

# 苏伊士 水处理行业领先专家

**SUEZ**  
The leading expert in the water  
treatment industry





## 苏伊士集团

苏伊士作为环境服务行业的重要参与者，在过去约 160 年以来为各地社区和工业客户提供水务管理、固废资源管理和空气质量管理等不可或缺的服务。在全球，苏伊士为 6600 万人生产饮用水，每年生产 200 万吨再生原料，通过废转能生产 3.1 太瓦时可再生能源。在我们应对生态转型和气候变化挑战的持续管理中，苏伊士的 3.5 万名员工将于法国、意大利、中欧、非洲、亚洲和澳大利亚等地，利用其专业知识致力于为各行各业的客户提供高附加值和定制化的环境解决方案。苏伊士的专业化服务帮助客户减少 420 万吨二氧化碳排放，从而减少其碳足迹和对气候的影响。凭借近 70 亿欧元的营收和强大的技术专长及创新能力，苏伊士具有强劲发展前景。苏伊士即将由实力雄厚的股东组成稳固的联合体共同持有，法国投资基金 Meridiam、私募股权公司 GIP（各占 40% 的股份）以及法国存托银行 CDG（占 20% 的股份，包括法国国家人寿保险公司持有的 8% 股份），为其在法国和全球化的战略发展计划提供坚实后盾。

苏伊士约 70 年前进入亚洲市场，起步于东南亚，继而扩展至中国的发展也近 50 年。苏伊士在亚洲拥有逾 6500 名员工，与各地合作伙伴成立逾 40 家合作公司，已建成 600 多座水厂和污水处理厂，向 2000 多万人提供水务和固废资源管理服务，为 16 个工业园区提供环境服务。苏伊士在澳门运营中国水务行业的第一个 PPP 项目，在上海运营亚洲最大的危废处理设施之一，在重庆的投资逾 40 亿元人民币。如今，苏伊士被公认为最具影响力的企业之一，也是引领亚洲环保行业的标杆。

## About SUEZ

SUEZ is a major player in environmental services. For almost 160 years, SUEZ has supported local communities and industrial companies in the management of essential services such as water, waste, and air quality. As such, SUEZ produces drinking water for 66 million people worldwide, recovers 2 million tons of secondary raw materials per year, and generates 3.1 TWh of renewable energy from waste. In our ongoing management of the ecological transition and climate change challenges, SUEZ will rely on the expertise and commitment of its 35,000 employees (particularly in France, Italy, Central Europe, Africa, Asia, and Australia) to offer high value-added and customized environmental solutions to all its customers. SUEZ's expertise allows, for instance, its customers to avoid the emission of 4.2 million tons of CO<sub>2</sub>, thus improving their carbon footprint and their impact on climate. With a turnover of nearly 7 billion euros and backed by its expertise and capacity to innovate, SUEZ has strong growth prospects. Soon, SUEZ will rely on a solid consortium of investors made up of Meridiam and GIP – with 40% stakes each – and the Caisse des Dépôts et Consignations Group with a 20% stake in the capital, including 8% held by CNP Assurances, to pursue its strategic development plans in France and internationally.

In Asia, SUEZ's journey began some 70 years ago, first in Southeast Asia before expanding to China nearly 50 years ago. With 6,500+ employees and 40+ joint ventures with local partners, SUEZ has built 600+ water and wastewater plants. The company also provides water and waste services to 20+ million people and delivers environmental services to 16 industrial parks. SUEZ manages China's first PPP water contract in Macau, operates one of Asia's largest hazardous waste treatment facilities in Shanghai, and has invested over RMB 4 billion in Chongqing. Today, SUEZ is recognized as one of the most influential companies and a service benchmark for leading the region's environmental industry.



## 水处理行业领先专家

**水务工程**是苏伊士旗下专门负责设计和建造城市内外的水处理设施的业务单元，拥有 **70** 多年的历史，能够充分利用自身的专业技术优势，为市政及工业客户量身打造最为先进、可靠且经济实用的解决方案，在确保满足当地环境要求的前提下，实现最佳的技术性能和经济绩效。

到目前为止，**水务工程**已拥有 500 余项专利技术、建成 10,000 多个遍布世界各地的水厂并为全球 10 亿人口提供饮用水和污水处理服务。

**水务工程**的员工始终贯彻执行公司的价值观：热爱环境、客户优先、相互尊重、团队精神。70 多年来，正是这些价值观成就了公司对卓越品质的追求。

## The leading expert in the water treatment industry

**Treatment Infrastructure**, a business line of SUEZ, designs and builds water treatment facilities for both municipal and industrial customers. With over 70 years' experience, Treatment Infrastructure draws on its areas of expertise to offer its customers solutions that are the most advanced, reliable and affordable available, and best suited to local resources and conditions, as well as the solutions achieving the best technical and economic performance under the condition of meeting environmental protection needs.

Until now, **Treatment Infrastructure** has owned more than 500 technologies patented. Over 10,000 plants have been designed and built by us worldwide. 1 billion people have been supplied with drinking water and wastewater services from plants built by us.

**Treatment Infrastructure's** employees are committed to the values which have underpinned the company's pursuit of excellence: passion for the environment, customer first, respect, team spirit. For over 70 years now, this culture is the source of the company's expertise and performance.

## 全球智慧

Global knowledge

**160+** 年全球经验  
years of global experience

向全球 **6,600 万** 人提供环境服务  
66 million people served with sanitation services globally

为集团客户减少 **420 万吨** 二氧化碳排放  
4.2 million tons of CO<sub>2</sub> avoided on behalf of the Group's customers

**200 万吨** 再生原材料产量  
2 million tons of secondary raw materials produced

## 本地经验

Local expertise

**40+** 年在大中华区经验  
years of experience in Greater China

向亚洲超过 **2,000 多万** 人口提供水务及固废资源管理服务  
20+ million people benefit from water and waste services in Asia

建成 **600 多座** 水厂和污水处理厂  
Built 600+ water and waste plant

服务遍及亚洲 **16 个** 工业园  
Presence in 16 Asian industrial parks



# 在中国的里程碑 key milestones in greater china

## 1975 /Liaoyang

在中国的第一个合同 —— 辽阳石化污水处理项目

The first contract in China - Liaoyang Petrochemical Wastewater Treatment Plant

## 1987 /Macau

中国第一座采用 V 型滤池工艺的饮用水厂 —— 澳门青洲水厂

The first drinking water treatment plant with Aquazur® V in China - Macau Qingzhou Drinking Water Plant

## 1998 /Shanghai

采用活性炭滤池、高密度沉淀池、臭氧技术 —— 上海供水项目

Use of Carbazur™, Densadeg™, Ozone technology - water supply project in Shanghai

## 1984 /Beijing

首家进入中国的国际水处理工程公司 —— 北京代表处成立

The first international water treatment engineering company to enter China - Establishment of Beijing Representative Office

