



用设备安全守护
化工人的幸福生活
Secure with equipment
Chemical people's happy life

海鑫蓝耐酸专家
HAI XIN LAN ACID-RESISTING EXPERT

蓝特LANTE

海特
HAITE

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海鑫蓝·耐酸专家
HAIXINLAN ACID-RESISTING EXPERT



临沂市海鑫化工设备有限公司
LINYI HAIXIN CHEMICAL EQUIPMENT CO., LTD

A bout SGT 简介

临沂市海鑫化工设备有限公司位于沂蒙革命老区——山东省临沂市罗庄经济开发区，成立于2008年，占地面积120000平方米，公司主要生产经营：20L-100000L搪玻璃反应釜、搪玻璃贮罐、搪玻璃搅拌器、管道、塔节及非标压力容器。国家高新技术企业、省级专精特新企业，拥有省、市级研发平台，自主研发专利30余项。具备D级压力容器、搪玻璃压力容器的设计、制造资质，拥有一支拼搏奋斗的员工队伍，科学完善的管理体系、始终以研发创新、和提高客户满意度为经营理念，不断提高用户的服务体验。

Linyi Haixin Chemical Equipment Co., Ltd. is located in the Yimeng revolutionary old area - Luozhuang Economic Development Zone, Linyi City, Shandong Province, was founded in 2008, covers an area of 120,000 square meters, the company's main production and management: 20L-100000L glass lined reactor, glass lined storage tank, glass lined agitators, pipes, towers and non-standard pressure vessels. National high-tech enterprises, provincial specialized new enterprises, with provincial and municipal R & D platforms, independent research and development patents more than 30. With D level pressure vessel, glass lined pressure vessel design, manufacturing qualifications, has a hard work team, scientific and perfect management system, always research and development innovation, and improve customer satisfaction for the business philosophy, and constantly improve the user's service experience.

企业使命： 为全球化工企业提供更完美的设备选择方案

Enterprise mission:
To provide more perfect equipment selection solutions for global chemical enterprises

企业愿景：

用心智造好设备

Corporate Vision:
Build the equipment with your mind

企业价值观：

诚信、高效、热情、负责

Corporate values:
Integrity, efficiency, enthusiasm, responsibility

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关于海鑫

- 公司简介 Company profile
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企业品牌 Enterprise brand
资质证书 Qualification certificate
部分商标、专利 Some trademarks, patents
生产装备 Production equipment

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产品优势

- 瓷釉 Porcelain glaze
工艺特点 Process characteristics
结构改进 Structural improvement
搅拌系统 Mixing system

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搪玻璃产品

- 整体分解图 Global decomposition graph
搪玻璃反应罐 Glass lined reaction tank
搪玻璃贮罐 Glass lined storage tank

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配件

- 搪玻璃搅拌器 Glass-lined agitator
机架支架 Rack support
减速机 Reduction gear
机封 Mechanical seal

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其他

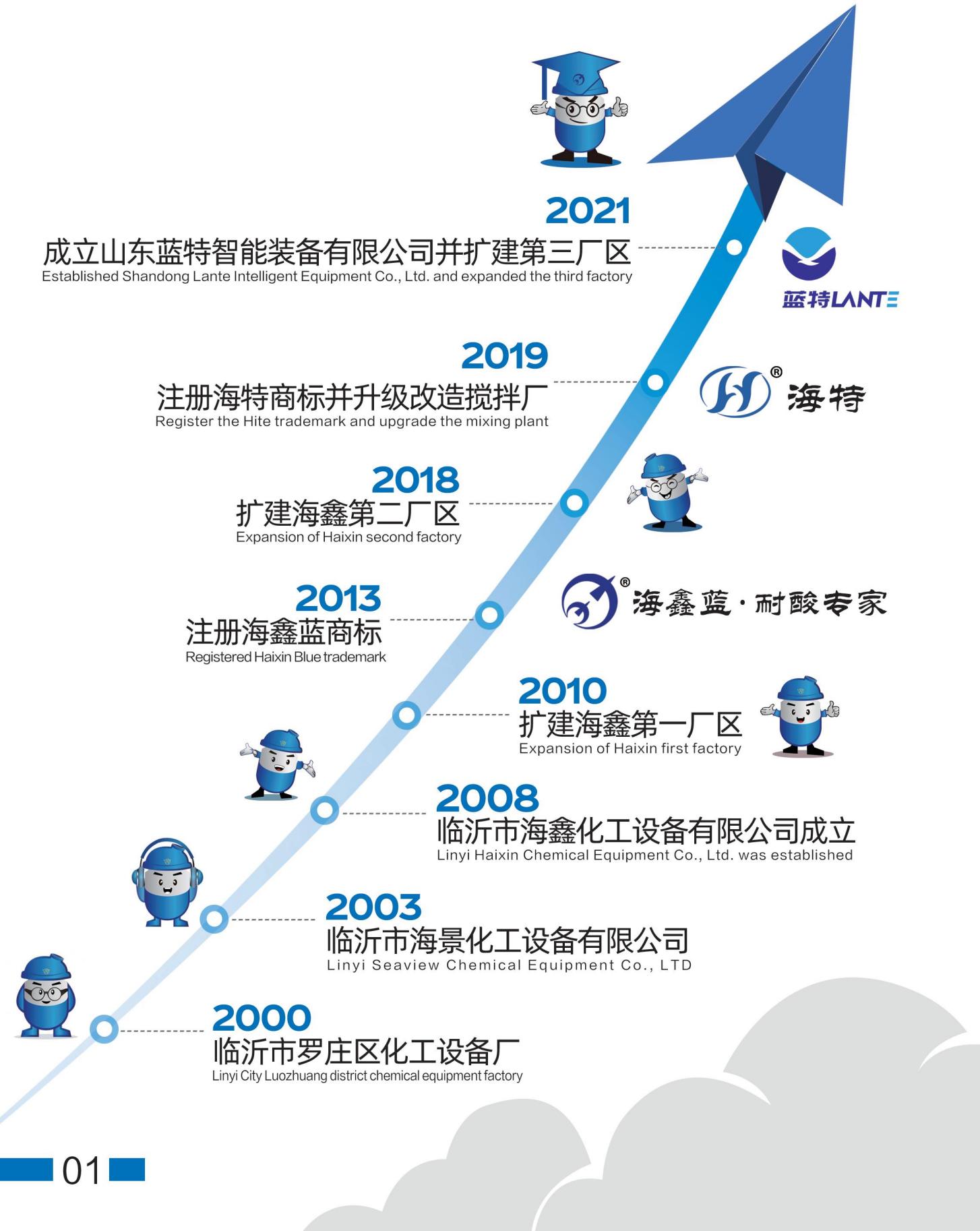
- 产品展示 Product display
安装、使用事项 Installation and use matters

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发展历程

Development course



品牌文化

Brand culture



海鑫蓝 · 耐酸专家

品牌一 高端搪玻璃设备

Brand one
High-end glass lining equipment

海鑫专业生产设备15年，持续专注“搪玻璃”技术研发领域的突破与创新，并秉承工匠精神的品质保证，让产品通体外观呈现晶莹透亮的科技蓝色，并以企业名称“海鑫”为专属的色彩冠名“海鑫蓝”。海鑫蓝不但可以做为行业、企业、产品、色彩、渠道多维度契合极高的品牌文化接触使用，同时奠定了行业“标杆品质”，因用户满意度高而得名“耐酸专家”

海鑫蓝商标是海鑫公司第一品牌，注册于2013年，历经数年不断升级优化，铸就今天的商标。LOGO是两只展翅翱翔的和平鸽，代表创始人对和平幸福的期望，也包含对搪玻璃事业努力向上发展的热情与决心。商标的升级夯实了公司产品的迭代，体现出公司做品质搪玻璃设备的初心及决心，坚守品牌之路为化工设备使用做好安全保障。用好产品为客户创造设备的长期使用价值，做细节我们多走一步，塑造中国工业搪瓷新形象，实现企业品牌市场化，实现品牌竞争优势。处医农之境，则守设备之安，用设备安全守护化工人的幸福生活处于海鑫使命之上。



海特

品牌二 搪玻璃附件

Brand two
Glass lining attachment

每个品牌的背后都有一份责任与担当。2017年，售后部做年度总结数据汇报，全年因搅拌问题产生的售后多达85%以上。2018年之前，公司配套搅拌器采用外协单位制造，为寻找优质的生产厂家，公司走访全国几十家搅拌生产厂家，因对质量验收要求高，寻找供应商愈发困难。搅拌器虽是一个小附件，但是对它的要求大大考验整个设备运转系统的质量和产量，也成为很多化工生产企业的使用痛点。提升搅拌器的使用质量已经迫在眉睫，为了解决它的使用痛点，2018年公司决定投资研发制造搅拌器，并同年成功注册第二品牌——海特，致力打造高效优质的搅拌器。海特生产经营五年以来，深耕困难寻求技术突破，不断创新以满足客户需求为价值中心，深度思考，努力解决目标客户的长期使用价值，用品牌成就未来。只要我们深挖市场需求，做足客户满意度，未来海特终将成为中国搪玻璃搅拌第一品牌。



蓝特LANTE

品牌三 高精端搪玻璃设备

Brand three
High precision end glass lining equipment

重塑创业初心，面对市场困难层层进行革新。

怀抱开放学习的态度，多做一点，多走一点，专注投入的做好一件事情。

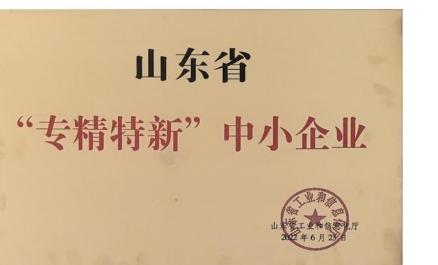
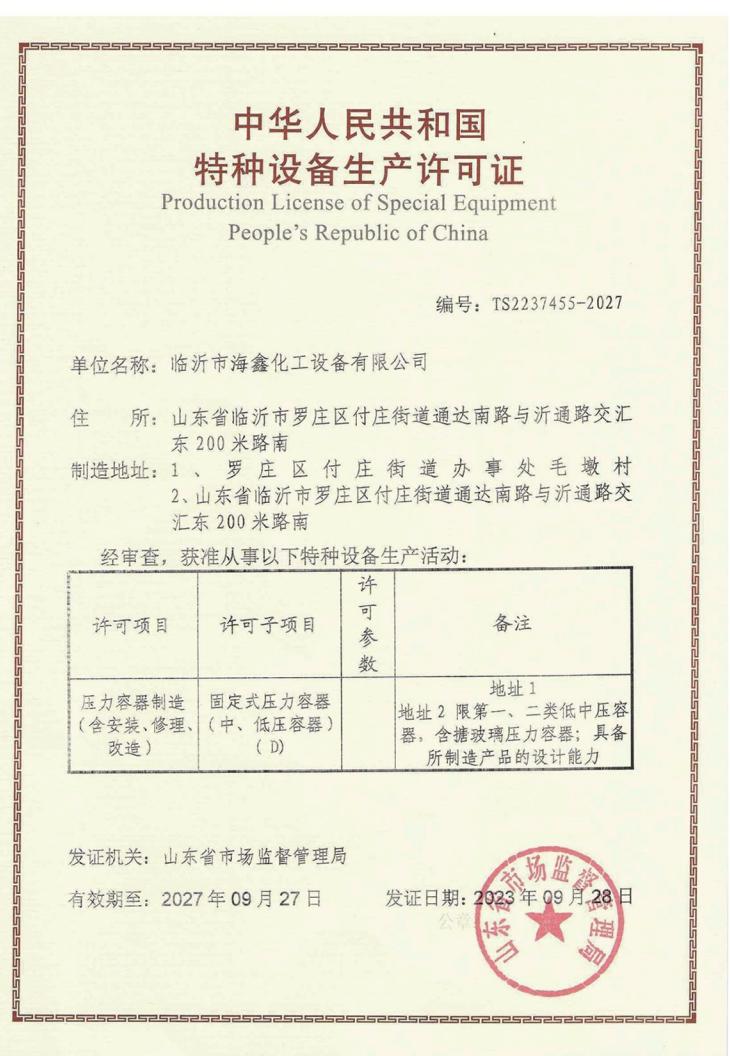
坚定品质初心，克服成长的阵痛，用匠心，做好设备！努力实现品牌国际化。





企业荣誉及资质

Enterprise honor and qualification



企业荣誉及资质

Enterprise honor and qualification



环境管理体系认证证书

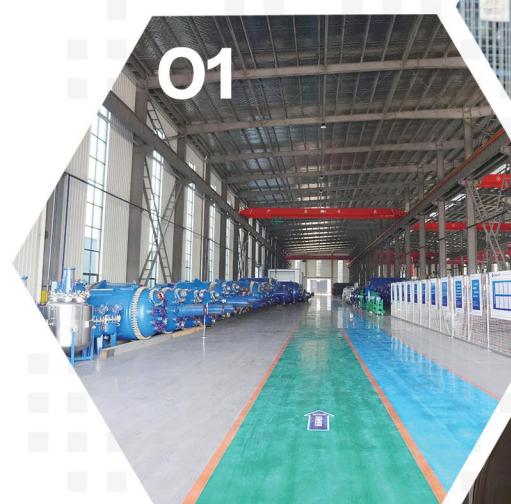




生产工艺装备

Production process equipment

- 01: 生产车间
- 02: 智能焊接设备
- 03: 砂带打磨设备
- 04: 焊接现场
- 05: 焊接现场



01



02



04



03



05



06



07



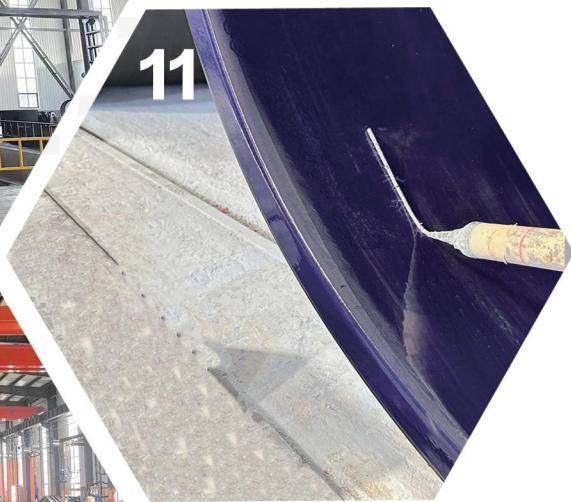
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- 06: 搪烧工艺
- 07: 喷粉现场
- 08: 搪烧电炉
- 09: 搅拌器车间
- 10: 搪玻璃检测: 厚度检验
- 11: 搪玻璃检测: 电火花检验

生产工艺装备

Production process equipment

- 01: Production workshop
- 02: Intelligent welding equipment
- 03: Sanding equipment
- 04: Welding site
- 05: Welding site



- 06: Enameling process
- 07: Powder spraying scene
- 08: Enameling furnace
- 09: Agitator shop
- 10: Glass lining test: thickness test
- 11: Glass lining test: electrical spark test



