中化 sinochem

发展膜产业
保障水安全

Advancing Membranes
Securing Water Safety

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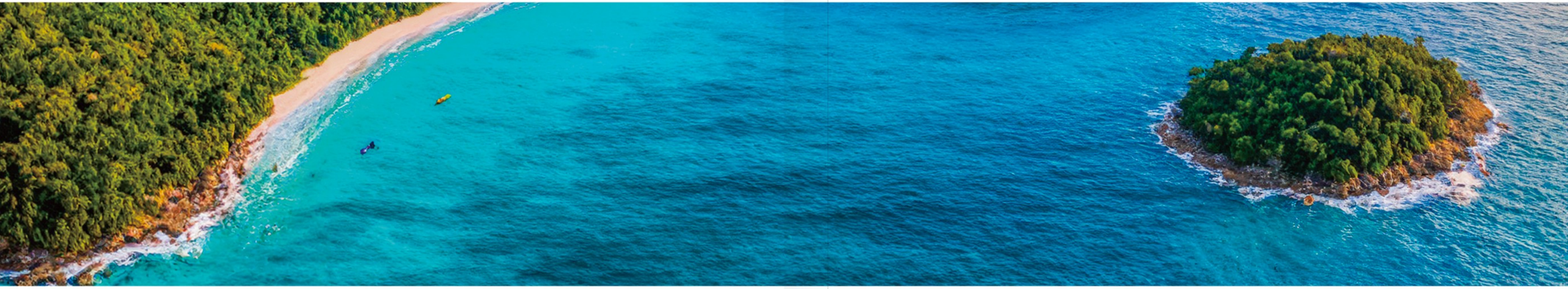
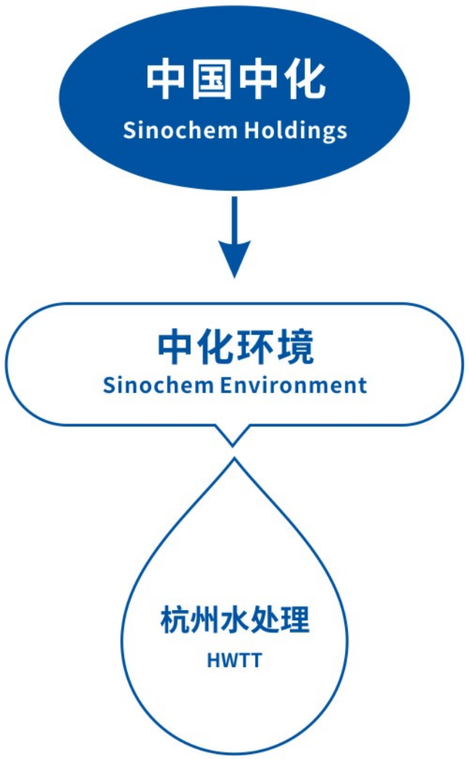




公司介绍
Company Introduction

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。目前已在海水及类海水、传统产业及新兴产业工业水、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。

立足全新发展阶段，公司聚焦膜产品主业，系统性重塑组织体系、健全运行机制，纵深推进核心技术攻关与产业化落地，秉持“志存高远、脚踏实地”的实干精神，凝心聚力攻坚突破，高质高效打响“十五五”开局攻坚战。

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 and seawater-like water, industrial water for traditional and emerging industries, 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.

Building on this new phase of development, the company is concentrating on its core business of membrane products. It is systematically restructuring its organizational system, improving operational mechanisms, and making deep-going efforts to advance core technology breakthroughs and industrial application. Guided by the pragmatic spirit of “aim high and stay grounded,” the company is rallying its strength to tackle key challenges and is launching the battle for a strong start to the 15th Five-Year Plan with high quality and efficiency.

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

1982年

国内首个自主研发、自主设计的“中空纤维反渗透膜”研发成功

In 1982, HWTT successfully developed China's first independently designed hollow fiber reverse osmosis membrane.

1981年

当时世界最大规模百吨级电渗析海水淡化站在西沙群岛建成

该项目1985年获国家科学技术进步三等奖

In 1981, HWTT established the world's largest 100-ton electrodialysis seawater desalination station on the Xisha Islands, earning the third prize in the 1985 National Science and Technology Progress Award.

1992年

“国产反渗透膜装置及工程技术开发”项目获国家科技进步奖一等奖

In 1992, "the Development of Domestic Reverse Osmosis Membrane Equipment and Engineering Technology" won the First Prize of the National Science and Technology Progress Award.

2000年

国内首个复合反渗透膜研发成功，被批准为国家重点新产品

In 2000, HWTT successfully developed China's first composite reverse osmosis membrane, which was listed as a National Key New Product.

1970年

海水淡化研究室成立

——进行海水淡化膜技术开发

In 1970, the seawater desalination lab was established for the R&D of seawater desalination membrane technology.

