



保障水安全
发展膜产业

Advancing Membranes
Securing Water Safety



杭州水处理技术研究开发中心有限公司

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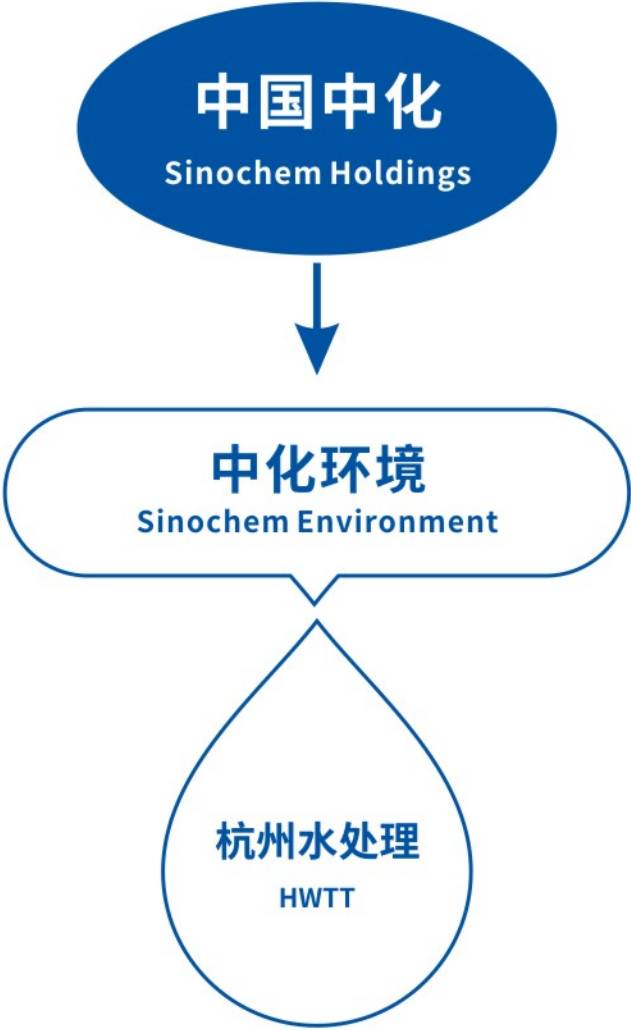
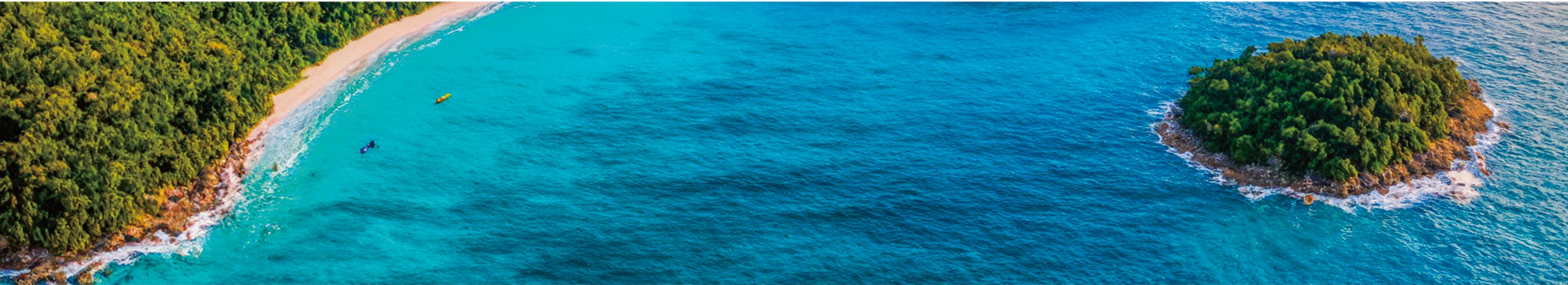
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公司介绍

Company Introduction

杭州水处理技术研究开发中心有限公司（简称杭州水处理，英文简称HWTT）起源于1967年海水淡化会战，正式组建于1984年，是国家液体分离膜领域的开拓者，是集专业膜法水处理研究开发、设计咨询、产品生产、装备制造、系统集成、工程总包、维护运行、技术服务等于一体的全方案解决服务商。目前已在海水淡化、工业水处理及其他常规业务、新能源及新兴业务、高品质饮用水等领域建造完成了一批国家及行业精品示范工程。

公司始终坚持以客户需求为导向，深入了解客户的痛点和期望，通过提供定制化的解决方案、优质的产品和高效的服务，持续提升客户体验，实现客户利益的最大化。

公司旗下拥有：蓝星（杭州）膜工业有限公司、杭州（火炬）西斗门膜工业有限公司、北京分公司。

Hangzhou Water Treatment Technology Development Center Co., Ltd. (HWTT) originated from the 1967 National Seawater Desalination Campaign and was established in 1984, It is a national pioneer in the field of liquid separation membrane technology. As a comprehensive solution provider, it integrates professional research and development of membrane-based water treatment, design consultation, product manufacturing, equipment manufacturing, system integration, engineering contracting, maintenance and operation, and technical services. The company has successfully completed a series of national and industry-leading demonstration projects in seawater desalination, industrial water treatment, other conventional businesses, new energy and emerging businesses, and high-quality drinking water.

HWTT consistently prioritizes customer needs by deeply understanding their pain points and expectations. Through tailored solutions, superior products, and efficient services, we continuously elevate the customer experience and strive to maximize customer value.

HWTT has subsidiaries including Bluestar (Hangzhou) Membrane Industries Co., Ltd., Hangzhou (Torch) Xidoumen Membrane Industries co. Ltd., and a Beijing branch.

发展历程

Development History



业务版图

Business Map

在中国31个省、自治区和直辖市均有提供膜法综合解决方案服务，具有自主知识产权的核心关键技术、膜产品、装备逐步实现国产化替代。

为“一带一路”沿线几十个国家和地区提供膜法综合解决方案，解决民生、工业用水难题，助力当地经济发展。

HWTT delivers comprehensive membrane-based solutions throughout China, with our proprietary technologies and membrane products increasingly dominating the market.

We are committed to providing comprehensive membrane solutions to dozens of member countries and regions under the BRI, in hope to improve the local livelihood, alleviate industrial water shortage and boost local economic development.