搪玻璃瓷釉性能介绍

Glass lining properties are introduced



HX-1#

HX-10#

HX-12#

HX-5#

HX-4#

瓷釉性能综合图
Comprehensive diagram of enamel properties



瓷釉理化性能表
Table of Physical and Chemical Properties of Porcelain Glaze

HX-1#

序号	试验项目	计量单位	试验方法	技术指标	测试数据
Serial number	Pilot project	Unit of measurement	Test method	Technical index	Test data
1	耐20%沸腾盐酸168h腐蚀性 Resistant to 20% boiling hydrochloric acid for 168h	g/(m ² *d)	GB/T 7989	≤1.2	0.42
2	耐0.1mol/L 80°C氢氧化钠24h Corrosion	g/(m ² *d)	GB/T 7988	≤5.0	2.16
3	耐温差急变性 Resistance to sudden temperature change	°C	GB/T 7987	≥200	203
4	耐机械冲击性 Mechanical shock resistance	J	GB/T 7990	≥220x10 ⁻³	269
5	耐沸腾水336h腐蚀性 Boiling water corrosion resistance for 336h	g/(m ² *d)	HG/T 2377	≤0.5	0.32

瓷釉性能综合图
Comprehensive diagram of enamel properties



瓷釉理化性能表
Table of Physical and Chemical Properties of Porcelain Glaze

HX-10#

序号	试验项目	计量单位	试验方法	技术指标	测试数据
Serial number	Pilot project	Unit of measurement	Test method	Technical index	Test data
1	耐20%沸腾盐酸168h腐蚀性 Resistant to 20% boiling hydrochloric acid for 168h	g/(m ² *d)	GB/T 7989	≤1.2	0.25
2	耐0.1mol/L 80°C氢氧化钠24h Corrosion	g/(m ² *d)	GB/T 7988	≤5.0	1.3
3	耐温差急变性 Resistance to sudden temperature change	°C	GB/T 7987	≥200	210
4	耐机械冲击性 Mechanical shock resistance	J	GB/T 7990	≥220x10 ⁻³	273
5	耐沸腾水336h腐蚀性 Boiling water corrosion resistance for 336h	g/(m ² *d)	HG/T 2377	≤0.5	0.32

瓷釉性能综合图
Comprehensive diagram of enamel properties



瓷釉理化性能表
Table of Physical and Chemical Properties of Porcelain Glaze

HX-12#

序号	试验项目	计量单位	试验方法	技术指标	测试数据
Serial number	Pilot project	Unit of measurement	Test method	Technical index	Test data
1	耐20%沸腾盐酸168h腐蚀性 Resistant to 20% boiling hydrochloric acid for 168h	g/(m ² *d)	GB/T 7989	≤1.2	0.27
2	耐0.1mol/L 80°C氢氧化钠24h Corrosion	g/(m ² *d)	GB/T 7988	≤5.0	1.85
3	耐温差急变性 Resistance to sudden temperature change	°C	GB/T 7987	≥200	210
4	耐机械冲击性 Mechanical shock resistance	J	GB/T 7990	≥220x10 ⁻³	310
5	耐沸腾水336h腐蚀性 Boiling water corrosion resistance for 336h	g/(m ² *d)	HG/T 2377	≤0.5	0.32

腐蚀性曲线数据

corrosivity curve data

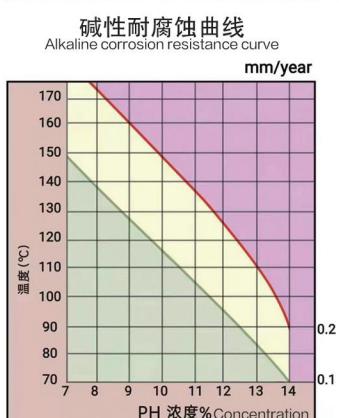
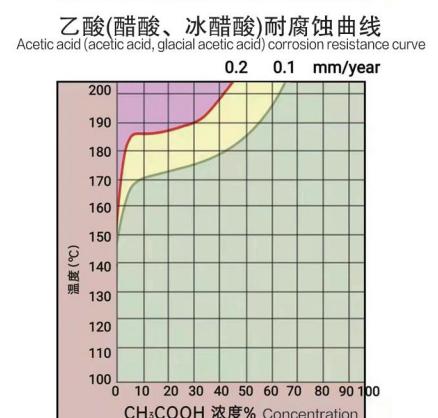
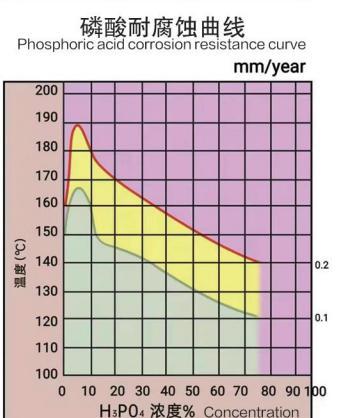
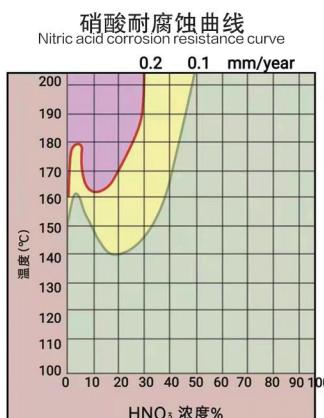
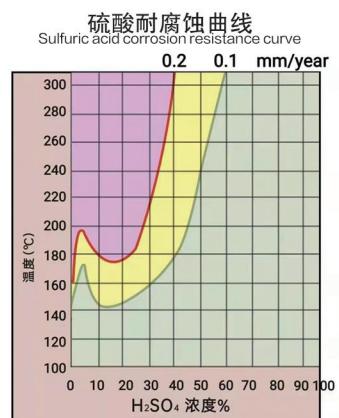
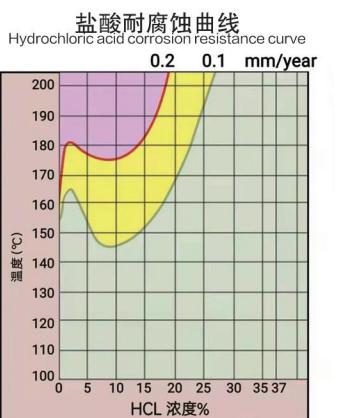


搪玻璃耐腐蚀曲线查询表

搪玻璃具备五大特性：耐腐蚀、不黏性、隔绝铁离子、绝缘性、保鲜性。而耐腐蚀性是其最大的优势，化工反应过程中会存在各种酸性工况，每种酸对搪玻璃的腐蚀速率是不同的，所以针对不同酸性、不同浓度、不同温度的工况下确定搪玻璃设备是否适合使用，使用寿命长短等均可参照以下的瓷釉耐腐蚀曲线表查询，绿色部分为完全适用、黄色部分为可用，但腐蚀较快，需要经常检查腐蚀状况确定后续使用状态，紫色区域为不推荐使用。

Glass lining corrosion resistance curve query table

Glass lining has five characteristics: corrosion resistance, non-adhesion, isolation of iron ions, insulation, preservation. Corrosion resistance is its biggest advantage, there will be a variety of acid conditions in the chemical reaction process, each acid on the glass lining corrosion rate is different, so for different acidity, different concentrations, different temperatures under the working conditions to determine whether the glass lining equipment is suitable for use, service life can refer to the following enamel corrosion curve table query, The green part is fully applicable, the yellow part is available, but the corrosion is fast, and the corrosion condition needs to be checked frequently to determine the subsequent use status. The purple area is not recommended.



搪玻璃不适用范围

- 对于含氟离子浓度大于等于5ppm介质。
- 温度大于等于180度，体积浓度大于等于30%的浓磷酸介质。
- PH值大于等于12，温度大于70度的强碱溶液。
- 以上工况须在设备订购前与供方详细对接清楚。

GLASS LINING IS NOT APPLICABLE

- for fluorine ion concentration is greater than or equal to 5ppm media.
- the temperature is greater than or equal to 180 degrees, the volume concentration is greater than or equal to 30% of concentrated phosphorus Acid medium.
- PH value is greater than or equal to 12, temperature is greater than 70 degrees of strong alkali solution.The above conditions must be connected with the supplier in detail before the equipment is ordered.



工艺特点

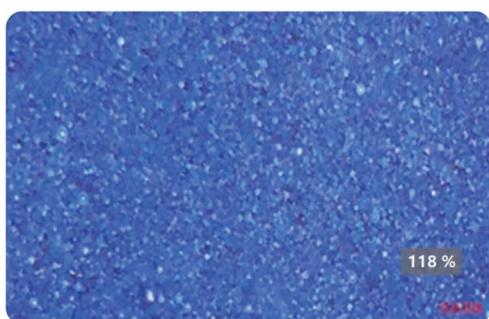
Process characteristics

冷喷工艺与热喷工艺的区别

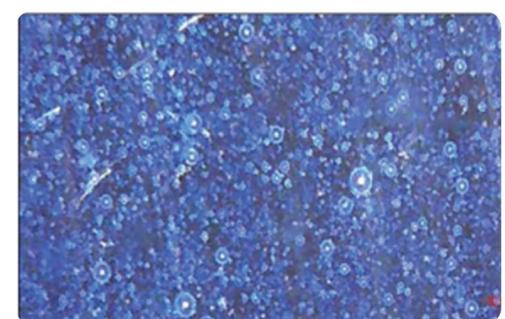
临沂海鑫一直采用的就是冷喷工艺，是在常温状态下进行喷粉作业，可对每遍产生的缺陷进行修磨，可实现薄层多道的精细化喷粉作业

Difference between cold spray process and hot spray process

Linyi Haixin has always used the cold spray process, which is the powder spraying operation at normal temperature, which can repair the defects generated by each pass, and realize the fine powder spraying operation of thin layer and multiple channels



冷喷工艺瓷面质量
Cold spray porcelain surface quality



热喷工艺瓷面质量
Cold spray porcelain surface quality

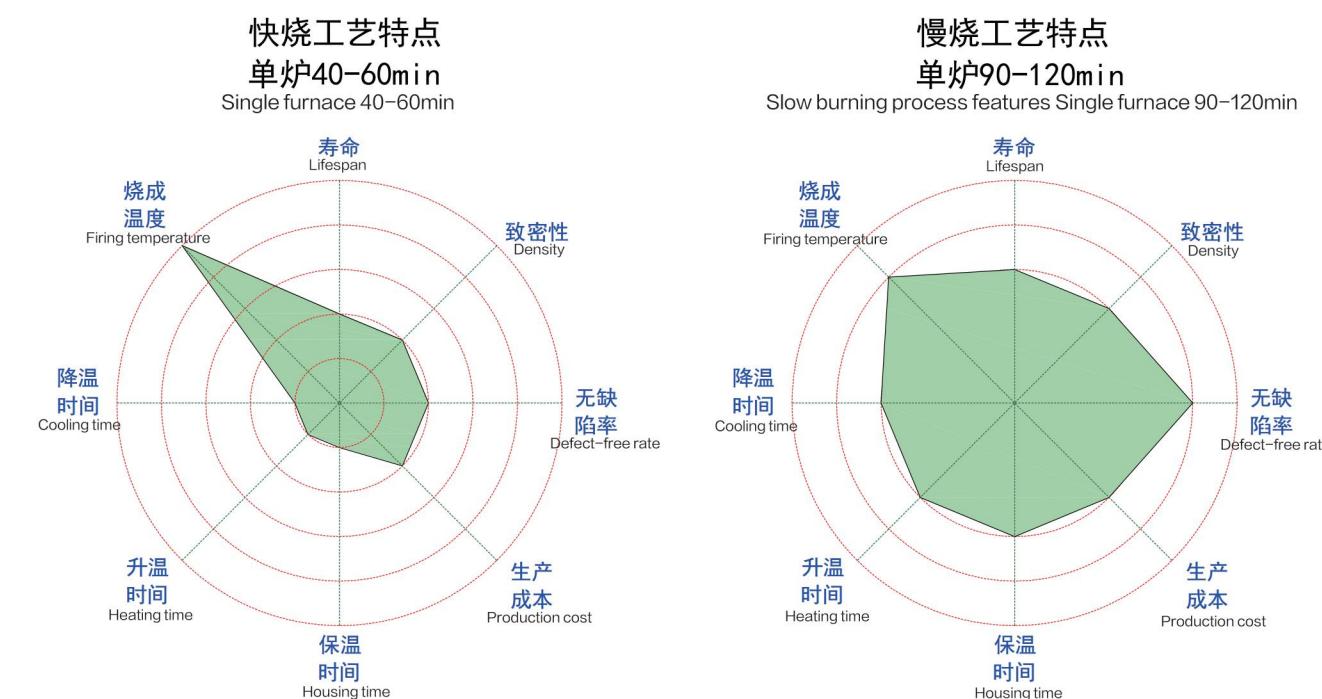


快烧工艺与慢烧工艺的区别

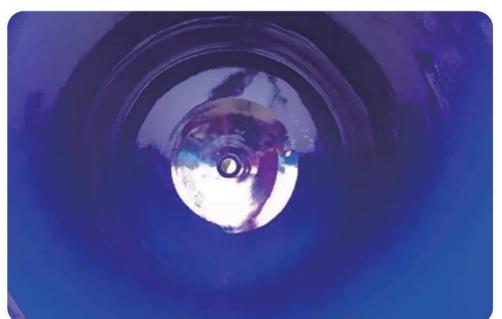
临沂海鑫一直采用的就是慢烧工艺，是在烧成过程中控制升温速度，设定足够的保温时间，使瓷釉缓慢融化、反应，达到气体排放彻底、瓷釉致密耐用的效果。

The difference between fast and slow burning processes

Linyi Haixin has always used the slow burning process, which is to control the heating rate in the burning process and set enough holding time to make the glaze slowly melt and react, so as to achieve the effect of thorough gas emission and dense and durable glaze.