## 1998 /Dalian

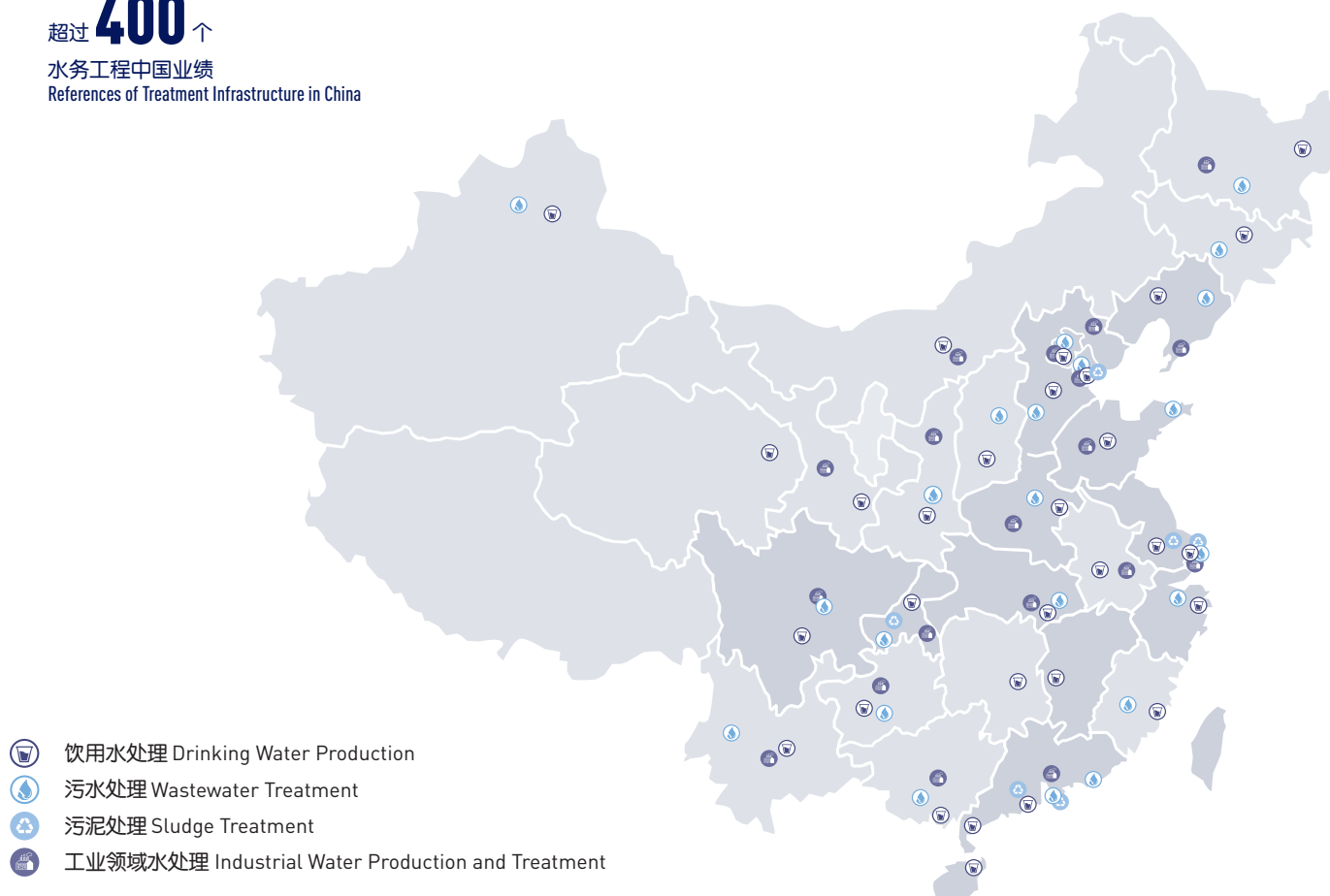
采用先进的生物滤池工艺 —— 大连马栏河污水处理厂

Use of advanced Biofor™ process - Dalian Malanhe Wastewater Treatment Plant

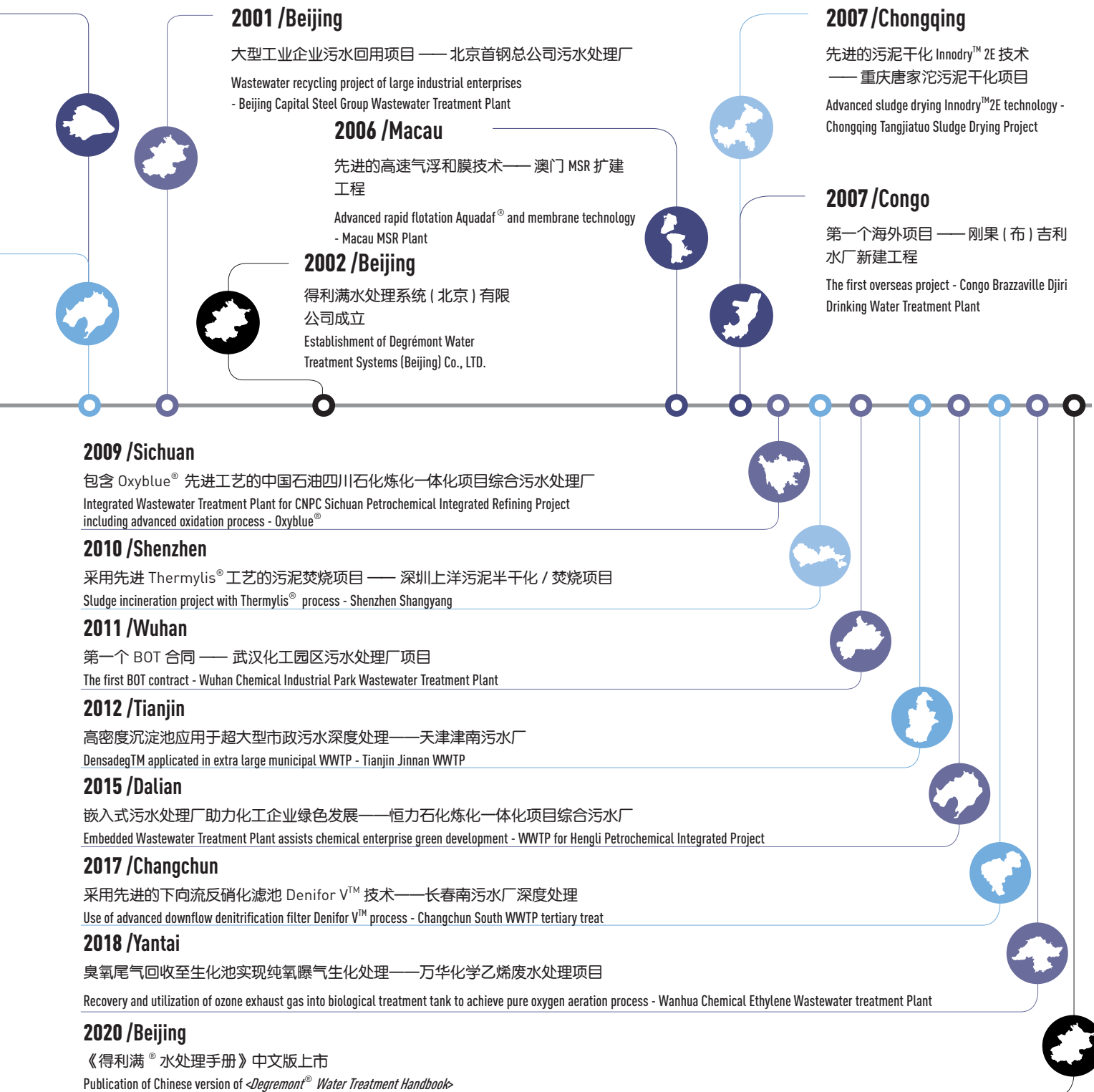
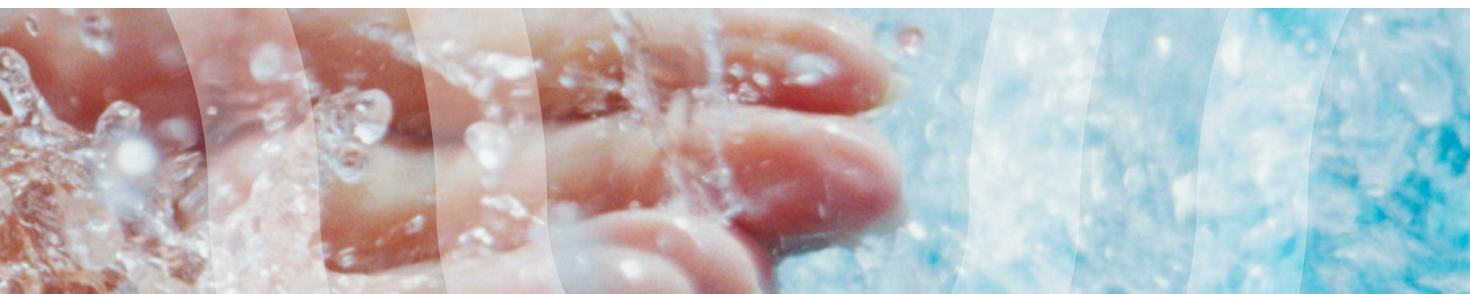
超过 **400** 个

