ELASTYCHEM

Industrial Measurement & Control Solutions

In Partnership with SUSTONIX

Instrumentation • Automation • EPC Solutions

Reliable technology and integrated industrial solutions

ELASTYCHEM + SUSTONIX

Local customer focus and technical support, combined with SUSTONIX OEM technology and engineering capability.

Product information and technical specifications retained from the SUSTONIX brochure.



05
Main products
主营产品

污水处理设备、格栅类、气浮机、污泥处理设备叠螺机、加药、沉淀、过滤净化

Sewage treatment equipment、screens, air flotation machines, screw sludge dewatering systems, dosing, sedimentation, and filtration purification.

01

Package Sewage Treatment Plant
一体化污水处理设备









概况 SURVEY

我们公司在间歇式活性污泥法（SBR）工艺基础上研制出能弥补SBR诸多不足的污水工艺技术和与之相配套的设备；可广泛应用在各型的污水处理厂的建设上。 一体化设备处理污水的原理是建立在使用活性污泥微生物法和生物膜生物法有机结和的方式进行污水的生化处理。在处理工艺上，大量的微生物生长在固定的和浮动生物载体上形成生物膜，随着水气在污水中的冲击翻动，进行菌和菌膜的更新在曝气时利用生物载体，提高微生物与污水中的污染物质和氧的接触效率。整体处理设备产生的厌氧一缺氧一好氧三种环境的轮流作用提高了不同种类微生物群体对污水的净化能力，强化了污水中有机物的去除和脱氮除磷的功效。

Our partner has developed advanced sewage treatment technology and equipment based on the SBR (Sequential Batch Reactor) process, overcoming its limitations.
This integrated system combines activated sludge and biofilm processes for efficient wastewater treatment. Microorganisms grow on fixed/floating bio-carriers, enhancing organic degradation and nutrient removal through anaerobic-anoxic-aerobic cycling, improving nitrogen/phosphorus elimination and overall purification.

02

设备特点 Equipment Features:

节省空间：设备埋于地下，地表可绿化或作其他用途，适合用地紧张的区域。
集成化设计：集预处理、生化处理、沉淀、消毒等功能于一体，结构紧凑，安装便捷。
高效处理：采用生物膜法（如MBR）或活性污泥法等工艺，出水水质稳定，可达标排放或回用。
自动化运行：PLC智能控制，可实现远程监控，运维简便，人工成本低。

Space-saving: Buried underground, freeing up surface land for greening or other uses, ideal for space-constrained areas.
Integrated design: Combines pretreatment, biological treatment, sedimentation, and disinfection in one compact unit for easy installation.
Efficient treatment: Uses biofilm (e.g., MBR) or activated sludge processes to ensure stable, compliant effluent for discharge or reuse.
Automated operation: PLC-based smart control enables remote monitoring, reducing maintenance and labor costs.

适应范围 Application Scope

适应于农村及分散式污水处理、城市、旅游区、生态保护区、高速服务区、车站、学校、商场、办公楼、餐饮、洗浴等生活污水及各种工业有机污水的处理

Treatment of domestic sewage (such as from rural and decentralized areas, urban areas, tourist zones, ecological reserves, highway service areas, bus/railway stations, schools, shopping malls, office buildings, restaurants, bathing facilities, etc.) and various industrial organic wastewater.

可以根据水质和现场的出水要求而定制工艺，比如城镇生活污水处理系统，工业污水处理系统等.
The process can be customized based on water quality and onsite discharge requirements, such as for municipal sewage or industrial wastewater treatment systems.

技术参数 Technical parameters

数据仅供参考，具体需根据出水水质要求
Note: Data for reference only. Specific adjustments required based on effluent quality standards.

型号 MODEL	ST-SZ-1	ST-SZ-3	ST-SZ-5	ST-SZ-7.5	ST-SZ-10	ST-SZ-15	ST-SZ-20	ST-SZ-30
容量 Capacity(m3/h)	1	3	5	7.5	10	15	20	30
设备 equipment Nm	1	1	1	1	2	2	2	3
初级沉淀池 Primary settling tank	1.8	5.5	9	14	18	27	36	50
消毒池 Disinfection tank (m3)	5.0	14.5	24	36	44	63	83	130
风机 Air blower	型号Model	HC-25IS	HC-30IS	HC-50C	HC-50IS	HC-60IS	HC-80S	HC-100S
	功率power	0.4	0.75	1.5	2.2	2.2	3.7	5.5
污水泵 Sewage pump	型号Model	AS10-2CB				AS16-2CB		
	功率power	1.0				1.6		
总重量（吨） Total Weight(t)	5.5	6.5	8	11	17	20	21	29
占用面积（㎡） Occupy area(m2)	6	14	20	30	50	65	75	115
接触氧化罐(m3) Contact oxidation tank (m3)	5.0	14.5	24	36	44	63	83	130