快烧工艺瓷面
Quick-burning process porcelain surface



慢烧工艺瓷面
Slow burning process porcelain



结构改进

Structural improvement

U型环结构



普通结构



对比优势

Comparative advantages

U型接环可有效缓解夹套内压力波动对瓷层造成的损伤

U-shaped collar can effectively relieve inside jacket damage to porcelain layer caused by pressure fluctuation

人孔盖翻转结构



无翻转结构



对比优势

Comparative advantages

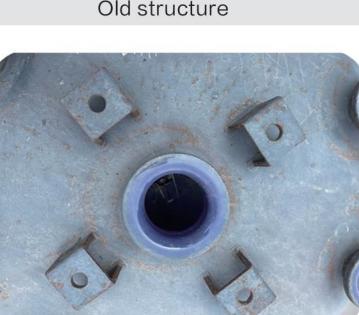
人孔翻转结构，可提高操作的安全性、便捷性

Manhole flip structure, it can improve the safety and convenience of operation

优化后的安装结构



老式结构



对比优势

Comparative advantages

优化的连接结构可提高机封等设备的安装精度及便捷性

The optimized connection structure can improve the sealing and so on precision and convenience of equipment installation

优化后的安装结构



老式结构



对比优势

Comparative advantages

管口焊道采用氩弧焊接工艺有效保障焊缝质量降低搪烧缺陷

Argon arc welding process is adopted for the tube bead effectively guarantee weld quality reduce boring defects

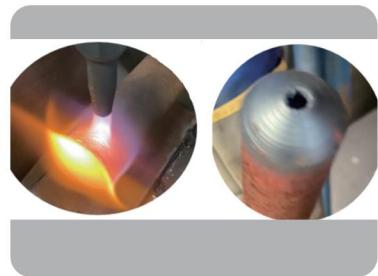
封头结构

Head structure



热收口结构

Hot closing structure



翻边结构

Flanging structure



普通结构

Ordinary structure



结构改进

Structural improvement



对比优势

Comparative advantages

搅拌端部采用封头结构，可有效杜绝应力、缺陷造成的爆瓷问题

Mixing end adopts head structure, can effectively prevent stress, defects caused by porcelain explosion problem

对比优势

Comparative advantages

翻边结构较常规结构可避免物料物料泄露导致的管口处由外向内腐蚀

Flanging structure can be avoided compared with conventional structure. Material pipe mouth caused by material leakage corrosion from the outside in

锻打结构

Forging structure



钢板冲压结构

Steel plate stamping structure



对比优势

Comparative advantages

锻打管口较钢板冲压管口的优势是强度高、材质稳定、结构合理

The advantages of forging pipe mouth compared with steel plate stamping pipe mouth are high strength, stable material and reasonable structure





搅拌系统CFD技术

Mixing system CFD technology

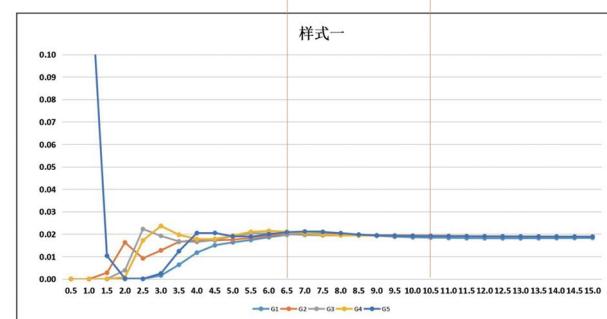
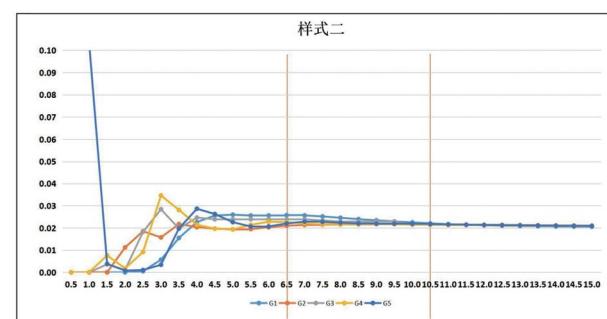
科学的搅拌系统设计选型方案

对于复杂的搅拌工况，我们可以利用 CFD-计算流体力学软件对各种搅拌形式、物料工况进行模拟计算，通过分析模拟结果中的流体流型、方向、速度、压力分布、密度分布、速度分布、浓度分布等参数，对方案进行科学的评估。通过CFD仿真模拟数据可以更直观、更具体的反应出某些搅拌方案的优劣，使搅拌系统选型方案更科学、更可靠、更优化。

Scientific mixing system design and selection scheme
For complex mixing conditions, we can use CFD-computational fluid dynamics software to simulate various mixing forms and material conditions, and scientifically evaluate the scheme by analyzing parameters such as fluid flow pattern, direction, velocity, pressure distribution, density distribution, velocity distribution and concentration distribution in the simulation results. Through CFD simulation data, the advantages and disadvantages of some mixing schemes can be reflected more directly and specifically, so that the selection scheme of mixing system is more scientific, more reliable and more optimized.

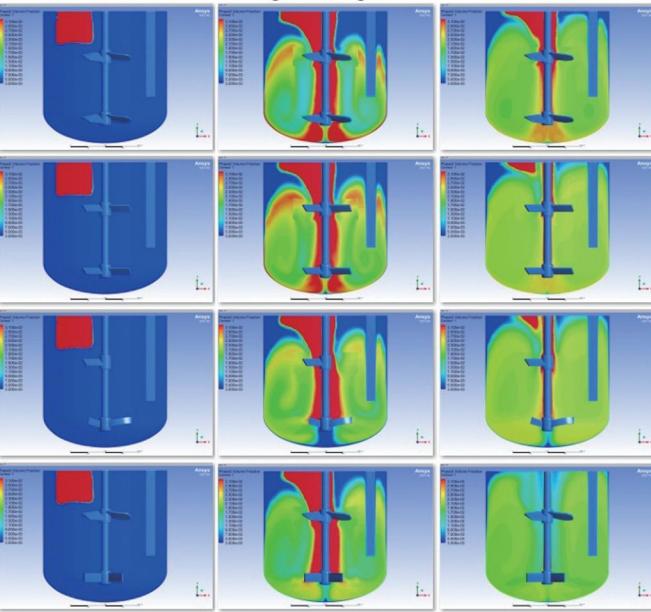
模拟结果：混合浓度变化曲线

Simulation results: mixed concentration curve



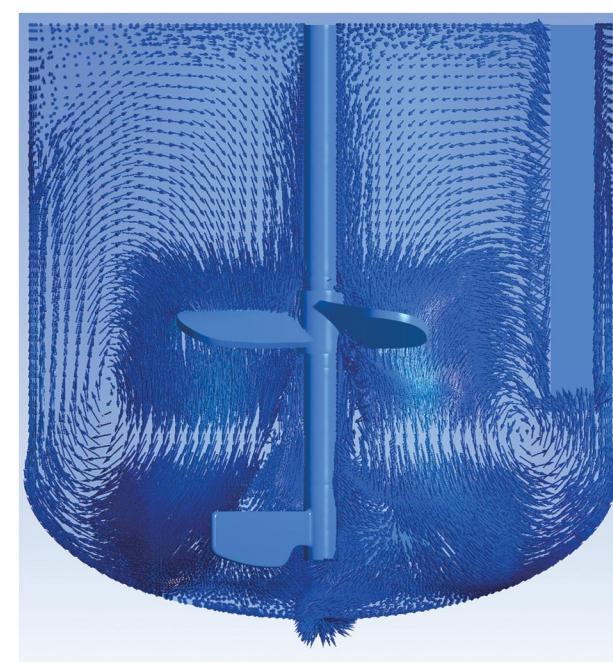
流体仿真云图变化效果

Fluid simulation cloud image change effect



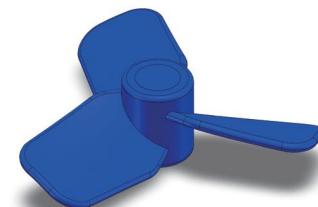
流体速度矢量图

Fluid velocity vector diagram

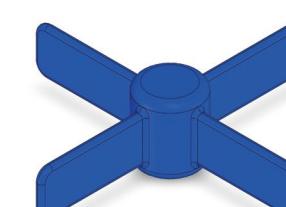


搅拌器样式及选型推荐表

Mixer style and selection recommendation table



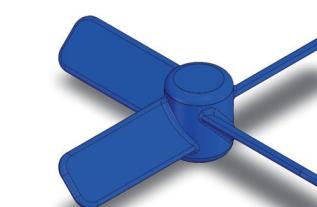
推进式
Push type



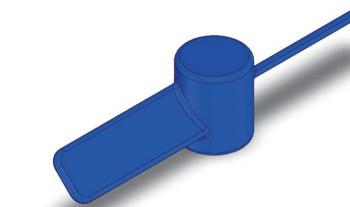
直叶涡轮式
Straight blade turbine type



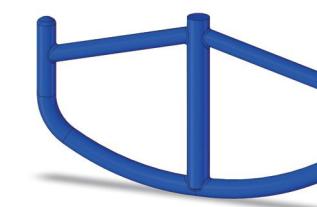
弯叶涡轮式
Curved blade turbine type



斜叶涡轮式
Inclined blade turbine type



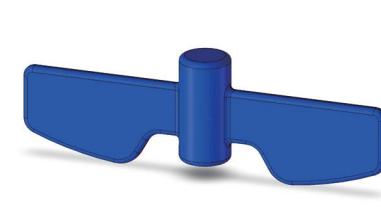
桨式
Paddle type



锚、框式
Anchor, frame type



叶轮式
Impeller type



刮板式
Drag type

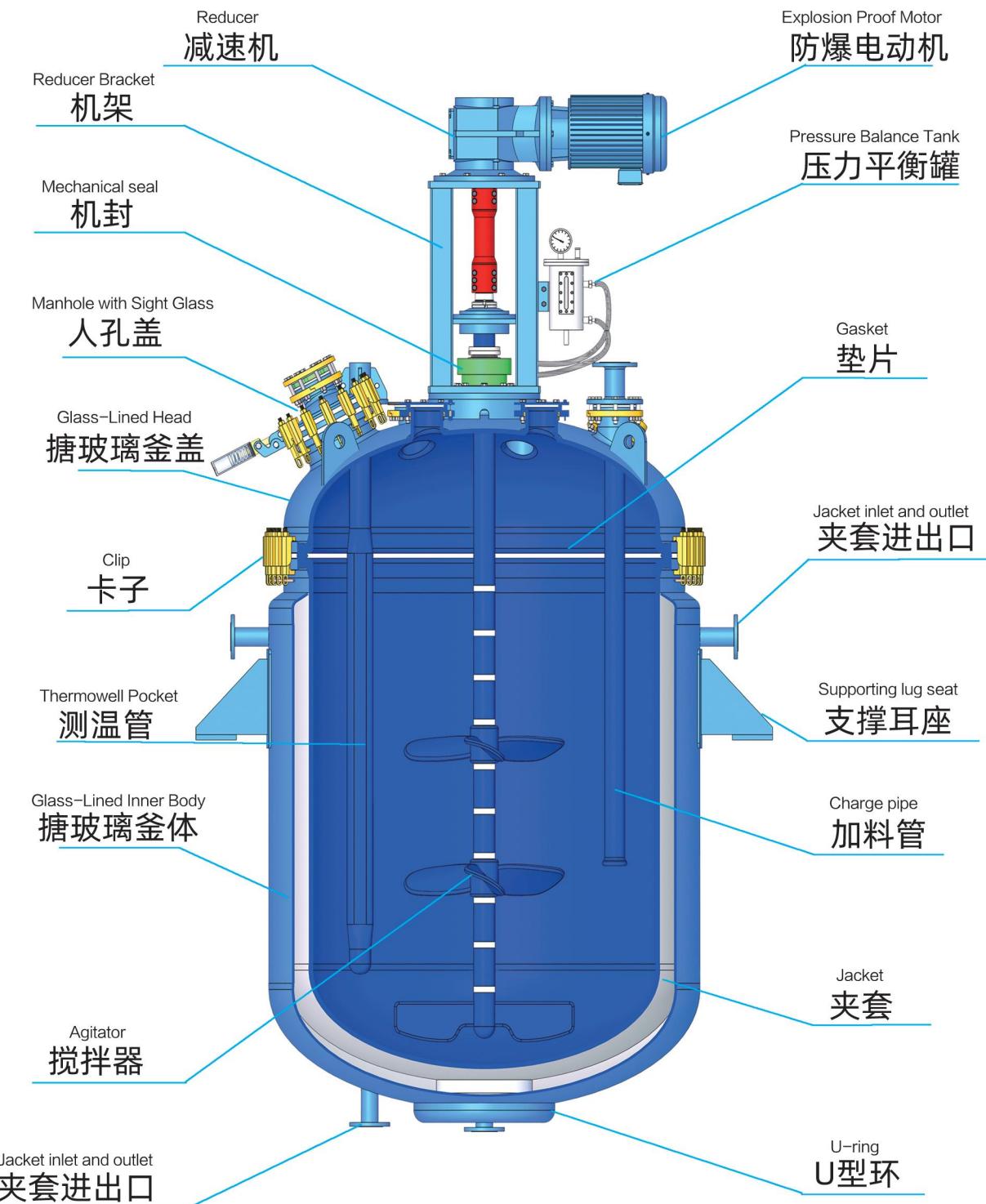
搅拌目的 Purpose of stirring	互溶液体的 混合、均化、调 和 Mixed homogeniza- tion and blending of miscible liquids	不互溶液 体的萃取、 溶解 Solid sus- pension dissolution	气体吸收 Gas absorption	结晶 大颗粒 Crystallized large parti- cles	结晶微粒 Crystallized microparti- cles	高粘度 混合传热 High vis- cosity mixed heat transfer	推荐转速 Recommended speed	粘度上 限 Upper viscosity limit	特点 Features	
									搅拌样式 Stirring style	与推进式 Propeller type
推进式 Propeller type	★★	★ 固体密度小 含固量少 Low solid density Small solid content					100 ~ 150	2	循环能力强、消耗动力小 Strong circulation capacity, low power consumption	
直叶开启涡轮 Straight blade open turbine	★ 功耗浪费 Power dissipation	★★	★				100 ~ 150	50	剪切力大，功效高，加挡板效果更好 High shear force, high efficiency, better effect with baffle	
弯叶开启涡轮 Curved blade open turbine	★	★	★★			★★	100 ~ 150	50	排出性能好，桨叶不易磨损，功效小 Good discharge performance, blades are not easy to wear, low efficiency	
斜叶开启涡轮 Oblique blade open turbine	★	★	★			★★	100 ~ 150	50	与推进比：循环能力强、消耗动力大 Ratio with propulsion: strong circulation capacity, high power consumption	
桨式 Paddle type	★ 小容量混合 Small volume mixing				★★		100 ~ 150	50	不能用于气体吸收、分散 Cannot be used for gas absorption and dispersion	
圆盘涡轮 Disc turbine			★★				100 ~ 150	50	剪切力强、圆盘下可存住气体，使气体分散更平稳 Strong shear force, gas can be stored under the disc, making gas dispersion more stable	
锚、框式 Anchor type frame type				★★		★★	60 ~ 85	100	直径大，提高传热膜系数；适用于高粘度、传热、析晶 Large diameter, improve heat transfer film coefficient; Suitable for high viscosity, heat transfer, crystallization	
涡轮+推进 Turbine + propulsion	★★						85 ~ 130	50	可适用于多种工况 Suitable for a variety of working conditions	

注：有★者为可用，空白者不详或不可用，以上数据仅供参考，更详细的方案数据请联系技术人员。
Note: ★ is available, blank is unknown or unavailable, the above data is for reference only, more detailed program data please contact technical personnel