1967年

海水淡化会战——服务国家战略

In 1967, National Seawater Desalination Campaign was launched to fulfill the national strategy.

1984年

杭州水处理成立

——服务于工程技术应用开发

In 1984, HWTT was founded to promote the application and development of engineering technology.

1978年

海水淡化研究室获“全国先进集体”荣誉称号

In1978, the seawater desalination laboratory has been awarded the honorary title of "National Advanced Collective".

1995年

首席科学家高从堦入选国内膜法水处理行业第一位工程院院士

In 1995, chief scientist Gao Congjie was selectedas the first academician of the Chinese Academyof Engineering in the domestic membrane watertreatment industry.

1993年

国家科委正式授牌“国家液体分离膜工程技术研究中心”

In 1993, the State Science and Technology Commission officially awarded a title to the National Engineering Research Center of Liquid Separation Membrane.

2011年

承建山东某核电海淡系统，为开拓国内核电海淡市场打下坚实基础；

海水淡化装备制造基地奠基

In 2011, HWTT undertook the construction of the seawater desalination system for the Nuclear Power Plant in Shandong, accelerating penetration into China's nuclear power seawater desalination market.
In 2011, the foundation was laid for the seawater desalination equipment manufacturing base in Hangzhou.

2010年

河北5万吨/日海水淡化项目，

被列为国家发改委重点示范项目

In 2010, HWTT launched a 50,000 tons/day seawater desalination project in Hebei, recognized as a key demonstration by the National Development and Reform Commission.

2022年

两化重组后，成为中化环境旗下水务领域的旗舰平台

In 2022, after the reorganization of the two companies, it became the flagship platform for the water sector under Sinochem Environment.

2021年

浙江25万吨/日膜法海水淡化项目成功验收

In 2021, the 250,000 tons/day membrane seawater desalination project in Zhejiang was successfully accepted.

2026年

阿尔及利亚海水淡化项目获全球水奖“年度杰出海水淡化项目”Distinction荣誉

In 2026,the Algerian seawater desalination project has received the Distinction Award for Desalination Plant of the Year at the 2026 Global Water Awards.

2024年

“新型膜法水处理关键技术及应用”项目获国家科学技术进步奖一等奖

In 2024, the project "Key Technologies and Applications of New Membrane Water Treatment" won the First Prize of the National Science and Technology Progress Award.

2006年

整体加入中国化工集团

——企业化运作，服务全球市场

In 2006, the whole company joined China National Chemical Corporation Ltd., operating as a corporate entity to serve the global market.

2018年

“均相离子膜制备关键技术及应用”项目获国家技术发明二等奖，260万m^2/年复合膜生产线完成调试验收

In 2018, the project "Key Technologies and Applications for the Preparation of Homogeneous Ion-Exchange Membranes" won the Second Prize of the National Technological Invention Award, and the 2.6 million square meters per year composite membrane production line completed commissioning and acceptance.

2023年

成功签约阿尔及利亚30万吨/日海水淡化项目

In 2023, a contract was successfully signed for a 300,000 tons/day seawater desalination project in Algeria.

业务版图

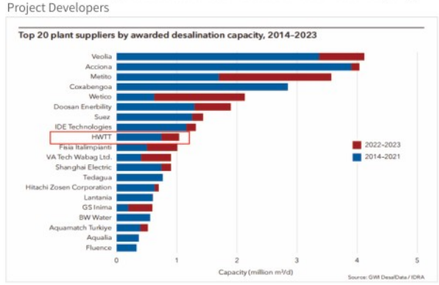
Business Map

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.

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5万吨及以下的海水淡化项目，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（传统产业）

Industrial Water (Traditional Industries)

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化转化示范项目

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化转化，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综合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

工业水（新兴产业）

Industrial Water (Emerging Industries)

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撑能力和客户响应机制，迅速有效解决该领域膜法相关痛难点问题。

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

提锂综合解决方案

Comprehensive Lithium Extraction Solution

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

湖北磷酸铁资源化零排放项目

Lithium iron phosphate resource zero discharge project in Hubei Province

电池回收综合解决方案

Comprehensive Battery Recycling Solution

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。

项目产能：300,000吨磷酸铁/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 Capacity: 300,000 tons/year of iron phosphate

