the bottom of the tank set mixing slag agitator used in the fermentation process and discharge process.

#### 产品特色

- ●容积有10m<sup>3</sup>、19m<sup>3</sup>、25m<sup>3</sup>等多种规格,可根据客户实际需求进 行设计、制造。
- ●夹套内通冷冻水或冷媒水,夹套为弥勒板式;夹套外覆盖有保温 层,保温材料为聚氨酯(保冷)。
- ●接口采用快装卡盘式(卡接), 罐体内胆选用304或316L, 内表 面镜面抛光Ra≤0.28µm~0.6µm,外表面可根据客户要求进 行抛光、拉丝、喷砂等。

## Feature

- Wine Fermentation Tank has 10m<sup>3</sup>, 19m<sup>3</sup>, 25m<sup>3</sup>, and other specifications, according to the requirement of customers. Jacket can be put into chilled water (or cooling water), jacket adopts dimple jacket. Jacketed outside is covered with
- insulation layer, insulation material is PU (keep cold). Connector uses tri-clamp, inner tank uses SS304 or SS316L, the inner surface mirror polishing Ra≤0.28 µ m ~ 0.6 µ m. Outer surface can be polished, wiredrawn, sandblasted according to customer's requirement.

#### 罐体可选配置

红酒发酵罐的罐体可选配置温度计(数显式或表盘式)、卫生级人 孔、进出液孔、无菌取样阀、排污阀、液位计及液位自控系统(承 重模块、无触点超声波、静压变送式器)等,或根据客户要求进行 配置。

#### **Tank Optional Configuration**

Wine Fermentation Tank optional configuration: thermometer (digital display type or dial), sanitary manhole, in-outlet, sterile sampling valve, drain valve, level gauge, and liquid level self-control system (bearing module, noncontact ultrasonic, static pressure transmitting device), etc., or configured according to customers' requirements.

型的应用	Application		
用红酒发酵。	Suitable for red		

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uitable for red wine fermentation.



机械排渣搅拌器 Mechanical slagging Agitator

#### 常规设计参数 Design Parameter

设计压力 Design pressure	常压(ATM罐体)/0.4MPa(夹套) ATM(Tank)/0.4MPa(Jacket)
设计温度 Design temperature	常温 Ordinary temperature (罐体 Tank) / 0℃~7℃(夹套 Jacket)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
保温层 Insulation	聚氨酯(保冷) Polyurethane(cold insulation)
支腿等 Legs	304

连接	Connection
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常规结构 Structure

进出口 In-outlet	快装卡接、法兰 Tri-clamp, Flange
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#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling
抛光精度 Polishing precision	内壁0.4µm, 外壁0.6µm Inner surface Ra≤ 0.4µm, Outside surface Ra≤ 0.6µm

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#### 红酒发酵罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Paramete	rs 型号 Model	JTRHJ-10	JTRHJ-19	JTRHJ-25
有效容积 Effective volume (L)		10	19	25
罐体 Tank	直径 Diameter (mm)	Φ2100	Φ2400	Φ2500
	高度 Height (mm)	2438	3657	4876
下维底形式 Bottom cone type			60°小锥底	
	电机功率 Power (kW)	5.5	7.5	7.5
搅拌 Mixing	搅拌工作转速 RPM (r/min)	60(揽拌排渣—体式)(可根据客户使用情况进行调整设计) 60(mixing, slagging integrated type)(Can adjust the design according to the customer's usage)		

上表数据为标准型,仅供参考,可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.



## **JTRSF** 食品发酵罐 **Food Fermentation Tank**

食品发酵罐严格遵循《药品生产质量管理规范》GMP总则(2010年修订)第三 十一、三十二条要求,并按《压力容器》(GB150-2011)、《钢制焊接常 压容器(附标准释义)》(NB/T 47003.1-2009)要求进行设计、制造及验 收

食品发酵罐采用全封闭立式三层不锈钢材质结构,罐体设有夹层、保温层 (需根据客户要求可加热、冷却、保温)。罐体与上下填充头(或雏形)均 采用旋压R角加工, 罐内壁经镜面抛光处理, 无卫生死角, 而全封闭设计确 保物料始终处一无污染的状态下混合、发酵,该发酵设备还配有空气呼吸 器、CIP清洗喷头、卫生人孔、视镜、液位计、视灯等装置。

Food Fermentation Tank is designed, manufactured and inspected in accordance with the pressure vessel standard (GB150-2011) and the steel welded atmospheric pressure vessel standard (NB/T 47003.1-2009) , strictly meeting GMP certificate requirements.

Food fermentation tank adopts a fully enclosed vertical stainless steel structure with 3 layers. The tank is provided with an interlayer insulation layer (according to customer requirements can be heating, cooling, heat insulation). The tank and the filling head (or prototype) were treated with spinning R angle processing. Inner wall of the tank is treated by mirror polishing, no dead angle, and fully enclosed design ensure processing material is pollution-freely mixed, fermenting, the fermentation tank is also equipped with air respirator, CIP cleaning spray head, sanitary manhole, mirror, liquid level meter, lamp etc.

#### 典型的应用 Application

适用于乳品、食品、饮料、果酒、日化、制药、精细化等行业领域 的混合、发酵、酶解操作。

Mixing, fermentation and enzyme solution in dairy, food, beverage, wine, chemical, pharmaceutical, fine chemical industry.

#### 罐体可选配置

食品发酵罐的罐体可选配置无菌空气过滤器、温度计(数显式或表盘式)、 PH计、压力表、蒸汽灭菌口、视镜、卫生级人孔、进出液孔、CIP万向旋转 清洗球、液位计及液位自控系统(承重模块、无触点超声波、静压变送式 器)等,或根据客户要求进行配置。

#### 产品特色

- ●容积有600L~20000L等多种规格,可根据客户实际需求进行设 计、制造。
- ●可在线CIP清洗、SIP灭菌(121℃/0.1MPa)。
- ●按照卫生级要求设计,结构设计极具人性化,操作方便。传动平 稳,噪音低。
- ●适宜的径高比设计,按需定制搅拌装置,节能,搅拌、发酵效果 好。
- ●内罐体表面镜面抛光处理(粗糙度Ra≤0.4µm);各进出管口、视 镜、人孔等工艺开孔与内罐体焊接处均采用拉伸翻边工艺圆弧过 渡,光滑易清洗无死角,保证生产过程的可靠性、稳定性。



#### Tank Optional Configuration

Food Fermentation Tank Optional Configuration: sterile air filter, thermometer (digital display type or dial), PH meter, pressure gauge, steam sterilization port, sight glasses, sanitary manhole, in-outlet ,CIP universal rotating cleaning ball, liquid level meter and liquid level self-control system (bearing module, non-contact ultrasonic, static pressure transmitting device), etc., or configured according to customers' requirements.

#### Feature

- There are varieties of volume from 600L to 20000L. It can be designed and customized according to the customers' requirements.
- Online CIP cleaning, SIP sterilization (121 °C /0.1MPa).
- Sanitary standard design, user-friend structure, easy to operate. Smooth transmission, low noise. Reasonable diameter ratio, customized mixing device, energy
- saving, good stirring and fermentation effect. Internal surface mirror polished (roughness Ra is less than or
- equal to 0.4 µ m). Holes of the inlet and outlet, mirror, manhole and inner tank welding using stretch flanging process arc transition, smooth and easy to clean no dead angle, ensuring the reliability and stability in the production process.

#### 常规结构 Structure







(E ISO9001

盘管式锥底生物发酵罐 Coil jacket type Biological Fermentation Tank

常规设计参数 Design Parameter

全夹套式碟形底生物发酵罐 Full jacket type Biological Fermentation Tank

## 弥勒板式锥底生物发酵罐

压力 Design pressure	罐体按客户要求(ATM ~ 1.0MPa) 夹套按客户要求(ATM ~ 0.6MPa)	
温度 Design temperature	罐体、夹套按客户要求(0℃~160℃)	

#### 材料 Material

设计

设计

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
支腿等 Legs	304

±出口 In-outlet	快装卡接、法兰 Tri-clamp, Flange	

#### 表面处理 Surface Finish

N理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling
a光精度 Polishing precision	内壁0.4μm, 外壁0.6μm Inner surface Ra≤ 0.4μm, Outside surface Ra≤ 0.6μm

#### 食品发酵罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Parameter	rs 型号 Model	JTRSF-600	JTRSF-1000	JTRSF-2000	JTRSF-3000	JTRSF-4000	JTRSF-5000
有效容积 Effective volume (L)		600	1000	2000	3000	4000	5000
	直径 Diameter (mm)	Φ900	Φ1100	Φ1300	Φ 1600	Φ1700	Φ1800
罐体 Tank	高度 Height (mm)	900	1000	1500	1500	1800	1800
	电机功率 Power (kW)	1.1	1.5	2.2	2.2	3	4
搅拌 Mixing	搅拌工作转速 RPM (r/min)	60(斜叶袭式)(可根据客户使用情况进行调整设计) 60(Paddle impeller)(Can adjust the design according to the customer's usage)					
参数 Parameter	rs 型号 Model	JTRSF-6000	JTRSF-8000	JTRSF-10000	JTRSF-12000	JTRSF-15000	JTRSF-20000
有效容积 Effective volume (L)		6000	8000	10000	12000	15000	20000
	直径 Diameter (mm)	Φ 1900	Φ2000	Φ2200	Φ2400	Φ2600	Φ2800
罐体 Tank	高度 Height (mm)	2000	2200	2400	2500	2700	3000
	电机功率 Power (kW)	4	5.5	7.5	7.5	11	11
搅拌 Mixing	搅拌工作转速 RPM (r/min)	60(斜叶桨式)(可根据客户使用情况进行调整设计) 60(Paddle impeller)(Can adjust the design according to the customer's usage)					