水务工程中国业绩

References of Treatment Infrastructure in China







# 五大业务专长

## five proven areas of expertise

水务工程为客户提供五个领域的专业技术，可适应当地的经济和地域条件。

Treatment Infrastructure offers its customers 5 areas of expertise, affordably and tailored to their economic and geographical realities.



### 饮用水处理 drinking water production

日益匮乏的世界水资源需要创新的解决方案。无论何种水源和水质，水务工程都能加以利用生产饮用水……

饮用水市场的方向同时由发展中国家和工业化国家所决定。遭受用水困难的发展中国家寻求经济可靠的产水方案，而工业化国家则侧重在提高舒适度和公众健康。水务工程技术的多样性（砂滤、气浮、超滤）在应对多元化需求时成为其关键的优势。

The growing scarcity of the world's water resources calls for innovative solutions. Treatment Infrastructure can produce drinking water from whatever water source, whatever its quality...

The drinking water market is driven both by developing countries and industrial countries. Suffering from their difficulties in accessing water, developing countries are looking for reliable and affordable production solutions. In the industrialised world, the focus is on improving comfort and public health. The diversity of the technologies developed by Treatment Infrastructure (sand filtration, flotation, ultrafiltration) is a key advantage in responding to these multiple priorities.



### 海水淡化 desalination

水务工程设计能够利用海水生产淡水的技术以应对用水紧张，这将是面向未来的替代方案……

海水淡化是应对日益增长的生活用水和工业用水需求的新型解决方案。水务工程能够提供反渗透海水淡化各阶段特别是预处理方面独特和高效的处理工艺，以充分保证处理系统的高效性、稳定性和耐久性。

To combat water stress, Treatment Infrastructure designs technologies capable of producing fresh water from seawater, an alternative for the future...

Desalination is an alternative with the capacity to respond to rising need for domestic and industrial water. Treatment Infrastructure provides unique and efficient treatment processes for each stage, with a particular focus on pre-treatment in reverse osmosis desalination, the process that dictates the efficiency, reliability and durability of membrane-based systems.



### 服务方案

水务工程可以提供多种服务以帮助水务管理部门和工业用户运营水厂。

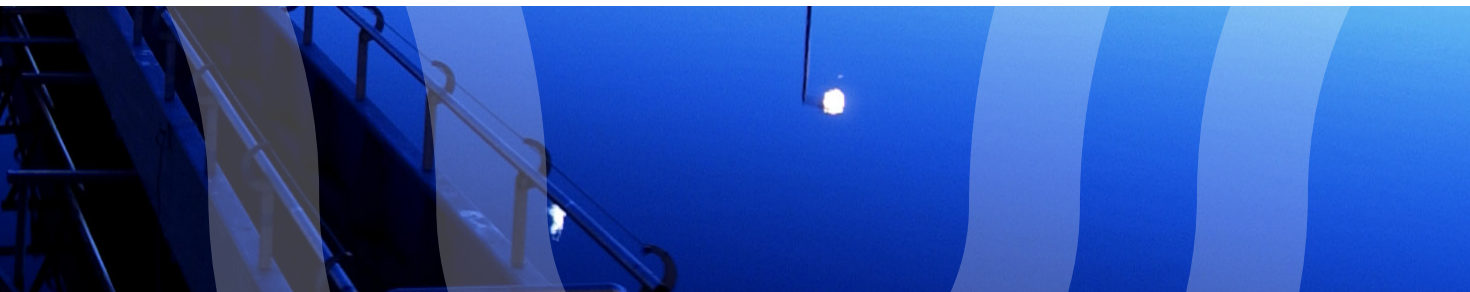
水务管理部门在运营工作中，诸如水厂启动、设备维护、改造扩建、设备租赁、工艺分析、人员培训及设备零部件采购，水务工程均可以提供相应的支持和协助。

### service solutions

To help local authorities and industrial clients operate their plants, Treatment Infrastructure provides a diverse range of Service Solutions.

The local authority maintains operational control, whilst receiving assistance for specific services and tasks: start-up, equipment maintenance, refurbishment, extensions, specialised equipment rental, process analysis, online parts and equipment purchase, operator training.





## 市政污水处理和回用 municipal wastewater treatment and reuse



水务工程提供雨水和生活污水处理方案，出水可用于多种可能的用途……

水务工程在该领域的专业技术和经验确保地方政府和工业客户实现公共健康和环境安全，并完全符合政策标准的要求。水务工程还提供污水回用处理工艺，以满足农业、市政和工业需求，或者作为一种恢复水资源储备的经济手段。

Solutions of Treatment Infrastructure enable rain and household water to be treated to a level of quality that opens up many possibilities...

Treatment Infrastructure's expertise and experience in this field guarantee local authorities and industrial customers public health and environmental safety as well as full compliance with regulatory requirements. Treatment Infrastructure also supplies processes for the reuse of wastewater to meet agricultural, urban and industrial needs, or as an affordable means to restore natural water reserves.



## 生物固废和污泥处理 biosolids and sludge treatment



从污泥中汲取能源、减少污水处理所生成的污泥量……

作为污水处理的副产物，污泥是一个需要从经济和环境上优先考虑的问题。由于政策标准的提高和处理工艺的改进，污泥产量明显增加。针对这一问题，水务工程为客户提供多种处理工艺：消化、浓缩、脱水、干化及焚烧。

Extracting energy from sludge, cutting the amount of waste resulting from wastewater treatment...

As a secondary product of wastewater treatment, sludge is a major economic and environmental priority. As a result of regulatory changes and better wastewater treatment processes, sludge quantities have increased significantly. To deal with this issue, Treatment Infrastructure offers its customers a wide range of processes, from digestion, thickening, dewatering and drying, through to incineration.



## 工业领域水处理 industrial water production and treatment



水务工程为工业客户量身打造适合的工艺水生产和废水处理方案……

工业废水处理是一个发展迅速的领域。水务工程能够从众多的专业技术中选取最合适的工艺以满足最严格的工业要求。并且，水务工程的专业技术在这个领域已获得了广泛认可。

Treatment Infrastructure aids its industrial customers in the selection of solutions tailored specifically to their process water production and effluent treatment needs...

