



# 重庆民心环保科技有限公司

Chongqing Minxin Environmental Protection Technology Co.,Ltd

玻璃行业水处理全方位一站式解决方案

One-Stop Comprehensive Solution for Water Treatment in Glass Industry

[www.minxintechgroup.com](http://www.minxintechgroup.com)

## 重庆民心环保科技有限公司

Chongqing Minxin Environmental Protection Technology Co.,Ltd

工厂地址:重庆市合川区高新区荣军一支路

Factory address: Rongjun 1st Road, High-tech Zone, Hechuan District, Chongqing

办公室地址:重庆市江北区金融街融景中心A座809

Office address: Room 809 RongJing Center Building A, finance Street, Jiang Bei District,Chongqing

销售热线(国内):刘经理——15876153065

Domestic sales: Mr.Liu-15876153065

销售热线(海外):张经理——008618983041367

Overseas sales:Jennifer-008618983041367

销售热线(海外):鲜经理——008617382374628

Overseas sales:Gabrielle-008617382374628

## 玻璃行业的用水痛点

### Pain Points of Water Using in Glass Industry

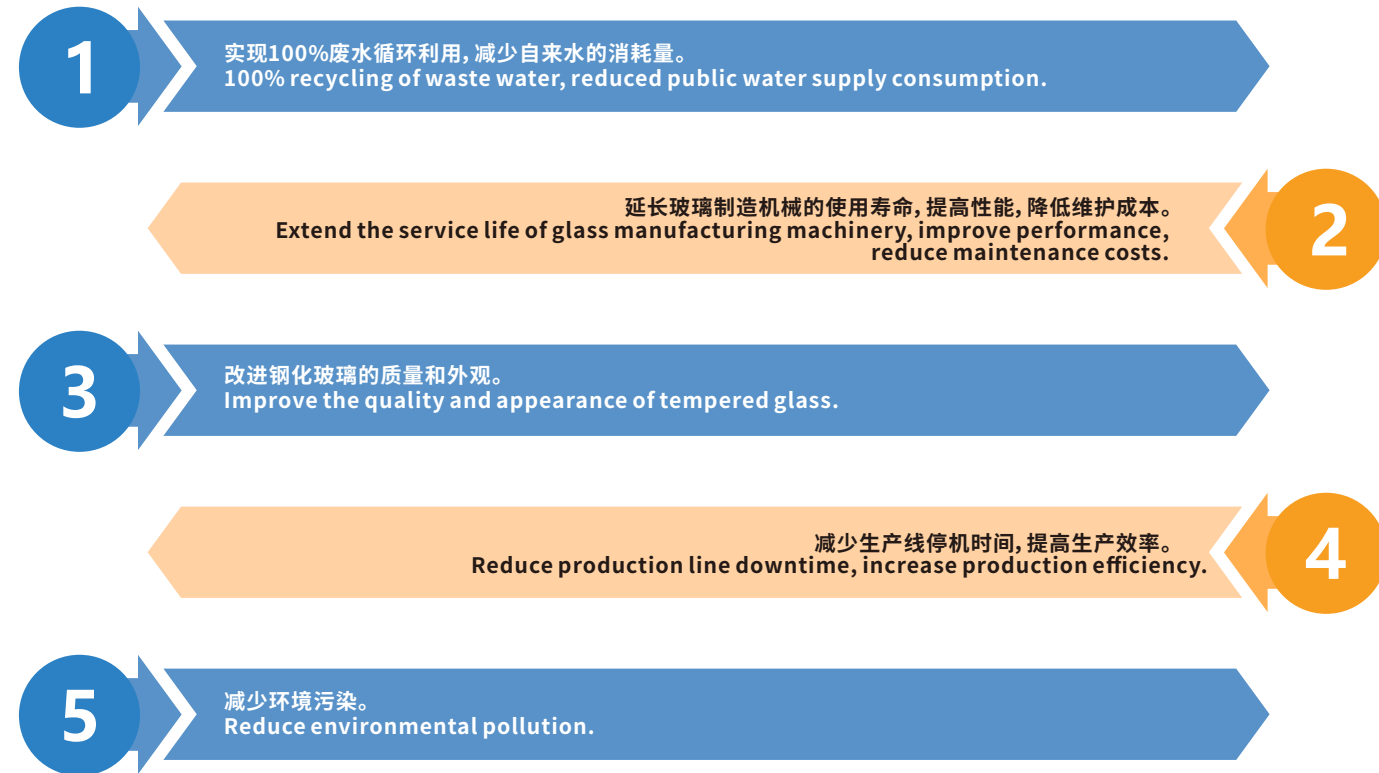
- ◆ 未经处理的磨边污水导致磨边清洗机清洗不干净，玻璃钢化后透光率降低，麻点增多，陶瓷辊使用寿命减少。
- ◆ 未经处理的磨边污水会导致磨边机进水管频繁堵塞，停机清理麻烦，玻璃烧边，磨轮寿命降低30%。
- ◆ 未经处理的磨边污水玻璃粉含量太高，会导致镀膜玻璃和大板玻璃磨边清洗过程中产生表面细微擦伤。
- ◆ 未经处理的磨边污水会导致清洗机换水频繁，致使成本浪费。
- ◆ 磨边污水的沉淀池需半年清理一次，清理难度大，成本高，停机影响生产。
- ◆ 未经处理的磨边污水直接排放导致环境污染，不符合国家标准。