Dimple jacket type Biological Fermentation Tank

连接 Connection

## (E ISO9001

## **JTRZF** 生物发酵罐 **Biological Fermentation Tank**

生物发酵罐采用径高比1:2~1:3的立式圆罐体罐体;采用大视角 罐内液位观察长条视镜,12V安全视灯耐酸碱腐蚀,pH电极、 DO电极、温度电极接口齐备; 罐盖配有火焰接种口和补料备用接 口等;内表面镜面抛光,Ra≤0.4µm,外表面镜面抛光或亚光处 理,内壁过渡段均采用圆弧过渡,无卫生死角,易清洗;夹套水浴 电加热可根据客户需求设计;配置顶部机械式搅拌可调速,数字化 设定转速控制,标配2层圆盘涡轮式搅拌桨,1层高效消泡桨;另有 平直叶桨、斜叶桨、弯叶桨等可选;全封闭的设计确保物料始终处 在无污染的状态下混合、发酵;装液系数65%~75%,最适70%, 工艺结构先进,操作简单。

Biological fermentation tank adopts a vertical circular structure with diameter height ratio of 1:2~1:3 and large viewing angle liquid level observation mirror in the tank. 12V safety lamp owns acid and alkali corrosion. Mirror polishing of the inner surface reaches less than 0.4 m Ra and the outer surface is finished by mirror polishing or matting. More, the transition section of the inner surface adopts arc transition, no dead angle, easy to clean. Water bath or electric heating in the jacket can be designed according to customer demand. Also it is equipped with adjustable mechanical stirring, digital speed control, the standard 2- layer disc shaped turbine impeller and 1-layer effective defoaming oar, Besides, flat blade, oblique blade and curved blade are optional. Full-closed design ensures material mixed, ferment in sterile condition. Liquid coefficient ranges from 65% to75%, optimal 70%. The whole tanks features advanced structure and simple operation.

#### 控制方式

下位机控制:品牌触摸屏操作界面,专用PLC自动化控制程序,对 发酵参数自动控制。温度、PH、DO、消泡、搅拌转速、补料系统 等参数实时测控;

上位机控制:远程计算机实时监控、发酵专用组态软件,历史数据 查询及显示,方便地进行数据分析、曲线分析。

#### 控制系统

- ●通气控制(DO):深层通气,底部进气;在线检测,范围0~100%或 0~200%;进口DO电极,可在线高温蒸汽消毒;可与转速与通气量关联自 动或手动控制;
- ●罐压控制:顶部排气口配置指针式压力表显示罐压,不锈钢阀门手动调 节;可选配进口压力变送器和自动调节阀实现罐压自动控制。
- ●酸碱控制(PH);在线检测,范围2~12;进口PH电极,可在线高温蒸汽 消毒;可与蠕动泵或自控阀门自动加酸或加碱进行控制;
- ●温度控制(T):在线检测,范围0-150℃,进口温度传感器,数字化设 定,自动/手动切换,利用恒温水、冷却水、冷冻水等不同工况加以选择; 补料控制:蠕动泵或自控阀门进行加料控制;
- 消泡控制: 传导式泡沫电极, 进行检测自动报警或自动流加消泡剂。
  - www.jhenten.com



### **Control Method**

PLC control: branded touch screen, special PLC automatic control program of fermentation parameters. Temperature, PH, DO, defoaming, stirring speed, feeding system are real-time controlled PC control: The remote real-time monitoring, special configuration software, historical data query and analysis, data analysis, curve conveniently

#### **Control System**

- Ventilation control (DO): deep ventilation, air intake in the bottom; online detection, range of 0~100% or 0~200%, imported DO electrode, can be online high temperature steam disinfection; can be associated with the speed and ventilation volume automatic or manual control.
- Pressure control: pointer type pressure gauge in top exhaust port displaying tank pressure, manual adjustable stainless steel valve; optional imported pressure transmitter and automatic control valve to achieve automatic pressure tank pressure control.
- Acid and alkali control (PH): online detection, range 2~12; imported PH electrode, can be online high temperature steam disinfection; can be with the peristalsis pump or automatic control valve with acid or alkali control.
- Temperature control (T): online detection, range 0–150 degrees Celsius, imported temperature sensor, digital setting, automatic / manual switching, constant temperature water, cooling water, chilled water and other differen conditions to be selected.
- Freeding control: a creeping pump or automatic control valve for feeding control.
   Defoaming control: conductive foam electrode, automatic alarm or automatic defoaming agent feeding.

#### 产品特色

- ●容积有50L~2000L等多种规格,可根据客户实际需求进行设计、制造;
- ●在位灭菌,安全可靠,无传动泄漏风险;
- ●接种方式可靠,火焰接种及差压接种多种形式可选;
- ●大视角纵向视镜观测清晰,落地式罐体结构设计合理,外观美观实用,装拆便捷。

#### Feature

- There are varieties of volume from 50L to 2000L. It can be designed and
- customized according to the customers' requirements Inline Sterilization, safety and reliability, no leakage risk.
- The inoculation method is reliable, and the flame inoculation and differential
- pressure inoculation are optional. Large viewing angle liquid level observation mirror reaches the clear view. Floor type tank structure, easy to install and dismount, realizes a reasonable design and practical and beautiful appearance.

#### 常规设计参数 Design Parameter

设计压力 Design pressure	罐体按客户要求(-0.1Mpa~1.0MPa) 夹套按客户要求(ATM~0.6MPa)
设计温度 Design temperature	罐体、夹套按客户要求(0℃~160℃)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
支腿等 Legs	304

#### 连接 Connection

进出口 In-outlet	快装卡接、法兰、螺纹 Tri–clamp, Flange, Thread
罐体接口 Connection	PH、DO、温度、接种、消泡、 补酸、补碱、补料、压力等 PH、DO、temperature, inoculation, defoam, Fill acid, alkali, material, pressure, etc.

#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling
抛光精度 Polishing precision	内璧0.4 μ m, 外璧0.6 μ m Inner surface Ra≤ 0.4 μ m, Outside surface Ra≤ 0.6 μ m

# 常规结构 Structure œ#

#### 搅拌桨叶形式 Mixing Paddle

桨叶形式 Paddle type	圆盘涡轮式搅拌桨、消泡桨、平直叶桨、 斜叶桨、弯叶桨等 Disc turbine type agitator, defoaming paddle.straight blade, inclined blade,
	curved blade

#### 系统可选配置 Optional Configuration

可选配置 Configuration	多路补料、全自动灭菌、补科称重、 罐体称重、尾气氧、二氧化碳合量在线检测等 Multi way feeding, automatic sterilization, filling material weighing, tank weighing, end gas oxygen, carbon dioxide content online detaction, etc.

#### 食品发酵罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Paramete	rs 型号 Model	JTRZF-50	JTRZF-100	JTRZF-200	JTRZF-300	JTRZF-500
有效容积 Effec	tive volume (L)	50	100	200	300	500
	直径 Diameter (mm)	300	400	500	550	600
罐体 Tank	高度 Height (mm)	700	800	1000	1200	1650
搅拌 Mixing	电机功率 Power (kW)	0.55	0.75~1.2	0.75~1.5	1.1~1.5	1.5 ~ 2.2
扼汗 Wixing	搅拌工作转速 RPM (r/min)	300~350		280~320		
		2825.0			SEC. 2010.00	
参数 Paramete	rs 켚号 Model	JTRZF-800	JTRZF-1000	JTRZF-1200	JTRZF-1500	JTRZF-2000
		JTRZF-800 800	JTRZF-1000 1000	JTRZF-1200 1200	JTRZF-1500 1500	JTRZF-2000 2000
参数 Paramete 有效容积 Effec						
有效容积 Effec	tive volume (L)	800	1000	1200	1500	2000
	tive volume (L) 直径 Diameter (mm)	800 800	1000	1200 900	1500 900	2000

上表数据为标准型,仅供参考,可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.







#### 3 储罐 Storage Tank

## **JTRCG** 储罐/搅拌罐 **Storage Tank/Mixing Tank**

储罐严格遵循《药品生产质量管理规范》GMP总则(2010年修订)第 三十一、三十二条要求,并按《压力容器》(GB150-2011)、 《钢制焊接常压容器(附标准释义)》(NB/T 47003.1-2009)要求 进行设计、制造及验收。

储罐通常采用立式圆罐体, 上均为标准的椭圆形或蝶形封头, 下均 为标准的锥形、蝶形或椭圆形等封头, 罐体内壁过渡段均采用圆弧 过渡,无卫生死角,易清洗;单层、双层(罐体和下封头设有保温 层)或夹套形式(罐体和下封头设有夹套和保温层),根据客户要 求进行组合; 罐体内镜面抛光处理, 能够实现CIP和SIP 符合卫生 规范要求。

储罐结构可采用立式结构或卧式结构,根据客户要求还可设计成方 形、圆形等多种形状; 配置机械式搅拌。

Storage Tank is designed, manufactured and inspected in accordance with the pressure vessel standard(GB150-2011) and the steel welded atmospheric pressure vessel standard(NB/T 47003.1-2009), strictly meeting GMP certificate requirements.