核心产品
Core Products

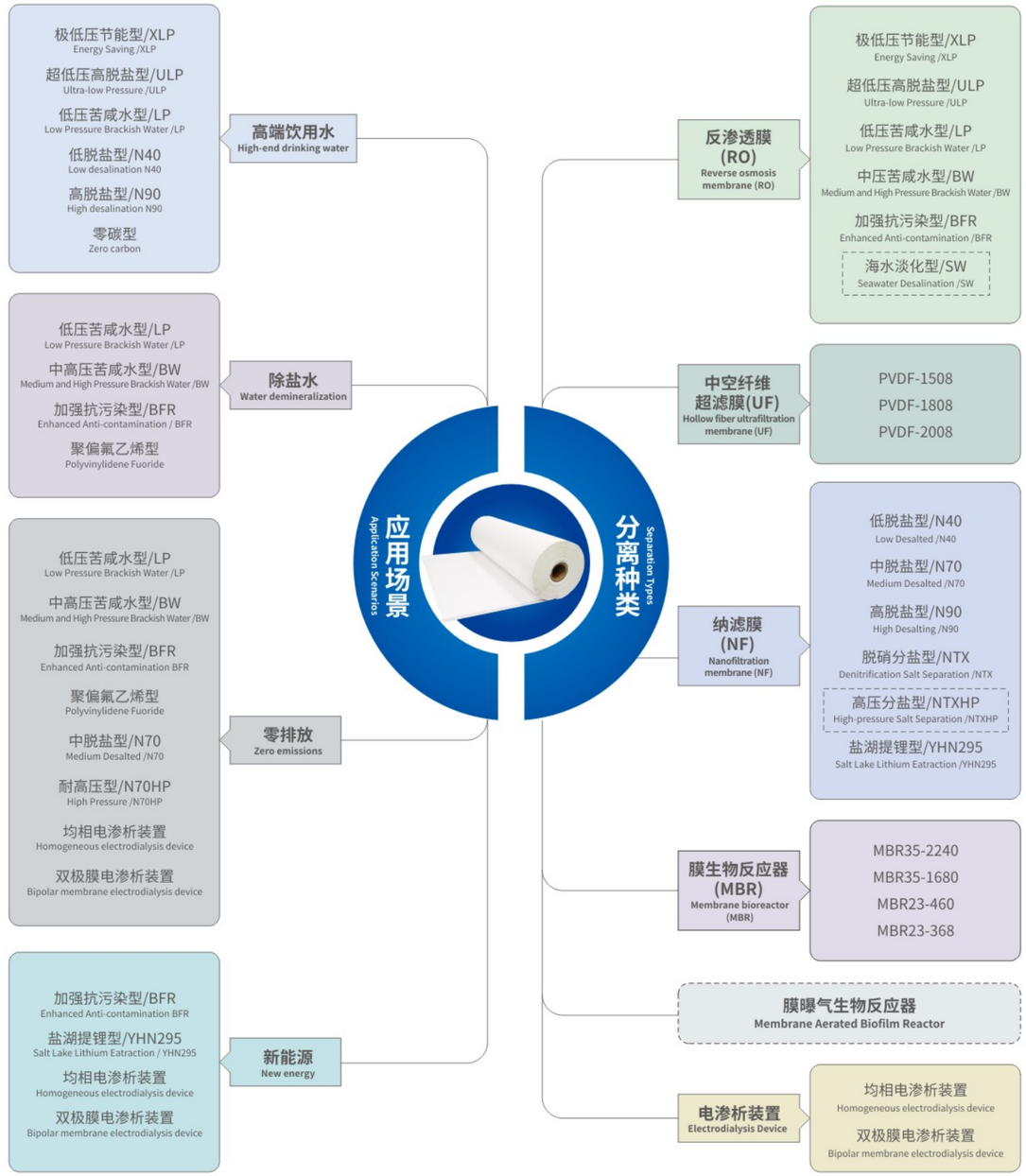
拥有全套自主开发的膜产品配方、生产工艺和设备选型技术等，相关产品技术总体居国内先进水平，并具备较强的定制和开发能力；建有占地150亩的现代化制造基地，具备70万吨/日的装置生产与成套设计能力，可制造反渗透、纳滤、超/微滤等膜法水处理系列装置，双极膜、均相膜等电渗析装置，酸盐分离器，能量回收装置和集装箱一体化水处理装置等。

HWTT 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



西北某煤化工企业浓水除盐水项目

A concentrated water demineralization project for a coal chemical enterprise in Northwest China

产品型号：抗污染反渗透膜FR8040-400/34i；
低压大通量反渗透膜LE8040-400/34i

项目介绍：该项目是全球单体最大煤制气项目（20亿Nm^3/年）的核心环保与节水工程，构建了浓水深度脱盐、淡水回用、盐资源化、危废减量全链条。项目累计用膜2000支，全面国产替代以来，已平稳运行两年。

Product Model: Fouling-Resistant Reverse Osmosis Membrane FR8040-400/34i; Low-Pressure High-Flux Reverse Osmosis Membrane LE8040-400/34i

Project Introduction: This project is a core environmental protection and water-saving initiative of the world's largest single-unit coal-to-gas project (2 billion Nm^3/year). It establishes a full-chain process encompassing deep desalination of concentrated brine, freshwater reuse, salt resource recovery, and hazardous waste reduction. A total of 2,000 membrane elements have been installed in the project. Since achieving full domestic replacement of membranes, the system has been operating smoothly for two years.