Industrial wastewater treatment is a fast-growing sector. Treatment Infrastructure is able to draw on its expertise in a wide array of processes to provide water production solutions compatible with the most sensitive industrial requirements. Treatment Infrastructure's expertise is widely acknowledged on this market.



# 核心产品 our flagship products

饮用水 海水淡化  
drinking water desalination

水务工程提供一系列有利于合理利用水资源、降低环境影响和行之有效可替代资源的产品和服务……

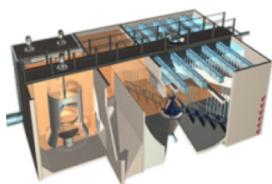
Treatment Infrastructure offers a range of products and services that favour the responsible use of water, mitigation of environmental impact and identification of alternative resources...

## 饮用水

为满足最新的公众健康要求，水务工程开发出最具前沿技术的解决方案：从气浮到超滤，在结构紧凑、自动控制、性能可靠以及经济高效方面都在不断提高。

## drinking water

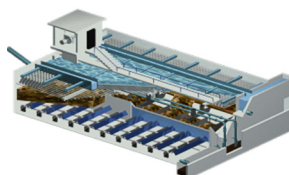
In order to meet new public health requirements, Treatment Infrastructure has developed state-of-the-art solutions: from flotation to ultrafiltration, our technologies are increasingly more compact, automated, reliable and cost-efficient.



### Densadeg™ 高密度澄清池

超强抗冲击能力、自带污泥浓缩功能的高效澄清处理工艺：适用于各种原水，占地小

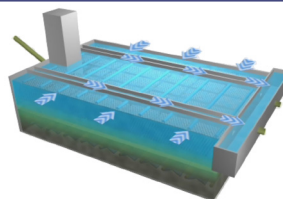
High efficient clarification process with strong resistance to variation of flow and water quality, and integrated sludge thickening function: applicable to various raw water treatment, small footprint



### Pulsatube™ 脉冲澄清池

经典的脉冲式节能型澄清工艺：设备数量少，管理简单，适用于各种原水，耐水质变化，占地省

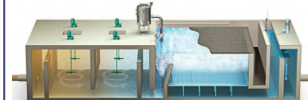
Classic pulse energy-saving clarification process: less equipment, easy to management, applicable to various raw water, adaptable to large variations of water quality, small footprint



### Pulsazur® 炭吸附脉冲澄清池

低能耗的有机物高效吸附澄清工艺：接触时间长，粉末活性炭利用率高，可根据水质变化灵活运行，投资及运行费用低

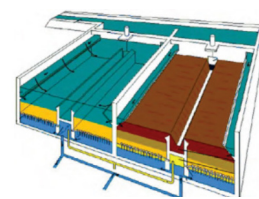
Organic adsorption clarification process with low energy consumption: long contact time of carbon and water, flexible operation according to the variation of water quality, low CAPEX & OPEX



### AquaDAF® 高速气浮

用于地表水澄清处理的超高速气浮工艺：适用于高藻低浊和低温水，除藻效率高，占地极为紧凑

Ultra high speed air flotation process for surface water clarification: extremely compact process for algae and suspended solid remove, suit to high algae, low turbidity and low temperature water treatment



### Aquazur® V 型滤池

经典的气水反冲洗砂滤工艺

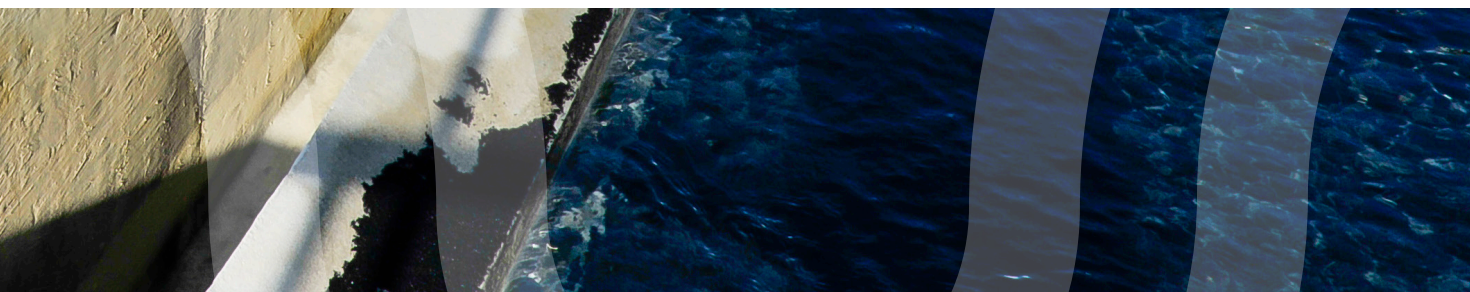
Classic sand filter with combined air + water backwash

over 3,000 drinking water production plants built

by Treatment Infrastructure worldwide

3,000 多个世界各地的饮用水厂



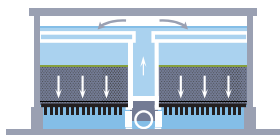


## 海水淡化

水务工程将可持续发展放在首要位置，始终站在海淡技术创新的最前沿，包括风能利用、能量回收、最大程度减少膜清洗的预处理系统及先进的浓水排放方式以保护海洋生物。

### desalination

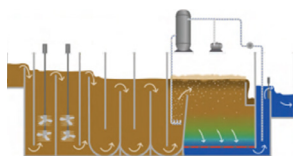
At the cutting edge of innovation in desalination, Treatment Infrastructure is fulfilling sustainable development priorities: use of wind power, energy recovery, pre-treatment systems to minimise membrane washing, improved concentrate dispersion processes to protect marine wildlife.



#### CarbMediazur™ 炭砂滤池

颗粒活性炭和石英砂双层滤料，具有物理化学吸附 & 生物降解作用，同时具备物理截留作用

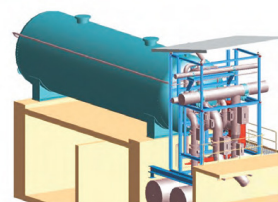
Dual-layer filter integrating GAC and sand media, combined effects of physico-chemical adsorption, biological degradation, and physical interception



#### SeaDAF® 高速气浮

用于海水淡化预处理的超高速气浮工艺：有效去除藻类和悬浮物的紧凑型溶气气浮

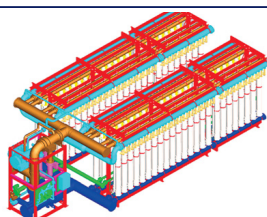
Ultra high speed air flotation for desalination pre-treatment: compact dissolved air flotation to effectively remove algae and suspended solids



#### Seaclean®

替代超滤做为反渗透预处理的压力式大型卧式双介质过滤器：出水水质堪比超滤，使用寿命长，无需化学清洗

Pressurized large horizontal DMF tank for RO pre-treatment as a substitution of ultrafiltration: water quality almost as ultrafiltration, long using life, no need chemical cleaning



#### Ultramarine™

用于海水淡化的高品质模块化压力式超滤万能膜架：兼容国内外主流品牌不同超滤膜

High quality and modular pressurized UF membrane rack for desalination: compatible with different brand UF membranes

over 250 desalination plants built

by Treatment Infrastructure worldwide

250 多个遍及全球的海水淡化厂

# 核心产品 our flagship products

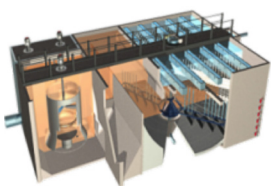
市政污水处理和回用  
municipal wastewater treatment and reuse

## 市政污水处理和回用

为了确保更好的生物多样性保护，水务工程开发了许多占地紧凑、节省能耗、药耗的污水处理工艺。此外，水务工程还提供应用于工业、农业、市政领域的污水回用技术。

## municipal wastewater treatment and reuse

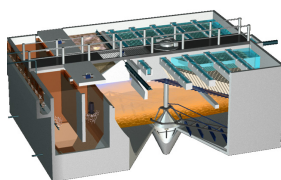
Innovative for their compact size and reduced energy and reagent consumption, these technologies guarantee better biodiversity protection. In addition, Treatment Infrastructure supplies solutions that reuse treated water for agricultural, industrial or municipal purpose.