Storage Tanks usually adopt vertical circular tank body. The top is standard elliptic or torispherical head, and the bottom is standard conical, torispherical or elliptic head. Inner wall of tank body transition section adopts circular arc transition, no dead corner, easy to clean. Single layer, double layer (tank body and the bottom head is equipped with insulation layer) or jacket type (tank body and the bottom head is equipped with the jacket and insulation layer) can be customized for customers. Tank inner surface mirror polished meets the CIP and SIP and the GMP standard.

Usually Storage Tank structure is vertical structure or horizontal structure, it also can be designed in square and circular shapes according to customers' requirements.

#### 产品特色

●容积有600L~20000L等多种规格,可根据客户实际需求进行设 计、制造。

Feature

requirements.

- ●保温层的保温材料为岩棉或聚氨酯。
- ●接口采用快装卡盘式(卡接),罐体内胆选用304或316L,内表 面镜面抛光Ra≤0.28µm~0.6µm,外表面可根据客户要求进 行抛光、拉丝、喷砂等。



There are varieties of volume from 600L~20000L, also it can be designed and customized according to the customers'

divided into coil jacket,full jacket and dimple jacket. Jacketed outside is covered with insulation layer. Insulation material is

Connector uses fast installation chuck (clamp). Inner tank uses SS304 or SS316L. The inner surface mirror polishing Ra  ${\leqslant}\,0.28\,\mu$ m ~ 0.6 µ m. Outer surface can be polished, wiredrawn, sandblasted according to customer's requirement.

Jacket can be put into steam (or hot water), and jacket is

rock wool (keep warm) or PU (keep cold).

#### 罐体可选配置

储罐的罐体可选配置无菌空气过滤器、温度计(数显式或表盘 式)、压力表、视镜、卫生级人孔、进出液孔、CIP万向旋转清洗 球、液位计等,或根据客户要求进行配置。

#### 典型的应用

适用于制药行业的纯水贮存、注射水贮存、药液贮存、中间缓冲, 也适用于食品、饮料行业牛奶、果汁等物料的常温及加温贮存。

#### 储罐常规结构 Storage Tank Structure

#### **Tank Optional Configuration**

Storage Tank optional configuration: sterile air filter, thermometer (digital display type or dial), pressure gauge, sight glass, sanitary manhole, in-outlet, CIP universal rotating cleaning ball, liquid meter etc, Or configured according to customers' requirements.

#### Application

Suitable for the pharmaceutical industry of pure water storage, injection water storage, liquid storage, intermediate buffer, also applies to normal temperature and warming storage of the food, milk, juice etc.







碟形底立式储罐(双层) Vertical type Storage Tank-dish bottom (double layer)

锥底立式储罐(双层) Vertical type Storage Tan-Conical bottom (double layer)

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平斜底立式储罐(双层) Vertical type Storage Tank -tilting bottom (double layer)



碟形端卧式储罐(单层) Horizontal type Storage Tank-dish ends (single layer)



锥形端卧式储罐(单层) Horizontal type Storage Tank-Conical ends (single layer)





#### 搅拌罐常规结构 Mixing Tank Struction



上立式碟形底搅拌储罐(夹套) Vertical type mixing Storage Tank -Dish Bottom (jacket type)



碟形底搅拌储罐(夹套) -Dish Bottom (Jacket type)



锥底侧搅拌储罐(夹套) Conical Bottom Agitator Storage Tanky (Jacket type)



带视窗锥底搅拌储罐(夹套) Conical Bottom Agitator Storage Tank with window (Jacket type)



上立式平斜底搅拌储罐(夹套)

Vertical type mixing Storage Tank -Tilting Bottom (jacket type)

上立式锥底搅拌储罐(夹套) Vertical type mixing Storage Tank -Conical Bottom (jacket type)



锥底搅拌储罐(夹套) Vertical type mixing Storage Tank –Conical Bottom (jacket type)



带挡流板锥底搅拌储罐(夹套) Conical Bottom Agitator Storage Tank with baffle (Jacket type)

## 电加热搅拌罐常规结构 Electrical Heat Mixing Tank Struction







ASME

电加热碟形底搅拌储罐(夹套) Electric heating Vertical Type Storage Tank-Dish Bottom (Jacket type)

电加热锥底搅拌储罐(夹套) Electric heating Vertical Type Storage Tank-Conical Bottom (Jacket type)

#### 常规设计参数 Design Parameter

设计压力 Design pressure	罐体按客户要求(ATM~1.0MPa) 夹套按客户要求(ATM~0.5MPa)
设计温度 Design temperature	罐体、夹套按客户要求(0℃~160℃)

## 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
保温层 Insulation	岩棉或聚氨酯 Rock wool or PU
支腿等 Legs	304

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#### 连接 Connection

进出口 In-outlet	快装卡接、法兰、螺纹 Tri-clamp, Flange, Thread

#### 表面处理 Surface Finish

2理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling
的光精度 Polishing precision	内壁0.4μm, 外壁0.6μm Inner surface Ra≤ 0.4μm, Outside surface Ra≤ 0.6μm

#### 储罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Parameter	rs 型号 Model	JTRCG-600	JTRCG-1000	JTRCG-2000	JTRCG-3000	JTRCG-4000	JTRCG-5000	
有效容积 Effective volume (L)		600	1000	2000	3000	4000	5000	
	直径 Diameter (mm)	Φ900	Φ1100	Φ 1300	Φ 1600	Φ 1700	Φ 1800	
罐体 Tank	高度/长度 Height/Length (mm)	900	1000	1500	1500	1800	1800	
	电机功率 Power (kW)	1.1	1.5	2.2	2.2	3	4	
搅拌 Mixing	搅拌工作转速 RPM (r/min)	60(斜叶条式)(可根据客户使用情况进行调整设计) 60(Paddle impeller)(Can adjust the design according to the customer's usage)						
参数 Parameter	rs 퓊号 Model	JTRCG-000	JTRCG-8000	JTRCG-10000	JTRCG-12000	JTRCG-15000	JTRCG-20000	
有效容积 Effective volume (L)		6000	8000	10000	12000	15000	20000	
	直径 Diameter (mm)	Φ 1900	Φ2000	Φ2200	Φ2400	Φ2600	Φ2800	
罐体 Tank	高度 Height (mm)	2000	2200	2400	2500	2700	3000	
	电机功率 Power (kW)	4	5.5	7.5	7.5	11	11	
搅拌 Mixing	搅拌工作转速 RPM (r/min)	60(斜叶桨式)(可根据客户使用情况进行调整设计) 60(Paddle impeller)(Can adjust the design according to the customer's usage)						

上表数据为标准型,仅供参考,可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.



**C€** ISO9001

电加热平斜底搅拌储罐(夹套) Electric heating Vertical Type Storage Tank-Tilting Bottom (Jacket type)

□ In-outlet	快装卡接、法兰、螺纹 Tri–clamp, Flange, Thread

类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling				
治精度 Polishing precision	内壁0.4μm, 外壁0.6μm Inner surface Ra≤ 0.4μm, Outside surface Ra≤ 0.6μm				







#### 储罐 Storage Tank

## **JTRYG** 移动储罐/搅拌罐 Mobile Storage Tank/Mixing Tank

Feature

requirements.

customer's requirement.

#### 罐体可选配置

移动储罐的罐体可选配置无菌空气过滤器、温度计(数显式或表盘 式)、压力表、视镜、卫生级人孔、进出液孔、CIP万向旋转清洗 球、液位计等,或根据客户要求进行配置。

#### 典型的应用

适用于乳品、饮料、制药、日化、油脂、颜料、化工等行业各类料 液的移动、周转、缓冲、清洗,适合运送、储存粉料、液体物料。

#### 移动储罐常规结构 Mobile Storage Tank Structure

#### **Tank Optional Configuration**

Mobile Storage Tank Optional Configuration: sterile air filter, thermometer (digital display type or dial), pressure gauge, sight glasses, sanitary manhole, in-outlet, CIP universal rotating cleaning ball, level gauge, etc., or configured according to customers' requirements.

#### Application

Apply to dairy, beverage, pharmaceutical, cosmetic, grease, paint, chemical and other industries of various kinds of material liquid movement, turnover, buffer, cleaning, suitable for transport and storage of powder and liquid.







