

水魔岛®

Green and Low-Carbon Prefabricated Water Plant Series

绿色低碳装配式水厂系列



中国·浙江中昌水处理科技有限公司
ZHEJIANG ZHONGCHANG WATER TREATMENT TECHNOLOGY CO., LTD., CHINA

水魔岛®

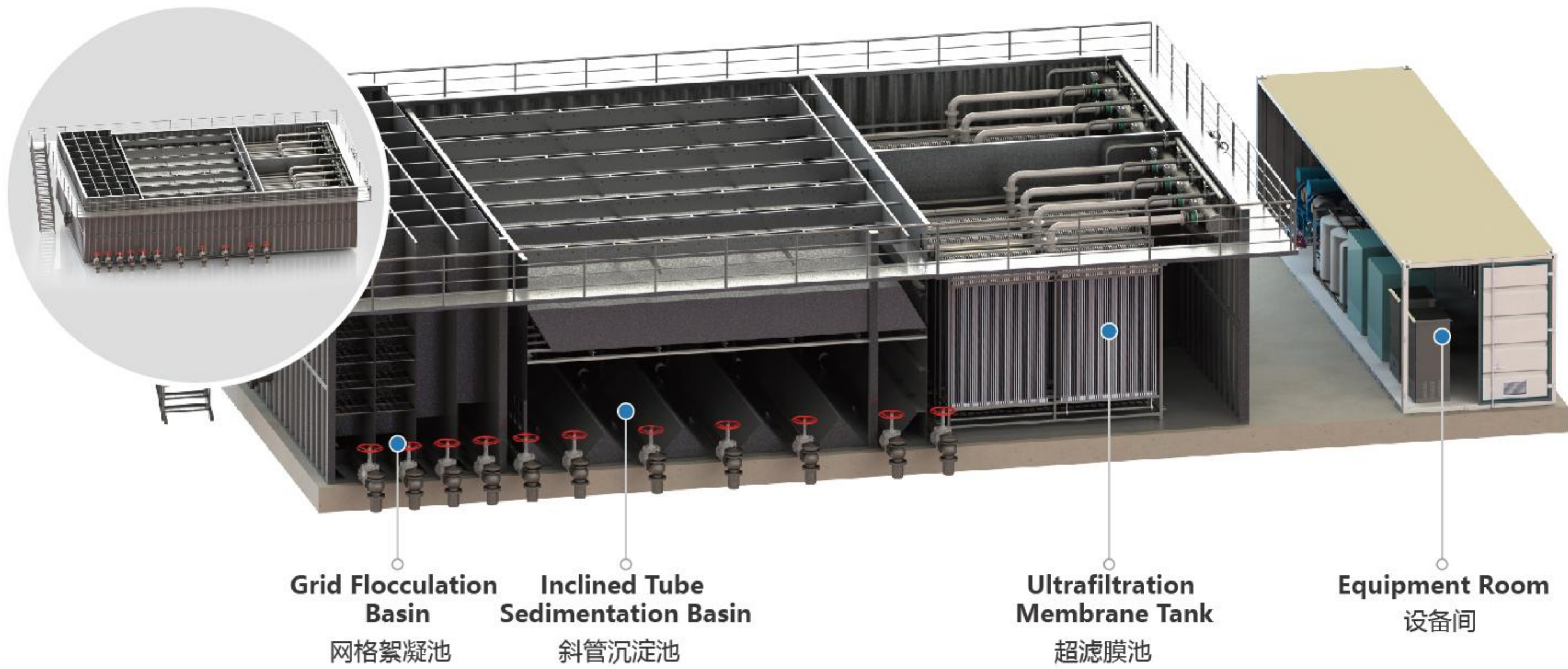
Water Magic Cubes

Intelligent Modular Prefabricated (Membrane Filtration)

Water Purification Plant

智能模块装配式（膜滤）净水厂

- Short construction period
建设周期短
- Small footprint
占地面积小
- Low investment
投资费用少
- Low operating cost
运营成本低



Type A
A型

Siphon-type Submerged Ultrafiltration Membrane Process
虹吸式浸没式超滤膜工艺

Features: Less auxiliary equipment, stable operation, excellent effluent water quality, supports manual and fully automatic control.
Suitable for projects where the clean water tank can be buried underground easily.

特点: 设备少、运行稳定、出水水质好，可手动、全自动控制。适用于清水池方便深埋的场合。

Type B
B型

Pump Suction-type Submerged Ultrafiltration Membrane Process
泵吸式浸没式超滤膜工艺

Features: Flexible layout, stable operation, excellent effluent water quality, supports manual and fully automatic control. Suitable for projects where underground burial of the clean water tank is inconvenient.

特点: 布置灵活、运行稳定、出水水质好，可手动、全自动控制。适用于清水池不便于深埋的场合。

Model Type 分类	Single Unit Capacity (m³/h) 单体规模(m³/h)	Membrane Tank Type 膜池形式	Water Production Mode 产水方式	Cleaning Mode 清洗方式	Control Mode 控制设备
Type A A型	10 ~ 660	Submerged Ultrafiltration Membrane 浸没式超滤膜	Siphon Type 虹吸式	Physical Cleaning + Maintenance Chemical Cleaning 物理清洗+维护洗化学洗	Manual + Automatic 手动+自动
Type B B型	10 ~ 660	Submerged Ultrafiltration Membrane 浸没式超滤膜	Pump Suction Type 泵吸式	Physical Cleaning + Maintenance Chemical Cleaning 物理清洗+维护洗化学洗	Manual + Automatic 手动+自动