企业文化

Corporate Culture



企业使命
Corporate Mission

发展膜产业 保障水安全

Advancing Membranes, Securing Water Safety



企业愿景
Corporate Vision

科技领先的全球膜产业领跑者

To be a globally leading pioneer in the membrane industry with cutting-edge technology

新时代中国中化
“精气神”

艰苦奋斗、开拓创新的精神状态
勇于担当、甘于奉献的价值取向
求真务实、真抓实干的工作作风

“6505”战略

“6505” Strategy

6 年 **50** 亿收入 **5** 亿净利润

6年时间，到2030年，实现50亿收入，5亿净利润。

Within 6 years, by 2030, we have achieved a revenue of 5 billion yuan and a net profit of 500 million yuan.

以膜技术为核心驱动，围绕液体分离膜技术及产品的研究开发，聚焦海水淡化、工业水及其他常规业务、新能源及新兴业务、高品质饮用水四大领域，为客户提供领先的膜法综合解决方案。

依托中国中化的强大支撑，通过不懈努力，持续扩大行业影响力和话语权，引领产业链上下游企业共同发展，逐步承担起中国膜产业链链长的责任，推动中国膜产业高质量发展！

Driven by core membrane technology, we focus on the research and development of liquid separation membrane technologies and products. Our efforts are concentrated in four key areas: seawater desalination, industrial water and other conventional operations, new energy and emerging sectors, and high-quality drinking water. We provide clients with leading membrane-based integrated solutions.

Leveraging the robust support from Sinochem, we continuously strive to expand our influence and leadership in the industry. We aim to lead in the collaborative development of upstream and downstream enterprises in the membrane industry, gradually taking on the role of a key driver in China's membrane industry value chain, and advancing high-quality development in China's membrane sector!



海水淡化业务

Seawater desalination business

工业水及其他常规业务

Industrial wastewater and other routine businesses

新能源及新兴业务

New energy and emerging businesses

高品质饮用水业务

High quality drinking water businesses

膜法水处理全流程解决方案

Membrane Water Treatment Full Process Solution

以膜技术为核心打造“技术+产品+应用”模式，为客户提供优质产品和综合解决方案，包括工程项目的咨询、设计、成套、安装、调试、总承包服务以及专业的水处理运维、故障诊断、膜更换、膜清洗等售后服务。

Centered around membrane technology, we have established a "technology + product + application" model to provide customers with high-quality products and comprehensive solutions, including consulting, design, packaging, installation, commissioning, and turnkey services for engineering projects, as well as professional water treatment operation and maintenance services, professional fault diagnosis, membrane replacement, membrane cleaning, and other specialized after-sales services for water treatment.



服务+运维

Service+Operation and Maintenance



设计咨询

Design Consultation

提供制作项目建议书、项目可行性研究报告、项目初步设计等服务。

Provide comprehensive operation and maintenance management services as well as facility maintenance services.



贸易服务

Trade & Service

提供涵盖水处理系统运行所需的专业耗材、专用化学品及定制化备件的一站式集成供应。

Provide one-stop integrated supply covering professional consumables, special chemicals and customized accessories required for the operation of the water treatment system.



运维服务

Operation and Maintenance Service

提供水处理项目全方位的运营管理与装置维护服务、做一站管家式运维服务。

Provide comprehensive operation management and equipment maintenance services for water treatment projects, offering a one-stop, butler-style operation and maintenance service.

装备支撑

Equipment Support



工程装备能力
Engineering equipment capability



供应链能力
Supply chain capability



执行交付能力
Execution and delivery capability



吨水能耗低于
3kwh

Energy consumption per ton of water is less than 3 kWh

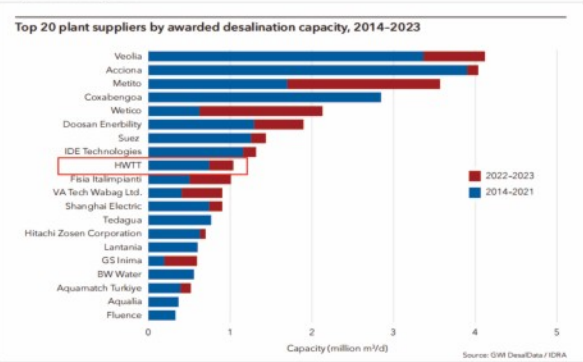
整体系统交付周期缩短至
6个月

The overall system delivery cycle has been shortened to 6 months

25,000吨/日	三十万吨级	2023年阿尔及利亚
12,500吨/日	十万吨级	2014年舟山六横 2017年岱山渔山岛
10,000吨/日	五万吨级	2010年河北曹妃甸
5,000吨/日	万吨级	2003年山东荣成
1,000吨/日	千吨级	2001年舟山嵊泗
500吨/日	百吨级	1997年舟山嵊山
单机规模	项目规模	

海水淡化业务 Seawater Desalination Business

2014-2023全球TOP10海水淡化与水再利用项目开发商
One of 2014-2023 Top 10 Global Seawater Desalination and Water Recycling Project Developers



• 数据来源于GWI研究 Data from GWI Study

拥有自主知识产权的海水淡化核心关键技术，在大型工程设计、装备制造、反渗透膜材料、系统节能降耗等方面均取得了重大创新突破，关键技术及装备实现国产化，整体技术已跃居世界领先水平，膜法海水淡化市场占有率居国内第一。

With proprietary core technologies in seawater desalination, we have achieved significant breakthroughs in large-scale

engineering design, equipment manufacturing, reverse osmosis membrane materials, and system energy efficiency. Key technologies and equipment have been localized, propelling our overall technology to the forefront of global advancements. We hold the leading market share in membrane-based seawater desalination within China.

核心技术 Core Technology

超大型海水淡化反渗透工程为淡水匮乏地区提供了高效、稳定的淡水供应，并在“一带一路”沿线国家和地区取得了广泛应用。

The super large seawater desalination reverse osmosis project has provided efficient and stable fresh water supply for areas lacking fresh water, and has been widely used in countries and regions along the "the Belt and Road".

新能源离网型海水淡化装置针对日淡水需求量在千吨级规模的海岛和临建项目场景，利用自主研发的自控系统，可实时监测和调节发电设备的运行状态，并具备智能化与远程控制功能。

New Energy Off-grid Seawater Desalination Unit: This system targets islands and temporary construction sites with freshwater demands at the thousand-ton scale. Equipped with a proprietary automatic control system, it enables real-time monitoring and adjustment of power generation equipment, along with intelligent and remote control capabilities.

模块化海水淡化系统1.0可全面覆盖日产5万吨及以下的水淡化项目，应对不同地区海水水质的差异，可降低海水淡化项目整体建设成本20%，减少建设周期30%。

The Modular Seawater Desalination System 1.0 is designed to handle desalination projects with a daily capacity of up to 50,000 tons. It adapts to variations in seawater quality across different regions, reducing overall construction costs by 20% and shortening the construction timeline by 30%.