整体设备分解图

Overall device breakdown diagram



配套附件

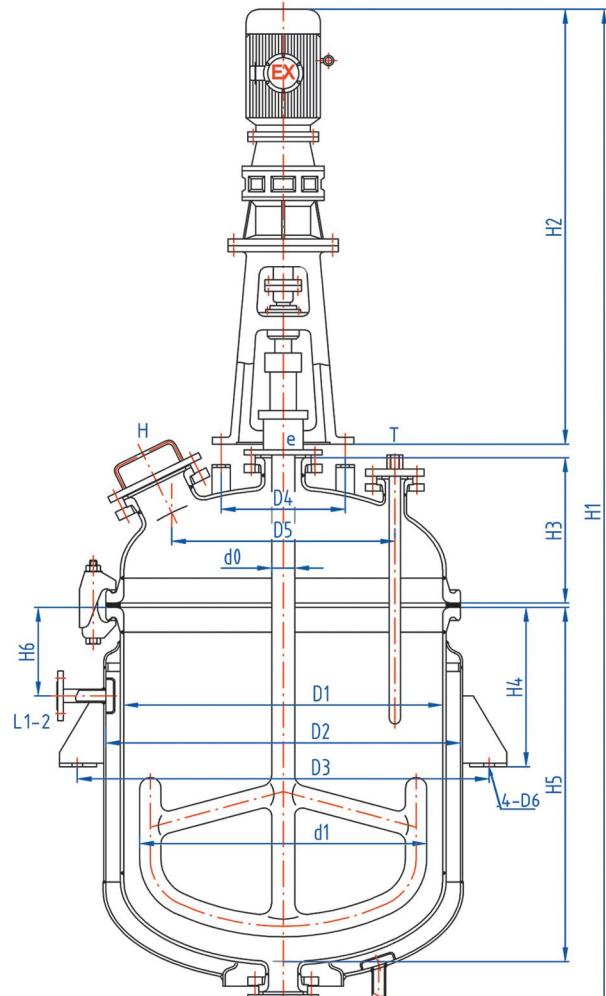
Supporting accessories





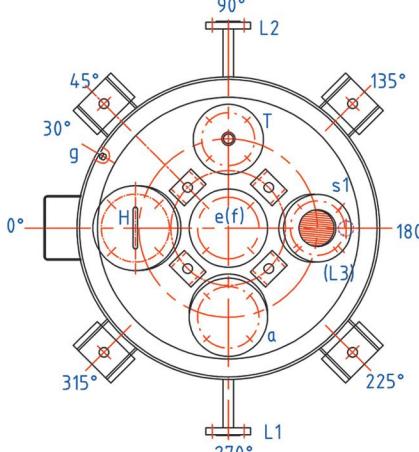
开式搪玻璃反应罐

Open glass lined reaction tank

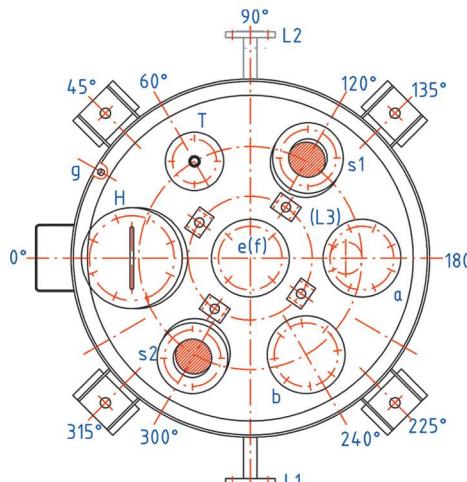


参数 项目 item	罐内 cylinder	夹套 jacket
设计压力 MPa Design pressure MPa	0.4	0.6
设计温度 °C Design temperature °C	-19/200	-19/200

符号 symbol	用途 use
H	人孔 manhole
a,b	备用口 Spare port
e	搅拌口 Agitator port
f	放料口 Emptying hole
T	温度计口 Thermometer port
s1,s2	视镜口 Sight port
L1,L2,L3	夹套进出口 Jacket inlet and outlet
g	排气口 Exhaust port



K50-K100L



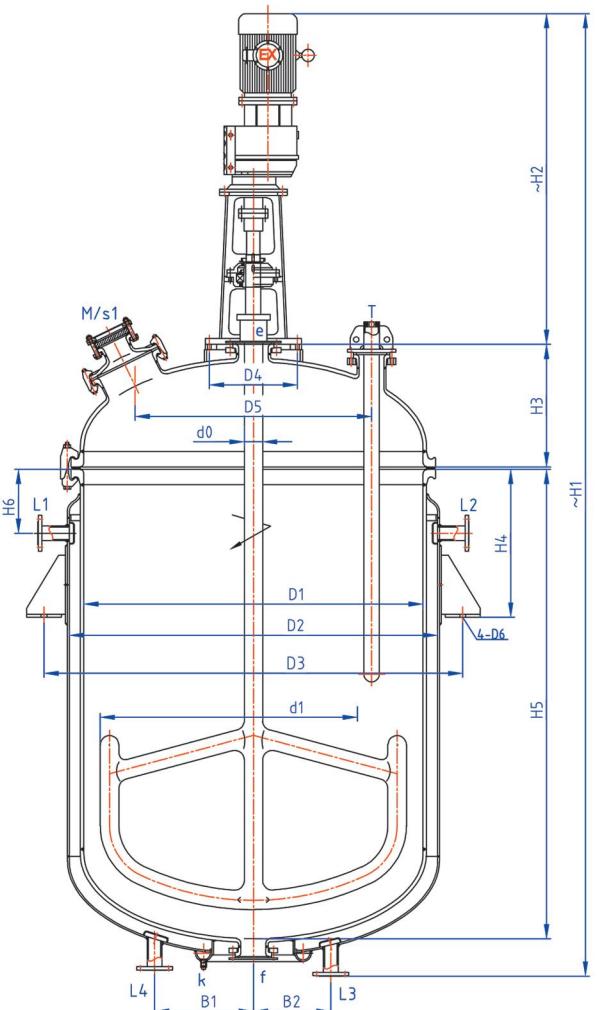
K200-K500L

规 格 size	K50	K100	K200	K300	K500	
全容积 (m³) Full volume	0.1	0.18	0.33	0.49	0.71	
夹套容积 (m³) Jacket volume	0.022	0.035	0.067	0.077	0.12	
换热面积 (m²) Heat transfer area	0.58	0.9	1.5	2	2.67	
内表面积 (m²) Internal surface area	1.2	1.8	2.6	3.3	4.4	
电机功率 (kW) Motor power	0.55	0.75	1.1	1.5	2.2	
整机参考重量 (kg) Machine reference weight	320	400	580	770	930	
主要尺寸 Main size	D1	500	600	700	800	900
	D2	600	700	800	900	1000
	D3	708	826	927	1029	1156
	D4	270	270	300	350	350
	D5	360	420	530	560	630
	D6	24	24	24	24	30
	d0	40*5	50*5	50*5	65*5	65*5
	d1	420	520	620	720	810
	H1	1870	2040	2310	2600	2840
	H2	1010	1010	1090	1220	1230
	H3	290	320	345	385	410
	H4	300	340	380	380	450
管口尺寸表 Nozzle size table	H5	400	500	700	800	1000
	H6	220	240	230	250	250
	B	250	250	250	250	270
	H	80	80	125	125	150
	T	50	50	50	50	50
	a	65	65	65	65	100
	b	/	/	50	65	100
	e	50	65	65	100	100
	f	65	65	80	80	80
	s1-s2	65	65	65	65	80



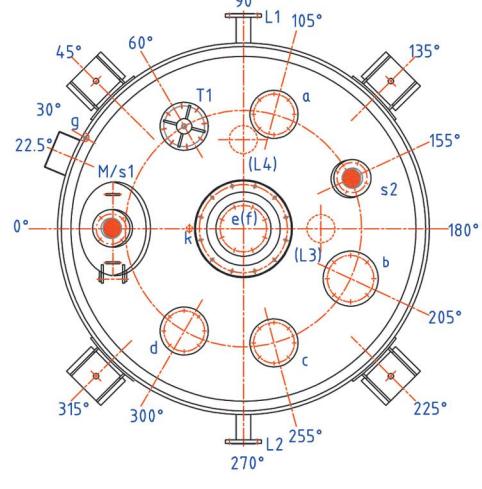
开式搪玻璃反应罐

Open glass lined reaction tank

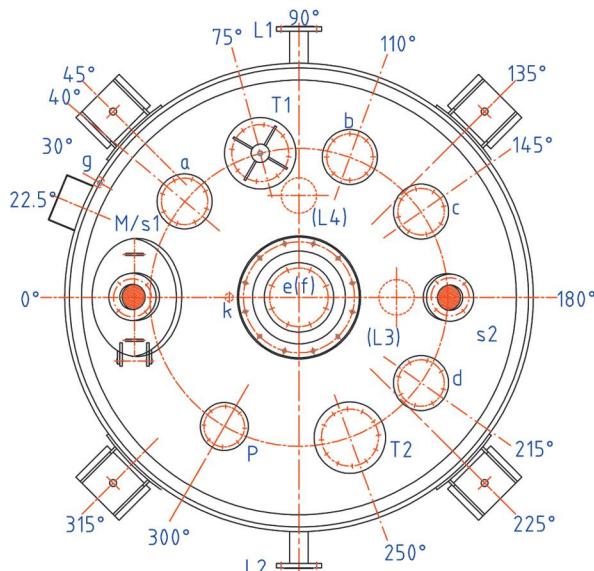


项目 item	参数 argument	罐内 cylinder	夹套 jacket
设计压力 MPa Design pressure MPa	0.4	0.6	
设计温度 °C Design temperature °C	-19/200	-19/200	

符号 symbol	用途 use
M	人孔 manhole
a,b,c,d,p	备用口 Spare port
e	搅拌口 Agitator port
f	放料口 Emptying hole
T1,T2	温度计口 Thermometer port
s1,s2	视镜口 Sight port
L1,L2,L3,L4	夹套进出口 Jacket inlet and outlet
n	排气口 Exhaust port
k	放净口 cleanout



K1000-K6300L



K8000-K12500L

开式搪玻璃反应罐

Open glass lined reaction tank

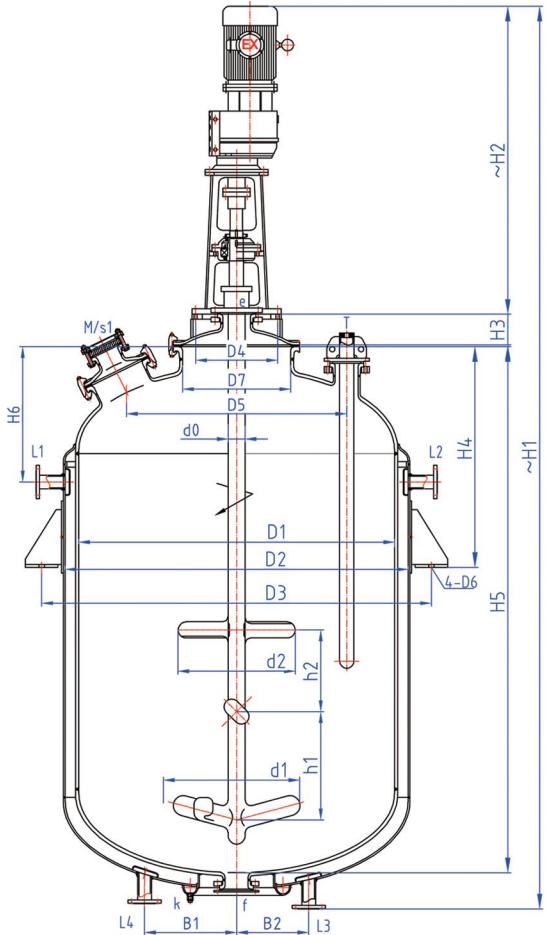


规 格 SIZE	K1000	K2000	K3000	K5000	K6300	K8000	K10000	K12500
全容积 (m³) Full volume	1.57	2.6	4.2	6.4	7.45	10	12.4	14
夹套容积 (m³) Jacket volume	0.22	0.47	0.6	0.8	0.95	1.55	1.8	2
换热面积 (m²) Heat transfer area	4.53	7.2	9.3	13.4	15.9	18.8	21.2	24.3
内表面积 (m²) Internal surface area	7.3	10.3	13.8	18.7	21.1	25.3	29	32
电机功率 (kW) Motor power	4	4	5.5	7.5	11	11	15	15
整机参考重量 (Kg) Machine reference weight	1670	2350	3470	4930	5620	7580	8530	9660
主要尺寸 Main dimensions	D1	1200	1300	1600	1750	1750	2000	2200
	D2	1300	1450	1750	1900	1900	2200	2400
	D3	1489	1639	1980	2152	2152	2507	2708
	D4	400	400	455	455	455	510	510
	D5	840	910	1120	1220	1220	1400	1540
	D6	30	30	30	30	30	36	36
	H1	3210	3800	4090	4970	5570	5780	5940
	H2	1315	1315	1400	1706	1875	1895	1935
	H3	485	510	595	632.5	632.5	705	770
	H4	500	650	700	700	700	850	850
	H5	1200	1750	1835	2423	2876	2935	3000
	H6	300	310	330	330	330	400	400
	d0	80*8	80*8	95*8	95*10	95*10	110*12	110*12
	d1	1080	1180	1440	1580	1580	1700	1800
管口尺寸表 Nozzle size table	B1		510	510	510	510	550	550
	B2	400	400	400	400	400	470	470
	M	400*300	400*300	400*300	400*300	400*300	400*300	400*300
	a	100	100	100	125	125	150	150
	b	125	125	125	150	150	150	150
	c	100	100	100	125	125	150	150
	d	100	125	125	125	125	150	150
	p						125	125
	T1	100	100	100	125	125	200	200
	T2						200	200
	e	125	125	150	150	150	200	200
	f	100	100	125	125	125	150	150
	s1-s2	100	125	125	125	125	125	125
	L1-L4	32	40	50	65	65	80	80
	g	G1/2	G1/2	G1/2	G1/2	G1/2	G3/4	G3/4
	k	G1/2						

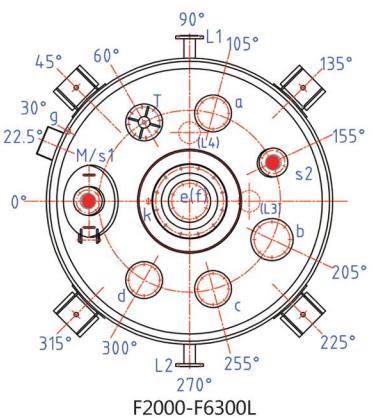


闭式搪玻璃反应罐

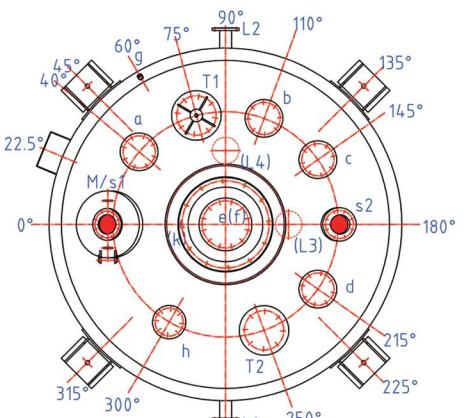
Closed glass lined reaction tank



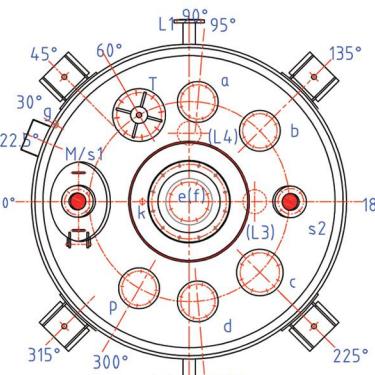
参数 item	罐内 cylinder	夹套 jacket
设计压力 MPa Design pressure MPa	0.4	0.6
设计温度 °C Design temperature °C	-19/200	-19/200
符号 symbol	用途 use	
M	人孔 manhole	
a,b,c,d,p,h	备用地口 Spare port	
e	搅拌口 Agitator port	
f	放料口 Emptying hole	
T1,T2	温度计口 Thermometer port	
s1,s2	视镜口 Sight port	
L1,L2,L3,L4	夹套进出口 Jacket inlet and outlet	
n	排气口 Exhaust port	
k	放净口 cleanout	