水魔岛®

Water Magic Cubes

Intelligent Modular Prefabricated Water Purification Plant

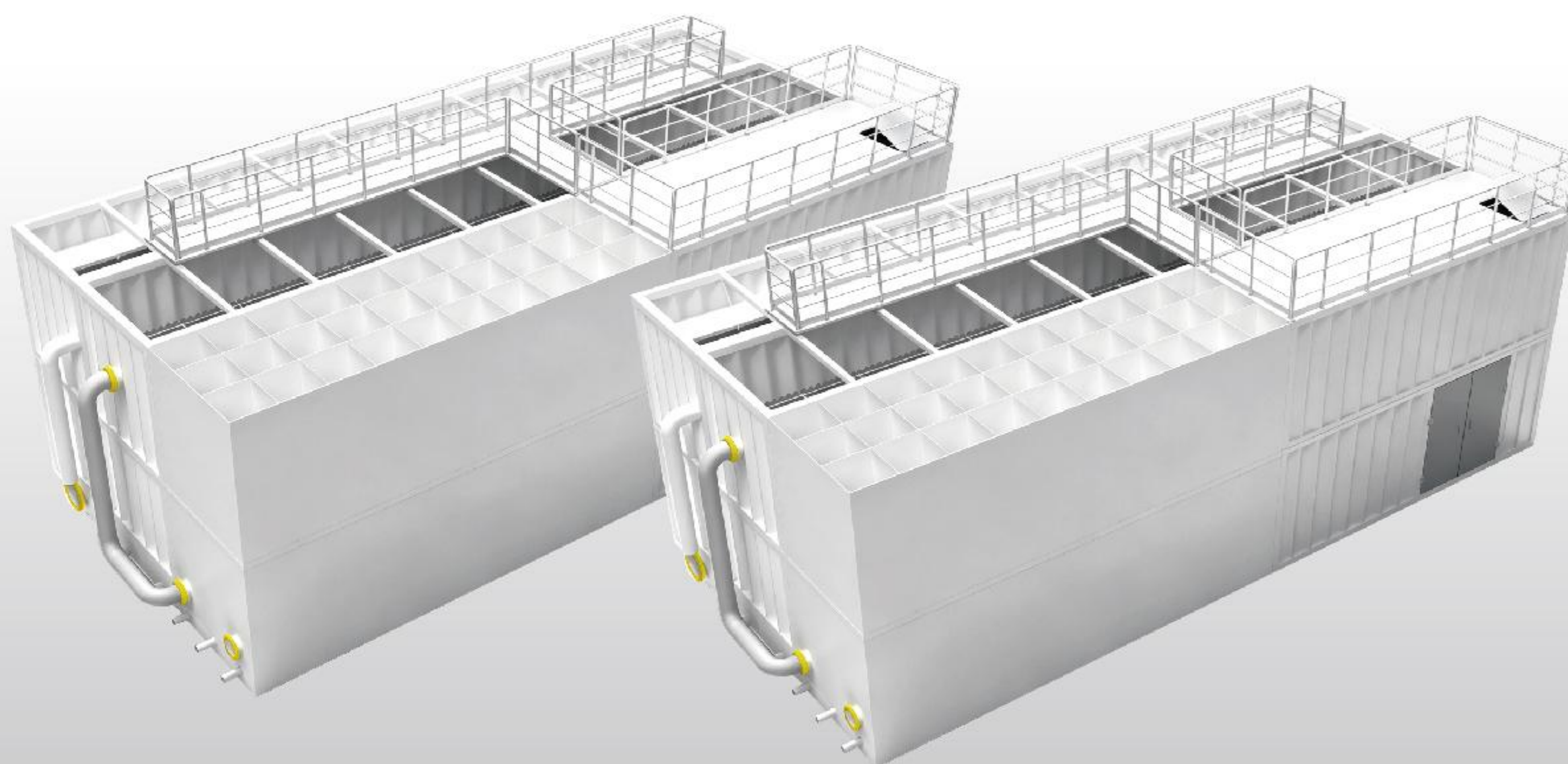
智能模块装配式净水厂

Short construction period
建设周期短

Superior Product Quality
产品质量优

Low investment
投资费用少

Low operating cost
运营成本低



Treatment Capacity
(m³/h)
处理水量(m³/h)

Product Dimension (L × W × H, Unit : m)
产品尺寸 (长 × 宽 × 高 单位: m)

10

2 sets of cabinets sized 3.5×2.438×2.591, stacked vertically
2 个 3.5×2.438×2.591 柜 (上下叠)

20

2 sets of cabinets sized 5×2.438×2.591, stacked vertically
2 个 5×2.438×2.591 柜 (上下叠)

30

2 sets of cabinets sized 6.5×2.438×2.591, stacked vertically
2 个 6.5×2.438×2.591 柜 (上下叠)

50

2 sets of cabinets sized 10×2.438×2.591, stacked vertically
2 个 10×2.438×2.591 柜 (上下叠)

100

2 sets of cabinets sized 18×2.438×2.591, stacked vertically
2 个 18×2.438×2.591 柜 (上下叠)

220

6 sets of cabinet sized 15.5×2.438×2.591, stacked vertically
6 个 15.5×2.438×2.591 柜 (上下叠)

440

12 sets of cabinets sized 15.5×2.438×2.591, stacked vertically
12 个 15.5×2.438×2.591 柜 (上下叠)

660

18 sets of cabinets sized 15.5×2.438×2.591, stacked vertically
18 个 15.5×2.438×2.591 柜 (上下叠)

Note: The above data are standard configuration parameters. The actual dimensions shall prevail. Customized sizes are available according to customers' practical requirements.