碟形底移动储罐(单层) Mobile Storage Tank-Dish Bottom (single layer)

平斜底移动储罐(单层) Mobile Storage Tank-Tilting Bottom (Single layer)

全封闭锥底移动储罐(单层) Mobile Storage Tank--Conical Bottom (single layer)







电加热平斜底移动储罐(夹套) Electric Heating Mobile Storage Tank-Tilting Bottom(Jacket)

电加热储罐(保温) Electric Heating Storage Tank (insulation)



移动储罐严格遵循《药品生产质量管理规范》GMP总则(2010年修 订)第三十一、三十二条要求,并按《压力容器》 (GB150-2011)、《钢制焊接常压容器(附标准释义)》(NB/T 47003.1-2009)要求进行设计、制造及验收。

移动储罐通常采用立式圆罐体,上均为标准的椭圆形或蝶形封头, 下均为标准的锥形、蝶形或椭圆形封头, 罐体内壁过渡段均采用圆 弧过渡,无卫生死角,易清洗;单层、双层(罐体和下封头设有保 温层)或夹套形式(罐体和下封头设有夹套和保温层),根据客户 要求进行组合; 罐体内镜面抛光处理, 符合卫生规范要求。

移动储罐合理设计了带刹车脚轮、脚撑或叉车专用槽,可采用立式 结构或卧式结构,同时根据客户要求还可设计成方形、圆形等多种 形状; 配置机械式搅拌。

Mobile Storage Tank is designed, manufactured and inspected in accordance with the pressure vessel standard (GB150-2011) and the steel welded atmospheric pressure vessel standard(NB/T 47003.1-2009), strictly meeting GMP certificate requirements.

Mobile Storage Tanks usually adopt vertical circular tank body. The top is standard elliptic or torispherical head, and the bottom is standard conical, torispherical or elliptic head. Inner wall of tank body transition section adopts circular arc transition,, no dead corner, easy to clean; Single layer, double layer (tank body and the bottom head is equipped with insulation layer) or jacket type (tank body and the bottom head is equipped with the jacket and insulation layer) can be customized for customers, tank inner wall are mirror polished, meeting the GMP standard.

Mobile Storage Tank is specially designed with brake casters, kickstand and forklift grooves. The are vertical structure and horizontal structure. It is according to the customer's requirements.

#### 产品特色

- ●实现灵活移动,具有缓冲储存功能,可增配搅拌、清洗、加热、冷却控温 等功能; 合理设计了带刹车脚轮、脚撑或叉车专用槽, 适合原材料或成品 的移动,方便离线清洗。
- ●可以根据工艺要求,是单层罐或者夹套形式或三层带保温,可根椐不同的 要求组合:保温层的保温材料为岩棉或聚氨酯。
- ●移动储罐容积有75L~2000L等多种规格,所有电气都为防水设置;亦可 非标定制,按客户要求制作,实行操作人性化、标准化等特点。
- ●接口采用快装卡盘式(卡接), 罐体内胆选用304或316L, 内表面镜面抛光 Ra≤0.28µm~0.6µm,外表面可根据客户要求进行抛光、拉丝、喷砂 等。



Flexible mobility with buffer storage function, optional mixing,

finished product of mobile, convenient off-line cleaning.

insulation. Material of insulation is Rock wool or PU.

Single layer tank or Optional jacket form or three layers with

cleaning, heating or cooling function, reasonable design of the brake wheel, pedal or forklift groove, suitable for raw materials or

There are varieties of volume from 600L~20000L, also it can be designed and customized according to the customers'

Connector uses tri-clamp, inner tank use SS304 or SS316L, the

surface can be polished, wiredrawn, sandblasted according to

inner surface mirror polishing Ra≤0.28 µ m ~ 0.6 µ m. Outer



## **JTRYG** 移动储罐/搅拌罐 Mobile Storage Tank/Mixing Tank



## 电加热搅拌储罐常规结构 Electric Heating Agitator Storage Tank Structure







全封闭锥底移动搅拌储罐(夹套) Mobile mixing Storage Tank-Conical Bottom (single layer)

常规设计参数 Design Parameter

设计压力 Design pressure 设计温度 Design temperature

材料 Material

内胆 Inner shell 夹套 Jacket

保温层 Insulation

支腿等 Leas

全封闭锥底移动搅拌储罐(夹套) Mobile mixing Storage Tank–Dish Bottom (single layer)

斜插式平斜底移动搅拌储罐(夹套) Mobile mixing Storage Tank-Tilting Bottom (Jacket type)

## 连接 Connection

进出口 In-outlet	快装卡接、法兰、螺纹 Tri-clamp, Flange, Thread
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#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling
抛光精度 Polishing precision	内壁0.4 μ m, 外壁0.6 μ m Inner surface Ra≤ 0.4 μ m, Outside surface Ra≤ 0.6 μ m

#### 储罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

岩棉或聚氨酯 Rock wool or PU

罐体按客户要求(ATM~1.0MPa) 夹套按客户要求(ATM~0.5MPa)

304

304

罐体、夹套按客户要求(0℃~160℃)

304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy

参数 Parameter	rs 켚号 Model	JTRYG-75	JTRYG-150	JTRYG-300	JTRYG-600	JTRYG-1000
有效容积 Effective volume (L)		75	150	300	600	1000
罐体 Tank	直径 Diameter (mm)	Φ 450	Φ 600	Φ800	Φ 1000	Φ1100
	高度/长度 Height/Length (mm)	460	550	600	800	1000
搅拌 Mixing	电机功率 Power (kW)	0.37	0.55	0.75	0.75	1.1
	搅拌工作转速 RPM (r/min)	200(推进式)(可根据客户使用情况进行调整设计) 200(propeller) (Can adjust the design according to the customer's usage)				

上表数据为标准型,仅供参考,可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.





## 罐体可选配置

#### 常规结构 Structure

多功能萃取罐的罐体可选配置无菌空气过滤器、温度计(数显式或 表盘式)、压力表、视镜、卫生级人孔、进出液孔、CIP万向旋转 清洗球、安全阀等,或根据客户要求进行配置。

#### Tank Optional Configuration

Mobile Storage Tank Optional Configuration: sterile air filter, thermometer (digital display type or dial), pressure gauge, sight glasses, sanitary manhole, in-outlet, CIP universal rotating cleaning ball, level gauge, etc., or configured according to customers' requirements.

#### 典型的应用

适用于食品、化工行业的常压、水煎、湿浸、热 回流、强制循环渗透、芳香油提取及有机溶媒回 收等多种工艺操作。特别是使用动态提取或逆流 提取效果更佳,时间短,药液含量高。 适用于茶叶、中药材等植物的叶子以水为溶媒介 质进行萃取动态提取等工艺过程。

#### Application

Suitable for food, chemical industry, atmospheric, decoction, wet leaching, heat reflux, forced circulation penetration, aromatic oil extraction and organic solvent recovery, especially for Dynamic extraction or countercurrent extractio, short time and high content of material. Suitable for dynamic extraction of tea, herbs and other plant leaves with water as solvent medium.



固定搅拌 Fixed Agitator Type

升降搅拌 Lift Agitator Type

连接 Connection

进出口 In-outlet	快装卡接、法兰、螺纹 Tri-clamp, Flange, Thread
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#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling
抛光精度 Polishing precision	内壁0.4 μ m, 外壁0.6 μ m Inner surface Ra≤ 0.4 μ m, Outside surface Ra≤ 0.6 μ m

## 储罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Parameter	rs 型号 Model	JTRDC-2000	JTRDC-3000	JTRD-5000	JTRDC-6000	JTRDC-8000
有效容积 Effective volume (L)		2000	3000	5000	6000	8000
	直径 Diameter (mm)	Φ1300	Φ1600	Φ1800	Φ 1900	Φ2000
罐体 Tank	高度 Height (mm)	1500	1500	1800	2000	2200
	电机功率 Power (kW)	2.2	3	4	5.5	7.5
搅拌 Mixing	搅拌工作转速 RPM (r/min)	35(螺带式)(可根据客户使用情况进行调整设计) 35(screw) (Can adjust the design according to the customer's usage)				

上表数据为标准型,仅供参考,可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.

## **JTRDC** 多功能萃取罐 **Multi-function Extraction Tank**

多功能萃取罐严格遵循《药品生产质量管理规范》GMP总则 (2010年修订)第三十一、三十二条要求,并按《压力容器》 (GB150-2011)或《钢制焊接常压容器(附标准释义)》(NB/T 47003.1-2009)要求进行设计、制造及验收。

多功能萃取罐通采用蘑菇式圆罐体,外型上大下小,上大:沸腾缓 冲空间大,不易跑料;下小:液体受热快,加热时间短,提取效率 高。可设置机械搅拌,同时夹套形式可选(罐体设有夹套和保温 层)。罐体内壁过渡段均采用圆弧过渡,无卫生死角,易清洗,罐 体内镜面抛光处理,符合卫生规范要求。

#### 多功能提取罐根据客户要求外形结构可设计成正锥型提取罐、蘑菇 型提取罐、直筒型提取罐、斜锥提取罐、倒锥型提取罐等形式。

Multi-function Extraction Tank is designed, manufactured and inspected in accordance with the pressure vessel standard (GB150-2011) and the steel welded atmospheric pressure vessel standard(NB/T 47003.1-2009), strictly meeting GMP certificate requirements.

Multi-function extraction tank is a mushroom round tank. The bigger upper part provides large boiling and baffling room to process all material without leakage. The smaller lower part attribute to the quick heating advantage, short heating time and high extracting efficiency. Agitator or jacket type (tank body and the bottom head is equipped with the jacket and insulation layer) can be customized. Inner wall of tank body transition section adopts circular arc transition, no dead corner, easy to clean. Tank inner wall are mirror polished, meeting the GMP standard.

Multi-function extraction tanks can be designed as positive conical tank, mushroom type tanks, cylindrical tanks, oblique conical tanks and inverted conical tanks according to the customers' requirements.