- ◆ Untreated wastewater causes the glass washing machine to be unclean, resulting the decrease of light transmittance after tempering the glass, an increase in tempering pits, and the reduction of the ceramic roller's service life.
- ◆ Untreated wastewater will cause frequently blockage of the water inlet pipe of the edging machine, causing trouble to shut down the machine for cleaning, burning the glass edge, and reducing the service life of the grinding wheel by 30%.
- ◆ The high concentration of glass powder in untreated wastewater cause fine scratches on the surface of coated glass and large plate glass during the edge grinding and cleaning process.
- ◆ Untreated wastewater will increase the frequency of water changes in the cleaning machine, resulting in waste of costs.
- ◆ The wastewater circulation pool needs to be cleaned every six months, which results in high costs, difficult to clean up, and downtime that affects production.
- ◆ Direct discharge of untreated wastewater causes environmental pollution, does not meet national standards.



## 为什么要购买水循环系统？

### Why You Need a Water Recycling System?





## 企业简介 Company Introduction



重庆民心环保科技有限公司是一家专为玻璃行业水处理提供全方位一站式解决方案的科技型企业。公司占地面积15000m<sup>2</sup>，自建10000m<sup>2</sup>标准化厂房。公司拥有一支专业的技术团队，以及多项发明专利和实用新型专利，产品通过ISO9001质量认证体系。

我们通过不断创新产品来迎合市场的需求。本公司已与多家集团公司和标杆企业达成合作，包括信义集团，南玻集团，耀皮集团，皓晶集团，旗滨集团等600多家。如今从同行业中脱颖而出，在不断发展的同时将我们的系统引入世界各地的新市场。

Chongqing Minxin Environmental Protection Technology Co., Ltd. is specializing in provide a comprehensive one-stop water treatment solution for the glass processing industry. Our company covers an area of 15,000 square meters, self-built 10000 square meters of standardized factory. We own a professional technical team, as well as a number of invention patents and utility model patents, products have passed the ISO9001 quality certification system.

We are constantly innovating our products to meet the market. Our company has reached cooperation with a number of group companies and benchmarking enterprises, including Xinyi Group, CSG Group, Yaopi Group, Haojing Group, Kibing Group and more than 600 others. Now we stand out from the industry and bring our systems to new markets around the world while continuing to grow.