注: 以上系列是标准配置参数, 尺寸以实际设备为准, 可根据客户实际需求定尺寸。

Layout Mode 布置方式

Two cabinets: side-by-side arrangement
双柜左右组合



Multiple cabinets: vertical stacking + side-by-side combination
多柜上下左右堆叠组合



Mass cabinets: side-by-side layout
多柜左右组合



Mass cabinets: multi-group combined layout
多柜多组组合



水魔岛®

Water Magic Cubes

Green And Low-Carbon Prefabricated Sewage Treatment Plant

Advanced BIOCOS Technology

绿色低碳装配式污水厂

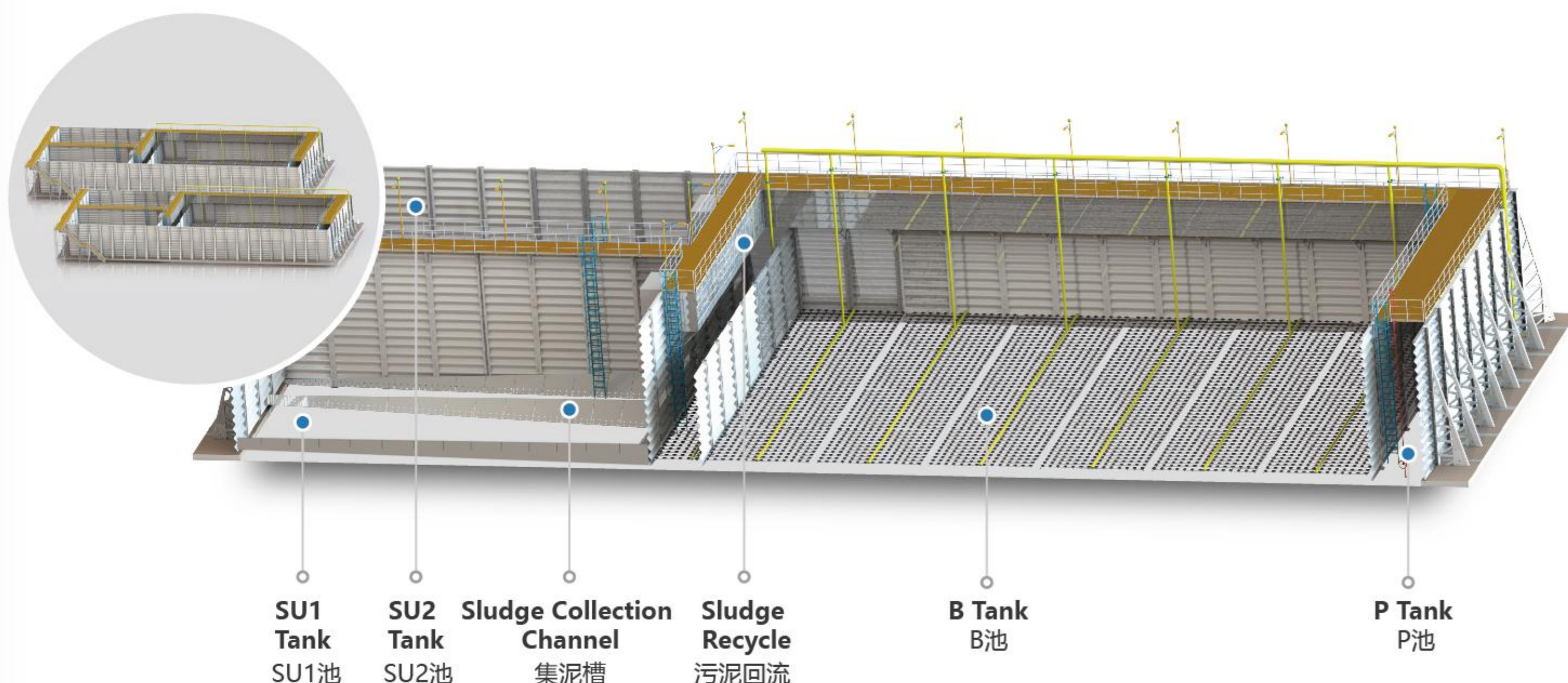
先进的 BIOCOS 工艺

Short construction period
建设周期短

Small footprint
占地面积小

Low investment
投资费用少

Low operating cost
运营成本低



Project Cases 工程案例

A Wastewater Treatment Plant Expansion Project, Shanxi

A prefabricated wastewater plant with 10,000 m³/d capacity. Scope: pretreatment workshop, biochemical tanks, membrane treatment workshop, Parshall flume and supporting facilities.