#### 产品特色

- ●容积有2000L~8000L等多种规格,可根据客户实际需求进行设 计、制造
- ●气动控制自锁型排渣门不仅无泄漏,而且保证在突然断电或停气 情况下, 排渣门不会自动打开, 使用安全可靠。
- ●接口采用快装卡盘式(卡接),罐体内胆和萃取篮均选用304或 316L, 罐体内胆内表面镜面抛光Ra≤0.28µm~0.6µm, 外表 面可根据客户要求进行抛光、拉丝、喷砂等。

#### Feature

• There are varieties of volume from 2000L~8000L, also it can be designed and customized according to the customers' requirements.

- Pneumatic control self-locking type discharge door ensures no leakage and it is fast and safe under the sudden electricity off and gas off.
- Connector uses tri-clamp, inner tank use SS304 or SS316L, the inner surface mirror polishing Ra≤0.28 µ m ~ 0.6 µ m. Outer surface can be polished, wiredrawn, sandblasted according to customer's requirement.



常规设计参数 Design Parameter 客户要求(ATM~0.8MPa) 客户要求(0℃~160℃)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
保温层 Insulation	岩棉(保暖) Rock wool (keep warm)
支腿等 Legs	304

CTTE/J Design pressure	按各户娄水(AII
设计温度 Design temperature	罐体、夹套按客

(E ISO9001

## **JTRKC** 咖啡萃取罐 **Coffee Extraction Tank**

咖啡萃取罐严格遵循《药品生产质量管理规范》GMP总则(2010年 修订)第三十一、三十二条要求,并按《压力容器》 (GB150-2011)或《钢制焊接常压容器(附标准释义)》(NB/T 47003.1-2009)要求进行设计、制造及验收。

咖啡萃取罐通常采用立式圆罐体, 上均为标准的椭圆形或蝶形封 头,下均为标准的蝶形或椭圆形封头,罐体内壁过渡段均采用圆弧 过渡,无卫生死角,易清洗,罐体内镜面抛光处理,符合卫生规范 要求。

#### 咖啡萃取罐配置机械搅拌,同时采用气动控制自锁型排渣门结构。

The Coffee Extraction Tank be designed, manufactured and inspected in accordance with the pressure vessel standard (GB150-2011) and the steel welded atmospheric pressure vessel standard(NB/T 47003.1-2009), strictly meet to GMP certificate requirements.

Coffee Extraction Tank usually uses vertical circular tank body, the top is an open structure, the bottom is standard conical head. inner wall of tank adopts circular arc transition, no dead corner, easy to clean, tank body and the bottom head is equipped with the jacket and insulation layer, tank inner wall are mirror polished, meet the sanitary standard.

Coffee Extraction Tank is equipped with mechanic Agitator and adopts Pneumatic control self-locking type discharge door structure.

#### 产品特色

- ●容积有1000L~5000L等多种规格,可根据客户实际需求进行设 计、制造。
- ●气动控制自锁型排渣门不仅无泄漏,而且保证在突然断电或停气 情况下, 排渣门不会自动打开, 使用安全可靠。
- ●接口采用快装卡盘式(卡接),罐体内胆选用304或316L,内表 面镜面抛光Ra≤0.28µm~0.6µm, 外表面可根据客户要求进 行抛光、拉丝、喷砂等。

## Feature

- Volume: 1000L~5000L and multiple specification, also can design and manufacture according to customers' requirement. Pneumatic control self-locking type slag extraction valve not only ensures no leakage, but also guarantee under the condition of suddenly without electricity or gas, slag discharge door won't open automatically, safe and reliable operation.
- The connection adopts Tri-clamp, the tanks' inner use 304 or 316L. The inner surface mirror polishing Ra≤0.28 µ m ~ 0.6 µ m. Outer surface can be polished, wiredrawn, sandblasted according to customer's requirement.

#### 罐体可选配置

咖啡萃取罐的罐体可选配置无菌空气过滤器、温度计(数显式或表 盘式)、压力表、视镜、卫生级人孔、进出液孔、CIP万向旋转清 洗球、安全阀等,或根据客户要求进行配置。

#### Tank Optional Configuration

The body of Coffee Extraction Tank can chose sterile air filter, thermometer(Digital display or Dial type), pressure gauge, sight glasses, sanitary manhole, liquid in-outlet, CIP Universal rotating cleaning ball, safety valve, also can configure as customers' requirement

#### 典型的应用

适用于咖啡等的萃取。

Application

Used for extracting coffee

#### 常规结构 Structure



常规设计参数	Design Parameter

设计压力 Design pr	essure 按客	户要求(ATM ~ 0.8MPa)
设计温度 Design te	mperature 罐体	、夹套按客户要求(0℃~160℃)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
保温层 Insulation	岩棉(保暖) Rock wool (keep warm)
支腿等 Legs	304

#### 连接 Connection

进出口 In-outlet	快装卡接、法兰、螺纹 Tri-clamp, Flange, Thread
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#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling
抛光精度 Polishing precision	内壁0.4 μ m, 外壁0.6 μ m Inner surface Ra≤ 0.4 μ m, Outside surface Ra≤ 0.6 μ m

#### 储罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Parameter	s 型号 Model	JTRKC-1000	JTRKC-1500	JTRKC-2000	JTRKC-3000	JTRKC-5000
有效容积 Effect	ive volume (L)	1000	1500	2000	3000	5000
	直径 Diameter (mm)	Φ1100	Φ 1250	Φ1300	Φ 1600	Φ1800
罐体 Tank	高度 Height (mm)	1000	1200	1500	1500	1800
	电机功率 Power (kW)	1.5	1.5	2.2	3	4
搅拌 Mixing	搅拌工作转速 RPM (r/min)	60(倾叶开启涡轮式)(可根据客户使用情况进行调整设计) 60(Special open turbine impellers) (Can adjust the design according to the customer's usage)				

上表数据为标准型,仅供参考,可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.



真空球形搅拌锅

JTQXG

## **(E** | ISO9001

#### 常规结构 Structure





#### 产品特性

JTQXG采用蒸汽加热系统,便于控制热源,清洁维修方便、简单, 操作安全,使用高效蒸汽压力(3.0kg/cm²),适于高温加热。

螺旋形式的叶片和搅拌装置,速度可通过变频控制自行设定,使得 物料不停地循环流动并充分混合,受热均匀。通过半圆形锅体的自 然流动与兼顾到食品特性的独特搅拌叶片的加工处理效果,能够柔 和搅拌,特别是不会损伤象颗粒豆馅那样精巧的制品。

采用带温度反馈控制系统,热控精确,蒸汽回收管道节能设计,降 低能耗。

罐体设计利于加热或冷却过程中热量的有效流动和利用。整机采用 304 或者316L不锈钢材料和抗腐蚀材料,浆叶材质材质选用耐磨食 品级PTFE,可调整拆卸,利于清洗和更换,完全符合食品卫生级 要求。

#### **Product Features**

JTQXG use steam heating system, easy to control the heat source, easy to clean and maintain, simple, safe operation, use efficient steam pressure (3.0kg/cm<sup>2</sup>), suitable for high temperature heating.

The speed of impeller and agitator in spiral form can be set by frequency conversion control, so that the material can circulate continuously and mix fully and evenly. Through the natural flow of the semicircular kettle body and the processing effect of the unique stirring leaves that take into account the characteristics of food, it can be gently stirred, especially the delicate products like the pellet bean paste will not be damaged.

Adopt temperature feedback control system, accurate thermal control, energy saving design of steam recovery pipeline, reduce energy consumption.

The design of tank is conducive to the efficient flow and utilization of heat during heating or cooling. The machine adopts 304 or 316L stainless steel material and anti-corrosion material, the blade material is made of wear-resistant food grade PTFE, which can be adjusted and disassembled, which is conducive to cleaning and replacement, and fully meets the requirements of food grade.

#### 主要技术参数 Main Technical Parameters

参数 Parameters 型号 M	odel	JTQXG-100	JTQXG-200	JTQXG-500	JTQXG-800	JTQXG-1100	JTQXG-2000	JTQXG-240
满水容量 Full water capacity(L)		100	200	500	800	1100	2000	2400
电源 Power supply					3相380V			
搅拌电机 Mixing motor(KW)		0.	75	2.2	3	.7	7.5	11
蒸汽最高工作压力 Maximum working pressur	e of steam				3.0kg/cm <sup>2</sup>			
蒸汽耗量 Steam consumption(kg/h)		70	105	150	220	235	250	315
缸体倾动 Cylinder tilt (KW)		0	.2		0.4		0.75	1.5
盖开闭 Cover opening and closing(KW)			0.2			0.4		
真空泵 Vacuum pump(KW)		1.5	2.2	3.7		7.5		15
真空泵安装空间 Vacuum pump installation sp	ace(mm)	400 × 650	$450 \times 700$	600 × 940		630 × 1120		700 × 1300
	₩L	1550	1850	2200	2730	3050	3500	3850
外形尺寸 Dimensions(mm)	宽W	840	930	1100	1260	1450	1520	1750
	高H	1435	1575	1765	1970	2330	2530	3755

上述外形尺寸以外的规格也可以非标定制 Specifications other than the above dimensions can also be customized

Vacuum Spherical Mixing	g Kettle	

#### 用途

果冻、果酱、橘皮果酱、牛奶蛋糊、易溶糖质、饼陷、嫩煎肉、黄油面酱、 奶油炸肉饼、花生酱、调味汁、汤汁等

#### Use

Jelly, jam, marmalade, milk custard, soluble sugar, cake pits, sauteed meat, butter noodle sauce, cream croquette, peanut butter, sauce, soup, etc.