浙江某海水淡化工程

Seawater Desalination Project in Zhejiang Province

产品型号：海水淡化膜SW-8040-400

项目介绍：产水经调质后进入市政管网，浓水远距离排回大海。项目采用高效能量回收技术，大大降低了运行能耗和制水成本。

Product Model: Seawater Desalination Membrane SW-8040-400

Project Introduction: The produced water, after conditioning, enters the municipal pipeline network, while the concentrate is discharged back into the sea over a long distance. The project employs high-efficiency energy recovery technology, which significantly reduces operational energy consumption and water production costs.

山东某动力化水超滤、反渗透处理及零排放项目

A power plant water treatment project in Shandong, involving ultrafiltration, reverse osmosis, and zero liquid discharge

产品型号：抗污染反渗透膜BFRII-8040-400；
中空纤维超滤膜PVDF-2008；
中脱盐纳滤膜N70-8040/34i

项目介绍：该项目为超大型UF+RO+EDI 全膜法水处理工程，是国内最大、技术最先进的化工园区化水装置之一。通过高性能膜材料、高回收率、零排放、长寿命设计，完美适配煤化工+盐化工复杂水质，实现稳定供水、深度节水、绿色低碳。

Product Model: Fouling-Resistant Reverse Osmosis Membrane BFRII-8040-400; Hollow Fiber Ultrafiltration Membrane PVDF-2008; Medium rejection nanofiltration membrane N70-8040/34i

Project Introduction: This project is an ultra-large-scale UF+RO+EDI full membrane water treatment facility. It is one of the largest and most technologically advanced demineralized water plants in a chemical industrial park in China. Featuring high-performance membrane materials, high recovery rate, zero liquid discharge (ZLD), and long-life design, the system is perfectly adapted to the complex water quality of coal chemical and salt chemical processes. It achieves stable water supply, deep water conservation, and green, low-carbon operation.

青海某盐湖提锂项目

Lithium Extraction Project in a Salt Lake in Qinghai Province

产品型号：盐湖提锂纳滤膜YHN295-8040

项目介绍：该项目采用梯度耦合膜分离为核心的镁锂分离技术，实现了超高镁锂比卤水高效分离、原卤短流程、低耗高收、绿色低碳，是目前全球最先进的盐湖镁锂分离工业化方案之一。项目所用的盐湖提锂纳滤膜已正常运行三年，镁锂分离率≥96%。

Product Model: FProduct Model: Nanofiltration Membrane for Lithium Extraction from Salt Lake Brine YHN295-8040/34i

Project Introduction: This project employs a gradient-coupled membrane separation technology for magnesium-lithium separation. It achieves efficient separation of brines with ultra-high magnesium-to-lithium ratios, a short process flow for raw brine, low energy consumption with high recovery, and green, low-carbon operation. It is one of the world's most advanced industrial solutions for magnesium-lithium separation in salt lakes to date. The nanofiltration membrane used for lithium extraction from salt lake brine in this project has been operating stably for three years, achieving a magnesium-lithium separation rate ⩾ 96%

山东某氯碱废水脱硝项目

A Chlor-Alkali Wastewater Denitration Project in Shandong Province

产品型号：高压纳滤膜N70HP-8040/34i

项目介绍：该项目采用的高选择性脱硝纳滤膜，通过一价/二价离子精准分离，实现盐水回用、脱硝达标、副产资源化，是氯碱行业盐水精制、节能降耗的核心技术，兼具环保与经济效益，也是当前氯碱脱硝的主流方案。

Product Model: High-Pressure Nanofiltration Membrane N70HP-8040/34i

Project Introduction: The high-selectivity denitration nanofiltration membrane used in this project enables precise monovalent/divalent ion separation, achieving brine reuse, compliant denitration, and by-product resource recovery. It is a core technology for brine purification, energy saving, consumption reduction in the chlor-alkali industry. Offering both environmental and economic benefits, it is also the current mainstream solution for chlor-alkali denitration.

广东某纸业中水回用项目

A Water Reuse Project in a Paper Industry Facility in Guangdong Province

产品型号：抗污染反渗透膜BFR-8040-400

项目介绍：该项目是造纸行业大型化、高回收率、抗污染的膜法深度回用标杆项目，以UF+RO为核心，处理生化后二级出水，实现85%+高回用率、水质稳定达标，解决造纸废水高有机物、高硬度、高悬浮物的回用难题，是节水降本、绿色低碳的典型工程。

Product Model: Fouling-Resistant Reverse Osmosis Membrane BFR-8040-400

Project Introduction: This project is a benchmark large-scale, high-recovery, fouling-resistant membrane-based advanced reuse project in the paper industry. With UF+RO as the core technology, it treats secondary effluent after biochemical treatment, achieving a high reuse rate of over 85%, stable water quality meeting standards. It solves the challenges of papermaking wastewater reuse posed by high organic matter, high hardness, and high suspended solids. It is a model project for water conservation, cost reduction, and green, low-carbon operation.