山西某污水处理厂扩容工程

该污水处理厂扩容工程为一座装配式污水厂，设计规模 1 万 m³/d。主要建设内容为预处理车间、生化池、膜处理车间、巴氏计量槽及其他配套设施。



水魔岛®

Water Magic Cubes Intelligent Integrated Sewage Treatment Equipment

智能一体化污水处理装备

Fast construction
建设周期快

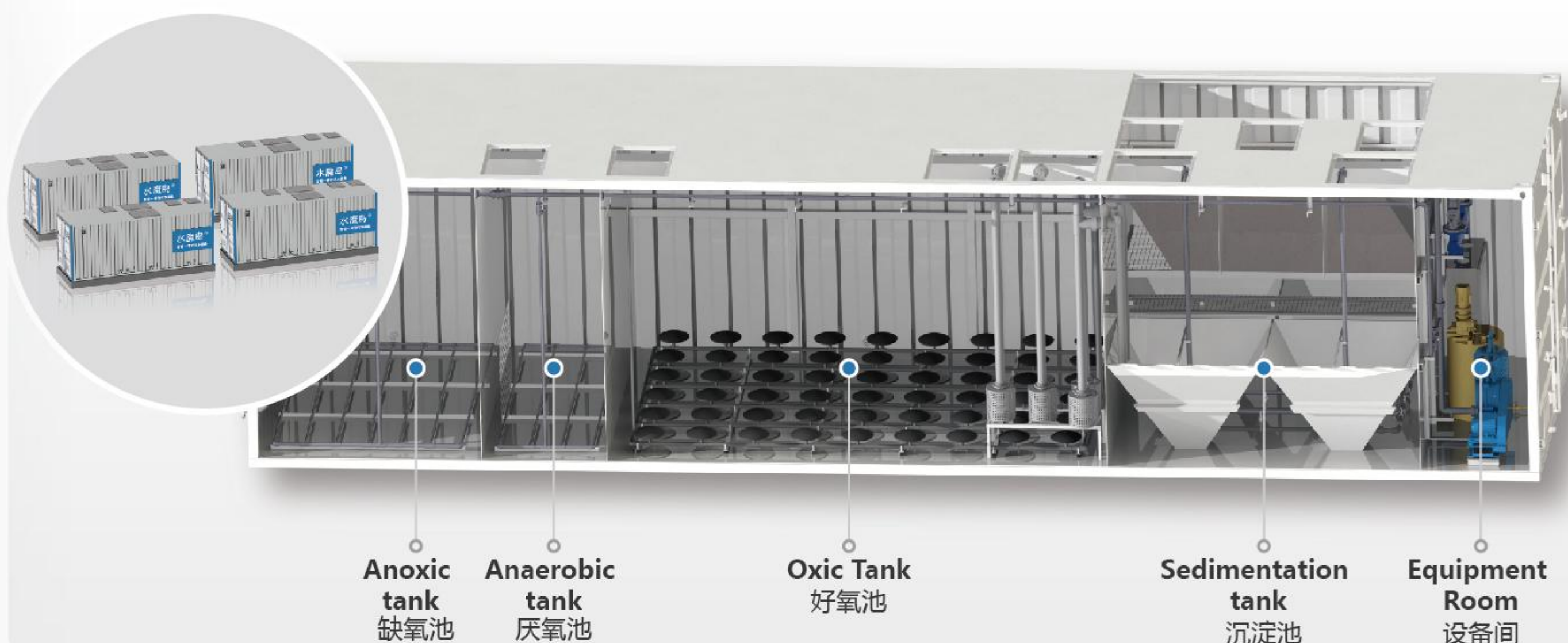
Compact footprint
集约化占地

Low investment
投资费用少

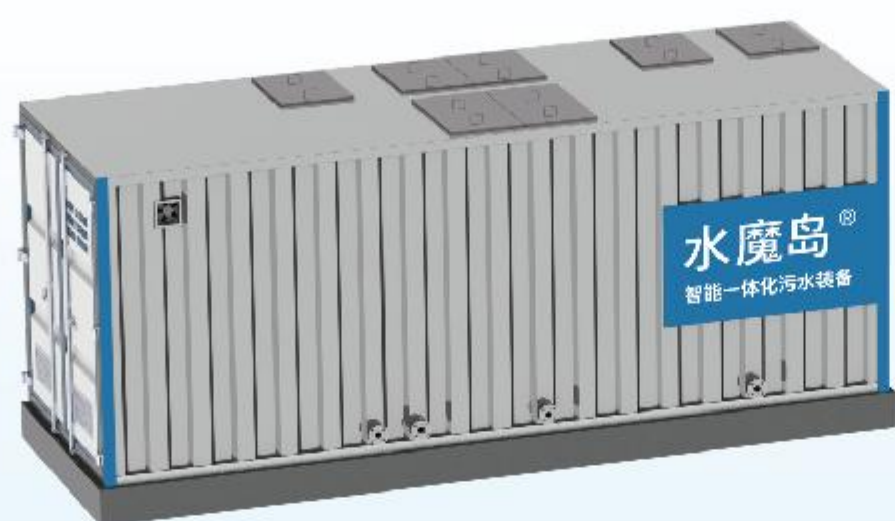
Low operating cost
运营成本低

Unmanned operation
无人化值守

Modular installation
模块化安装



Project Cases 工程案例



Fugu County Domestic Wastewater Treatment Project, Shanxi

After capacity expansion, MBR process was adopted. For scattered rural residential areas, small integrated wastewater stations were built. Our company supplied and installed integrated wastewater treatment equipment.

陕西府谷某生活污水治理工程

该处生活污水处理系统增容后，采用了膜生物反应器处理工艺，针对农村居民点分散的特点，该项目选择了建设小型一体化污水处理站的模式。我司负责一体化污水处理设备供货及安装。



Keshan Village Domestic Wastewater Integrated Equipment Project, Heilongjiang

MBR process was applied. Small integrated wastewater stations were constructed to treat decentralized rural domestic wastewater.

黑龙江克山某村生活污水一体化设备项目

该项目采用了膜生物反应器处理工艺，根据农村居民点分散的特点，该项目采用建设小型一体化污水处理站的模式解决农村污水处理问题。

Awards & Honors 屡获殊荣

The company has participated in drafting more than 10 industrial standards, including: CJ/T 47-2016 Filter Blocks for Water Treatment; CJ/T 83-2016 Inclined Tubes for Water Treatment; CECS 178:2009 Technical Specification for Monolithic Cast Filter Plates and Adjustable Filter Nozzles for Air-Water Washing Filters. It owns more than 10 software copyrights and over 60 authorized patents.