L

Vertical

卧式 Horizontal





## JTRZG 夹层锅 Jacketed Steam Kettle

夹层锅严格遵循《药品生产质量管理规范》GMP总则(2010年修订)第三十 一、三十二条要求,并《压力容器》(GB150−2011)、《钢制焊接常压容 器(附标准释义)》(NB/T 47003.1−2009)要求进行设计、制造及验收。

夹层锅由锅体、支架等部分组成,锅体是由内外球形锅体组成的双层结构形 式,夹层中通入蒸汽或着导热油作为介质进行加热;夹层锅底部可装送兰出 料口,物料蒸煮完毕可直接出料,方便作业;锅体内壁过渡段均采用圆弧过 旋,无卫生发消,易清洗;锅体内镶面锁光处理,符合卫生规范要求。

夹层锅可采用固定式结构或可倾斜式结构,同时根据客户要求可增加搅拌装 置和乳化装置。

Jacketed Steam Kettle is designed, manufactured and inspected in accordance with the pressure vessel standard(GB150-2011) and the steel welded atmospheric pressure vessel standard(NB/T 47003.1-2009), strictly meeting to GMP certificate requirements.

Steam kettle have double-layer structure, and jacket uses steam or heat conduction oil as a heating medium. Steam kettle can use installed flange discharge, and material can be directly discharging after steaming. It is a convenient operation. Kettle body adopts circular arc transition, no dead corner, easy to clean; mirror polishing processing meets samilary standard.

Jacket kettle can be fixed structure or tiltable structure, also can add mixing device and emulsification device according to customers' requirements.

#### 典型的应用

应用于各种类型食品加工业、宾馆、餐厅、工矿企业、机关部队、大专院校 食堂,作为煮粥、熬汤、烧菜与炖肉之用。

应用于糖果、糕点、饮料、蜜饯、果酱等食品加工及酿造、制酒、制药与日 用化工等行业,作为物料溶化、消毒、加热、热烫、预煮、配制、蒸煮、杀 菌、调配与浓缩等加工。

#### Application

Used for the processing of various kinds of food, specially used in large restaurant or dining room to boil soup, cook, stew, boil congee, etc. Used in liquid configuration, decoction and concentration in pharmaceutical, food, chemical industry and light industry.

#### 产品特色

- 夹层锅具有受热面积大、热效率高、加热均匀、液料沸腾时间 短、加热温度容易控制等特点,是食品加工过程中提高质量,缩 短时间,改善劳动条件的优良设备。
- ●夹层锅容积有50L~500L等多种规格,可根据客户实际需求进行 设计、制造。
- ●接口采用快装卡盘式(卡接),锅体内胆选用304或316L,内表面 镜面抛光Ra≤0.28µm~0.6µm,外表面可根据客户要求进行 抛光、拉丝、喷砂等。



#### 罐体可选配置

夹层锅的罐体可选配置温度计(数显式或表盘式)、压力表、视镜、 卫生级人孔、进出液孔、CIP万向旋转清洗球等,或根据客户要求 进行配置。

#### Tank Optional Configuration

Jacketed Steam Kettle can configure thermometer(Digital display or Dial type), pressure gauge, sight glasses, sanitary manhole, liquid in–outlet, CIP cleaning bail and so on, also can configure as customers' requirement.

#### Feature

- Jacketed kettle have large heating area, high thermal efficiency, even heating advantage, short boiling time and easy control of heating temperature. It is a good equipment to improve quality, shorten time and improve working conditions on food processing.
- Volume:50L~500L and multiple specification, also we can design and manufacture according to customers' requirement.
- The connection adopts Tri–clamp, the tanks' inner use 304 or 316L. The inner surface mirror polishing Ra≤0.28 μ m - 0.6 μ m. Outer surface can be polished, wiredrawn, sandblasted according to customer's requirement.







Vertical lifting Jacketed Steam Kettle with Double Agitator

#### 常规设计参数 Design Parameter

设计压力 Design pressure	按客户要求(ATM ~ 1.0MPa)
设计温度 Design temperature	罐体、夹套按客户要求(0℃~250℃)

#### 材料 Material

内胆 Inner shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
夹套 Jacket	304
锅体外层 Kettle outer layer	304
支腿等 Legs	304

乳化搅拌型立式夹层锅	
Vertical Jacketed Steam Kettle with Emulsifying Agitator	

#### 连接 Connection

进出口 In-outlet	快装卡接、法兰、螺纹 Tri-clamp, Flange, Thread
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#### 表面处理 Surface Finish

h理类型 Finish type	机械抛光、电解抛光、喷砂、酸洗 Mechanical/electrolytic polishing, sand blasting, pickling		
也光精度 Polishing precision	内壁0.4 μ m, 外壁0.6 μ m Inner surface Ra≤ 0.4 μ m, Outside surface Ra≤ 0.6 μ m		

#### 乳化罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Parameter	s 型号 Model	JTRZG-50	JTRZG-100	JTRZG-200	JTRZG-300	JTRZG-400	JTRZG-500
有效容积 Effecti	ive volume (L)	50	100	200	300	400	500
蒸发量 Evapora	tion Kg/h(清水 Rinsing)	30	40	65	75	100	150
传热面积 Heat-	transfer aream <sup>2</sup>	0.40	0.60	1.00	1.44	1.65	1.90
蒸汽耗量 Steam	i consumptionKg/h	33	44	72	110	136	165
	口径 Diameter	Φ600	Φ700	Φ800	Φ900	Φ 1000	Φ1100
锅体 Kettle	锅深 Kettle depth	450	520	550	630	680	750
搅拌 Mixing	电机功率 Power (kW)	0.37	0.37	0.55	0.75	0.75	1.1
1921+ MIXING	搅拌工作速度 RPM (r/min)	36(可根据	客户使用情况进行调	整设计) 36 (Can a	djust the design acc	ording to the custor	ner's usage)
乳化	电机功率 Power (kW)	1.1	1.1	1.5	1.5	1.5	2.2
Emulsification	乳化工作速度 RPM (r/min)	4P(可根据	客户使用情况进行调	整设计) 4P (Can a	djust the design acc	ording to the custor	ner's usage)
结构形式 Struct	ure		固定 ( 立式或卧:	弐)/可傾/搅拌 Fixed	(Vertical or horizont	al)/tiltable/mixing	

上表数据为标准型乳化搅拌型立式夹层锅,容积、夹层工作压力、电机功率、搅拌桨结构等可以根据客户特定要求定做。 The above-mentioned data is the standard for vertical Jacketed Steam Kettle (Emulsifying stirring type), the capacity, jacket operate pressure, power and agitator structure can be customized according to customers' requirements.



## 热水回收式侧喷淋杀菌罐 Hot Water Recovery Side Spray Sterilization Tank



镇田生产的各种类型的高质量全自动程序控制杀菌釜,充分地从用 户角度着想,具有高效、低耗、易操作、方便维护等特点。我们的 优势就是在确保食品安全的前提下,用合理的杀菌工艺最大限度地 使客户的产品保持原有风味和良好口感。 Jhenten production of various types of high quality automatic program control sterilization tank, fully focus on the user's point of view, with high efficiency, low consumption, easy to operate, convenient maintenance and other characteristics. Our advantage is to ensure the premise of food safety, with a reasonable sterilization process to maximize the customer's products to maintain the original flavor and good taste.

#### 各类型杀菌罐主要规格参数 Main Specifications Of Each Type Of Sterilization Tank

#### 热水回收式侧喷淋杀菌罐 Hot Water Recovery Side Spray Sterilization Tank

#### 应用 Application

适用于充气的铝箔袋、塑料杯等要求严格保持包装外形的产品,同不回收热水的相比可节约50%以上的蒸汽。

It is suitable for inflatable aluminum foil bags, plastic cups and other products that require strict maintenance of packaging appearance. Compared with those that do not recycle hot water, it can save more than 50% steam.

<del>퓊号</del> Model	杀菌罐直径(mm) Sterilization tank diameter	桶体长度(mm) Barrel length	有效杀菌容积(W×H×L) Effective sterilization volume	进出物料形式 In and out material form	控制形式 Control form
CPZ1540	1500	4000	$0.85m \times 1m \times 4m = 3.4m^{\circ}$	电动/手动 Electric / Manual	全自动 Fully automatic
CPZ1330	1300	3000	0.76m × 0.85m × 3m=1.9m <sup>3</sup>	电动/手动 Electric / Manual	全自动 Fully automatic
CPZ1130	1100	3000	0.59m × 0.69m × 3m=1.2m <sup>3</sup>	手动 Manual	全自动 Fully automatic

## 热水回收式上淋水杀菌罐 Hot Water Recovery Type Drenching Sterilization Tank

#### 应用 Application

适用于易拉罐、玻璃瓶等有规则外形的产品,同不回收热水的相比可节约50%以上的蒸汽。 It is suitable for regular shape products such as cans and glass bottles, and can save more than 50% steam compared with those that do not recycle hot water.