阿尔及利亚30万吨/日海水淡化项目

300,000 tons/day seawater desalination project in Algeria

该项目是阿尔及利亚保障国家水资源安全的重点项目之一，也是目前由中国企业独立设计和提供核心工艺包的最大的国际海水淡化项目。

This project is one of the key projects in Algeria to ensure national water resource security, This is currently the largest international seawater desalination project independently designed and provided with core process packages by Chinese enterprises.

浙江25万吨/日海水淡化项目

250,000 tons/day seawater desalination project in Zhejiang Province

该项目是国家重点研发计划项目，是目前国内石化行业日处理规模最大的膜法海水淡化工程。系统中的V型滤池、卧式机械过滤器、海水淡化单机规模都创造了国内之最。项目获2021全球水奖（Global Water Awards）中“年度全球海水淡化项目”的提名。

This project is a national key research and development plan project and currently the largest membrane seawater desalination project in the domestic petrochemical industry in terms of daily processing capacity. The V-shaped filter, horizontal mechanical filter, and seawater desalination unit scale in the system have all created the largest in China. The project was nominated for the "Annual Global Desalination Project" at the 2021 Global Water Awards.



河北5万吨/日海水淡化项目

50,000 tons/day seawater desalination project in Hebei Province

该项目被列为国家发展和改革委员会海水淡化重点示范项目，“十二五”规划示范项目。

The project has been designated as a key desalination demonstration project by the National Development and Reform Commission and as a demonstration project under the 12th Five-Year Plan.

浙江10万吨/日海水淡化项目

100,000 tons/day seawater desalination project in Zhejiang Province

该项目是国家科技支撑计划重点项目，有利于解决海岛饮用水困难，促进海岛经济发展和社会和谐，开发国产自主产权的海水淡化技术。

This project is a key project of the National Science and Technology Support Program, which is conducive to solving the difficulty of drinking water on islands, promoting economic development and social harmony on islands, and developing domestically produced and independently owned seawater desalination technology.





工业水及其他常规业务

Industrial Water and Other Routine Businesses

以膜产品和膜工艺为核心，集成工艺设计和产品装备制造，针对不同行业前、中、后端工业水的处理痛点难点问题，在国内率先打通了废水零排放工艺和废水膜法分盐资源化工艺，废水资源化工艺盐回用率90%以上，水回用率95%以上，处于国内领先水平，年处理废水总量和工业用水总量均超过百亿吨。

Focusing on membrane products and processes, we integrate process design and equipment manufacturing to address the critical issues in industrial water treatment at various stages across different industries. Pioneering in China, we have developed zero-discharge processes and membrane-based desalination techniques for wastewater. Our processes achieve a salt recovery rate of over 90% and a water reuse rate of over 95%, leading the industry domestically. We handle over 10 billion tons of wastewater and industrial water annually.

核心技术 Core Technology

工业给水资源开发：拥有苦咸水淡化、中水回用、除盐水及超纯水制备等技术和设备，实现新水开发、中水回用和高品质水制备。

Industrial Water Supply Resource Development: We offer technologies and equipment for brackish water desalination, reclaimed water reuse, deionization, and ultrapure water preparation. This enables the development of new water sources, reclamation of intermediate water, and production of high-quality water.

工业废水达标处理：具有自主研发的高效生物处理、新型生物脱氮、污泥减量、电絮凝浮选、特种过滤器、高级氧化、诱导结晶造粒等技术和设备。

Industrial Wastewater Treatment: We have independently developed technologies and equipment for efficient biological treatment, novel biological denitrification, sludge reduction, electrocoagulation flotation, special filtration, advanced oxidation, and induced crystallization granulation to ensure compliance with discharge standards.

物料分离和资源回收：建立国内石化、氯碱和印染等行业首套高盐废水分盐资源化零排放项目，高盐废水累计处理量超5亿吨/年，回收盐量超150万吨/年。

Material Separation and Resource Recovery: We have established China's first high-salinity wastewater zero-discharge projects in the petrochemical, chlor-alkali, and textile dyeing industries. These projects treat over 500 million tons of high-salinity wastewater annually, recovering more than 1.5 million tons of salt per year.



山东某石化废水分盐资源化示范项目

Petrochemical Wastewater Salt Separation Resource Utilization Demonstration Project in Shandong Province

项目简介：石化行业国内首套高盐废水分盐资源化综合利用装置，处理厂区内中水回用系统外排膜浓水、高盐高污染生产废水及循环系统排污水，通过组合膜分盐浓缩+分质结晶工艺，实现废水零排放，淡水全部回用，副产工业纯氯化钠和硫酸钠。

项目规模：4,800吨/日

Project Introduction: The first domestic comprehensive utilization device for high salt wastewater separation and resource utilization in the petrochemical industry. It treats the membrane concentrated water discharged from the water reuse system in the plant area, high salt and high pollution production wastewater, and wastewater discharged from the circulation system. Through a combination of membrane separation and concentration+quality crystallization process, it achieves zero discharge of wastewater, full reuse of fresh water, and by-products of industrial pure sodium chloride and sodium sulfate.

Project Scale: 4,800 tons/day

广东某印染工业园区废水资源化及盐高值转化示范项目

Demonstration project for wastewater resource utilization and high-value conversion of salt in a printing and dyeing industrial park in Guangdong Province

项目简介：国内最大的印染园区废水资源化项目，也是国内首个印染废水零排放项目。园区印染废水通过多膜集成技术高效分离硫酸钠和氯化钠，并通过双极膜技术实现盐高值转化，回收的淡水以及高品质元明粉（I类优等品）、酸和碱，均回用于园区企业印染生产，实现资源高值化循环利用。

项目规模：120,000吨/日

Project Introduction: It is the largest printing and dyeing park wastewater resource utilization project in China, and also the first zero discharge printing and dyeing wastewater project in China. The printing and dyeing wastewater in the park is efficiently separated from sodium sulfate and sodium chloride through multi membrane integration technology, and the high-value conversion of salt is achieved through bipolar membrane technology. The recovered fresh water, high-quality sodium sulfate powder (Class I superior product), acid, and alkali are all reused in the printing and dyeing production of park enterprises, achieving high-value recycling of resources.

Project Scale: 120,000 tons/day



江西某化工废水达排处理项目

Chemical Wastewater Discharge Treatment Project in Jiangxi Province

项目简介：组合多种工艺技术，开发了适合有机硅废水处理的集合工艺技术。

项目规模：24,000吨/日

Project Introduction: By combining multiple process technologies, an integrated process suitable for treating organic silicon wastewater has been developed.