## 公司主营业务 Company Main Business

磨边污水处理设备  
Glass Edging Wastewater Treatment Equipment



玻璃行业纯水设备  
Pure Water Equipment for Glass Industry



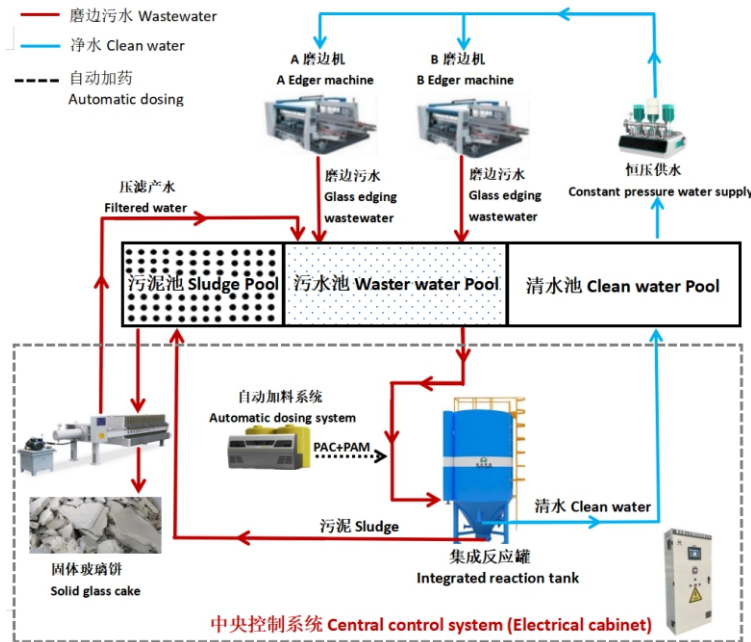
中水回用设备  
Reclaimed Water Equipment



## 絮凝沉淀反应 Flocculation Precipitation Reaction

该处理工艺是将多台磨边机或斜边机, 钻孔机, CNC等产生的污水收集至污水池。污水池底部安装爆气系统, 防止玻璃粉沉淀在水池底部, 大大提高清理玻璃粉效率及减少清理成本。将污水池的污水集中抽至高效集成反应罐进行处理, 集成反应罐集抽水, 加药, 反应, 排水一体化。处理后的清水排放到清水池循环用于玻璃磨边, 可以大大减少玻璃磨边机出水喷嘴的堵塞及损坏, 可以延长机器的使用寿命及提高磨边效率。经高效集成反应罐处理后的固体废物则排放至污泥池, 再由泵抽至压滤机将其压成固体玻璃饼, 可将该玻璃饼进行直接处理, 避免环境污染。

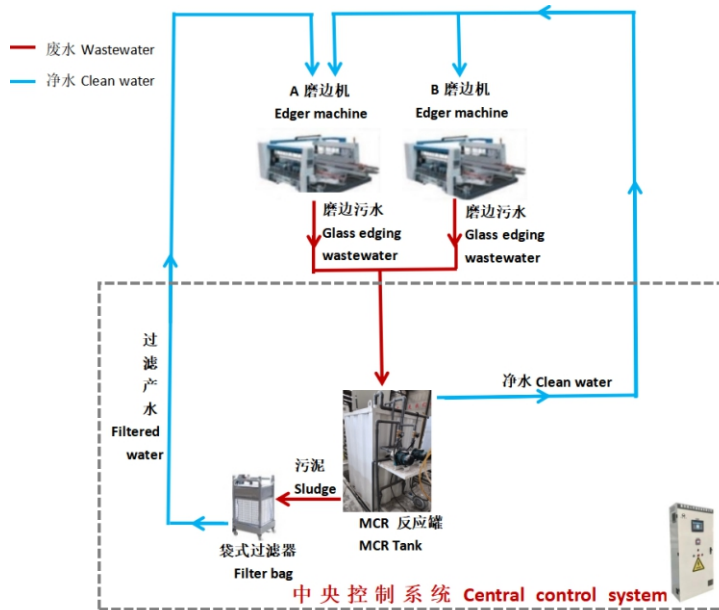
The treatment process of this system is to collect wastewater discharged from multiple glass edging machines or beveling machine, drill machine, CNC etc into a wastewater pool, an aeration device is installed at the bottom of the wastewater collection pool, to avoid the glass powder precipitate on the bottom of the pool. Greatly improve the efficiency of cleaning glass powder and reduce cleaning costs. The integrated reaction tank integrates water pumping, dosing, reaction and drain, The treated clean water is flow into the clean water pool and recycling for the glass edging, which can greatly reduce the blockage and damage of the water outlet nozzle of the glass edging machine, prolong the service life of the machine, and improve the grinding efficiency. The glass powder is discharged into the sludge pool, and then pumped to the filter press to press it into solid glass cake, which can be treated directly to avoid environmental pollution.