型号 Model	杀菌罐直径(mm) Sterilization tank diameter	桶体长度(mm) Barrel length	有效杀菌容积(W×H×L) Effective sterilization volume	进出物料形式 In and out material form	控制形式 Control form
LSZ1330	1300	3000	0.9m × 0.9m × 3m=2.4m <sup>3</sup>	电动/手动 Electric / Manual	全自动/手动 Fully automatic / Manual
LSZ1230	1200	3000	0.8m × 0.8m × 3m=1.9m <sup>3</sup>	电动/手动 Electric / Manual	全自动/手动 Fully automatic / Manual
LSZ1125	1100	2500	0.7m × 0.7m × 2.5m=1.2m <sup>3</sup>	电动/手动 Electric / Manual	全自动/手动 Fully automatic / Manual
LSZ0920	900	2000	0.6m × 0.6m × 2m=0.72m <sup>3</sup>	手动 Manual	全自动/手动 Fully automatic / Manual

## 全水式双罐杀菌罐 All - Water Double - Tank Sterilizer

#### 应用 Application

适用于真空软包装的产品,杀菌升温迅速,最大限度地保持产品的风味特性,生产效率在各种杀菌罐中最高。

Suitable for the product of vacuum soft packaging, the sterilization temperature rises rapidly, the maximum limit maintains the product flavor characteristic, the production efficiency is the highest in each kind of sterilization tank.

型号 Model	杀菌罐直径(mm) Sterilization tank diameter	桶体长度(mm) Barrel length	有效杀菌容积(W×H×L) Effective sterilization volume	进出物料形式 In and out material form	控制形式 Control form
SJZ1330	1300	3000	0.9m × 0.9m × 3m=2.4m <sup>3</sup>	电动/手动 Electric / Manual	全自动/手动 Fully automatic / Manual
SJZ1230	1200	3000	0.8m × 0.8m × 3m=1.9m <sup>3</sup>	电动/手动 Electric / Manual	全自动/手动 Fully automatic / Manual
SJZ1125	1100	2500	0.7m×0.7m×2.5m=1.2m <sup>3</sup>	电动/手动 Electric / Manual	全自动/手动 Fully automatic / Manual
SJZ0920	900	2000	0.6m × 0.6m × 2m=0.72m <sup>3</sup>	手动 Manual	全自动/手动 Fully automatic / Manual

#### 全水回转式双罐杀菌罐 Full Rotary Duplex Tank Sterilizer

#### 应用 Application

适用于八宝粥、二次灭菌奶、谷物类饮料等在杀菌过程中需要对包装内物料进行搅拌的产品。

It is suitable for the products that need to stir the materials in the packaging during the sterilization process, such as babaocongee, secondary bacteria-killing milk and cereal beverage.

型号 Model	杀菌罐直径(mm) Sterilization tank diameter	桶体长度(mm) Barrel length	有效杀菌容积(W×H×L) Effective sterilization volume	进出物料形式 In and out material form	控制形式 Control form
SHZ1330	1300	3000	0.9m × 0.9m × 3m=2.4m <sup>a</sup>	手动 Manual	全自动/手动 Fully automatic / Manual
SHZ1230	1200	3000	0.8m × 0.8m × 3m=1.9m <sup>3</sup>	手动 Manual	全自动/手动 Fully automatic / Manual
SHZ1125	1100	2500	0.7m × 0.7m × 2.5m=1.2m <sup>3</sup>	手动 Manual	全自动/手动 Fully automatic / Manual
SHZ0920	900	2000	0.6m × 0.6m × 2m=0.72m <sup>3</sup>	手动 Manual	全自动/手动 Fully automatic / Manual



# 

#### 常规结构 Structure



公司运用先进的工艺水压膨胀法来将曾与挡板结合在一起。这个过程在很大 程度上减少了由滚筒扩张带来的表面损伤,比如在淬水工作和在管扩张变薄 的时候,除止之外,我们所有的整体双向薄管实际上减少了管与挡板接口的 压力,为的是能够保持一致性、减少维护时间和加长设备的使用寿命。在出 货之前,每一台热交换器都要经过严格的测试和程序文件的检测。 包括如下:

●流体静力学测试

●燃料渗透试验

●X射线分析

- ●表面光度仪来确保机抛和电抛的表面粗糙度Ra值在0.25µm,以下 ●计算机校验性能
- ●光线及内窥镜检测

We use advanced technology of hydraulic expansion method to connect the lube and the baffle. This process, to a great extent, reduces the surface damage caused by the cylinder expansion, such as hardening work and thin tube actually reduces pressure between tube and baffle interface in order to maintain consistency, reduce maintenance time and lengthen the service life of the equipment. Before shipment, each heat exchanger should be tested with strict test and program file.

- Including the following: • Fluid static test
- •Fuel penetration test
- •X ray analysis
- Surface photometer to ensure that the surface roughness of mechanical and electrolytic polishing Ra below  $0.25\,\mu$  m.
- Computer verification performance
- Detection of light and endoscopy

#### 典型的应用

管式换热管广泛适用于化工、轻工、冶金、制药、食品、化纤等。

#### Application

Tube heat transfer tubes are widely used in chemical, light industry, metallurgy, pharmaceutical, food, chemical fiber and so on.

#### Feature

- Custom-made design, the latest technology of water pressure pipeline expansion-no hardening in contact surface, scratches, thin walls and scars.
- Custom-made design for the latest scientific and technological track welding of pipeline to pipe sheet welding seal.
- The pipe bending equipment designed by all U tube can ensure that the pipe has a good contact surface in the U curved area.
- •The surface roughness of all heat exchangers is 0.6 µm to 0.3 µm including the electronic grade seamless tube.



## 产品特色

- ●用户定制设计,最新科技的水压管道膨胀一产品接触面无加工硬化,划痕,薄壁和疤痕。
- ●用户定制设计,用于管道到管材片的焊接密封的最新科技的轨道 焊接。
- ●所有U型管设计的管道弯制设备能确保管道在U型弯区域内有很 好的接触表面。
- ●所有的換热器的表面粗糙度为0.6 µ m至0.3 µ m包括电子级无缝 管。
- ●卫生级焊接管的粗糙度可高于0.75µm。
- ●U-型管和直管的设计100%符合ASME BPE 2005的要求。 ●严格的QA/QC程序。
- ●卓越的文件控制部门制作所有的认证文件,50多年来,产品 100%都通过FDA认证。
- The roughness of the sanitary welded pipe can be higher than 0.75 u m.
- The design of the U type tube and the straight tube 100% meets the requirements of the ASME BPE 2005.
- Strict QA/QC procedures.
- The excellent document control department produces all the certification documents. Over the past 50 years, 100% of the products have been certified by FDA.



#### 操作条件 Operation

0.6MPa 1.0MPa
150°C
0.6MPa 1.0MPa
150°C
1/2/4

#### 连接 Connection

壳体连接 Shell connection	快装、法兰、螺纹 Clamp, flange, Thread
管程连接 Tube connection	快装、法兰、活接 Clamp、flange、screw

#### 材料 Material

売程 Shell	304、316L、双相钢、钛材、哈氏合金 304, 316L, Duplex SS, Titanium, Hastelloy
管程 Tube	304、316L
密封圈 O-ring	三元乙丙橡胶、聚四氟乙烯、硅橡胶 EPDM、PTFE、silicon

#### 表面处理 Surface Finish

处理类型 Finish type	机械抛光、电解抛光 Mechanical polishing、 electrolytic polishing	
抛光精度 Polishing precision	0.4 μ m	

#### 主要技术参数 Technical Parameters

公称直径	管程数	管子数量	扬	快热面积 Trans surface	9	管子长度 mm Pipe ler	igth
Diameter	Tube No.	Pipe No.	1500	2000	3000	4000	6000
159	L	14	1.5	2	3	4.5	6.6
219	1	26	3	4	6	8	12
219	11	26	3	4	6	8	12
273	1	44	5	7	10	14	21
2/3	Ш	40	5	6	9	12	19
325	1	60	7	9	14	19	28
325	11	56	6	9	13	17	26
400	I	119	14	18	28	37	55
400	Ш	110	13	17	26	34	50
500	1	185	22	29	45	55	85
500	II	170	20	27	40	55	85
600	1	277	33	43	60	85	125
600	Ш	266	31	41	60	80	125
700	. I.	379	44	59	90	120	125
700	II	358	42	56	85	110	165
000	I	511	60	80	120	160	240
800	Ш	488	57	77	115	150	230
900	1	649	76	102	150	200	305
900	Ш	630	73	99	145	195	295
100	1	805	95	126	185	250	375
100		792	92	124	185	245	370



#### 常规结构 Structure

## 配液系统 Liquid Mixing System



#### 产品特色

- ●就地清洗、操作简便、工作安全、劳动强度低、工作效率高。 ●清洗彻底,并能同时达到消毒灭菌目的,保证卫生要求,有利于
- 制品质量提高。 ●清洗采用管道化,可减少占用车间面积。
- ●洗涤剂可循环使用、利用率高,蒸汽和水也比较节省。
- ●易损件少,设备使用寿命长。
- ●适合于大、中、小型各类设备清洗。
- ●清洗工作可实现程序化和自动化。

#### Feature

- In-place cleaning, easy to operate, safe, low labor intensity, high work efficiency.
- Clean thoroughly, achieving disinfection sterilization, and guaranteeing the sanitary requirements, is helpful to improve product quality.
- Pipelining type cleaning to reduce the occupying room.
   Detergent can be recycled, high utilization ratio saving steam and water.
- •Less wearing parts, equipment, long service life.
- Suitable for large, medium and small equipment cleaning.
- Cleaning can be programmed and automated.