公司参与了《水处理用滤砖》CJ/T 47-2016、《水处理用斜管》CJ/T 83-2016 和《气水冲洗滤池整体浇筑滤板及可调式滤头技术规程》CECS 178:2009 等 10 余项行业标准的制定，拥有软件著作权 10 余项，授权专利 60 余项。

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|--|---|
| • Class II General Contracting Qualification for Mechanical and Electrical Engineering | • ISO 9001 Quality Management System Certification |
| • 机电工程施工总承包二级 | • ISO9001 质量管理体系认证 |
| • Class II Professional Contracting Qualification for Electronic and Intelligent Engineering | • ISO 14001 Environmental Management System Certification |
| • 电子与智能化工程专业承包二级 | • ISO14001 环境管理体系认证 |
| • Class II General Contracting Qualification for Municipal Public Works | • ISO 4500 Occupational Health and Safety Management System Certification |
| • 市政公用工程施工总承包二级 | • ISO45001 职业健康安全管理体系认证 |
| • Luban Award for China Construction Projects (National Quality Project) | • Five-Star After-Sales Service Certification |
| • 中国建筑工程鲁班奖（国家优质工程） | • 五星商品售后服务认证 |
| • National High-Tech Enterprise | • Certification Intellectual Property Management System |
| • 国家高新技术企业 | • 知识产权管理体系认证 |
| • Zhejiang Provincial SRDI SME | • Certification National Benchmark Enterprise for Energy-Saving Water Treatment Equipment |
| • 浙江省专精特新中小企业 | • 全国水处理设备节能标杆企业 |
| • Zhejiang Provincial High-Tech R&D Center | • China Well-Known Environmental Protection Brand |
| • 浙江省高新技术研究开发中心 | • 环保产品中国驰名商标 |
| • Hangzhou High-Tech Enterprise | • Top 10 Domestic Brands in the water treatment Engineering Industry |
| • 杭州市高新技术企业 | • 水工业十大国内品牌 |
| • Hangzhou High-Tech R&D Center (Industrial) | • Municipal Famous Trademark Council |
| • 杭州市高新技术研究开发中心（工业类） | • 市级著名商标 |
| • China Quality & Reputation Assurance Enterprise | • Member of China Urban Water Supply and Drainage Association |
| • 中国质量信誉保证企业 | • 中国城镇供水排水协会理事会员 |

Intelligent Production Line 智能生产线

Stamping forming:
one-step stamping according to designed corrugated plate curvature.

模压成型:
按设计波纹板弧度，一次冲压成型。

Automatic welding:
full robotic welding for corrugated plates, columns, beams.

自动焊接:
波纹板、立柱、梁柱等全自动机器人焊接。

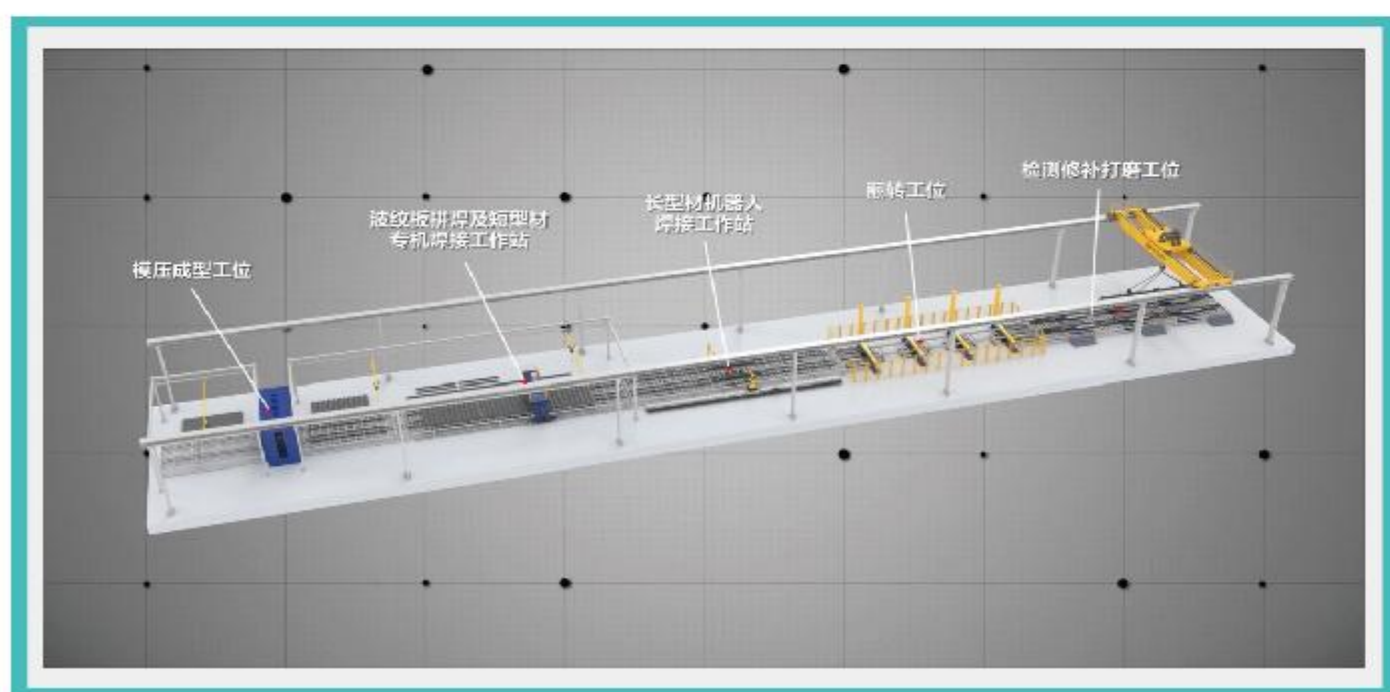


Double-sided reinforcement:
double-sided welding for all structural parts for stability.