## 超滤膜过滤 Ultrafiltration Membrane Filtration

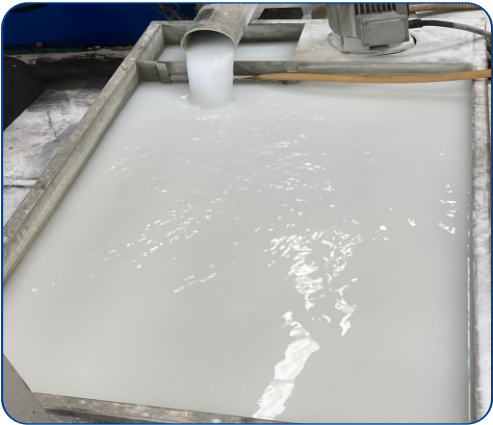
超滤膜是一种用于超滤过程能将一定大小的高分子胶体或悬浮颗粒从溶液中分离出来的高分子半透膜。以压力为驱动力, 膜孔径为1~100nm, 属非对称性膜类型。孔密度约10/cm, 操作压力差为100~1000kPa, 适用于脱除胶体级微粒和大分子, 能分离浓度小于10%的溶液。超滤是采用中空纤维过滤新技术, 配合三级预处理过滤清除水中杂质, 超滤微孔小于0.01微米, 能彻底滤除水中的细菌、铁锈、胶体等有害物质, 保留水中原有的微量元素和矿物质。污水中的玻璃粉将排至袋式过滤器。

Ultrafiltration membrane is a polymer semi permeable membrane used in the ultrafiltration process to separate a certain size of polymer colloid or suspended particles from the solution. Driven by pressure, the membrane has a pore size of 1-100nm and belongs to the asymmetric membrane type. The pore density is about 10/cm, and the operating pressure difference is 100-1000kPa. It is suitable for removing colloidal grade particles and macromolecules, and can separate solutions with a concentration of less than 10%. Ultrafiltration uses a new technology of hollow fiber filtration, combined with tertiary pre-treatment filtration to remove impurities from wastewater. Ultrafiltration with micropores smaller than 0.01 micrometers can completely remove harmful substances such as bacteria, rust and colloids from water, while retaining the original trace elements and minerals in the water. The glass powder in wastewater will discharge into the filter bag.

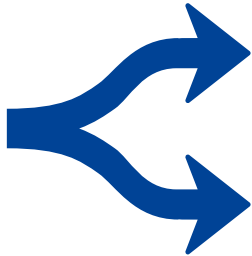


磨边污水处理后的效果  
Effect of Wastewater after treated

序号 No	进水水质 Water inlet quality	检测项目 Test item	净化后水质 Purified water quality
1	磨边污水 Edging wastewater	PH	7~8.5
2	磨边污水 Edging wastewater	SS(mg/L)	<30
3	磨边污水 Edging wastewater	COD(mg/L)	<20
4	磨边污水 Edging wastewater	色度 Chroma	<30
5	磨边污水 Edging wastewater	氨氮(mg/L) AMMONIA(mg/L)	<15



Glass edge grinding wastewater



Crystal clear water (after treatment)



Solid state glass cake (without water)

磨边污水处理系统的特点  
The Features of Wastewater Treatment System

- ◆ 设备运行采用全自动化西门子控制系统, 无需专人值守。
- ◆ 处理水量大, 运行成本低, 是常规水处理设备用药量的三分之一, 设备稳定, 故障率低。
- ◆ 全自动酸碱调节, 严格控制用水水质。
- ◆ 全自动水位平衡控制, 灵敏度高, 不易出现误操作。根据生产用水量, 自动调节水处理节奏。
- ◆ 设备直接连接压滤机, 不需要人工控制压滤机, 全自动落料, 残留物为饼状固体, 方便处理。
- ◆ 全自动曝气系统, 污水池不沉淀, 不用经常清理污水池。
- ◆ 全自动反冲洗自洁系统防止罐内积渣现象。
- ◆ 智能云监控系统, 在线手机APP监控设备状态, 远程修改参数, 监控水质, 报表输出等。
- ◆ 清水输到车间可选配恒压供水, 全电脑控制, 压力传感器控制变频器, 恒压调节, 保证车间供水稳定, 同时起到节能降耗作用。
- ◆ The equipment operates using a fully automated siemens control system, no need for personnel to be on duty.
- ◆ The water treatment capacity is large, and the operating cost is low, which is one-third of the dosage of conventional water treatment equipment. The equipment is stable and the failure rate is low.
- ◆ Fully automatic acid-base regulation, strictly control the water quality.
- ◆ Fully automatic water level balance control, high sensitivity, less prone to mis-operation. Automatically adjust the water treatment rhythm based on the production water consumption.
- ◆ The equipment directly connected to the filter press, don't need to manual control the filter press. The residue is cake shaped solid waste, which is convenient for treatment.
- ◆ Automatic aeration system, glass powder does not settle at the bottom of wastewater pool, and there is no need to clean the wastewater pool frequently.
- ◆ The fully automatic self-cleaning system prevents slag accumulation in the tank.
- ◆ Intelligent cloud system monitoring system, online mobile app monitoring device status, remote parameter modification and monitoring water quality, report output, etc.
- ◆ Clear water can be supplied to the workshop with constant pressure water supply system, fully computer controlled, pressure sensor controlled frequency changer, constant pressure regulation, ensuring stable water supply in the workshop and playing a role in energy conservation and consumption reduction.