Project Scale: 24,000 tons/day



辽宁某钢铁污水回用处理项目

A Steel Wastewater Reuse Treatment Project in Liaoning Province

项目简介：产水供给热电锅炉脱盐水、循环水补水、冷轧冲洗等使用。

项目规模：60,000吨/日

Project Introduction: The produced water is supplied for use in the desalination of thermal power boilers, make-up water for circulating water systems, and cold rolling rinsing processes.

Project Scale: 60,000 tons/day



北京某开发区高品质再生水处理项目

A high-quality reclaimed water treatment project in a development zone in Beijing Province

项目简介：国内首例工业园区大规模高品质再生水项目，水源为工业园区污水及周边市政污水排水，再生水用于满足区内企业的生产用水。

项目规模：180,000吨/日

Project Introduction: It is China's first large-scale high-quality reclaimed water project in an industrial park, utilizing wastewater from the park and nearby municipal sources. It provided reclaimed water to meet the production needs of enterprises within the area.

Project Scale: 180,000 tons/day



宁夏某煤化工废水资源化及零排放处理项目

A wastewater resource utilization and zero discharge treatment project for a coal chemical plant in Ningxia Province

项目简介：煤制烯烃及煤焦化废水资源化及零排放，实现污水的分质分级资源化处理及零排放。

处理规模：18,000吨/日

Project Introduction: The project focused on the resource utilization and zero discharge of wastewater from coal-to-olefins and coal coking processes. It achieved comprehensive wastewater management and zero discharge by implementing classification and grading strategies.

Project Scale: 18,000 tons/day



新能源及新兴业务

New Energy & Emerging Business

已打通提锂综合解决方案和电池回收综合解决方案等新能源动力电池领域核心环节，并逐步延伸至其他产业链环节，形成极具竞争力的全产业链技术支持能力和客户响应机制，迅速有效解决该领域膜法相关痛点难点问题。

HWTT has established integrated solutions for critical processes in the new energy battery sector, including lithium extraction and battery recycling. By extending capabilities across the industrial chain, the company has developed a competitive full-chain technical support system and client-responsive mechanisms to efficiently resolve membrane-related challenges.

核心技术 Core Technology

磷酸铁洗水处理工艺：该工艺将FPS耐酸滤器、耐酸膜、脱酸电渗析等多项核心科技成果与先进工艺装备进行整合，具有运行成本低、回收率高、可连续在酸性条件下运行等优势，为电池回收行业带来全新的技术解决方案，显著提升资源回收效率和环保水平。

Phosphate Iron Washing Water Treatment Process: This process integrates multiple core scientific and technological achievements and advanced process equipment, including FPS acid-resistant filters, acid-resistant membranes, and acid-removal electrodialysis. It boasts low operating costs, high recovery rates, and the ability to continuously operate under acidic conditions. It brings a brand-new technological solution to the battery recycling industry, significantly enhancing resource recovery efficiency and environmental protection standards.

盐湖提锂技术：该技术以自主研发的YHN295盐湖提锂纳滤膜为核心材料，成功应用至高镁锂比盐湖卤水镁锂分离、低镁锂比解吸液与富锂料液深度除杂精制等多种场景。在同等处理规模条件下，可减少50%的分离级数，工艺流程缩短40%以上，设备占地面积减少约35%，从而大幅缩短工艺流程，降低工程投资与运营成本。

Salt Lake Lithium Extraction Technology : This technology utilizes HWTT's self-developed YHN295 nanofiltration membrane for lithium extraction from salt lakes as its core material. It has been successfully applied in various scenarios, including magnesium-lithium separation from salt lake brine with high Mg/Li ratios, and deep impurity removal and refinement of desorption solutions and lithium-rich solutions with low Mg/Li ratios. Compared to traditional methods of the same processing scale, this technology can reduce the number of separation stages by 50%, shorten the process flow by over 40%, and decrease the equipment footprint by approximately 35%, thereby significantly streamlining the process and lowering engineering.

青海某盐湖提锂项目

Lithium Extraction Project in a Salt Lake in Qinghai Province

项目简介：自主研发的YHN295盐湖提锂纳滤膜，在高镁锂比盐湖卤水镁锂分离、低镁锂比解吸液与富锂料液深度除杂精制等多种实际应用场景下展现出优异的镁锂分离性能、稳定性和广泛适用性，各项指标明显优于现场的国内外同类产品。

项目规模：10,000吨/年

Project Introduction: The self-developed YHN295 lithium extraction nanofiltration membrane for salt lakes demonstrates exceptional magnesium-lithium separation performance, stability, and versatility in various practical applications, such as magnesium-lithium separation in salt lake brines with high magnesium-to-lithium ratios, deep purification of desorption solutions and lithium-rich slurries with low magnesium-to-lithium ratios, and other scenarios. Its indicators significantly outperform those of similar domestic and foreign products currently on the market.

Project Scale: 10,000 tons/year



提锂综合解决方案

Comprehensive Lithium Extraction Solution

湖北磷酸铁资源化零排放项目

Lithium iron phosphate resource zero discharge project in Hubei Province

项目简介：自主研发的低成本资源循环利用综合解决方案，采用FPS耐酸滤器，高效去除悬浮物且抗污堵性能优越，实现废水的低成本资源循环利用和零排放，相关膜产品、装备及集成工艺均为杭州水处理首创。

项目规模：2,250,000万吨/年

Project Introduction: The self-developed integrated solution for low-cost resource recycling utilizes FPS acid-resistant filters to efficiently remove suspended solids with superior anti-fouling performance, enabling low-cost resource recycling and zero discharge of wastewater. The related membrane products, equipment, and integrated processes are all pioneering innovations by Hangzhou Water Treatment.