双面加固:
所有焊接件采用双面焊接，稳固安全。

Full inspection:
weld inspection to ensure quality.

质检保障:
检焊缝测，确保优质质量。

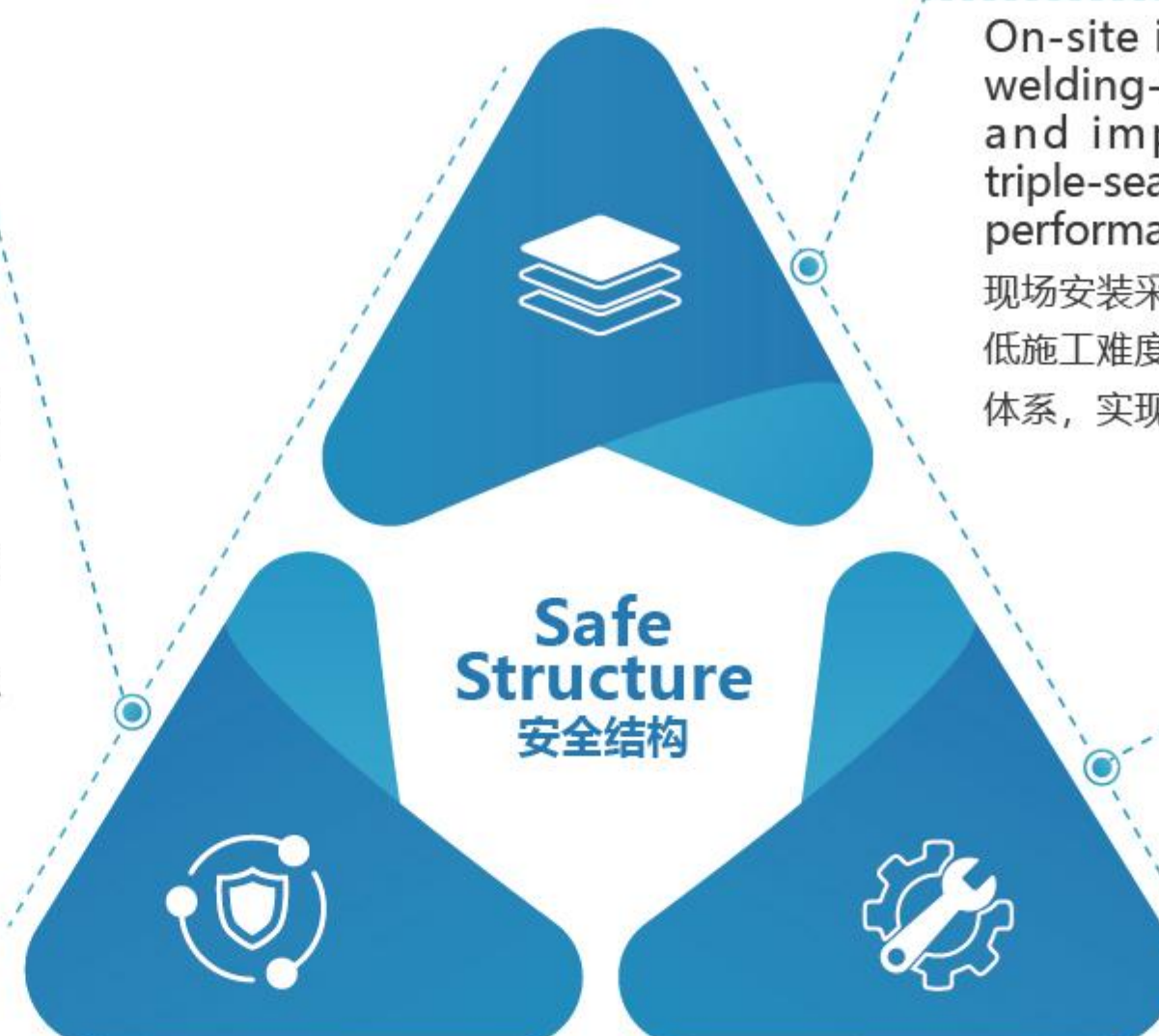


Safe & Stable Structural System

体系结构 安全稳定

A complete "beam-column-slab" structural system is designed considering permanent loads (self-weight, internal water pressure) and variable loads (seismic, wind, snow, geological settlement).

考虑永久荷载“自重、内部水压力”及可变荷载“地震荷载、风荷载、雪荷载、地质沉降”等对结构的要求，建立了一套完整的“梁、柱、板”结构体系。



Welding-free Assembly & Triple Sealing

无焊拼装 三重密封

On-site installation uses bolted connections for welding-free assembly, speeding up construction and improving quality. ZCEN's patented triple-seal structure ensures safe, zero-leakage tank performance.