Densadeg™  
高密度沉淀池

超强抗冲击能力、自带污泥浓缩功能的高效初沉和深度处理的物化工艺：占地紧凑，超高污染物去除率

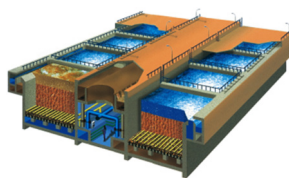
High efficient physico-chemical process for primary or tertiary treatment with strong resistance to variation of flow and water quality, and integrated sludge thickening function: compact footprint, ultra high pollutants removal rate



Sedipac™  
高密度沉淀池

具有沉砂除油功能的、专用于污水初沉的紧凑型高效沉淀池：无需投加化学药剂，占地省

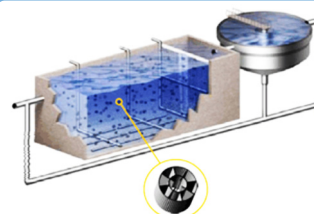
Compact high efficient settling tank with grit and grease removal, specially for primary wastewater treatment: without chemical dosing, small footprint



Biofor™  
生物滤池

专利的紧凑型上向流生物滤池工艺：占地省，负荷高，耐水质变化冲击，去除率高

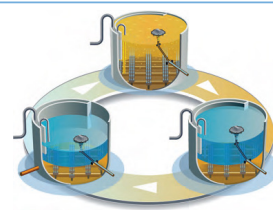
Patented compact upflow biofilter process: adaptable to large variations of water quality, high removal rate and load, small footprint



Meteor®

高效去除有机物和氮的紧凑型移动床生物膜处理工艺：尤其适用于现有活性污泥处理的升级改造

Compact moving bed biofilm process to effectively remove organics and nitrogen: especially suits to upgrading and refurbishment of existing activated sludge treatment process



Cyclor®

全自动序批式活性污泥处理工艺：占地紧凑，操作灵活，适应水量水质变化

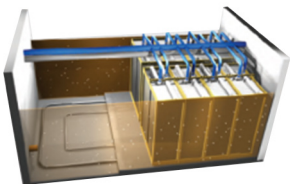
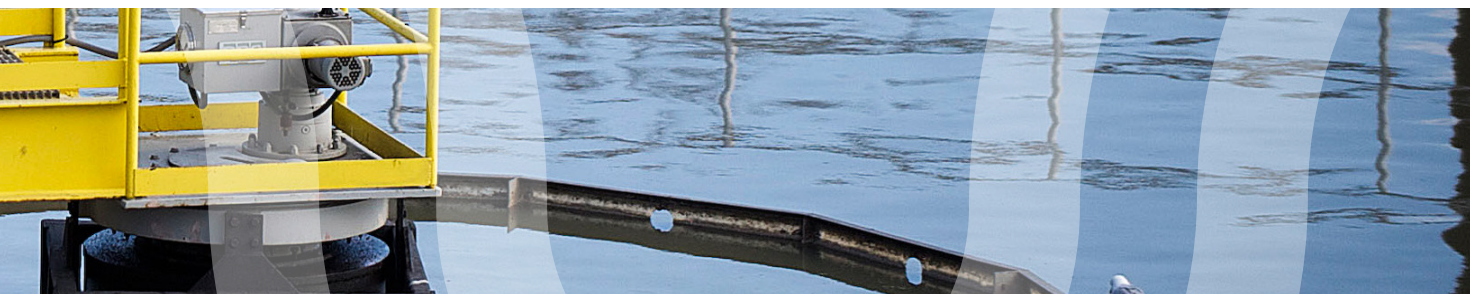
Automatic sequence biological activated sludge treatment process: compact footprint, flexible operation, adaptable to large variations of water quantity and quality

over 2,500 wastewater plants built

by Treatment Infrastructure worldwide

2,500 多个全球各地的污水处理厂

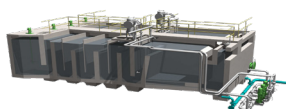




### Ultrafor® 膜生物反应器

集成最新超滤膜及膜擦洗技术的领先 MBR 工艺：处理效率高，出水水质好，占地省

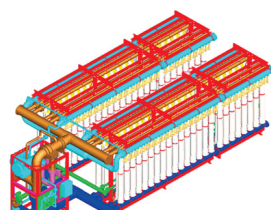
Leading MBR process integrated with the latest ultrafiltration membrane and membrane cleaning technology: high efficiency, excellent effluent quality, small footprint



### GreenDAF® 高速气浮

用于污水深度处理的紧凑型超高速溶气气浮工艺：除磷除 SS 效率高，出水水质好，占地少，设备及土建费用低

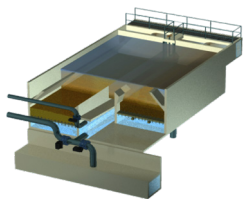
Compact ultra high speed flotation process for wastewater tertiary treatment: high efficiency of phosphorus and SS removal, good effluent quality, small footprint, low equipment and civil work cost



### Ultrablue®

集成最新板式超滤膜及膜擦洗技术的领先 MBR 工艺：处理效率高，出水水质好，使用寿命长

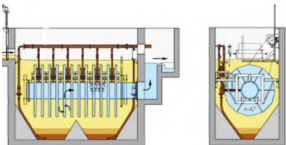
Leading MBR process integrated with the latest flat ultrafiltration membrane and membrane cleaning technology: high efficiency, excellent effluent quality, long using life



### Denifor V™ 丹尼弗 ——深度脱氮 V 型滤池

高负荷下向流反硝化 V 型生物滤池：可同步高效脱氮除磷和除悬浮物

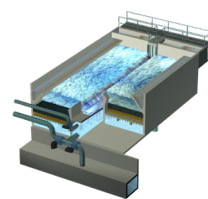
High load downward-flow denitrification biological filter developed from Aquazur® V: simultaneous removal of phosphorus, nitrogen and suspended solid



### Compakblue® 转盘式过滤器

适用于污水深度处理除 SS，可代替砂滤，占地省，水头损失小

Submerged disc filter to remove SS, an alternative solution of sand filter with less footprint and head loss



### Flopac™ 好氧 V 型生物滤池

高负荷下向流好氧 V 型生物滤池：用于污水深度处理中去除 BOD 和 SS，也可同步去除总磷

High load downward-flow aerated biological filter developed from Aquazur® V: simultaneous removal of BOD, phosphorus and suspended solid in WW tertiary treatment

Over 50 membrane bio-reactor plants

50 多个膜生物反应器工艺处理厂

# 核心产品 our flagship products

生物固废 / 污泥 工业领域  
biosolids / sludge industry

## 生物固废 / 污泥

水务工程在生物固废 / 污泥处理多个领域拥有专长技术，针对各类污泥的最终用途，处理质量的创新是关注的重点。目标是在农业应用和能量利用上有效使用生物固废 / 污泥。

## biosolids / sludge

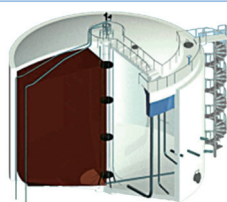
When it comes to biosolids / sludge, Treatment Infrastructure possesses expertise in multiple areas, with a focus on innovation in treatment quality, whatever the final purpose of the sludge produced. The aim is to use the biosolids efficiently, whether for agriculture or energy generation.