F2000-F6300L



F16000-F50000L



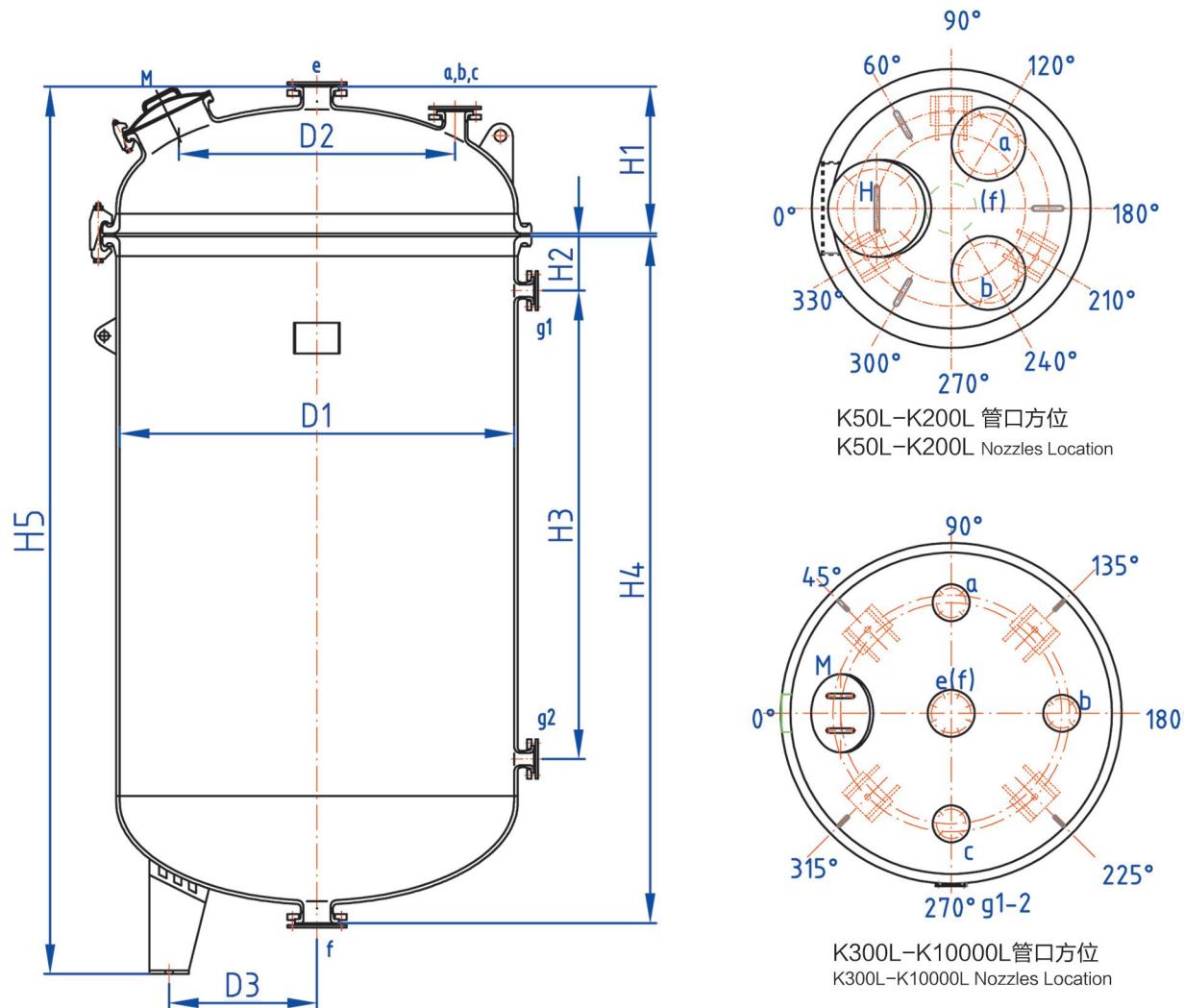
F8000-F12500L

规 格 size	F2000	F3000	F5000	F6300	F8000	F10000	F12500	F16000	F20000	F30000	F50000
全容积 (m³) Full volume	2.4	3.85	6	6.82	9.04	11.65	13.6	17.28	21.7	34.3	56.6
夹套容积 (m³) Jacket volume	0.48	0.62	0.85	0.98	1.57	1.8	2.1	2.38	2.74	3.5	7.9
换热面积 (m²) Heat transfer area	7.6	9.84	13.96	15.8	18.5	21.6	25.2	29.2	33.9	43.6	67.4
内表面积 (m²) Internal surface area	9.75	12.95	17.76	20.05	24.16	27.66	31.66	35.66	41.58	56.48	79.5
电机功率 (kW) Motor power	4	5.5	7.5	11	11	15	15	22	22	37	55
整机参考重量 (kg) Machine reference weight	2250	3220	4600	5130	7060	8040	9490	12570	14350	21980	35150
D1	1300	1600	1750	1750	2000	2200	2200	2400	2600	3200	3400
D2	1450	1750	1900	1900	2200	2400	2400	2600	2800	3400	3600
D3	1640	1980	2151	2152	2507	2708	2708	2912	3181	3900	4800
D4	420	455	455	455	510	510	510	650	650	810	940
D5	1000	1120	1220	1220	1400	1540	1540	1680	1820	2200	2260
D6	30	30	30	30	36	36	36	36	36	36	36
D7	600	600	600	600	800	800	800	900	900	1300	2000
H1	3930	4110	5000	5500	5700	5940	6460	7500	7840	8490	10230
H2	1390	1400	1706	1860	1895	1935	1935	2708	2708	3027	3300
H3	170	170	170	170	205	205	205	220	220	285	705
H4	845	1020	1100	1100	1250	1300	1300	1350	1500	1800	2300
H5	2145	2295	2915	3255	3340	3560	4080	4335	4670	4930	6765
H6	620	700	750	750	800	900	900	950	1050	1150	1250
d0	80*8	95*8	95*10	95*10	110*12	110*12	110*12	140*14	140*14	160*14	180*16
d1	700	700	700	700	900	900	900	1000	1000	1200	1700
d2	650	650	650	650	750	750	750	850	850	1200	1700
h1	550	550	600	650	650	650	650	800	1000	1200	1700
h2				650	650	650	650	800	1000	1200	1700
B1	510	510	510	510	510	550	550	550	550	510	510
B2	400	400	400	400	400	470	470	470	470	550	550
主要尺寸 Main size	M	400*300	400*300	400*300	400*300	400*300	400*300	400	400	400	450
	a	100	100	125	125	150	150	150	150	200	200
	b	100	125	150	150	150	150	150	150	200	200
	c	100	100	125	125	150	150	150	150	200	200
	d	100	125	125	125	150	150	150	150	200	250
	p					125	125				
	h							125	125	200	200
	T1	100	100	125	125	200	200	200	200	200	250
	T2						200	200	200	200	200
	e	125	150	150	150	200	200	200	250	250	250
	f	100	125	125	125	125	150	150	150	150	150
管口尺寸表 Nozzle size table	s1-s2	125	125	125	125	125	125	125	125	125	150
	L1-L4	40	50	65	65	65	80	80	100	100	100
	g	G1/2	G1/2	G1/2	G1/2	G1/2	G3/4	G3/4	G3/4	G3/4	G3/4
	k	G1/2	G1/2	G1/2	G1/2	G1/2	G1/2	G1/2	G1/2	G1/2	G1/2



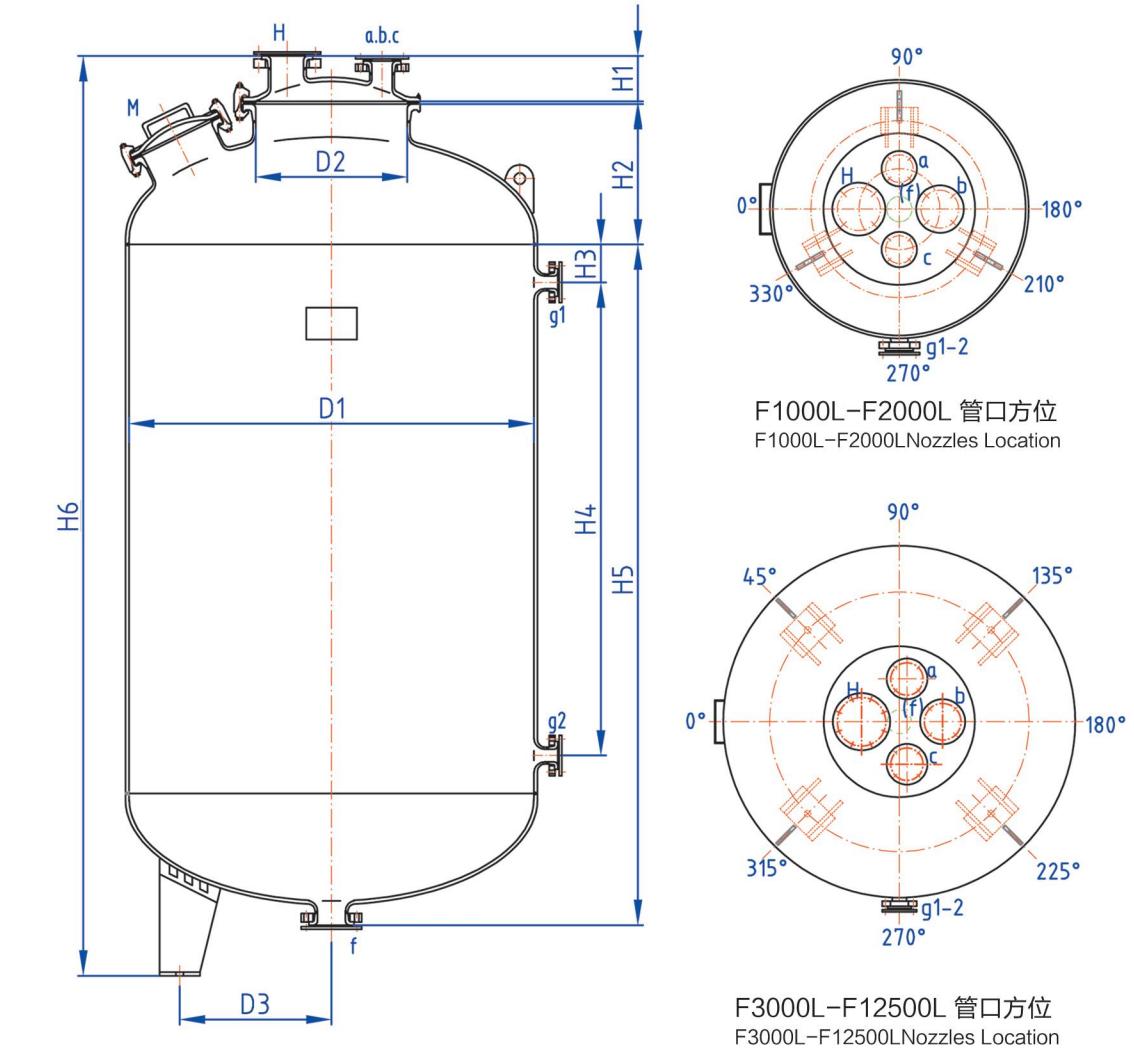
开式搪玻璃贮罐

Open glass lined tank



闭式搪玻璃贮罐

Closed glass lined tank



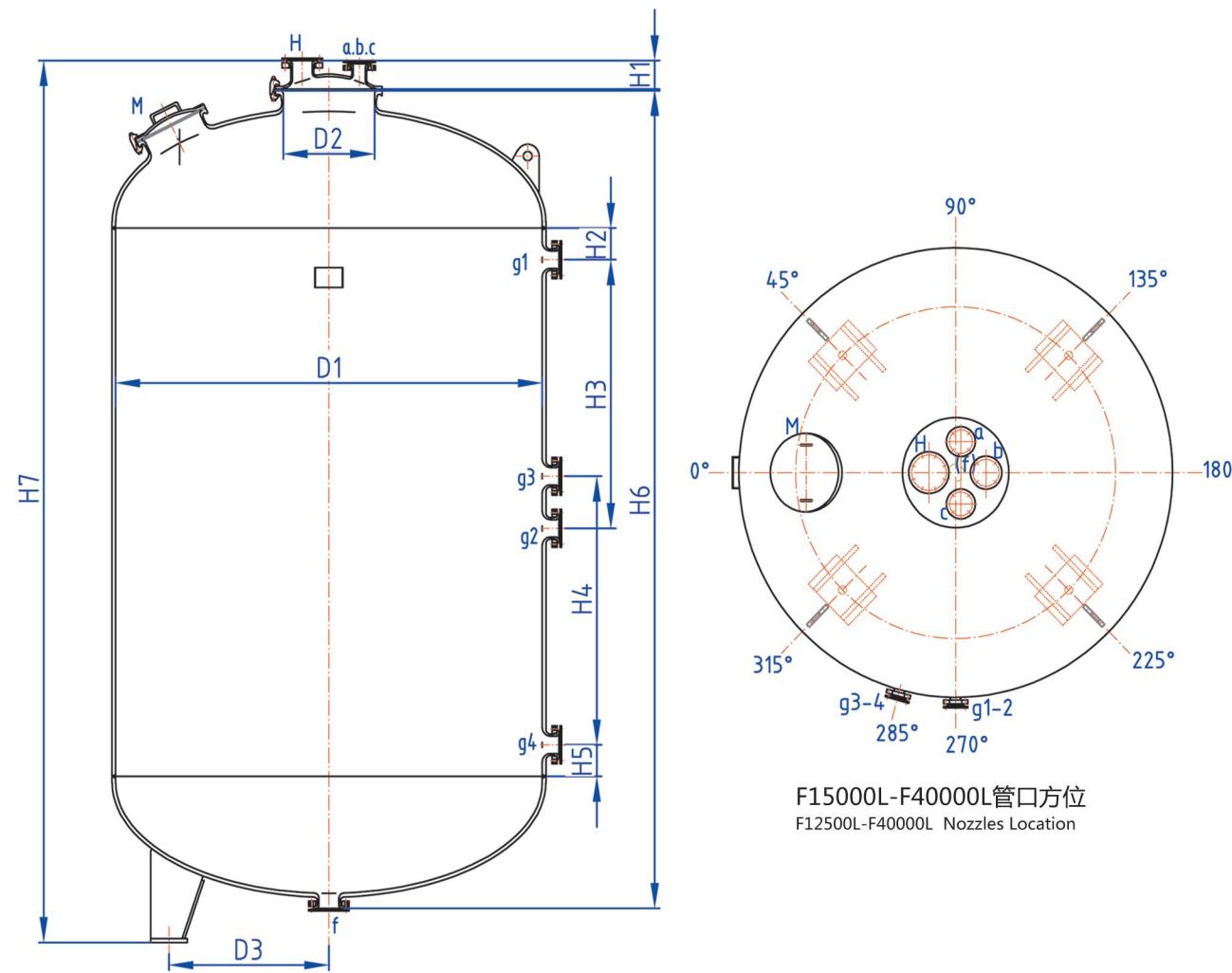
公称容积 Nominal capacity VN/L	主要尺寸 (mm) Main Dimension							管口公称直径 (mm) Nozzle DN								
	D1	D2	D3	H1	H2	H3	H4	H5	M	H	a	b	c	f	e	g1,g2
50	400	280	160	185			580	1005		80	65	65		65		
100	500	320	210	210			680	1108		100	65	65		65		
200	600	420	230	245			900	1400		100	65	65	65	65		
300	700	490	260	350			980	1525		125	65	65	65	65		
500	800	560	280	375	170	700	1320	1910		150	65	65	65	80	80	65
1000	1000	700	350	425	170	950	1580	2206		150	80	80	80	80	80	65
1500	1200	840	420	480	200	900	1640	2360	300×400		80	80	80	100	100	65
2000	1300	910	475	505	200	1050	1835	2588	300×400		80	80	80	100	100	65
3000	1450	1020	550	553	200	1300	2115	2990	300×400		80	80	80	125	100	65
5000	1600	1120	600	595	220	1900	2785	3598	300×400		80	80	80	125	125	65
6300	1750	1220	660	633	220	1920	2896	3730	300×400		100	100	100	125	125	65
8000	2000	1400	750	695	220	1860	2850	3771	300×400		100	100	100	125	125	65
10000	2200	1540	825	765	220	1900	2965	3941	300×400		125	125	125	150	150	100