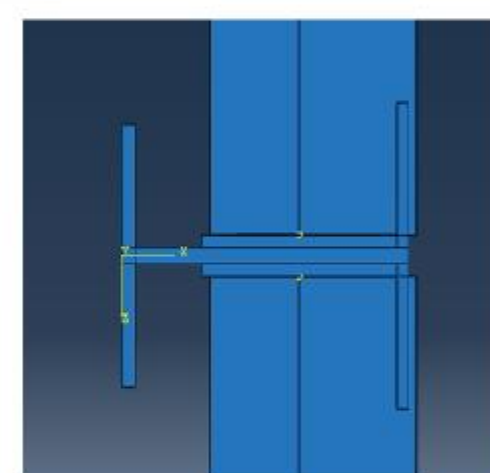
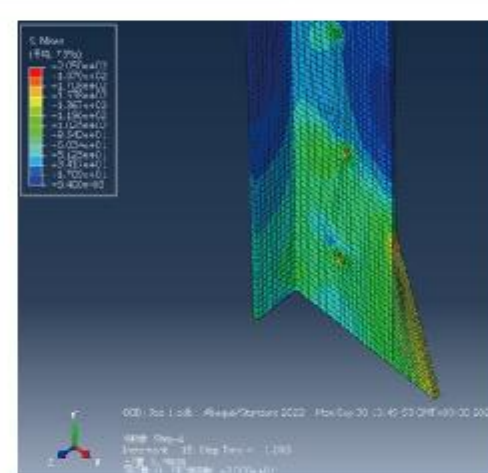
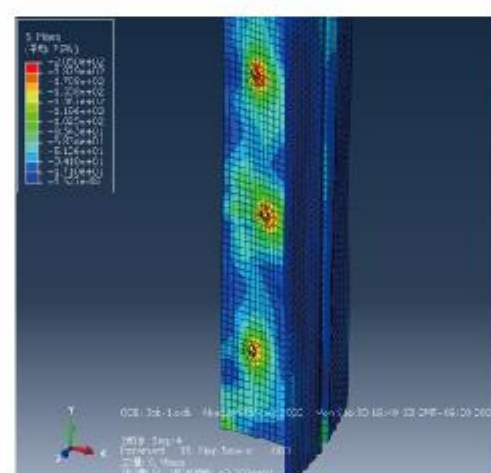
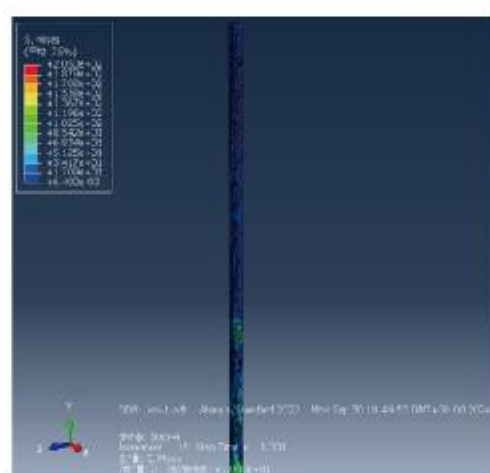
现场安装采用螺栓连接，实现无焊拼装，加快施工进度，降低施工难度，提高施工质量。中昌创新发明了“三重密封构造”体系，实现池体安全、零泄漏。

Flexible Configuration & Process Compatibility

灵活搭建 工艺兼容

Beams, columns, and slabs adopt standardized design for fast production and high universality. The structure can be flexibly adjusted to match various common water treatment processes.

“梁、柱、板”均采用标准化设计，具有生产加工快、通用性强的特点。可根据不同的工艺要求灵活调整结构设计，能适应常用的各种工艺场景。



Green & Prefabricated Advantages 绿色装配



Lower Carbon Emissions

节能减排

Reduces reinforced concrete consumption and cuts use of cement, sand, formwork, machinery, and labor; **overall carbon emissions reduced by over 70%.**

中昌装配式水厂减少传统结构工程中对钢筋混凝土需求，减少大量水泥、黄沙、模板、机械及劳动力的使用等，实现**综合碳排放减少70%以上**。



Shorter Construction Period

节约工期

Standardized design, intelligent manufacturing, and prefabrication. On-site assembly like "building blocks". **Construction period: approx. 3 months, saving over 80% time.**

中昌装配式水厂采用标准化设计、智能化制造、装配式预制，安装现场只需“搭积木”式拼装。**建设周期大约3个月，节约80%以上工期。**



Greener Construction

绿色施工

Reduces civil engineering works by over 90%, minimizing dust, noise, waste, and sewage.

中昌装配式水厂在实际建设中，**减少土建工程量90%以上**，从而相应在建设过程中，减少扬尘、噪音、垃圾、污水等环境污染物的产生。



Recycling

循环利用

Standardized design of 'beams, columns, and slabs', prefabricated structure, highly versatile; on-site construction uses **full bolt connections, no welding needed**, and can be 100% recycled.

“梁、柱、板”标准化设计，装配式结构，互换性，通用性非常强；现场施工采用**全螺栓连接，无需焊接作业**，可100%无损拆卸，循环利用。

Water Magic Cubes – One-Stop Solution Provider

水魔岛®—装配式水厂一站式解决方案服务商。

Zhongchang Company was founded in 1978 and has been specializing in the research and development, manufacturing, and complete equipment integration of water treatment equipment, as well as providing one-stop services including equipment process package, design, procurement, construction, and operation (EPC+O) for over four decades.

The company possesses the second-level qualification for general contracting of electromechanical engineering construction and the second-level qualification for general contracting of municipal public works construction. As a national high-tech enterprise and a provincial specialized, refined, unique, and innovative small and medium-sized enterprise, the company has established an intelligent production workshop for water treatment equipment, an innovative smart manufacturing base for prefabricated water plants, an advanced equipment industrial base for water environment treatment, and a provincial-level high-efficiency water treatment research and development center. Additionally, as a major drafting unit, the company has participated in the compilation of industry standards such as "Inclined Tubes for Water Treatment", "Filter Bricks for Water Treatment", and group standards such as "Technical Regulations for Prefabricated Sewage Treatment Plants", "Integrated Water Purification Equipment", "Technical Regulations for the Application of Integrated Water Purification Equipment", "Technical Regulations for Deep-bed Filter Technology", and "Technical Regulations for Integrally Cast Filter Plates and Adjustable Filter Heads in Air-Water Washing Filters".