### DehydriS® Twist 脱湿特高干脱水机

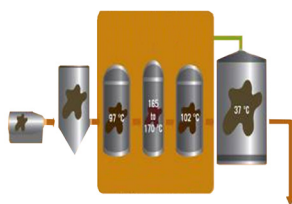
独创型全自动超高干度绞压式污泥脱水机

Unique full automatic sludge piston press system with ultra-high dryness



### Digelis® 常规消化技术

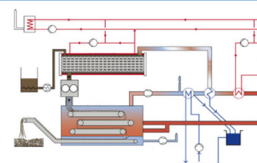
经典的中温或高温污泥消化工艺  
Classic mesophilic or thermophilic sludge digestion process



### Digelis® Turbo 高温热水解增强型消化技术

成熟的加强型污泥热水解消化组合工艺

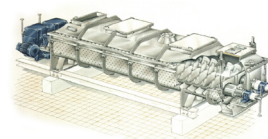
Mature enhanced combined sludge treatment processes of thermal hydrolysis and anaerobic digestion



### Innodry™ 2E 两段式污泥干化技术

能耗最低且具有极高安全性的独创型两段式污泥干化工艺

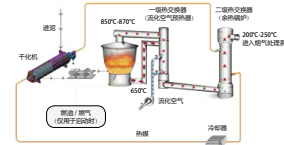
Creative two-stage sludge drying process with the lowest energy consumption and very high safety



### Innodry™ 1P 桨叶式干化

可处理高粘滞工业污泥的干化处理技术，系统配置灵活、安全系数高

Flexible and safety sludge drying process, can drying high viscous industrial sludge



### Thermylis® 2S 预干化——高温流化床焚烧技术

针对中国污泥低热值特点的最佳可行工艺：预干化 - 高温流化床焚烧工艺

The most feasible process for low calorific value sludge in China: pre-drying high temperature fluidized bed incineration process

Over 40 Innodry™ 2E

drying shops

40 多个两段式污泥干化厂

Over 50 Thermylis®

thermal oxidation systems

50 多个高温流化床污泥焚烧厂



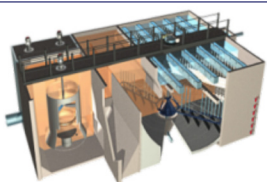


## 工业领域

采用水务工程的水处理技术能够满足工业上最严格的水质和工艺需求，制造生产各种工业产品。

### industry

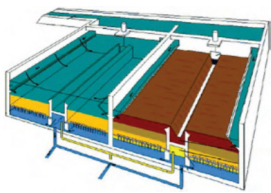
Treatment Infrastructure's technologies produce water that is consistent with the most critical industrial needs, contribute to our customers' industrial processes, and provide the raw material needed to manufacture a wide range of products.



### Densadeg™ 高密度沉淀池

超强抗冲击能力、自带污泥浓缩功能的高效初沉和深度处理的物化工艺：占地紧凑，超高污染物去除率

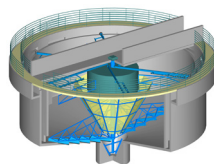
High efficient physico-chemical process for primary or tertiary treatment with strong resistance to variation of flow and water quality, and integrated sludge thickening function: compact footprint, ultra high pollutants removal rate



### Aquazur® V 型滤池

经典的气水反冲洗砂滤工艺

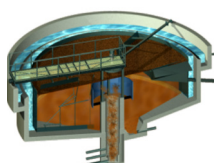
Classic sand filter with combined air + water backwash



### DCI™ 隔油分离器

专利的高效除油工艺：除油效率高，耐冲击，结构简单，故障率极低

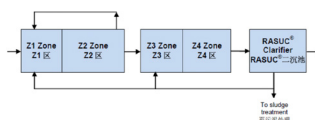
Patented circular interceptor for oil removal: compact and high efficiency, strong resistance to the variation



### Sediflotazur™ 气浮池

高效溶气气浮工艺：既可用于污水的预处理，也可作为深度处理，高效去除水中的乳化油和 SS

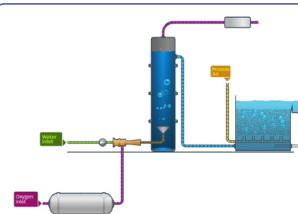
High efficient air flotation process: compact process to remove emulsified oil and suspended solid, can be used as a pre-treatment or tertiary treatment



### Nitrotor™ 活性污泥工艺

改良型多级 AO 工艺，可灵活改变各区功能，以应对复杂的原水水质

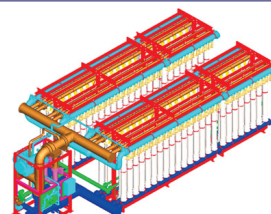
Optimized multiple stage AO process, better suit to complex raw water quality



### Oxyblue® 臭氧生物滤池工艺

臭氧氧化与生物滤池组合、高效去除难降解 COD 的清洁工艺：无耗材、无化学污泥等副产物

Clean process combined with ozonation and biological filter, efficiently remove hard COD: no consumables, no chemical sludge



### Ultrablue®

用于污水深度处理及回用的外压式超滤膜架

UF membrane rack for wastewater tertiary treatment and reuse

over 3,800 industrial plants built

by Treatment Infrastructure worldwide

3,800 多个全球各地的工业废水处理厂

# 典型业绩 typical references

## 澳门石排湾净水厂

### Macau Seac Pai Van drinking water treatment plant

#### 两种水源切换供水 原水水质复杂

#### Water supply from two sources, raw water featured by complex quality

澳门石排湾净水厂的水源来自西江水和竹银水库水，雨季高浊、短时有机物偏高；春季水库水低浊高藻、还存在有机物污染。水厂采用了 Pulsatube™ 脉冲澄清池和 Pulsazur™ 炭吸附澄清池有效应对水源和水质多变的问题，确保合格的供水水质。

The water source of Macau SPV DWTP consist of the water from West River and Zhuyin Reservoir, and it is featured by high turbidity and high organic matter concentration in a short period. In spring, the water from reservoir with low turbidity and high algae is also contaminated by organic pollutants. The SPV DWTP adopts Pulsatube™ and Pulsazur® to solve the problem of complex water source and water quality, ensuring a qualified water supply.

完工时间 Year of Completion: 2021

处理量 Capacity: 130,000 m³/d

主要工艺 Main Processes:

脉冲澄清池、炭吸附澄清池、V 型滤池

Pulsatube™, Pulsazur®, Aquazur® V



## 珠海乾务水厂

### Zhuhai Qianwu drinking water treatment plant

#### 紧凑 高效除藻

#### Compact footprint, efficient algae removal

珠海乾务水厂 I 期将折板絮凝平流池改造为高速气浮，并扩建 II 期，使得水厂整个都采用了高速气浮，有效应对低浊高藻的水质，保证了日常供水的安全。

The phase I project of Zhuhai Qianwu DWTP reconstructs the horizontal flow folded-plate flocculating tank into AquaDAF®, and then expands the scale in phase II project with the full application of AquaDAF® to effectively treat the low turbidity and high algae water and ensure the safety of daily water supply.