公称容积 Nominal capacity VN/L	主要尺寸 (mm) Main Dimension							管口公称直径 (mm) Nozzle DN								
	D1	D2	D3	H1	H2	H3	H4	H5	H6	H	M	a	b	c	f	g1,g2
1000	1000	500	350	160	380	120	830	1415	2170	100		50	80	50	100	65
1500	1200	500	420	160	430	120	955	1590	2440	100		50	80	50	100	65
2000	1300	500	475	160	455	120	1010	1670	2525	100		50	80	50	100	65
3000	1450	600	550	180	518	120	1245	1947.5	2882	125		80	100	80	125	65
4000	1600	600	600	180	555	150	1480	2280	3230	125		80	100	80	125	65
5000	1600	600	600	180	555	150	1870	2670	3635	125		80	100	80	125	65
6300	1750	600	675	180	592.5	150	1900	2737.5	3715	125		80	100	80	125	65
8000	2000	600	750	180	655	150	1860	2760	3841	125		80	100	80	125	65
10000	2200	600	825	180	720	150	1900	2865	3996	125	400×300	80	100	80	150	100
12500	2200	600	825	180	720	150	2470	3435	4568	125	400×300	80	100	80	150	100



闭式搪玻璃贮罐

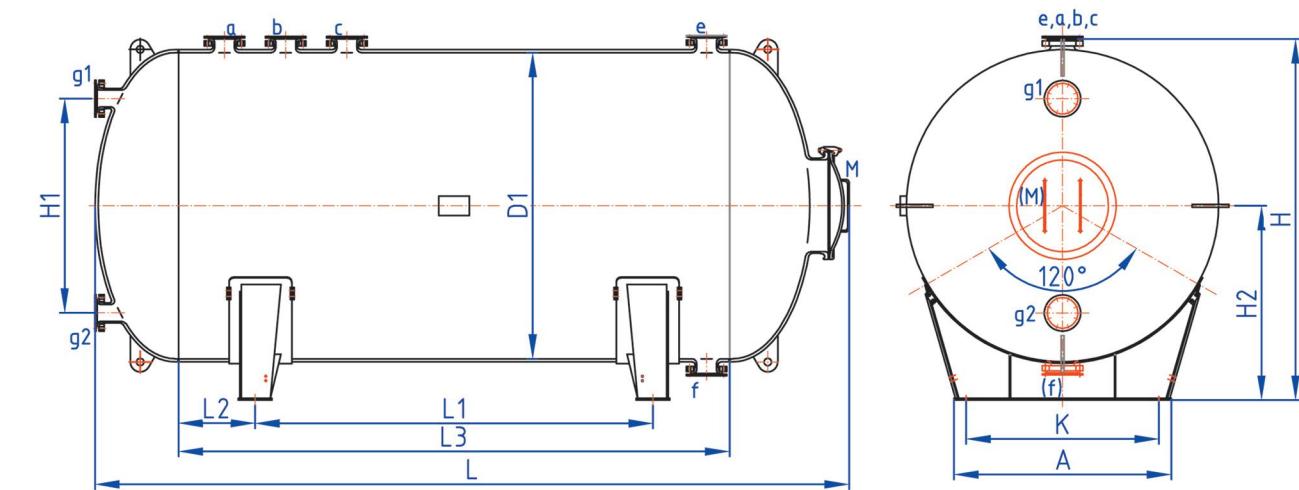
Closed glass lined tank



公称容积 Nominal capacity VN/L	主要尺寸 (mm) Main Dimension										管口公称直径 (mm) Nozzle DN						
	D1	D2	D3	H1	H2	H3	H4	H5	H6	H7	M	H	a	b	c	f	g1-g4
15000	2400	600	900	180	200	1400	1400	200	4285	4712	DN400	125	80	100	80	150	100
16000	2400	600	900	180	200	1450	1450	200	4425	4852	DN400	125	80	100	80	150	100
20000	2600	600	975	180	200	1530	1530	200	4725	5120	DN400	125	80	100	80	150	100
25000	2800	600	1050	180	200	1700	1700	200	5155	5580	DN400	125	80	100	80	150	125
30000	3000	600	1125	180	200	1730	1730	200	5305	5715	DN400	125	80	100	80	150	125
40000	3200	600	1200	180	200	2120	2120	200	6110	6470	DN400	125	80	100	80	150	125

卧式搪玻璃贮罐

Horizontal glass lined tank

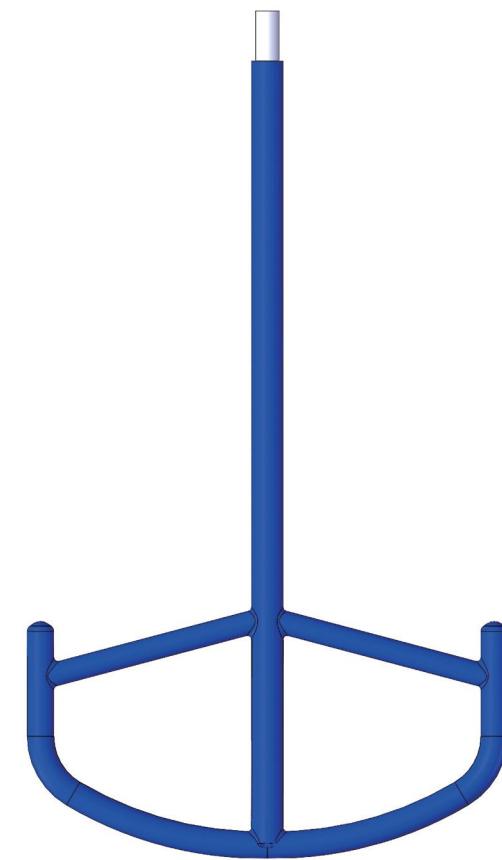
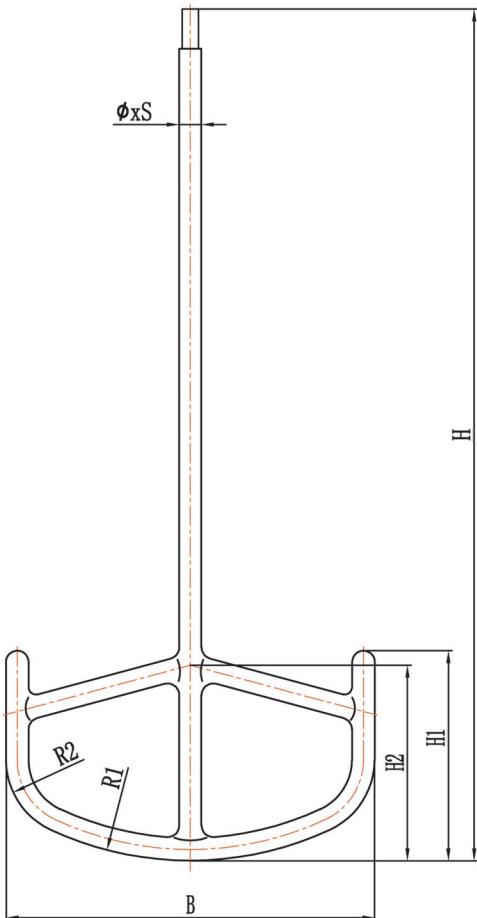


公称容积 Nominal capacity VN/L	主要尺寸 (mm) Main Dimension										管口公称直径 (mm) Nozzle DN						
	D1	H1	H2	H	L1	L2	L3	L	K	A	M	a	b	c	f	e	g1-g2
3000	1450	1100	989	1795	760	370	1500	2600	900	1060	600	100	80	80	80	80	65
4000	1450	1100	989	1800	1430	370	2170	3233	900	1060	600	100	80	80	80	80	65
5000	1600	1200	1066	1950	1340	400	2140	3343	960	1120	600	100	80	80	80	80	65
6300	1750	1230	1141	2100	1420	390	2200	3397	1120	1280	600	100	80	80	80	80	65
8000	1900	1350	1218	2250	1580	440	2460	3734	1200	1360	600	100	80	80	80	80	65
10000	2000	1400	1270	2360	1890	460	2810	4136	1260	1420	600	150	150	150	150	150	65
12500	2000	1400	1270	2360	2600	500	3600	4926	1260	1420	600	150	150	150	150	150	125
16000	2200	1540	1370	2560	2720	500	3720	5176	1380	1580	600	150	150	150	150	150	125
20000	2400	1680	1472	2770	2820	550	3920	5478	1520	1720	600	150	150	150	150	150	125
25000	2800	1960	1674	3170	2270	600	3470	5230	1800	2040	600	150	150	150	150	150	150
30000	3000	2100	1776	3370	2240	630	3500	5362	1940	2180	600	150	150	150	150	150	150

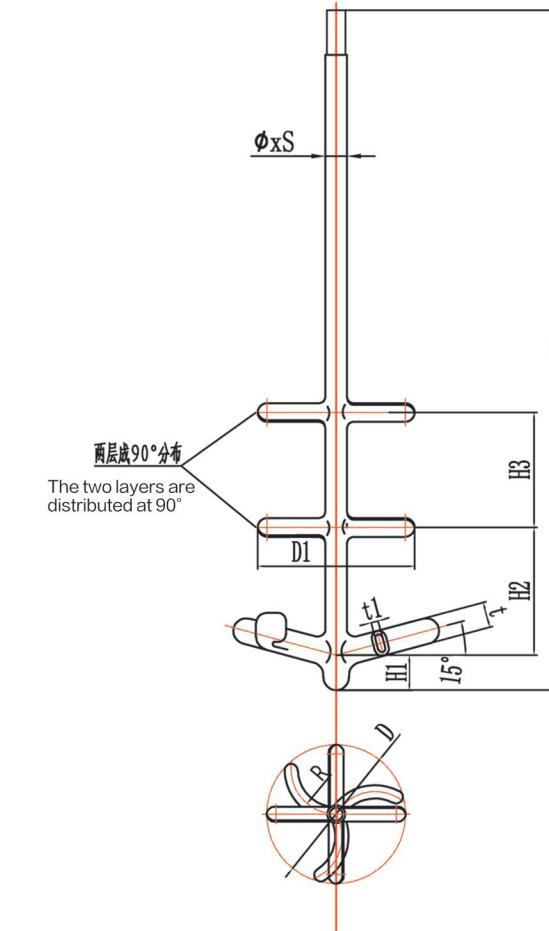


锚、框式搅拌器

Anchor and frame agitator



参数 Argument	规格 Size												
	K50	K100	K200	K300	K500	K1000	K1500	K2000	K3000	K5000	K6300	K8000	K10000
主要尺寸 Main size	ØxS	40*5	50*5	50*5	65*5	60*5	80*8	80*8	95*8	95*10	95*10	110*12	110*12
	H	900	1040	1240	1400	1620	1940	2150	2500	2640	3560	3980	4130
	H1	250	320	350	450	450	650	700	700	800	950	950	1000
	H2	220	290	320	410	410	600	650	650	750	900	900	
	B	420	520	620	720	810	1080	1180	1180	1440	1580	1580	1700
	R1	420	520	620	720	810	1080	1180	1180	1440	1580	1580	
	R2	100	115	130	150	170	225	245	245	300	330	330	
	轴头尺寸详见机架轴头图 Axe head dimensions are detailed in the frame axle head drawing												



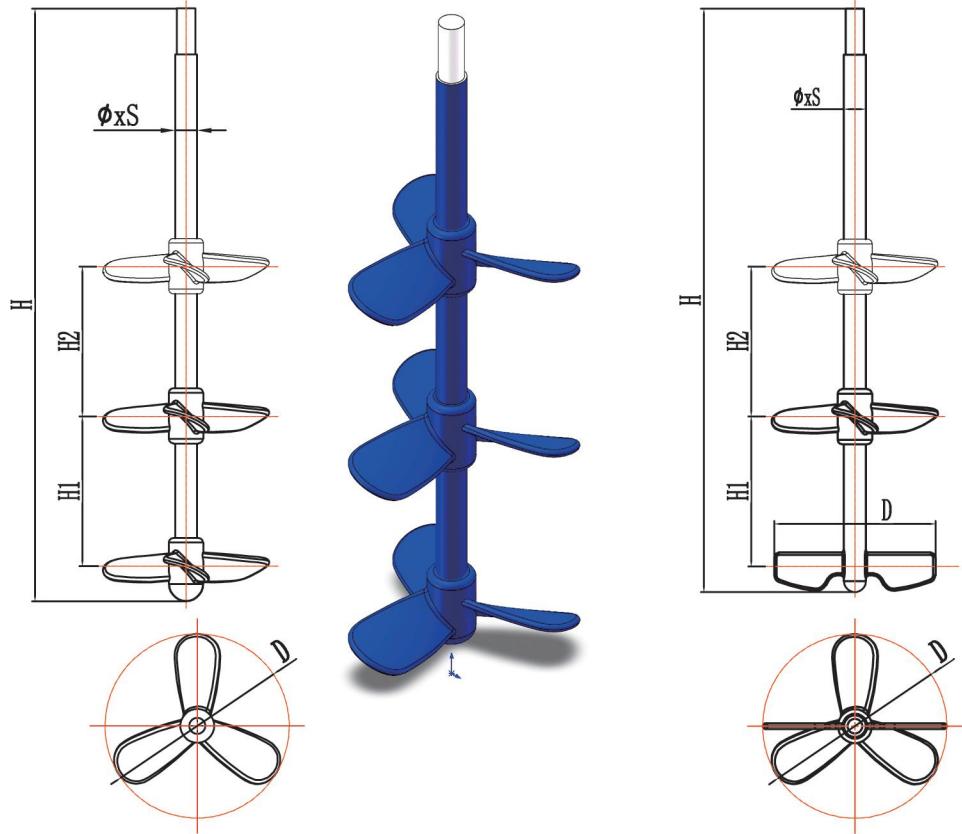
参数 Argument	规格 Size												
	K1000	K1500	K2000	F3000	F5000	F6300	F8000	F10000	F12500	F16000	F20000	F30000	
主要尺寸 Main size	ØxS	80*8	80*8	80*8	95*8	95*10	95*10	110*12	110*12	110*12	140*14	140*14	160*14
	H	1760	2170	2430	2620	3500	3850	3940	4120	4620	5560	5870	6800
	H1	120	135	135	135	135	135	135	135	150	150	150	150
	H2	450	450	450	550	600	650	650	650	650	800	1000	1000
	H3						650	650	650	650	800	1000	1000
	D	700	700	700	700	700	700	900	900	900	1000	1000	1200
	D1	650	650	650	650	650	650	750	750	750	850	850	1000
	轴头尺寸详见机架轴头图 Axe head dimensions are detailed in the frame axle head drawing												