The company has participated in numerous national key water supply and drainage projects, including the South-to-North Water Diversion Project, the Shanghai World Expo, and the Beijing Olympic Games. It has been awarded titles such as the China Construction Engineering Luban Award, China's Top Ten Water Engineering Brands, and China's Famous Brands. The company has provided stable and reliable products and high-quality services for over 9,500 domestic and international water treatment projects.

中昌公司始创于一九七八年，四十多年专业从事水处理专用设备研发、制造及成套设备集成、设备工艺包、设计、采购、施工、运营（EPC+O）等一站式服务。

公司拥有机电工程施工总承包二级和市政公用工程施工总承包二级资质。公司系国家高新技术企业和省专精特新中小企业，建有水处理设备智能化生产车间、装配式水厂创新智造基地、水环境治理先进装备产业基地和省级高效水处理研发中心，并作为主要起草单位参编了《水处理用斜管》、《水处理用滤砖》行业标准和《装配式污水处理厂技术规程》、《一体化净水设备》、《一体化净水设备应用技术规程》、《深床滤池技术规程》、《气水冲洗滤池整体浇筑滤板及可调式滤头技术规程》等团体标准。

公司迄今已参与国家南水北调、上海世博会、北京奥运会等供排水多个国家重点工程，并荣获中国建筑工程鲁班奖、中国十大水工品牌、中国驰名商标等称号，为9500余个国内外水处理工程项目提供了稳定可靠的产品和优质服务。

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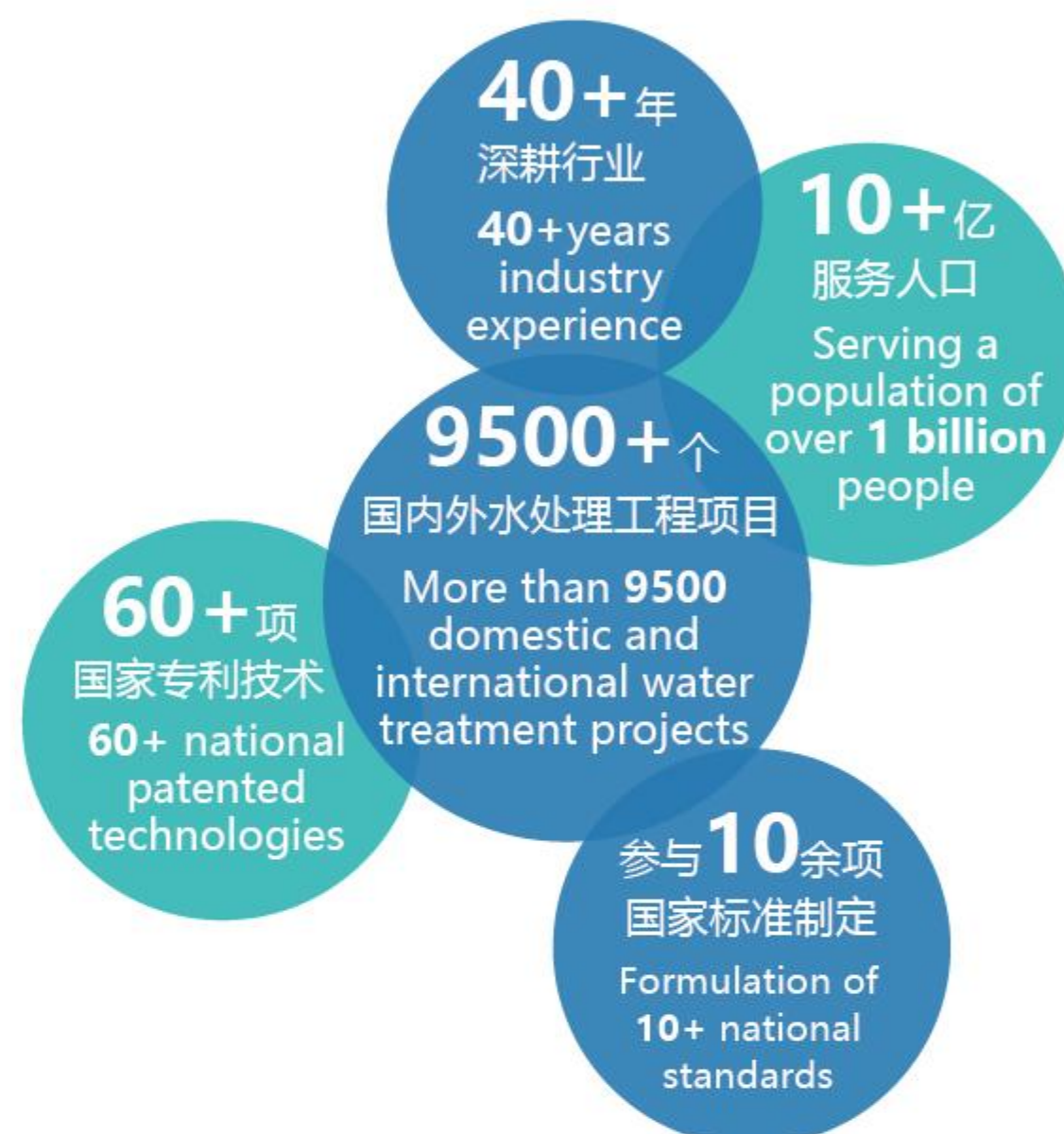
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Full-chain service

全产业链服务



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