完工时间 Year of Completion: 2016

处理量 Capacity: 280,000 m³/d

主要工艺 Main Processes:

高速气浮、V 型滤池

AquaDAF®, Aquazur® V







## 南京桥北污水厂

### Nanjing Qiaobei wastewater treatment plant

#### 满足超高的总氮排放要求

Meet the high requirement on TN discharge standard



南京桥北污水厂采用了 Denifor V™ 深度脱氮 V 型滤池，用于深度处理中去除 TN，出水 TN 和 SS 均可稳定小于 5mg/L，同时 TP 小于 0.1mg/L。是国内最早实现超高 TN 排放要求的污水厂之一。

Nanjing Qiaobei WWTP adopts Denifor V™ to remove TN in the advanced treatment process. The concentration of TN and SS can be treated to lower than 5mg/L stably in the effluent with the TP concentration lower than 0.1mg/L. This WWTP is also one of the pioneering WWTPs which meet the high requirement on TN discharge standard.

**完工时间** Year of Completion: 2020

**处理量** Capacity: 150,000 m³/d

**主要工艺** Main Processes:

深度脱氮 V 型滤池

Denifor V™

## 槐房再生水厂

### Beijing Huaifang reclaimed water plant

#### 绿色环保 — 地下水厂，地上公园

Environmental-friendly - underground plant with wetland park above



槐房再生水厂是目前中国规模最大的全地下再生水厂，日生产再生水能力达到 60 万立方米，出水水质主要指标达到地表四类水体，出水标准全国最高。处理后的再生水将会回用于湿地、绿地和河道等景观用水，为北京市西南地区水环境创造了良好的环境效益和社会效益。

Beijing Huaifang Reclaimed Water Plant is currently the largest fully underground reclaimed water plant in Asia, with the daily reclaimed water production capacity of 600,000 m³. The main indicators of treated water could reach surface water standard class IV. The reclaimed water will be used for the irrigation of the wetland, grassland and river ways, to bring good environmental and social benefits for the water environment of southwest Beijing.

**完工时间** Year of Completion: 2016

**处理量** Capacity: 600,000 m³/d

**主要工艺** Main Processes:

膜生物反应器、臭氧处理

MBR, Ozonation

# 典型业绩 typical references



## 苏州工业园区污泥干化处置项目 Suzhou industrial park sludge drying project

### 节能减排

#### Energy conservation and emission reduction

苏州工业园区污泥干化项目采用最优化工艺技术，是国内污泥处置领域中的一个完美的示范项目。园区内所有污泥经过干化转变成可用燃料，送入毗邻的东吴热电厂发电，而干化所需的热能则来自于该热电厂的余热蒸汽。

Suzhou Industrial Park Sludge Drying Project is a perfect example of optimized solution for sludge disposal in China. All the sludge produced from the industrial park is dried and converted into biomass fuel, which is sent to Dongwu Thermal Power Station adjacent for power generation, while the energy for drying comes from the steam of waste heat from power station.

完工时间 Year of Completion: 2011

处理量 Capacity: 500 TWS/d

主要工艺 Main Processes:

两段式污泥干化工艺

Innodry™ 2E sludge drying



## 上海浦东污泥处理处置工程

### Shanghai Pudong sludge treatment and disposal project

### 高效节能 环境友好

#### Energy-efficient and environment-friendly

上海浦东污泥处理处置工程采用苏伊士 Thermylis® 2S 污泥焚烧系统及两级余热回收工艺，代表着当代最为先进的污泥焚烧流化床技术，体现着安全、低碳、清洁的焚烧处理理念，是破解大型城市污泥处理处置困局的主流技术。

Shanghai Pudong sludge treatment and disposal project adopts SUEZ's Thermylis® 2S sludge incineration system and two-stage residual heat recovery process, which represent the most advanced sludge incineration fluidized bed technique. It embodies the concept of safe, low carbon and clean incineration treatment, and it is the mainstream technique to solve the problem of sludge treatment and disposal in large cities.

处理量 Capacity: 800 TWS/d, 高峰 1,040 TWS/d

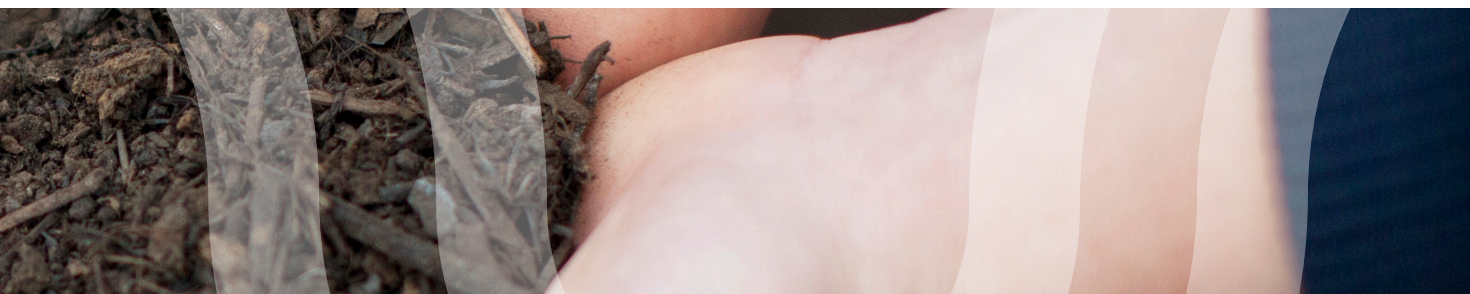
主要工艺 Main Processes:

半干化、高温流化床、余热回收、烟气处理

Pre-drying, Thermylis® 2S, Waste heat recovery, Ash pollution control







## 上海化工区水厂污泥脱水项目 SCIP water treatment plant sludge dewatering project

### 全封闭的污泥高效脱水工艺 High-efficiency dewatering process with fully enclosed system



上海化工区水厂是苏伊士的“脱湿特”在中国的首次应用。该项目中的脱水污泥含固率达到 49% 以上。脱湿特为全封闭操作系统，卸料过程中产生的臭气通过臭气收集罩进行收集，确保了工作环境的安全，以及全方位的除臭。

SCIP Water Treatment Plant is the first area for the application of Dehydris® Twist in China. The dry solid in this project is higher than 49%. Dehydris® Twist is a fully enclosed system, and the odor produced in the sludge cake unloading is collected through the odor collection cover, which ensures safety of working environment, and perfect deodorization.

处理量 Capacity: 228 TDS/d

主要工艺 Main Processes:

污泥浓缩池、脱湿特

Static sludge thickener, Dehydris® Twist

## 墨尔本反渗透海水淡化厂 Melbourne reverse osmosis desalination plant

### 可持续发展 Sustainable development



2009 年 7 月，维多利亚州将世界上最大的公私合营海水淡化项目授给了作为 Aquasure 联合体一方的苏伊士和得利满。

该 BOT 合同期限为 30 年，包括融资、设计、建造以及为期 27 年的运营。

该项目通过宏大的再种植计划来创建生态空间并利用风能最大限度减少碳排放，以此达到保护自然环境的目的。

In July 2009, the State of Victoria awarded SUEZ and Degrémont, as part of the Aquasure consortium, the world's largest public-private desalination project.