Project Scale: 2.25 million tons/year



电池回收综合解决方案

Comprehensive Battery Recycling Solution



高品质饮用水业务

High-Quality Drinking Water Business

依托新型膜法水处理关键技术创新研发出农饮水特种膜、膜组器以及新质零碳膜净水工艺，服务农村基础民生。未来，该技术成果将从全面提升饮用水品质出发，拓展应用至楼宇、苦咸水地区、应急等更多场景，保障居民健康用水需求。

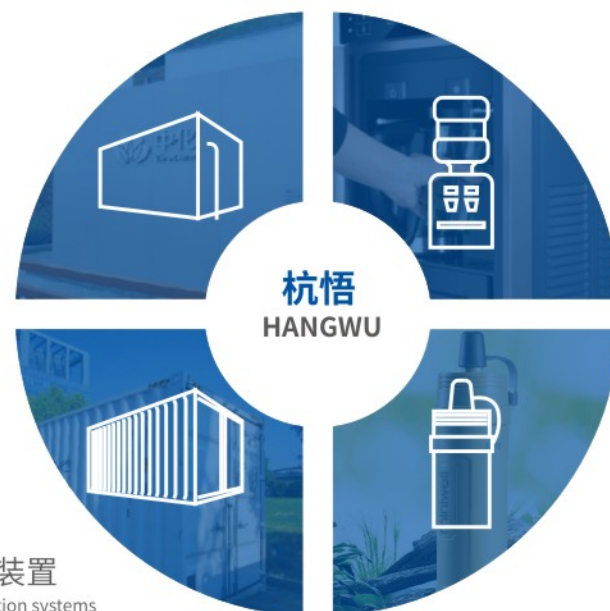
HWTT has innovatively developed special agricultural drinking water membranes, membrane assemblers, and new-quality zero carbon microfiltration membrane water purification processes based on key technologies of new membrane water treatment, serving the basic livelihood of rural areas. In the future, this technological achievement will significantly enhance drinking water quality and broaden its applications, including in buildings, brackish water regions, and emergency situations, to ensure local residents have access to safe water.

悟农——
农饮水装置
Wunong : Rural purification systems

悟源——
家用/商用饮水装置
Wuyuan : Household/commercial units

悟泉——
苦咸水/海水淡化饮水装置
Wuquan : Brackish/seawater desalination systems

悟行——
应急饮水装置
Wuxing : Military units



浙江某农村饮用水净化项目

Rural Drinking Water Purification Project in Zhejiang Province

项目简介：该项目通过新质零碳膜技术实现水源除浊。入选《2024年度浙江省水利先进适用技术推广指导目录》、入选浙江省水利厅推进单村水站改造提升工作第六批典型案例。

项目规模：6吨/小时

Project Introduction: The project utilizes new-quality zero-carbon technology to remove turbidity from the water source. The system has been included in the "2024 Zhejiang Provincial Water Conservancy Advanced and Applicable Technology Promotion Guidance Catalog" and selected as a typical case in the sixth batch of facilities to promote the renovation and upgrading of single-village water stations by the Zhejiang Provincial Water Resources Department.

Project Scale: 6tons/h



为国内多家知名食品饮料企业提供近百套饮用纯净水生产装置，总产水量超10万吨/日。

Provided nearly 100 sets of purified water production devices for multiple domestic famous beverage & food companies. The total water yield reaches 100,000 tons/day.

杭州水处理系列膜产品
HWT's Membrane Products



核心产品

Core Products

拥有全套自主开发的膜产品配方、生产工艺和设备选型技术等，相关产品技术总体居国内先进水平，并具备较强的定制和开发能力；建有占地150亩的现代化制造基地，具备70万吨/日的装置生产与成套设计能力，可制造反渗透、纳滤、超/微滤等膜法水处理系列装置，双极膜、均相膜等电渗析装置，酸盐分离器，能量回收装置和集装箱一体化水处理装置等。

HWT possesses a full set of self-developed membrane product formulas, production processes, equipment selection technologies, etc. The related product technologies are generally at the advanced level domestically, and the company has strong customization and development capabilities. It has established a modern manufacturing base covering an area of 150 acres, with a production and design capacity of 700,000 tons/day for complete sets of equipment. The company can manufacture a series of membrane water treatment devices such as reverse osmosis, nanofiltration, and ultrafiltration, as well as electrodialysis devices such as bipolar membranes and homogeneous membranes, acid-salt separators, energy recovery devices, and containerized integrated water treatment devices.



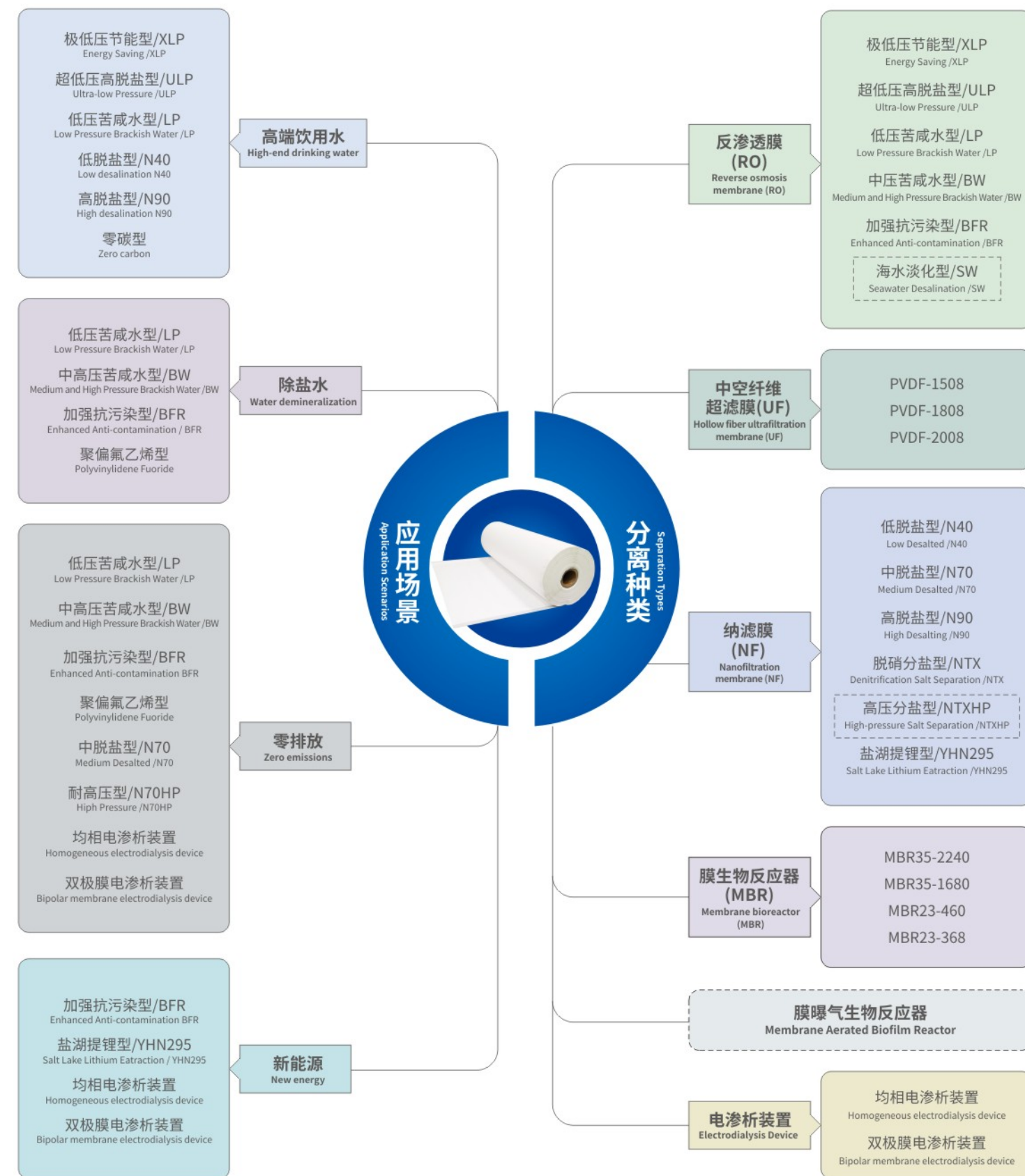
加强抗污染膜 (RO)
Reverse osmosis membrane (RO)