湖北某酸性废水回用项目

An Acidic Wastewater Reuse Project in Hubei Province

产品型号：耐酸反渗透膜BWAR-8040，SWAR-8040；
高压纳滤膜N70HP-8040/34i；
耐酸纳滤膜ACRN-8040

项目介绍：该项目以耐酸纳滤+反渗透为核心，构建强酸性直接膜分离、酸-金属-水全资源化工艺，攻克pH1-3、高氟高磷高盐世界级难题，减少酸碱的使用，实现90%+回用率、零固废、全资源回收。项目集环境、经济、社会效益三赢，是新能源电池材料循环产业绿色低碳的中国标杆。

Product Model: FAcid-Resistant Reverse Osmosis Membrane BWAR-8040，SWAR-8040；High-pressure nanofiltration membrane N70HP-8040/34i；Acid-resistant nanofiltration membrane ACRN-8040

Project Introduction: This project employs acid-resistant nanofiltration and reverse osmosis as core technologies to establish a direct membrane separation process for strongly acidic wastewater, enabling full resource recovery of acid, metals, and water. It has overcome the world-class challenges of pH 1–3, high fluoride, high phosphorus, and high salinity. The project reduce the use of acids and alkalis，achieves a reuse rate of over 90%, zero solid waste, and complete resource recovery. With environmental, economic, and social benefits realized together, it stands as a Chinese benchmark for green, low-carbon development in the circular economy of new energy battery materials.

江苏某开发区水厂超滤项目

An Ultrafiltration Project at a Water Treatment Plant in a Development Zone in Jiangsu Province

产品型号：中空纤维超滤膜PVDF-2008

项目介绍：该项目以外压式PVDF 超滤为核心，构建UF+NF（优质饮用水）、UF+RO（工业脱盐水）两大系统，成功破解沿海高氯、高盐、高浊原水治理难题。项目技术先进、运行稳定、效益显著，是国家级石化产业基地水安全保障的关键支撑工程，为沿海工业园区膜法供水提供成熟范本。

Product Model: Hollow Fiber Ultrafiltration Membrane PVDF-2008

Project Introduction: This project centers on outside-in PVDF ultrafiltration (UF) technology, establishing two major systems: UF + NF (for high-quality drinking water) and UF + RO (for industrial demineralized water). It has successfully addressed the challenges of treating raw water with high chloride, high salinity, and high turbidity in coastal areas. The project features advanced technology, stable operation, and significant benefits. It serves as a key supporting project for water security assurance at a national-level petrochemical industrial base and provides a mature model for membrane-based water supply in coastal industrial parks.

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
- Class-A design qualification of environment (water pollution control) engineering
- Class-A design qualification of marine (seawater utilization) industry 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

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.

绿色低碳
Green and low-carbon

环保科普
Science popularization of environmental protection

公益行动
Charitable action

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 m^3/d
Current total processing capacity: 3,000,000 m^3/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 m^3/d
摩洛哥某海水淡化项目 Seawater Desalination System in Morocco	30,000m^3/d
印尼某海水淡化项目 A Seawater Desalination Project in Indonesia	50,000 m^3/d
中东某海水淡化项目 Seawater Desalination System in the Middle East	11,000m^3/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 m^3/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 m^3/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 m^3/d
南美洲某市政海水淡化系统 Municipal Seawater Desalination System in the South America	10,000 m^3/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	8,016m^3/d 4,320m^3/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 m^3/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 m^3/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 m^3/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 m^3/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 m^3/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 m^3/d
浙江某反渗透海水淡化项目 A RO Seawater Desalination Project in Zhejiang Province	100,000 m^3/d
河北某海水淡化系统 A Seawater Desalination System in Hebei Province	50,000 m^3/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 m^3/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 m^3/d
浙江某海水淡化系统 A Seawater Desalination System in Zhejiang Province	16,000 m^3/d
浙江某海水淡化系统 A Seawater Desalination System in Zhejiang Province	15,000 m^3/d
浙江某海水淡化系统 A Seawater Desalination System in Zhejiang Province	60,000m^3/d
浙江某水产企业海水淡化项目（一期） Seawater Desalination Project of an Aquatic Company in Zhejiang Province(Phase Ⅰ)	12,000 m^3/d
浙江某水产企业海水淡化项目（二期） Seawater Desalination Project of an Aquatic Company in Zhejiang Province(Phase Ⅱ)	10,000m^3/d
山东某海水淡化项目 A Seawater Desalination System in Shandong Province	10,000 m^3/d
山东某反渗透海水淡化项目 A RO Seawater Desalination System in Shandong Province	20,000 m^3/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 m^3/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 m^3/d
浙江某电厂海水淡化项目 Seawater Desalination Project of a Power Plant in Zhejiang Province	24,000 m^3/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 m^3/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建设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 m^3/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 m^3/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 m^3/d
天津某船用海水淡化装置 Marine Seawater Desalination Units in Tianjin	7×10 m^3/d
浙江某岛用海水淡化装置 Island Seawater Desalination Units in Zhejiang Province	300 m^3/d
浙江某岛用海水淡化装置 Island Seawater Desalination Units in Zhejiang Province	250 m^3/d