The 30-year BOT contract includes financing, design, construction and 27 years operation.

The project aims to preserve natural environment by creating an ecological space through an ambitious revegetation program and using wind power to minimise the carbon footprint.

投产时间 Year of Putting-into-Operation: 2012

产水量 Capacity: 450,000 m³/d

主要工艺 Main Processes:

多介质压力滤池、两级反渗透系统、能量回收、后处理

Seaclean®, Two passes reverse osmosis system, Energy recovery, Post treatment system

# 典型业绩 typical references

## 大连恒力石化综合污水处理厂

### Dalian Hengli Petro embedded wastewater treatment plant

#### “嵌入式污水处理厂”助力石化绿色发展

#### The "Embedded WWTP" assists petrochemical green development

率先引入了“嵌入式污水处理厂”的概念，通过综合分析上游装置污染物，对污水处理厂与上游石化装置进行协同设计，利用各环节产生的废物以“废”制“废”，有效减少了污染物的排放，并降低了企业的运行成本。

Introducing the concept of "Embedded WWTP" for the first time. Through a synthetic analysis of the pollutants produced by upstream units, SUEZ creates a collaborative design for the plant and the upstream petrochemical installations. By making use of wastes produced during various processes to treat waste, the "Embedded WWTP" effectively reduces pollutant emissions, saves operational costs for clients.

**处理量 Capacity:** 炼油废水 36,000 m<sup>3</sup>/d, 乙烯废水 21,600 m<sup>3</sup>/d

#### 主要工艺 Main Processes:

DCI™ 隔油池、均衡中和池、Sediflotazur™ 圆形气浮、A/O 生化池、Densadeg™ 高密度沉淀池、Oxyblue® 臭氧生物滤池、Biofor DN™ 反硝化生物滤池、Biofor CN™ 生物滤池、GreenDAF® 高速气浮、Carbazur™ 活性炭滤池

DCI™, N-Tank, Sediflotazur™, A/O, Densadeg™, Oxyblue®, Biofor DN™, Biofor CN™, GreenDAF®, Carbazur™



## 万华烟台工业园综合废水处理装置及浓水深处理

### Wanhua Yantai industry park integrated wastewater treatment plant and brine treatment

#### 循环经济、绿色发展

#### Circular economy and green development

创新性的采用“OxyBio Green 臭氧尾气曝气活性污泥工艺”，将臭氧尾气回用至曝气生化处理段，极大提高了生化处理段的处理效率，同时大幅节省电费，为用户创造显著的经济效益，处理出水满足国内工业水处理最严格的排放要求。

Creatively applying "OxyBio Green-ozone off gas reuse & pure oxygen aeration technology". The ozone off gas is reused for the biological aerating treatment process, which greatly improves the treatment efficiency. This technology dramatically saves electricity cost, creating significant economic benefits for the client. The treated water quality will meet the most stringent requirement on industrial water treatment in China.

**处理量 Capacity:** 乙烯废水 16,800 m<sup>3</sup>/d, 东区综合废水 45,000 m<sup>3</sup>/d

#### 主要工艺 Main Processes:

Sediflotazur™ 圆形气浮、OxyBio Green 臭氧尾气曝气活性污泥工艺、Nitrotor™ 生化池、Densadeg™ 高密度沉淀池、Oxyblue® 臭氧生物滤池、AOP™ 臭氧双氧水高级氧化、Biofor DN™ 反硝化生物滤池、GreenDAF® BWW 高速气浮、Carbazur™ 活性炭滤池  
Sediflotazur™, OxyBio Green, Nitrotor™, Densadeg™, Oxyblue®, AOP™, Biofor DN™, GreenDAF® BWW, Carbazur™







## 泰兴经济开发区污水处理厂 Taixing Economic Development Zone WWTP

### 污水排放标准严格 Strict standards for wastewater discharge



泰兴经济开发区是全国最早的专业性精细化工园区之一，包括氯碱、金属、染料和颜料、医药、农药、油脂化工等，2020 年位居我国化工园区综合排名第 5。为了园区的持续发展，满足江苏省及长江沿线的环保要求，2020 年苏伊士新建了一座 5 万吨 / 日的工业园区集中式污水处理厂，包括主处理线、预处理线、除臭线以及污泥处理线，处理后的废水满足江苏省及长江沿线严格的污水排放标准。

Taixing Economic Development Zone (Taixing EDZ) is one of the earliest professional fine chemical industry parks in China, including chlor-alkali, metal, dyestuff and pigment, medicine, pesticide, oil chemical industry. In 2020, it ranked the 5th among China's chemical industry parks. Considering the development of EDZ and the environmental protection requirements of Jiangsu Province and Yangtze River, SUEZ built a new WWTP with the daily treatment capacity of 50,000m<sup>3</sup> for Taixing EDZ. The scope includes the main treatment line, pretreatment line, odor treatment line, and sludge treatment line. The treated water can meet the strict discharge standards of Jiangsu Province and Yangtze River.

**处理量 Capacity:** 50,000 m<sup>3</sup>/d

**主要工艺 Main Processes:**

Nitrotor™ 生化池、Densadeg™ 高密度沉淀池、Aquazur® V 型滤池、Oxyblue® 臭氧生物滤池技术、Carbazur™ DF 型（双向流）颗粒活性炭吸附池  
Nitrotor™, Densadeg™, Aquazur® V, Oxyblue®, Carbazur™ DF

## 上海化工园区污水处理项目 Shanghai chemical industry park wastewater treatment project

### 复杂、高浓度工业污水处理 Complicated high concentration industrial wastewater treatment



上海化学工业园区为国家级经济技术开发区，是国家首批新型工业化示范基地、国家生态工业示范园区、全国循环经济先进单位。配合园区的“环境保护一体化”理念，针对复杂和高浓度的工业污水，苏伊士以优化投资成本和运行成本的设计，采用稳定安全和易于操作维护的工艺，以及最先进可靠的技术，严格确保了园区污水达标排放的目标。

As a National-level Economic and Technical Development Zone, Shanghai Chemical Industry Park (SCIP) is the first batch of pilot base of new industrialization, ecological demonstration area and advanced unit of circular economy in China. Supporting the concept of "integration of environmental protection", SUEZ guaranteed the discharge of "complicated high concentration industrial wastewater" with the design which could optimize CAPEX and OPEX, the processes which are stable, safe and easy for operation and maintenance, as well as the technologies which are advanced and reliable.

**处理量 Capacity:** 50,000 m<sup>3</sup>/d

**主要工艺 Main Processes:**

均衡中和池、A2/O 生化池、气浮池、臭氧消毒、污泥处理、Oxyblue® 臭氧生物滤池、Carbazur™ 颗粒活性炭吸附池

N-tank, A2/O, Floatation, Ozonation, Sludge treatment, Oxyblue®, Carbazur™



**苏伊士水务工程有限责任公司**

中国北京市朝阳区东三环北路 38 号院 1 号楼泰康金融大厦 31 层  
电话: (86)10-5957 7000

SUEZ Water Treatment Company Limited

31F, Taikang Financial Tower, No. 38 Dongsanhuan North Road,  
Chaoyang District, Beijing 100026, PRC  
Tel: (86)10-5957 7000

[www.suez-asia.com](http://www.suez-asia.com)

email: [suez.asia@suez.com](mailto:suez.asia@suez.com)

扫描二维码，请关注苏伊士亚洲微信、推特和领英账号

Scan below for SUEZ Asia WeChat, Twitter and LinkedIn account