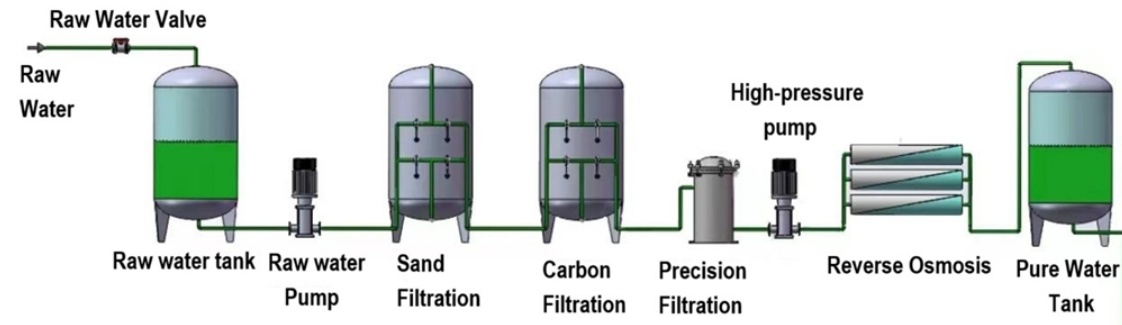


## 纯水设备处理工艺

### Pure Water Equipment Technological Process

纯水设备主要采用的是反渗透膜技术。它的工作原理是对水施加一定的压力，使水分子和离子态的矿物质元素通过反渗透膜，而溶解在水中的绝大部分无机盐(包括重金属)、有机物以及细菌、病毒等无法透过反渗透膜，从而使渗透过的纯净水和无法渗透过的浓缩水严格的分开。反渗透膜上的孔径只有0.0001微米，而病毒的直径一般有0.02-0.4微米，普通细菌的直径有0.4-1微米。纯水设备在玻璃行业的应用：磨边清洗机，中空线，镀膜清洗，对玻璃表面洁净要求高的场所，以及高端LOWE玻璃的清洗。经过纯水清洗的玻璃，表面污垢，水印，脱模等问题均得到有效解决。

Pure water equipment, which is mainly used in reverse osmosis membrane technology. The working principle is to exert a certain pressure to water, so that water molecules and ionic mineral elements can pass through the reverse osmosis membrane, but most of the inorganic salts (including heavy metals), organic matter, bacteria and viruses can't pass through the RO membrane. So that the purified water and the concentrated water separated strictly. The pore size on the reverse osmosis membrane is only 0.0001 microns. The diameter of the virus is 0.02-0.4 microns, the common bacteria is 0.4-1 microns. Pure water equipment's application in the glass industry: glass cleaning machine, insulating glass production line, glass coating cleaning, high requirements for glass surface cleanliness and high-end low-E glass cleaning. The problems of dirt, watermarking and film removal on the glass surface can be solved effectively after pure water cleaning. eaction tank integrates water pumping, dosing, reaction and drain, The treated clean water is flow into the clean water pool and recycling for the glass edging, which can greatly reduce the blockage and damage of the water outlet nozzle of the glass edging machine, prolong the service life of the machine, and improve the grinding efficiency. The glass powder is discharged into the sludge pool, and then pumped to the filter press to press it into solid glass cake, which can be treated directly to avoid environmental pollution.