中空纤维超滤膜(UF)
Hollow fiber ultrafiltration membrane (UF)



MBR膜
MBR membrane





高从堦 院士
Academician Gao Congjie

研发实力

Core Products

技术团队 Technical Team

拥有一支以高从堦院士和2名中国中化高级专家领衔，一批国内行业知名专家为骨干的技术队伍。

是目前国内从事膜技术研究开发最早、技术力量最强的单位之一，是国家液体分离膜领域的开拓者。

目前拥有院士工作站、博士后工作站、水质分析室、重点实验室、专业的实验小组、膜研发团队、一体化装置研究室。

HWTT is home to an industry-leading technical team, comprising renowned experts across China and spearheaded by Academician Gao Congjie.

It is currently one of the earliest and most technically proficient units engaged in membrane technology research and development in China, and a pioneer in the field of liquid separation membranes in the country.

HWTT has academician workstations, postdoctoral workstations, water quality analysis laboratories, key laboratories, professional experimental groups, membrane research and development teams, and integrated device research laboratories.

荣誉成就 Honorary Achievements

- 国家科技进步一等奖2项
- 国家技术发明二等奖1项
- 国家科技进步三等奖1项
- 国家科技攻关重大成果奖3项
- 大禹水利科学技术奖特等奖1项
- 海洋行业设计金奖
- 浙江省科技进步一等奖
- 2 First Prize of National Science and Technology Progress Awards
- 1 Second Prize of National Science and Technology Invention Award
- 1 Third Prize of National Science and Technology Progress Award
- 3 Major Achievement Awards for National Science and Technology Key Projects
- 1 Special Award for Dayu Water Conservancy Science and Technology
- Gold Award for Design in the Marine Industry
- First Prize of Zhejiang Provincial Science and Technology Progress Award



作为我国膜法水处理技术创新“国家队”，承担完成国家“863”计划、“973”计划、科技支撑计划、重点研发计划及浙江省重大科技项目近百项，获国家和省部级科技奖项70余项。

As China's leading innovator in membrane water treatment technology, we've completed nearly 100 national projects, including the 863, 973, and key R&D programs, as well as major Zhejiang provincial projects, earning over 70 national and provincial science and technology awards.

资质 Qualifications

设计甲级资质
Class-A Design Qualification

- 环境工程（水污染防治工程）设计甲级
- 海洋行业（海水利用）工程设计甲级
- 化工石化医药行业设计甲级
- 建筑行业（建筑工程）设计甲级

- Class-A design qualification of environment (water pollution control) engineering
- Class-A design qualification of marine (seawater utilization) industry engineering
- Grade A Design for Chemical, Petrochemical, and Pharmaceutical Industries
- Class A Design in the Construction Industry (Construction Engineering)



质量体系认证
Quality System Certification

- ISO9001质量管理体系
- ISO14001环境管理体系
- ISO45001职业健康安全管理体系

- ISO 9001 quality management system
- ISO 14001 environmental management system
- ISO 45001 occupational health and safety management system



专利 Patents



拥有实用新型、发明、外观设计等专利186项，其中发明类专利136项。
Obtained 186 patents for utility models, invention, and design, including 136 patents for invention.

行业平台 Industry Platforms

- 国家液体分离膜工程技术研究中心
- 国家环境保护膜分离工程技术中心
- 国家净水设备技术动员中心
- 国家海水淡化产业基地（试点）
- 中国海水淡化与水再利用学会
- 中国膜工业协会海水及苦咸水淡化膜分会
- 全国膜技术信息站
- 浙江省膜学会
- 浙江省膜产业协会
- 浙江省海水淡化技术研究重点实验室
- National Engineering Research Center of Liquid Separation Membrane
- National Environmental Protection Engineering Technology Center for Membrane Separation
- National Technology Mobilization Center for Water Purification Equipment
- National Desalination Industry Base (Pilot)
- Chinese Society for Desalination and Water Reuse
- Seawater and Brackish Water Desalination Membrane Branch of China Membrane Industry Association
- National Membrane Technology Information Center
- Zhejiang Membrane Society
- Zhejiang Membrane Industry Association
- Key Laboratory of Seawater Desalination Technology Research of Zhejiang Province

国家和行业标准
National and Industry Standards



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社会责任

Social Responsibility



绿色低碳
Green and low-carbon



环保科普
Science popularization of environmental protection



公益行动
Charitable action

始终将社会责任融入技术研发与运营实践。我们以自主创新为核心，通过专利技术推动资源循环利用；以高标准引领行业，助力“企业领跑者”计划，以绿色低碳为纽带，开展环保科普与公益行动。未来，我们将继续践行“发展膜产业、保障水安全”的使命，为绿色全球贡献力量。

HWTT has always integrated social responsibility into its technology research and development as well as operational practices. With independent innovation as our core, we promote resource recycling through patented technologies; we lead the industry with high standards, supporting the "Enterprise Leader" program; we engage in science popularization of environmental protection and charitable activities to promote green and low-carbon transition. In the future, we will be committed to advancing membrane technology innovation, so as to ensure water security and contribute to building a more sustainable world.