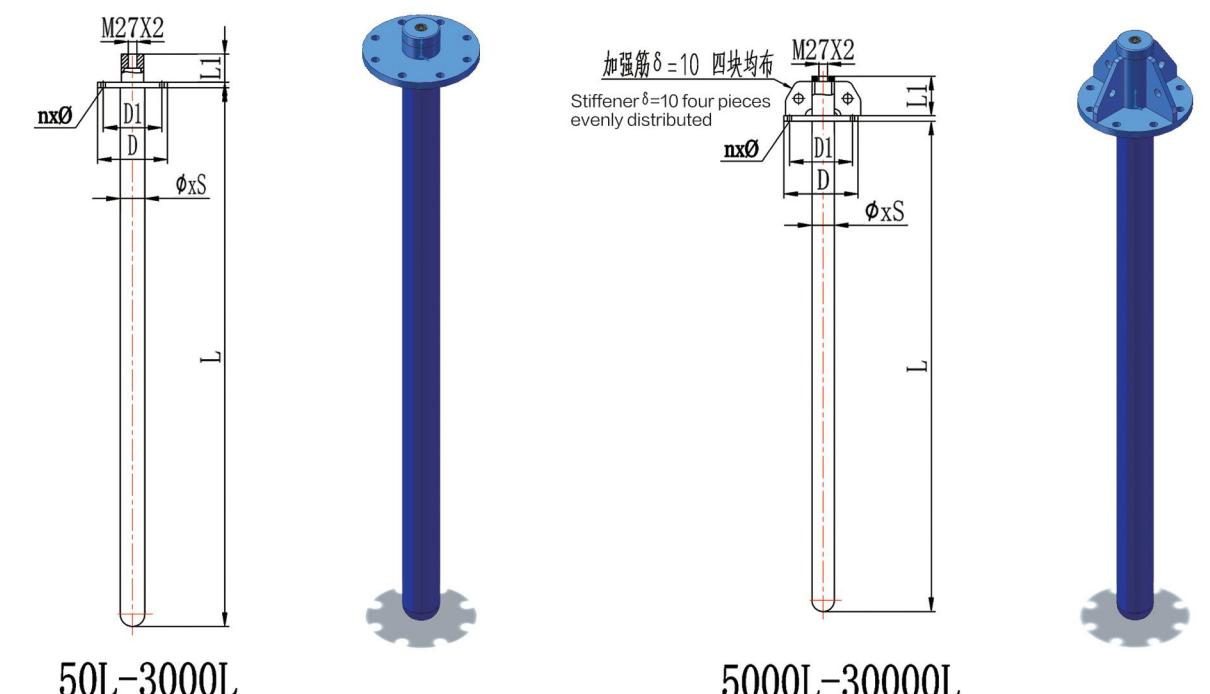


推进式、刮板推进组合式

Propulsive, scraper propulsion



参数 Argument	规格 Size													
	K500	K1000	K1500	K2000	F3000	F5000	F6300	F8000	F10000	F12500	F16000	F20000	F30000	
主要尺寸 Main size	øxS	65*5	80*8	80*8	80*8	95*10	95*10	95*10	110*12	110*12	110*12	140*14	140*14	160*14
	H	1850	2220	2440	2430	3070	3660	3990	4100	4320	4820	5780	6070	7000
	H1		500	600	600	600	700	700	900	800	900	900	900	1000
	H2							700	800	800	900	900	900	1000
	D	450	600	600	600	550	550	550	750	750	750	800	800	1100
	轴头尺寸详见机架轴头图 Axe head dimensions are detailed in the frame axle head drawing													

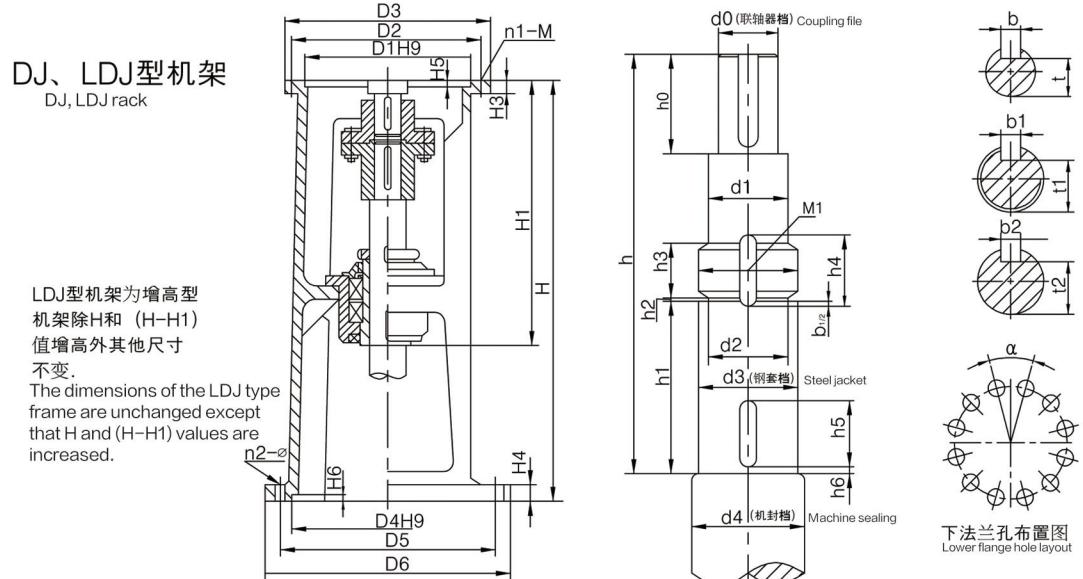


规格 Size	øxS	L	L1	所配管口 Supplied pipe orifice	D	D1	NxØ
50L	32x4	320	40	PN1.0DN50	165	125	4xØ18
100L	32x4	380	40	PN1.0DN50	165	125	4xØ18
200L	32x4	500	40	PN1.0DN50	165	125	4xØ18
300L	32x4	500	40	PN1.0DN50	165	125	4xØ18
500L	32x4	700	40	PN1.0DN50	165	125	4xØ18
1000L	60x5	800	40	PN1.0DN100	220	180	8xØ18
1500L	60x5	1000	40	PN1.0DN100	220	180	8xØ18
2000L	60x5	1300	40	PN1.0DN100	220	180	8xØ18
3000L	60x5	1300	40	PN1.0DN100	220	180	8xØ18
4000L	60x5	1500	150	PN1.0DN100	220	180	8xØ18
5000L	80x6	1700	150	PN1.0DN125	250	210	8xØ18
6300L	80x6	2000	150	PN1.0DN125	250	210	8xØ18
8000L	95x8	2300	150	PN1.0DN200	340	295	8xØ22
10000L	95x8	2300	150	PN1.0DN200	340	295	8xØ22
12500L	95x8	2500	150	PN1.0DN200	340	295	8xØ22
16000L	110x10	2800	150	PN1.0DN200	340	295	8xØ22
20000L	110x10	2800	150	PN1.0DN200	340	295	8xØ22
30000L	110x10	3000	150	PN1.0DN200	340	295	8xØ22



减速机支架

Reducer bracket

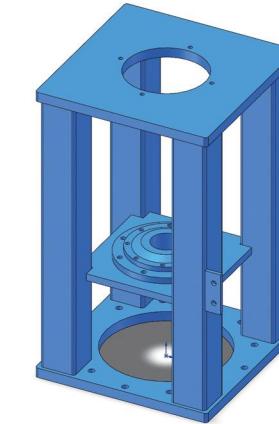
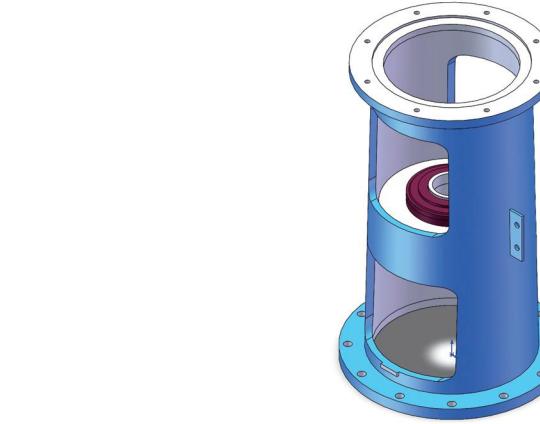


DJ、LDJ型单支点机架主要参数及尺寸。
Main parameters and dimensions of DJ, LDJ type single support frame.

机架型号 Frame type	H1	H3	H4	H5	H6	输入端接口 Input interface				输出端接口 Output interface				
						D1	D2	D3	n1-M	D4	D5	D6	a	n2-Φ
DJ.LDJ30-RF37	320	15	20	4	6	130	165	200	4-M10	240	285	315	30	12-Φ14
DJ.LDJ30-RF47	320	15	20	4	6	130	165	200	4-M10	240	285	315	30	12-Φ14
DJ.LDJ35-RF57	334	17	20	5	6	180	215	250	4-M12	260	320	360	30	12-Φ14
DJ.LDJ40-RF57	334	17	20	4	6	180	215	250	4-M12	260	320	360	30	12-Φ14
DJ.LDJ45-RF57	338	20	20	5	6	180	215	250	4-M12	260	320	360	30	12-Φ14
DJ.LDJ45-RF67	338	20	20	5	6	180	215	250	4-M12	260	320	360	30	12-Φ14
DJ.LDJ55-RF77	372	22	24	6	6	230	265	300	4-M12	325	400	435	30	12-Φ14
DJ.LDJ55-RF87	372	22	24	6	6	230	265	340	4-M12	325	400	435	30	12-Φ14
DJ.LDJ65-RF87	447	22	24	6	6	250	300	350	4-M16	350	420	460	30	12-Φ18
DJ.LDJ65-RF97	447	22	24	6	6	250	300	350	4-M16	350	420	460	30	12-Φ18
DJ.LDJ70-RF87	447	22	24	6	6	250	300	350	4-M16	350	420	460	30	12-Φ18
DJ.LDJ70-RF97	447	22	24	6	6	250	300	350	4-M16	350	420	460	30	12-Φ18
DJ.LDJ80-RF87	495	22	28	6	8	250	300	350	4-M16	380	455	495	30	12-Φ18
DJ.LDJ80-RF97	495	22	28	6	8	250	300	350	4-M16	380	455	495	30	12-Φ18
DJ.LDJ80-RF107	495	22	28	6	8	250	300	350	4-M16	380	455	495	30	12-Φ18
DJ.LDJ90-RF97	519	22	28	7	8	350	400	450	8-M16	430	510	555	30	12-Φ23
DJ.LDJ90-RF107	519	22	28	7	8	350	400	450	8-M16	430	510	555	30	12-Φ23
DJ.LDJ100-RF137	535	25	28	9	10	450	500	550	8-M16	480	560	600	22.5	16-Φ23
DJ.LDJ110-RF137	660	30	28	11	10	450	500	550	8-M16	560	650	700	22.5	16-Φ27
DJ.LDJ110-RF147	660	30	28	11	10	450	500	550	8-M16	560	650	700	22.5	16-Φ27
DJ.LDJ120-RF137	660	30	28	11	10	450	500	550	8-M16	560	650	700	22.5	16-Φ27
DJ.LDJ120-RF147	660	30	28	11	10	450	500	550	8-M16	560	650	700	22.5	16-Φ27
DJ.LDJ130-RF167	790	45	40	12	10	550	600	660	8-M20	720	810	880	18	20-Φ27
DJ.LDJ140-RF167	790	45	40	12	12	550	600	660	8-M20	720	810	880	18	20-Φ27
DJ.LDJ180-RF177	910	55	50	14	12	680	800	880	8-M30	970	1080	1160	18	20-Φ33

减速机支架

Reducer bracket



DJ、LDJ型单支点机架主要参数及尺寸。
Main parameters and dimensions of DJ, LDJ type single support frame.

型号 Model number	搅拌轴轴端尺寸 Mixing shaft end dimensions														DJ型 H 重量	LDJ型 H 重量					
	h	h0	h1	h2	h3	h4	h5	h6	d0	d1	d2	M1	d3(h9)	zd4	b	b1	b2	t	t1	t2	
DJ.LDJ30-RF37	260	53	103	3	13	22	30	3	30	32	32.8	M35*1.5	35	40	8	6	6	26	31	32	550 48
DJ.LDJ30-RF47	250	53	103	3	13	22	30	3	30	32	32.8	M35*1.5	35	40	8	6	6	26	31	32	550 48
DJ.LDJ35-RF57	254	53	113	3	15	24	40	3	35	42	42.8	M45*1.5	45	50	10	6	6	30	41	42	600 58
DJ.LDJ40-RF57	254	69	113	3	15	24	40	3	40	42	42.8	M45*1.5	45	50	12	6	6	35	41	42	750 64
DJ.LDJ45-RF57	258	69	113	3	15	28	40	3	45	47	47.8	M50*1.5	50	65	14	8	8	40	46	46	750 66
DJ.LDJ45-RF67	258	69	113	3	15	28	40	3	45	47	47.8	M50*1.5	50	65	14	8	8	40	46	46	750 66
DJ.LDJ55-RF77	282	80	118	4	15	27	40	3	55	57	57	M60*2	60	65	16	8	8	49	56	56	660 95
DJ.LDJ55-RF87	262	80	118	4	15	27	40	3	55	57	57	M60*2	60	65	16	8	8	49	56	56	660 95
DJ.LDJ65-RF87	337	87	143	4	18	32	50	3	65	71	72	M75*2	75	80	18	10	10	58	69	70	720 125
DJ.LDJ65-RF97	317	87	143	4	18	32	50	3	65	71	72	M75*2	75	80	18	10	10	58	69	70	720 125
DJ.LDJ70-RF87	337	87	143	4	18	32	50	3	70	71	72	M75*2	75	80	20	10	10	63	69	70	720 125
DJ.LDJ70-RF97	317	87	143	4	18	32	50	3	70	71	72	M75*2	75	80	20	10	10	63	69	70	720 138
DJ.LDJ80-RF87	385	91	163	4	18	32	60	3	80	81	82	M85*2	85	95	22	10	10	71	79	80	785 180
DJ.LDJ80-RF97	365	91	163	4	18	32	60	3	80	81	82	M85*2	85	95	22	10	10	71	79</td		



减速机

Reduction gear



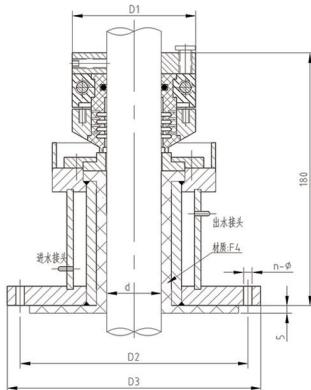
摆线针轮减速机 Cycloidal pin gear reducer	
优点 advantage	1. 传动平稳 精度高 1. Smooth transmission with high precision 2. 体积小 2. Small size 3. 成本低 3. Low cost
	缺点 shortcoming
	1. 负荷不能太大 中心轴是最容易断 拆装麻烦 1. The load can not be too large. The center shaft is the easiest to break and install 2. 容易发热、漏油 2. Easy to heat, oil leakage



斜齿轮减速机 Helical gear reducer	
优点 advantage	喷合性能好 振动低 噪音小 传动平稳 Good meshing performance low vibration low noise stable transmission
	缺点 shortcoming
	重合度大 降低了每对轮齿的载荷 相对地提高了齿轮的承载能力 寿命长 The large contact degree reduces the load of each pair of gear teeth and increases the load carrying capacity of the gear relatively long life
	因为面接触 受力面积大 传动的扭矩大 常用于重型机械上 Because of the large surface contact force area, the transmission torque is often used in heavy machinery
	斜齿轮机构较直齿轮紧凑 体积小 重量轻 传动精度高 Helical gear mechanism is more compact than spur gear, small size, light weight and high transmission accuracy
	价格较高 Higher price