#### 系统组成

典型的应用

配液系统一般由浓配罐、稀配罐、过滤器、管道阀门等组成。配液 罐一般为全密封、立式结构的卫生洁净型容器,具有可加热、冷 却、保温、搅拌等功能。具有加热或冷却功能的配液罐罐体设有夹 套,可通入加热或冷却介质分别进行加热或冷却,使药液借助搅拌 器的运转得到充分溶解与调配。

主要用于生物工程、大输液、口服液、精细化学等行业的物料配制。 应用在无菌制药中的无菌制剂、生物制剂、疫苗、滴眼剂等药品生产

#### System composition

Liquid Mixing System is mainly composed of transmission device, mechanical seal device, temperature control device, shoot the light, sight glasses, stirring device, manhole inlet, steam inlet, condensate water outlet, material outlet, drain outlet, sample connection, 360 ° cleaning ball, some of them has orifice plate filter device, weighing metering device, liquid level measuring device, loop device, etc

#### Application

Mainly used for biological engineering, infusion solutions, oral solutions, fine chemical industry material preparation Used in sterile pharmaceutical preparations, biological agents, vaccines, such as eye drops drug manufacturing.

#### 储罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Parameter	rs 켚号 Model	JTPY-500	JTPY-1000	JTPY-1500	JTPY-2000	JTPY-2500
浓配罐容器 Cor	ncentrated mixing tank (L)	500	1000	1500	2000	2500
浓配过滤器 Cor	ncentrated filter (钛棒 Ti cartridge)	3R10	5R10	9R10	15R10	20R10
稀配罐容积 Dilu	ute mixing tank (L)	500	1000	2000	3000	4000
稀配过滤器 Dilu	ute filter (精密 Cartridge)	3R10	5R10	9R10	15R10	20R10
高心泵	流量 Follow Rate (m³/h)	3	5	5	10	15
Centrifugal	扬程 Pump Head (m)	15	15	20	20	20
pump	功率 Power (kw)	1.1	1.5	1.5	2.2	2.2
搅拌电机	功率 Power (kw)	0.55	0.75	1.1	1.5	1.5
Agitator motor	搅拌工作转速 RPM (r/min)	20~400(可根据客户使)	用情况进行调整设计) 20 -	400 (The design can be	e adjusted according to	customer use cond

上表数据为标准型,仅供参考,可根据客户要求定制; The above-mentioned data is the standard, it can customize according to customer's requirements.





## CIP 在线清洗系统 CIP/SIP System

CIP 在线清洗系统是一个中央集成系统,主要由单个或多个清洗液 贮罐及管道,分布器,增压泵,回流泵,气动控制阀、胶碱计量 泵、板式换热器、温度控制仪、电导率检测仪、液位控制仪、 PLC触摸屏,控制柜及系统管阀件等组成。

CIP Systems is a central integration system, mainly composed of single or multiple cleaning fluid Storage Tank and pipe, distributor, booster pump, circumfluence pump, pneumatic control valve, acid–base metering pump, plate heat exchanger, temperature control instrument, electrical conductivity detector, liquid level controller, PLC, touch screen, control cabinet and system pipe valve parts, etc.

#### 产品特色

- ●就地清洗、操作简便、工作安全、劳动强度低、工作效率高。
- ●清洗彻底,并能同时达到消毒灭菌目的,保证卫生要求,有利于制品质量提高。
- ●清洗采用管道化,可减少占用车间面积。
- ●洗涤剂可循环使用、利用率高,蒸汽和水也比较节省。
- ●易损件少,设备使用寿命长。
- ●适合于大、中、小型各类设备清洗。
- ●清洗工作可实现程序化和自动化。

#### Feature

- In-place cleaning, easy to operate, safe, low labor intensity, high work efficiency.
- Clean thoroughly, achieving disinfection sterilization, and guaranteeing the sanitary requirements, is helpful to improve product quality.
- Pipelining type cleaning to reduce the occupying room.
   Detergent can be recycled, high utilization ratio saving steam
- and water.
- Less wearing parts, equipment, long service life.
   Suitable for large, medium and small equipment cleaning.
- Suitable for large, medium and small equipment cleanin
   Cleaning can be programmed and automated.
- cleaning can be programmed and adjoinated.

#### 常规的清洗程序 Usual Cleaning Process

时间 Time	温度 Temperature
3min ~ 5min	40°C ~ 50°C
5min ~ 15min	60°C ~ 80°C
3min ~ 5min	40°C ~ 50°C
5min ~ 10min	60°C ~ 80°C
3min ~ 5min	40°C ~ 50°C
	3min ~ 5min       5min ~ 15min       3min ~ 5min       5min ~ 10min

#### 典型的应用

广泛应用于饮料、乳品、果汁、啤酒、制糖、生物制药等自动化程度较高的生产企业中。 小型移动式CIP 在线清洗系统主要应用于生物发酵、制药行业。

#### Application

Widely used in the beverage, dairy, juice, beer, sugar, biological pharmaceutical automatic production process. The small portable CIP online cleaning system mainly used in biological fermentation, the pharmaceutical industry.

#### 储罐常规型号及主要技术参数 Normal Model And Main Technical Parameters

参数 Parameters 型号 Model		JTCIP-0.5	JTCIP-1	JTCIP-2	JTCIP-3	JTCIP-4
酸罐容积 Acid tank Volume (L)		500	1000	2000	3000	4000
碱罐容积 Alkali tank Volume (L)		500	1000	2000	3000	4000
热水罐容积 Hot water tank Volume (L)		500	1000	2000	3000	4000
加热方式 Heating method		盘管、板式、管式加热、电热管加热 Coil, plate, tube heating, electric heat pipe heating				
CIP泵 Pump	流量 Follow Rate (m³/h)	10	10	20	20	30
	扬程 pump head (m)	24	24	36	36	36
	功率 Power (kw)	2.2	2.2	4.0	4.0	5.5

上表数据为标准型,可以根据客户特定要求定做。CIP清洗系统选型需提供的工艺参数:酸、碱、水罐容积,自动化程度,加热方式,特殊要求等。 The above-mentioned data is the standard, for reference only. It can customize according to custome's requirements. CIP cleaning system selection should provide technology Parameter z, Acid, akial, itan volume, degree of automation, heating mode, special requirements, etc

## 茶饮料自动提取排渣生产线 Automatic Tea Extraction and Discharge Line



#### 系统组成

茶饮料自动提取及排渣生产线由多功能提取罐设备成套装置、螺旋 输送排渣装置、管道阀门等,以及配套的提取过程智能控制系统等 构成。

多功能提取罐设备成套装置由多功能提取罐、冷凝器、冷却器、过 滤器、出渣门气动控制系统等构成。多功能提取罐外形结构;主要 有正锥型提取罐、蘑菇型提取罐、直筒型提取罐、斜锥提取罐、 锥型提取罐等形式;按照有无搅拌可分为动态提取罐和静态提取 罐。与物料接触部分全采用不锈钢制造,具有良好的耐蚀性,完全 达到GMP标准。

#### 典型的应用

适用于茶叶、中药材等植物的叶子以水为溶媒介质进行萃取动态提 取等工艺过程。

#### 产品特色

- ●多功能提取繼设备成套装置采用食品卫生级设计、无死角活动区域,最大限度减少残留;设备内表面精抛光,抛光精度0.28µm~0.45µm。外表面镜面抛光或2B拉丝板面。
- ◆茶饮料自动提取排渣生产线具有效率高,操作方便,自动化程度高等优点,减少作业人数,降低劳动强度,自动排渣干净卫生,避免了茶渣等对 环境的污染问题。

#### System composition

Automatic Tea Extraction and Discharge Line is composed of a multifunctional extraction tank equipment, screw conveyor discharging device, a pipeline valve, and a intelligent control system of extraction process.

The multifunctional extracting tank device is composed of a multifunctional extraction tank, a condenser, a cooler, a filter and a pneumatic control system of slagging outlet. Multifunctional extraction tank, has several structures—positive conical type extraction tank, mushroom type extraction tank, straight cylinder type extraction tank, tapered extraction tank, inverted conical type extraction tank. Whether there is Agitator, it can be divided into dynamic extraction tank. Whether there is Agitator, it can be divided into dynamic extraction tank and static extraction tank. The material-contacting part of the tank is made of stainless steel, with good corrosion resistance fully meeting the GMP standard.

#### Application

Suitable for dynamic extraction of tea, herbs and other plant leaves with water as solvent medium.

#### Feature

- Multi function extraction tank equipment complete sets use the food hygiene level design, no dead corner to minimize the residual. The inner surface fine polishing precision from 0.28 µ m to 0.45 µ m. The outer surface is mirror polishing or 2B drawing board.
- Automatic Tea Extraction and Discharge Line has the advantages of high efficiency, convenient operation, high degree of automation reducing staff numbers and the labor intensity, automatic slag is clean and sanitary, avoiding the environmental pollution problem.









夹套类型 Jacket Type

P

- D









P Insulation / 保温层 THE O Dimple jacke 冲压槽型板 8 П Outside shell Inside shel 罐体外层 罐体内层 -----

槽型夹套式(新型) Slot type Jacket(new type)







容器常用附件 Accessories