海水淡化小课堂进校园
Seawater Desalination Mini-Classroom



助力民勤治沙
Assist in desert control and management in Minqin



义务献血活动
Voluntary blood donation activity



疫情期间，员工志愿参与园区核酸检测
During the pandemic, employees voluntarily participated in nucleic acid testing at the park



西湖环境保护公益活动
West lake environmental protection public welfare activity

业绩列表

Performance List



海水综合利用

Comprehensive Utilization of Seawater

目前总计处理量：3,000,000 m³/d

Current total processing capacity: 3,000,000 m³/d

国际海水淡化业务 International Seawater Desalination Business		
阿尔及利亚某海水淡化项目 A Seawater Desalination Project in Algeria		300,000 m³/d
印尼某海水淡化项目 A Seawater Desalination Project in Indonesia		37,500 m³/d
中东某钢厂海水淡化系统（一期） Seawater Desalination System of Steelworks in the Middle East (Phase I)		50,000 m³/d
菲律宾某燃煤机组工程海水淡化系统 Seawater Desalination System of Coal-fired Unit Engineering in Philippines		15,000 m³/d
东南亚某燃煤电厂海水淡化系统 Seawater Desalination System of Coal-fired Power Plant in the Southeast Asia		14,400 m³/d
南美洲某市政海水淡化系统 Municipal Seawater Desalination System in the South America		10,000 m³/d
印尼某原水预处理以及生活水加氯系统、海水淡化系统 Raw Water Pretreatment and Living Water Chlorine Dosing System, Seawater Desalination System in Indonesia		8,016m³/d 4,320m³/d
南亚某燃煤发电项目海水淡化系统 Seawater Desalination System of Coal-fired Power Generation Project in the South Asia		7,200 m³/d
远东某甲醇项目海水淡化系统 Seawater Desalination System of Methanol Project in the Far East		6,000 m³/d
印尼某超临界燃煤电站项目海水淡化系统 Seawater Desalination System of Supercritical Coal-fired Power Station Project in Indonesia		6,096 m³/d
印尼某燃煤电站海水淡化系统 Seawater Desalination System of Coal-fired Power Station in Indonesia		6,000 m³/d

国内海水淡化业务 Domestic Seawater Desalination Business		
浙江某电厂项目膜法海水淡化系统 Membrane Seawater Desalination System for a Power Plant Project in Zhejiang Province		30,000 m³/d
浙江某石油化工企业海水淡化项目 Seawater Desalination Project of a Petrochemical Enterprise in Zhejiang Province		250,000 m³/d
浙江某反渗透海水淡化项目 A RO Seawater Desalination Project in Zhejiang Province		100,000 m³/d
河北某海水淡化系统 A Seawater Desalination System in Hebei Province		50,000 m³/d
广东某纸业亚海水淡化项目 Sub-seawater Desalination Project of a Paper Company in Guangdong Province		100,000 m³/d
浙江某亚海水淡化（一期）抗旱应急工程 Phase I Sub-Seawater Desalination Drought Fighting Engineering in Zhejiang Province		30,000 m³/d
浙江某海水淡化系统 A Seawater Desalination System in Zhejiang Province		16,000 m³/d
浙江某海水淡化系统 A Seawater Desalination System in Zhejiang Province		15,000 m³/d
浙江某水产企业海水淡化项目 Seawater Desalination Project of an Aquatic Company in Zhejiang Province		12,000 m³/d
山东某海水淡化项目 A Seawater Desalination System in Shandong Province		10,000 m³/d
山东某反渗透海水淡化项目 A RO Seawater Desalination System in Shandong Province		20,000 m³/d
福建某热电厂二期超超临界燃煤海水淡化系统 Phase II Ultra-Supercritical Coal-fired Seawater Desalination System of a Thermal Power Plant in Fujian Province		18,000 m³/d
广东某热电厂新建工程海水淡化系统 Seawater Desalination System of Newly-built Engineering in A Thermal Power Plant in Guangdong Province		10,000 m³/d
浙江某电厂海水淡化项目 Seawater Desalination Project of a Power Plant in Zhejiang Province		24,000 m³/d
浙江某发电厂海水淡化系统 Seawater Desalination System of a Power Plant in Zhejiang Province		18,000 m³/d

一体化智能海水淡化装置 Integrative Intelligent Seawater Desalination Units

印尼某风能-太阳能互补海岛节能型海水淡化示范工程项目设备采购集装箱 Equipment Procurement Container for Energy-saving Seawater Desalination Demonstration Project of a Wind Solar Complementary Island in Indonesia	500 m³/d
广东某钻井平台海水淡化装置 Seawater Desalination Units of a Drilling Platform in Guangdong Province	250 m³/d
天津某钻井平台海水淡化装置 Seawater Desalination Units of a Drilling Platform in Tianjin	2×150 m³/d
天津某船用海水淡化装置 Marine Seawater Desalination Units in Tianjin	7×10 m³/d
浙江某岛用海水淡化装置 Island Seawater Desalination Units in Zhejiang Province	300 m³/d
浙江某岛用海水淡化装置 Island Seawater Desalination Units in Zhejiang Province	250 m³/d



工业水及其他常规业务

Industrial Water and Other Routine Businesses

废水资源化及零排放 Wastewater Resource Utilization and Zero Discharge	
内蒙古某新能源公司工业废水综合处理项目 Industrial Wastewater Comprehensive Treatment Project of a New Energy Company in Inner Mongolia	4,800 m³/d
河北某化工企业PVC离心母液处理系统 PVC Mother Liquid System of a Chemical Enterprise in Hebei Province	4,320 m³/d
山东某硫酸钠回收项目膜处理系统 Membrane Treatment System for A Sodium Sulfate Recovery Project in Shandong Province	7,700 m³/d
宁夏某能源焦化废水零排放 Zero Discharge of Coking Wastewater from an Energy Company in Ningxia	10,800 m³/d
宁夏某能源煤制烯烃高盐废水零排放 Zero Discharge of High Salt Wastewater from Coal to Olefin Production in Ningxia	7,200 m³/d
内蒙古某能源煤基新材料零排放 Zero Emissions of Coal-based New Materials for an Energy Plant in Inner Mongolia	14,400 m³/d
西北某煤化工废水资源化项目 Wastewater Recycling Zero Discharge Project of a Coal Chemical Plant in Northwest China	10,000 m³/d
山东某热电厂化水废水综合处理项目 Chemical Wastewater Comprehensive Treatment Project of a Thermal Power Plant in Shandong Province	6,500 m³/d
内蒙古某煤化工企业20万吨/年己内酰胺污水零排放项目 200000 Tons/Year Caprolactam Wastewater Zero Discharge Project of a Coal Chemical Enterprise in Inner Mongolia	6,000 m³/d

污水达标排放 Compliant Wastewater Discharge	
宁夏某污水回用工程 A Sewage Reuse Project in Ningxia	60,000 m³/d
河北某污水提标改造项目 A Sewage Upgrading and Reconstruction Project in Hebei Province	315,000 m³/d
内蒙古某煤化工生化出水废水处理及回用系统 Biochemical Wastewater Treatment and Reuse System of a Coal Chemical Plant in Inner Mongolia	12,000 m³/d
广东某电镀城废水处理系统 Wastewater Treatment System of an Electroplating Town in Guangdong Province	10,000 m³/d
广东某印染园区废水回用项目 Wastewater Reuse Project of a Printing and Dyeing Park in Guangdong Province	60,000 m³/d
陕西某污水提标改造项目 A Sewage Upgrading and Reconstruction Project in Shaanxi Province	50,000 m³/d
河南某化纤企业纤维废水回用系统 Fiber Wastewater Reuse System of a Chemical Fiber Plant in Henan Province	14,400 m³/d
江苏某造纸废水水系统 A Paper-making Wastewater System in Jiangsu Province	10,000 m³/d