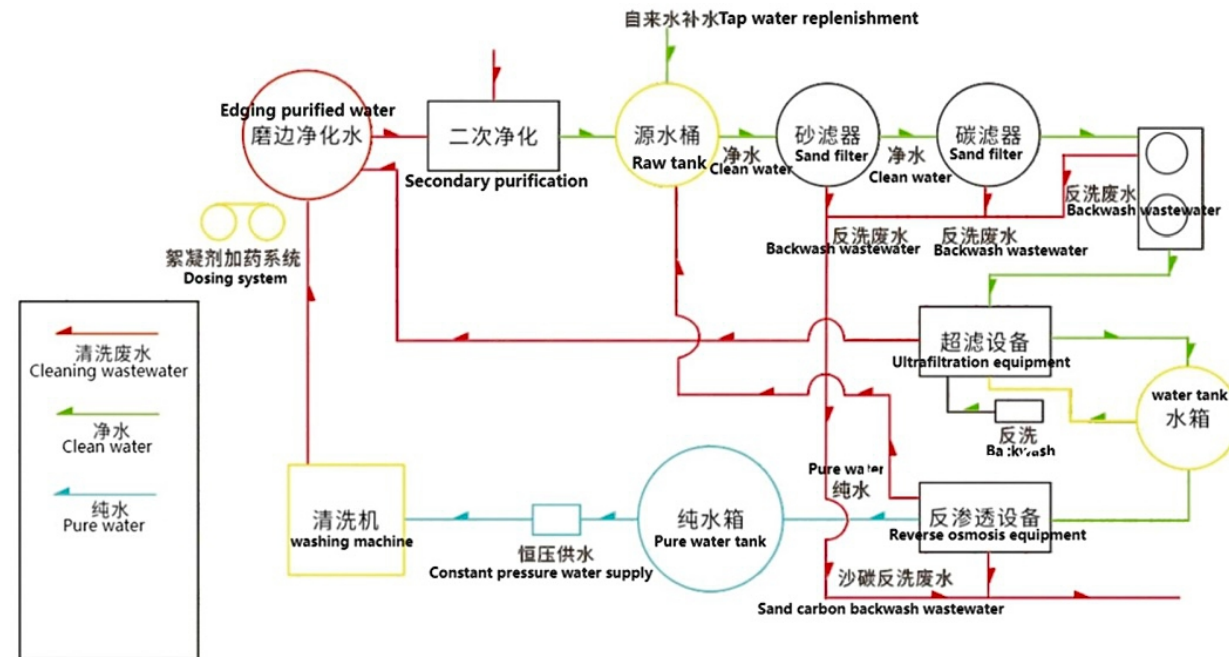


## 中水回用设备介绍

### Introduction of Reclaimed Water Equipment

为解决清洗玻璃用水量大导致的高成本，多余污水外排环保风险大的问题，我司研发出一套完整可靠的中水回用系统，工艺流程如下：

In order to solve the high cost caused by the large amount of water used for glass washing and the high environmental risk of the discharge of excess wastewater, our company has developed a complete and reliable reclaimed water equipment. The process flow is as follows:





咸宁南玻180T/H Xianning CSG 180T/H



江苏君弘200T/H Jiangsu junhong 200T/H



张家港信义80T/H Zhang jiagang Xinyi 80T/H



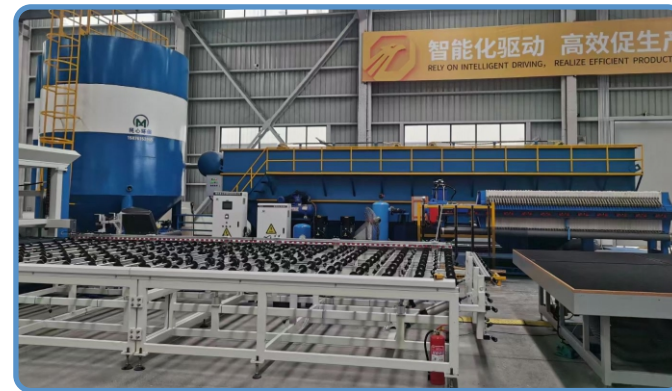
江西博信180T/H Jiangxi boxin 180T/H



那库家具225T/H Naku furniture 225T/H



皓晶集团750T/H Haojing glass 750T/H



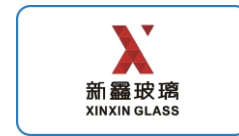
成都博奥腾120T/H Chengdu Bo Aoteng 120T/H



澳大利亚120T/H Australia 120T/H



部分客户  
Some Customers



部分客户  
Some Customers