螺旋锥减速机 Spiral cone reducer	
优点 advantage	传动效率高 High transmission efficiency
	噪音低 Low noise
缺点 shortcoming	过载能力大 运转平稳 工作可靠 Large overload capacity, stable operation and reliable work
	皮带传动 易产生静电 The belt drive is prone to static electricity



212型单端面机械密封

Model 212 single end mechanical seal

结构：单端面、小弹簧、聚四氟乙烯波纹管型
Structure: single end face, small spring, polytetrafluoroethylene bellows

压力：≤0.4Mpa
Pressure: ≤0.4Mpa

温度：-40~150℃
Temperature: -40~150℃

转速：≤2m/s
Speed: ≤2m/s

轴径：30~150mm
Axe diameter: 30~150mm

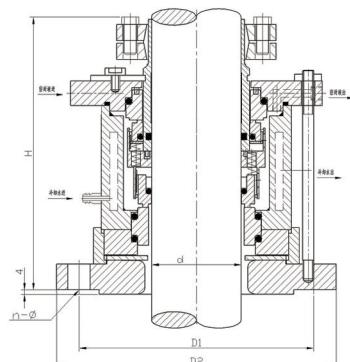
介质：硫酸、硝酸、有机酸等强腐蚀性介质（无悬浮颗粒）
Medium: sulfuric acid, nitric acid, organic acid and other corrosive media (no suspended particles)

79标安装尺寸 79 standard mounting dimensions

d	D1	D2	D3	n-Φ
40	90	130	160	4-Φ18
50	100	150	185	4-Φ18
65	115	170	205	4-Φ18
80	130	200	235	8-Φ18
95	150	200	235	8-Φ18
102	150	255	290	8-Φ18

92标安装尺寸 92 standard mounting dimensions

d	D1	D2	D3	n-Φ
40	90	130	160	4-Φ18
50	100	150	190	4-Φ18
65	115	170	210	4-Φ18
80	130	200	240	8-Φ18
95	150	225	265	8-Φ18
110	165	280	320	8-Φ18
125	180	280	320	8-Φ18
140	195	335	375	12-Φ18



2009型双端面机械密封

Model 2009 double mechanical seal

结构：双端面、小弹簧、非平衡型
Structure: double end face, small spring, unbalanced type

压力：≤0.6~1.6Mpa
Pressure: ≤0.6~1.6Mpa

温度：-20~150℃
Temperature: -20~150℃

转速：≤3m/s
Speed: ≤3m/s

轴径：30~160mm
Axe diameter: 30~160mm

介质：油、水、弱碱、弱酸及易燃、易爆有毒气体
Medium: oil, water, weak alkali, weak acid and flammable, explosive toxic gas

符号 symbol	d	D1	D2	n-Φ	H
轴径 Shaft diameter	40	40	175	4-Φ18	135
	50	50	240	8-Φ18	140
	60	65	240	8-Φ18	150
	80	80	275	8-Φ22	160
	95	95	305	8-Φ22	170
	110	110	330	8-Φ22	195
	120	120	330	8-Φ22	195
	140	140	395	12-Φ18	200
	160	160	395	12-Φ18	205

备注：
t≤150℃ 水套可用衬四氟

150℃>t≤200℃ 需用搪玻璃

t>200℃ 需定做非标水套

Note:
t≤150℃ Water jacket can be lined with tetrafluoroethylene

150℃>t≤200℃ Glass lining is required

t>200℃ Need to customize non-standard water jacket



产品展示

Product display



外包不锈钢反应釜展品

Outsourcing stainless steel reactor exhibits



底部钽钉测温管

Bottom tantalum nail thermometer tube



筒体侧开口工艺

Cylinder side opening process



搪玻璃反应釜

Glass lined reactor



搪玻璃反应釜

Glass lined reactor



搪玻璃反应釜

Glass lined reactor



整机发货现场

Complete machine delivery site



底部侧口结构

Bottom lateral mouth structure



涡轮+推进式
Curved blade turbine
+ push type



刮板推进组合式
Scraper propulsion
combination



推进+四页开启涡轮式
Straight blade turbine
+ push type



叶桨组合式
Combination of
blades



蒸发式
Evaporative



高效刮板式
Anchor paddle
combination



圆盘涡轮式
Disc turbo
type



布尔马金式
Blumagin type



异形框式
Special-shaped
frame type

产品展示

Product display



Product display



搪玻璃设备的安装

Installation of glass lining equipment

1.设备的吊装

搪玻璃设备吊装时应在指定部位(如支座、吊耳等)进行吊装严禁用 人孔、管口、卡子等部件作为吊耳，轻吊轻放。严禁搪玻璃面与 硬物直接接触。严禁对搪玻璃面进行敲击、碰撞和撞击。严禁采 用滚动、撬杠等方式移动设备。

When hoisting the glass lining equipment, lift the equipment at the specified position (such as supports and lifting ears). Do not use manholes, pipes, and clips as lifting ears. Do not directly contact the glass-lined surface with hard objects. It is strictly forbidden to knock, collide or bump the glass-lined surface. Do not move the device by rolling or crowbar.

2.装配前的检查

搪玻璃设备组装前人员、部件和安装工具进入设备时，应对搪玻璃 面进行可靠和有效的防护。严禁硬物掉落砸伤和划伤搪玻璃面。

Before the assembly of the glass lining equipment, the personnel, components and installation tools shall be reliably and effectively protected against the glass lining surface when entering the equipment. It is strictly prohibited for hard objects to fall and hurt or scratch the glass-lined surface.

3.设备卡子、法兰（螺栓）的安装

检查卡子、法兰（螺栓）是否完整，数量是否符合规定，卡子安 装时应要保证距离均等，按规定扭矩拧紧以确保运行安全及密封 可靠。法兰安装时，应沿对角线方向成对地逐渐拧紧、用力均匀， 不应一次完全拧紧，避免受力不均匀而造成搪玻璃层破裂影响使 用寿命。

Check whether the clip, flange (bolt) is complete, whether the number meets the requirements, the clip should be installed to ensure that the distance is equal, tighten according to the specified torque to ensure safe operation and reliable sealing. When the flange is installed, it should be gradually tightened in pairs along the diagonal direction with uniform force, and should not be completely tightened at one time to avoid uneven force resulting in the fracture of the glass lining layer affecting the service life.

4.搅拌器的安装

①安装前对搅拌、机封、机架检查。②先将搅拌器放入罐内（罐底铺设软垫），然后将罐盖吊至预定位置，同时将密封件套入搅 拌轴，再将搅拌器提升与减速机输出轴连接，锁紧防松装置。③先调整罐体的水平度，再调整搅拌轴与密封件的同轴度及垂直 度，达到规定的技术要求后使搅拌轴缓慢转动，（顺时针转动）当运转灵活，无异常现象时，方可再罐内注水，以水代料进 行试车。

① Check the mixing, machine seal and frame before installation. ② First put the agitator into the tank (the bottom of the tank is laid with soft cushion), and then lift the tank lid to the predetermined position, while the sealing piece is fitted into the mixing shaft, and then the agitator is lifted and connected with the output shaft of the reducer, and the anti-loose device is locked. ③ First adjust the levelness of the tank, and then adjust the coaxiality and verticality of the mixing shaft and the seal, and make the mixing shaft rotate slowly after meeting the specified technical requirements. (clockwise rotation) When the operation is flexible and there is no abnormal phenomenon, water can be injected in the tank and the test run can be carried out with water substitute.

5.施焊

严禁在搪玻璃设备外壁表面施焊。在夹套上焊接接管、罐耳、耳座时，一律使用电焊，并采用冷却措施，绝对不准使用气焊。 在临近搪玻璃层空间部位施焊时，应将搪玻璃面、管口、釜口盖严，避免电焊渣飞溅，损坏搪玻璃面。

Welding on the outer wall surface of the glass lining equipment is strictly prohibited. Welding nozzle, tank ear, ear holder on the jacket, all use electric welding, and adopt cooling measures, absolutely do not use gas welding. When welding near the space of the glass lining layer, the glass lining surface, pipe mouth and kettle mouth should be tightly covered to avoid the splash of welding slag and damage to the glass lining surface.

6.安装验收

设备安装完毕后，应再次进行搪玻璃面的检查工作，使用木质等材质的绳梯进入罐内，做好人孔法兰附近和罐体下部包括其他接触 到搪玻璃的地方的防护工作。使用手电目测法将搪玻璃层全部检查一遍，如需电火花检测仪进行检测时，电压不可超过7000V， 以防止对搪玻璃层造成损伤。

After the equipment is installed, the glass-lined surface should be inspected again, and rope ladders made of wood and other materials should be used to enter the tank, and the protection work near the manhole flange and the lower part of the tank including other places that come into contact with the glass-lined surface should be done. Use the flashlight visual inspection method to check all the glass lining layer. If the electrical spark detector is needed for detection, the voltage should not exceed 7000V to prevent damage to the glass lining layer.



搪玻璃设备的使用

Use of glass lining equipment



一、加料

1. 加料时不应有任何坚硬物体及块状金属、绳、带掉到设备内，以防碰伤搪玻璃层，绳、带会缠绕罐内件温度计套管及搅拌器造成断裂。对于大块硬质物料，应粉碎后加入，如反应物是颗粒对瓷面会造成磨损的，要少加、勤加。
2. 从管口加入强腐蚀会直接引起放热反应的物料。如加硫酸、硝酸、盐酸，第一要控制加料速度，第二最好要用防腐材料管做成莲蓬头插到管口内适当的距离加料，防止局部温度超标破坏搪玻璃瓷层。尽量避免冷罐加热料，热罐加冷料。由于突然改变温度，形成内应力，影响使用寿命。

1. When feeding, there should be no hard objects, block metal, rope and tape falling into the equipment to prevent damage to the glass lining layer, and the rope and tape will wind the thermometer casing and stirrer in the tank and cause fracture. For large hard materials, should be crushed after adding, such as the reactant particles will cause wear on the porcelain surface, to add less, more often.
2. From the pipe mouth to add strong corrosion will directly cause exothermic reaction of the material. Such as adding sulfuric acid, nitric acid, hydrochloric acid, the first to control the feeding speed, the second is best to use the anti-corrosion material tube made of showerhead head inserted into the pipe mouth of the appropriate distance to feed, to prevent local temperature exceeding the damage to the glass-lined porcelain layer. Try to avoid cold tank heating material, hot tank adding cold material. Due to the sudden change of temperature, internal stress is formed, which affects the service life.

二、操作

1. 夹套设备的升温、升压应缓慢进行加压、升温
① 打开气动阀门至20%，压力控制在0.1MPa内，保持10分钟；
② 10分钟后，气动阀门打开至50%，压力控制在0.2MPa内，保持10分钟；
③ 10分钟后，气动阀门打开至70%，压力控制在0.3MPa内，保持10分钟；
④ 10分钟后，气动阀门打开至100%，压力控制在反应罐的操作压力为止。
整个过程用时30分钟，这样有效的缓解了反应罐的温差急变的发生，延长使用寿命。
(升压速度以每10分钟升0.1MPa压力为宜)

2. 使用温度和介质要求
我公司设备使用温度0°C~200°C或-19°C~200°C，温差热冲击120°C，冷冲击110°C。（超过上述使用温度范围，订货合同中注明，另行设计制造。）在使用中严防夹套内进入酸液，以防止搪玻璃层金属析氢反应，引起搪玻璃层鳞爆。

3. 夹套排气孔
① 设备运行一段时间后，夹套顶部会有不凝性气体聚积，占据夹套空间，降低夹套的换热性能。
② 不凝性气体中游离氢原子的浓度较高，游离氢会向金属基体中渗透、扩散并聚积，形成氢气，时间长了压力升高，导致瓷层爆裂。因此，放汽孔还有保护设备的功能。

1. The heating and pressure boost of the jacket equipment should be pressurized and heated slowly
① Open the pneumatic valve to 20%, and control the pressure within 0.1MPa for 10 minutes;
② After 10 minutes, the pneumatic valve is opened to 50%, the pressure is controlled within 0.2MPa, and it is kept for 10 minutes;
③ After 10 minutes, the pneumatic valve is opened to 70%, the pressure is controlled within 0.3MPa, and it is kept for 10 minutes;
④ After 10 minutes, the pneumatic valve is opened to 100%, and the pressure is controlled at the operating pressure of the reaction tank.
The whole process takes 30 minutes, which effectively alleviates the occurrence of sudden temperature difference of the reaction tank and prolongs the service life. (The pressure increase rate is 0.1MPa pressure per 10 minutes)

2. Use temperature and medium requirements
Our equipment use temperature 0°C ~ 200°C or -19°C ~ 200°C, temperature difference thermal impact 120°C, cold impact 110°C. (Beyond the above temperature range, indicated in the order contract, separately designed and manufactured.) In use, the acid into the jacket is strictly prevented to prevent the metal hydrogen evolution reaction of the glass lining layer, causing the scale explosion of the glass lining layer.
3. Jacket vent hole
① After the equipment runs for a period of time, there will be non-condensable gas accumulation on the top of the jacket, occupying the jacket space and reducing the heat transfer performance of the jacket.
② The concentration of free hydrogen atoms in non-condensable gas is high, and free hydrogen will penetrate, diffuse and accumulate into the metal matrix, forming hydrogen, and the pressure will rise for a long time, resulting in the porcelain layer bursting. Therefore, the steam release hole also has the function of protecting the equipment.

三、过程

1. 要注意法兰、人孔、机械密封、放料阀等密封情况，如发现渗漏应立即采取措施，防止金属基体腐蚀而破坏密封面。
2. 尽量避免罐体外壳与酸液接触，防止因铁胎腐蚀而使搪玻璃瓷面损坏。如遇有有酸液接触时，应立即设法中和，然后再用水冲洗。

3. 在酸、碱交替使用时，应先加酸后加碱，加碱性物料时始终采用内申管（用四氟乙烯塑料加工一个保护套，套管在管口内壁，防止碱料挂壁腐蚀）

4. 传达装置如有不正常噪声应及时检查处理。

1. Pay attention to the sealing conditions of flanges, manholes, mechanical seals, discharge valves, etc. If leakage is found, immediate measures should be taken to prevent metal matrix corrosion and damage to the sealing surface.
2. Try to avoid contact between the tank shell and the acid solution to prevent damage to the glass-lined porcelain surface due to corrosion of the iron tire. If there is any acid contact, should immediately try to neutralize, and then rinse with water.
3. When the acid and alkali are used alternately, the acid should be added first and then the alkali, and the internal pipe should always be used when the alkaline material is added (a protective sleeve is processed with tetrafluoroethylene plastic, and the sleeve is in the inner wall of the pipe mouth to prevent the alkali material from hanging on the wall corrosion).
4. If the transmission device has abnormal noise, it should be checked and processed in time.

四、出料

1. 出料时，如出料阀、出料管堵塞，一律用非金属工具轻轻捅开，不得碰敲。发现有瓷层碎屑，应立即开罐检查损坏的瓷面，修好再用。
2. 清洗罐内时，不能使用金属器具，而且对粘在罐的内表面上的物料必须清洗及时、彻底。
1. When discharging, if the discharge valve and discharge pipe are blocked, use non-metal tools to gently open, do not touch. If you find porcelain layer debris, you should immediately open the can to check the damaged porcelain surface and repair it before use.
2. When cleaning the tank, no metal utensils can be used, and the materials stuck on the inner surface of the tank must be cleaned promptly and thoroughly.