工业水 Industrial Water

废水资源化及零排放 Wastewater Resource Utilization and Zero Discharge

北京某园区再生水厂项目Industrial Park Reclaimed Water Plant Project in Beijing	20,160m^3/d
重庆某纸业凝结水再利用项目Paper Industry Condensate Reuse Project in Chongqing	5,760m^3/d
西北某煤焦化废水零排放项目Coal Coking Wastewater Zero Discharge Project in Northwest China	9,600m^3/d
河北某钢铁新材料综合水站项目Steel New Materials Integrated Water Station Project in Hebei Province	6,360m^3/d
广东某纸业造纸废水返回水项目Paper Industry Papermaking Wastewater Reuse Project in Guangdong Province	2×5,760m^3/d
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 m^3/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 m^3/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 m^3/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 m^3/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 m^3/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 m^3/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 m^3/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 m^3/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 m^3/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 m^3/d
河北某污水提标改造项目 A Sewage Upgrading and Reconstruction Project in Hebei Province	315,000 m^3/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 m^3/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 m^3/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 m^3/d
陕西某污水提标改造项目 A Sewage Upgrading and Reconstruction Project in Shaanxi Province	50,000 m^3/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 m^3/d
江苏某造纸废水系统 A Paper-making Wastewater System in Jiangsu Province	10,000 m^3/d

江苏某纸业超浓盐水处理项目Paper Industry Hyper-Concentrated Brine Treatment Project in Jiangsu Province	15,120 m^3/d
山西某市政供水纳滤膜系统Municipal Water Supply Nanofiltration Membrane System in Shanxi Province	432,000 m^3/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 m^3/d
江苏某水厂二期工程一阶段设备集成工程 Equipment Integration Project for the Stage Ⅰ of Phase Ⅱ of a Water Plant in Jiangsu Province	废水水量：50,000 m^3/d Wastewater volume 污水水量：10,000 m^3/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 m^3/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 m^3/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 m^3/h,220 m^3/h,200 m^3/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 m^3/h
湖北某石化企业水处理系统 Water Treatment System of a Petrochemical Company in Hubei Province	500 m^3/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 m^3/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 m^3/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 m^3/d
浙江某市政中水回用系统 A Municipal Reclaimed Water Reuse System in Zhejiang Province	12,000 m^3/d
浙江某炼化除盐水项目 Refining and Chemical Desalination Water Project in Zhejiang Province	2,420 m^3/h
陕西某水务反渗透装置 A Water Reverse Osmosis Device in Shaanxi Province	600 m^3/h
宁夏某煤矿矿井水资源化工程 A Coal Mine Water Resource Utilization Project in Ningxia	520 m^3/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 m^3/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 m^3/h, 800m^3/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 m^3/h
远东某甲醇脱盐水站项目 Methanol Desalted Water Station Project in the Far East	570 m^3/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 m^3/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 m^3/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 m^3/h
山东某化学公司除盐水系统 Water Demineralization System of a Chemical Company in Shandong Province	600 m^3/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 m^3/h, 200 m^3/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 m^3/h
河北某化工企业除盐水项目 Water Demineralization Project of a Chemical Enterprise in Hebei Province	600 m^3/h
河南某无机化工脱盐水项目 Inorganic Chemical Demineralized Water Project in Henan Province	690m^3/h
广西某纸业脱盐水项目Paper Industry Demineralized Water Project in Guangxi	2×600m^3/h
内蒙古某有色金属脱盐水给水项目Non-Ferrous Metal Demineralized Water Supply Project in Inner Mongolia	550m^3/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 m^3/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 m^3/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 m^3/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 m^3/d

新能源及新兴业务 New Energy & Emerging Business

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 m^3/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