浙江某服装企业印染废水系统 Printing and Dyeing Wastewater System of a Clothing Enterprise in Zhejiang Province	12,000 m³/d
江苏某水厂二期工程—阶段设备集成工程 Equipment Integration Project for the Stage I of Phase II of a Water Plant in Jiangsu Province	废水水量：50,000 m³/d Wastewater volume 污水水量：10,000 m³/d Sewage volume
山东某污水处理EPC工程总承包项目 A General Contract Project of Sewage Treatment EPC Engineering in Shandong Province	20,000 m³/d
内蒙古某矿区生态环境治理及入河排口整治项目膜处理系统 Membrane Treatment System of Ecological Environmental Management and River Mouth Regulation Project in Inner Mongolia	10,000 m³/d
西北某纤维公司水处理系统 Water Treatment System of a Fiber Company in the Northwest China	300 m³/h,220 m³/h,200 m³/h
河南某化纤公司水处理系统 Water Treatment System of a Chemical Fiber Company in Henan Province	600 m³/h
湖北某石化企业水处理系统 Water Treatment System of a Petrochemical Company in Hubei Province	500 m³/h

水资源开发 Water Resource Development

北京某开发区(BDA)高品质再生水处理工程 High Quality Recycled Water Treatment Project in a Certain Development Zone (BDA) in Beijing	180,000 m³/d
浙江某开发区再生水厂工程 The Project of a Reclaimed Water Plant in a Certain Development Zone in Zhejiang Province	100,000 m³/d
山东某造纸园区废水处理及回用项目 Wastewater Treatment and Reuse Project of a Paper-making Park in Shandong Province	70,000 m³/d
浙江某市政中水回用系统 A Municipal Reclaimed Water Reuse System in Zhejiang Province	12,000 m³/d
浙江某炼化除盐水项目 Refining and Chemical Desalination Water Project in Zhejiang Province	2,420 m³/h
陕西某水务反渗透装置 A Water Reverse Osmosis Device in Shaanxi Province	600 m³/h
宁夏某煤矿矿井水资源化工程 A Coal Mine Water Resource Utilization Project in Ningxia	520 m³/h
山东某化工电站脱盐水处理工程 Desalination Water Treatment Project of a Chemical Power Station in Shandong Province	1,840 m³/h
浙江某热电厂工程补给水项目 Engineering Feed Water Project of a Thermal Power Plant in Zhejiang Province	2,600 m³/h, 800m³/h
江苏某能源公司中水回用EPC项目 Reclaimed Water Reuse EPC Project of an Energy Company in Jiangsu Province	1,800 m³/h
远东某甲醇脱盐水站项目 Methanol Desalted Water Station Project in the Far East	570 m³/h
西北某纤维有限公司除盐水系统 Demineralized Water System of a Fiber Company Limited in the Northwest China	1,600 m³/h
浙江某石化PTA除盐水系统 PTA Demineralized Water System of a Petrochemical Company in Zhejiang Province	1,500 m³/h
福建某热电厂化学反渗透改造工程采购、施工总承包（PC）项目 Engineering Procurement Construction (PC) Project for Chemical RO Transformation of a Thermal Power Plant in Fujian Province	1,030 m³/h
山东某化学公司除盐水系统 Water Demineralization System of a Chemical Company in Shandong Province	600 m³/h
山东某热电厂化学水处理系统 Chemical Water Treatment System of a Thermal Power Plant in Shandong Province	400 m³/h, 200 m³/h
黑龙江某化工企业除盐水项目 Water Demineralization Project of a Chemical Enterprise in Heilongjiang Province	600 m³/h
河北某化工企业除盐水项目 Water Demineralization Project of a Chemical Enterprise in Hebei Province	600 m³/h

物料分离 Material Separation

山东某集团大豆废水低聚糖回收项目 A Certain Group's Soybean Wastewater Oligosaccharides Recovery Project in Shandong Province	1,000 m³/d
山东某集团海带废水提取甘露醇项目 A Certain Group's Kelp Wastewater Extraction Mannitol Project in Shandong Province	600 m³/d
福建某苯丙氨酸解析液回收氨基酸项目 A Phenylalanine Analysis Solution Recovery Amino Acid Project in Fujian Province	150 m³/d
江苏某苯丙氨酸解析液回收氨基酸项目 A Phenylalanine Analysis Solution Recovery Amino Acid Project in Jiangsu Province	1,350 m³/d

 高品质饮用水业务
High-Quality Drinking Water Business

浙江某饮料公司水处理系统 Water Treatment System of a Beverage Company in Zhejiang Province	114 m³/h
陕西某饮料公司水处理系统 Water Treatment System of a Beverage Company in Shaanxi Province	440 m³/h
广东某啤酒公司水处理系统 Water Treatment System of a Beer Company in Guangdong Province	160 m³/h
广东某啤酒公司水处理系统 Water Treatment System of a Beer Company in Guangdong Province	120 m³/h
西北某饮品公司水处理系统 Water Treatment System of a Beverage Company in the Northwest China	80 m³/h
吉林某饮料公司水处理系统 Water Treatment System of a Beverage Company in Jilin Province	240 m³/h
江西某饮料食品公司水处理系统 Water Treatment System of a Beverage & Food Company in Jiangxi Province	180 m³/h, 105 m³/h
山东某啤酒公司水处理系统 Water Treatment System of a Beer Company in Shandong Province	40 m³/h
北京某饮料公司水处理系统 Water Treatment System of a Beverage Company in Beijing	40 m³/h
山西某自来水供水工程 A Tap Water Supply Project in Shanxi Province	3,333 m³/h

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湖北某磷酸铁车间中水回用系统 Reclaimed Water System in a Phosphate Iron Workshop in Hubei Province	7,500 m³/d
青海某锂业电池级碳酸锂项目 A Lithium Industry Battery Grade Lithium Carbonate Project in Qinghai Province	20,000 t/a
四川某电池级碳酸锂项目 A Battery Grade Lithium Carbonate Project in Sichuan Province	20,000 t/a
湖南某磷酸铁锂项目 A lithium Iron Phosphate Project in Hunan province	50,000 t/a