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 m^3/h
陕西某饮料公司水处理系统 Water Treatment System of a Beverage Company in Shaanxi Province	440 m^3/h
广东某啤酒公司水处理系统 Water Treatment System of a Beer Company in Guangdong Province	160 m^3/h
广东某啤酒公司水处理系统 Water Treatment System of a Beer Company in Guangdong Province	120 m^3/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 m^3/h
吉林某饮料公司水处理系统 Water Treatment System of a Beverage Company in Jilin Province	240 m^3/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 m^3/h, 105 m^3/h
山东某啤酒公司水处理系统 Water Treatment System of a Beer Company in Shandong Province	40 m^3/h
北京某饮料公司水处理系统 Water Treatment System of a Beverage Company in Beijing	40 m^3/h
山西某自来水供水工程 A Tap Water Supply Project in Shanxi Province	3,333 m^3/h

膜产品应用
Membrane product application

反渗透膜 Reverse osmosis membrane

项目名称 Project Name	产品类型 Product Type	应用类型 Application Type
甘肃某发电厂除盐水项目 Demineralized Water Project of a Power Plant in Gansu Province	低压大通量反渗透膜 Low-pressure, high-flux reverse osmosis membrane 抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	深度处理 Advanced treatment
江西某水厂反渗透设备 Procurement project of RO equipment for a water treatment plant in Jiangxi Province	低压大通量反渗透膜 Low-pressure, high-flux reverse osmosis membrane 抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
山西某新能源科技公司除盐水站RO膜项目 RO Membrane Project for Demineralized Water Station of a New Energy Technology Company in Shanxi Province	低压大通量反渗透膜 Low-pressure, high-flux reverse osmosis membrane 抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	深度处理 Advanced treatment
陕西某水厂反渗透设备 Reverse osmosis equipment for a water treatment plant in Shaanxi Province	低压大通量反渗透膜 Low-pressure, high-flux reverse osmosis membrane 抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
湖北某新能源公司酸性废水处理项目 Acidic wastewater treatment project of a new energy company in Hubei Province	高压耐酸反渗透膜 High-pressure acid-resistant reverse osmosis membrane 耐酸反渗透膜 Acid-resistant reverse osmosis membrane	特种分离 Specialty separation
辽宁某新钛业公司中水回用项目 Water reuse project of a new titanium industry company in Liaoning Province	海水淡化反渗透膜 Seawater Desalination reverse osmosis membrane 抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
西北某钾盐项目 Potash project in Northwest China	海水淡化反渗透膜 Seawater Desalination reverse osmosis membrane 抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	深度处理 Advanced treatment

反渗透膜 Reverse osmosis membrane

项目名称 Project Name	产品类型 Product Type	应用类型 Application Type
福建某化工企业双膜法项目 Dual-membrane process project of a chemical enterprise in Fujian Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
福建某石化企业双膜法项目 Dual-membrane process project of a petrochemical enterprise in Fujian Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
甘肃某水厂反渗透膜更换项目 RO membrane replacement project for a water treatment plant in Gansu Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	深度处理 Advanced treatment
甘肃某特种气体公司反渗透膜更换项目 RO membrane replacement project of a specialty gas company in Gansu Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
河北某钢铁集团反渗透膜采购项目 Reverse osmosis membrane procurement project of a steel group in Hebei Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
河北某新能源科技公司深度处理车间RO膜更换项目 RO membrane replacement project for the advanced treatment workshop of a new energy technology company in Hebei Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	深度处理 Advanced treatment
黑龙江某新材料公司中水回用项目 Water reuse project of a new materials company in Heilongjiang Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
湖北某造纸企业反渗透膜更换项目 RO membrane replacement project of a papermaking enterprise in Hubei Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
吉林某化工有限公司RO膜更换项目 RO membrane replacement project for a chemical company in Jilin Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
江苏某丙烯酸废水处理RO膜更换项目 RO membrane replacement project for acrylic acid wastewater treatment in Jiangsu Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
江苏某化工公司反渗透膜更换项目 RO membrane replacement project of a chemical company in Jiangsu Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
江苏某新材料公司反渗透膜更换项目 RO membrane replacement project of a new materials company in Jiangsu Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
辽宁某化工公司水处理车间反渗透膜更换项目 RO membrane replacement project for the water treatment workshop of a chemical company in Liaoning Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
辽宁某热源厂改造项目化水站RO膜更换 RO membrane replacement in the chemical water station of a heat source plant renovation project in Liaoning Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
宁夏某生物公司反渗透采购项目 Reverse osmosis procurement project of a biotechnology company in Ningxia	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse

反渗透膜 Reverse osmosis membrane

项目名称 Project Name	产品类型 Product Type	应用类型 Application Type
山东某化工中水回用反膜更换项目 RO membrane replacement project for water reuse at a chemical company in Shandong Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
山东某集团中水双膜法项目 Dual-membrane water reuse project of a group company in Shandong Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
山东某聚氨酯公司膜更换项目 Membrane replacement project of a polyurethane company in Shandong Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
山东某石化集团反渗透膜更换项目 RO membrane replacement project of a petrochemical group in Shandong Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
陕西某水厂净水项目 Water purification project of a water plant in Shaanxi Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	深度处理 Advanced treatment
四川某化工研究院反渗透膜更换项目 RO membrane replacement project of a chemical research institute in Sichuan Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
天津某造纸企业双膜法项目 Dual-membrane process project of a papermaking enterprise in Tianjin	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
西北某煤化工公司中水回用项目 Water reuse project of a coal chemical company in Northwest China	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
浙江某公司中水回用项目 Water reuse project of a company in Zhejiang Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
浙江某热电公司除盐水RO膜更换项目 RO membrane replacement project for demineralized water at a thermal power company in Zhejiang Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	深度处理 Advanced treatment
浙江某印染公司中水回用项目 Water reuse project of a printing and dyeing company in Zhejiang Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
浙江绍兴某发电厂除盐水项目 Demineralized water project of a power plant in Shaoxing, Zhejiang Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	深度处理 Advanced treatment
浙江台州某发电厂除盐水项目 Demineralized water project of a power plant in Taizhou, Zhejiang Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	深度处理 Advanced treatment
浙江长兴某发电厂除盐水项目 Demineralized water project of a power plant in Changxing, Zhejiang Province	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	深度处理 Advanced treatment
重庆某化工公司反渗透膜更换项目 RO membrane replacement project of a chemical company in Chongqing	抗污染反渗透膜 Fouling-resistant reverse osmosis membrane	中水回用 Reclaimed water reuse
印尼某智慧能源发电厂项目双膜法项目 Dual-membrane process project for a smart energy power plant project in Indonesia	中压高脱盐反渗透膜 Medium-pressure, high-rejection reverse osmosis membrane	深度处理 Advanced treatment

纳滤膜 Nanofiltration membrane

项目名称 Project Name	产品类型 Product Type	应用类型 Application Type
湖北某新能源公司酸性废水处理项目 Acidic wastewater treatment project of a new energy company in Hubei Province	耐酸分盐纳滤膜 Acid-resistant Salt-separating nanofiltration membrane	特种分离 Specialty separation
山东某香料公司硫酸钠分离项目 Sodium sulfate separation project of a fragrance company in Shandong Province	高压纳滤膜 High-pressure nanofiltration membrane	特种分离 Specialty separation
山东某化工公司硫酸钠浓缩项目 Sodium sulfate concentration project of a chemical company in Shandong Province	高压纳滤膜 High-pressure nanofiltration membrane	特种分离 Specialty separation
内蒙古某铜矿提取项目纳滤设备 Nanofiltration equipment for a copper extraction project in Inner Mongolia	高压纳滤膜 High-pressure nanofiltration membrane	中水回用 Reclaimed water reuse
青海某盐湖提锂项目 Lithium extraction project from salt lake brine in Qinghai Province	盐湖提锂纳滤膜 Salt Lake Lithium Extraction nanofiltration membrane	特种分离 Specialty separation

超滤膜 Ultrafiltration membrane

项目名称 Project Name	产品类型 Product Type	应用类型 Application Type
湖浙江某公司中水回用项目 Water reuse project of a company in Zhejiang Province	中空纤维超滤膜 Hollow fiber ultrafiltration membrane	中水回用 Reclaimed water reuse
印尼某智慧能源发电厂项目双膜法项目 Dual-membrane process project for a smart energy power plant project in Indonesia	中空纤维超滤膜 Hollow fiber ultrafiltration membrane	深度处理 Advanced treatment
山东某化工中水回用反膜更换项目 RO membrane replacement project for water reuse at a chemical company in Shandong Province	中空纤维超滤膜 Hollow fiber ultrafiltration membrane	中水回用 Reclaimed water reuse
天津某造纸企业双膜法项目 Dual-membrane process project of a papermaking enterprise in Tianjin	中空纤维超滤膜 Hollow fiber ultrafiltration membrane	中水回用 Reclaimed water reuse
福建某化工企业双膜法项目 Dual-membrane process project of a chemical enterprise in Fujian Province	中空纤维超滤膜 Hollow fiber ultrafiltration membrane	中水回用 Reclaimed water reuse
福建某石化企业双膜法项目 Dual-membrane process project of a petrochemical enterprise in Fujian Province	中空纤维超滤膜 Hollow fiber ultrafiltration membrane	中水回用 Reclaimed water reuse
山东某香料公司硫酸钠分离项目 Sodium sulfate separation project of a fragrance company in Shandong	中空纤维超滤膜 Hollow fiber ultrafiltration membrane	特种分离 Specialty separation
山东某集团中水双膜法项目 Dual-membrane water reuse project of a group company in Shandong Province	中空纤维超滤膜 Hollow fiber ultrafiltration membrane	中水回用 Reclaimed water reuse
宁夏某生物公司反渗透采购项目 Reverse osmosis procurement project of a biotechnology company in Ningxia	中空纤维超滤膜 Hollow fiber ultrafiltration membrane	中水回用 Reclaimed water reuse