MBR Membrane Bioreactor
MBR膜生物反应器









概况 SURVEY

膜生物反应器是一种结合高效膜分离技术和活性污泥法的新型污水处理技术，它具有膜分离技术和生化处理技术特点，系统采用中空纤维膜进行固液分离。NL系列浸没中空纤维膜是一种特殊开发的膜组件。它具有较高的过滤效率，能有效去除细菌、悬浮颗粒和杂质，从而获得优越的过滤水。

The Membrane Bioreactor (MBR) is an advanced wastewater treatment technology that combines high-efficiency membrane separation with the activated sludge process. This system integrates the advantages of both membrane separation and biochemical treatment technologies, utilizing hollow fiber membranes for effective solid-liquid separation.The NL series submerged hollow fiber membrane represents a specially engineered membrane module. It delivers exceptional filtration performance, efficiently removing bacteria, suspended solids and other impurities to produce high-quality treated water.

MBBR Containerized Integrated Sewage Treatment Unit

MBBR集装箱式一体化污水处理设备









概况 SURVEY

MBBR是一种介于活性污泥法和固定生物膜法之间的新型高效反应器。较大的比表面积使反应器从填料中自由移动，污水连续通过装有移动填料的反应器，在填料中生长时会形成生物膜，大型微生物在生物膜中繁殖，自养和异养微生物利用水中的C、N、P等进行代谢，从而实现净化污水的功能。

MBBR is one kind of new type high effective reactor which between activated sludge method and the fixed biofilm method.Larger specific surface area of the reactor from packing for freedom of movement in the water, sewage continuous pass by the reactor which equipped with mobile packing, it will form into biofilm when grow in packing, large microorganism breed in the biofilm,autotrophic and heterotrophic microorganisms using C, N, P, etc in water to make metabolism , thus to to realize purify sewage function.

设备特点 Equipment Features:

集装箱式结构：设备采用标准集装箱尺寸，将预处理、MBBR反应区、沉淀、消毒等单元高度集成便于运输和快速安装。
灵活扩展：可通过并联多个集装箱模块实现处理能力的弹性调整，适合不同规模需求
高效生物处理能力（MBBR核心技术）：反应器内填充悬浮生物填料，提供巨大比表面积，形成高活性生物膜，显著提升污染物（COD、BOD、氨氮等）降解效率。
抗冲击负荷：生物膜法对水质水量波动（如工业废水间歇排放）耐受性强，恢复速度快
低能耗：无需传统活性污泥法的污泥回流系统，曝气系统优化设计（如微孔曝气器）降低电耗。

Containerized Structure:
The equipment adopts standard container dimensions, integrating pretreatment, MBBR reaction zone, sedimentation, and disinfection units into a compact system, ensuring easy transportation and rapid installation.
Scalable Flexibility:
The treatment capacity can be flexibly adjusted by connecting multiple containerized modules in parallel, making it suitable for varying scale requirements.
High-Efficiency Biological Treatment (Core MBBR Technology):
The reactor is filled with suspended biofilm carriers, providing a vast specific surface area to form highly active biofilm, significantly enhancing the removal efficiency of pollutants (COD, BOD, ammonia nitrogen, etc.).
Strong Resistance to Shock Loads:
The biofilm process demonstrates high tolerance to fluctuations in water quality and quantity (e.g., intermittent industrial wastewater discharge) and ensures quick recovery.
Low Energy Consumption:
The system eliminates the need for sludge recirculation required in conventional activated sludge processes, and the optimized aeration system (e.g., fine bubble diffusers) reduces power consumption.

适应范围 Application Scope

酒店、餐厅、社区等国内污水处理循环利用、工矿企业、偏远村庄、哨兵、旅游区等生活污水回收利用。各类工业废水:如医院、制药、洗衣、食品加工、屠宰、奶制品等

Domestic sewage recycling and utilization in hotels, restaurants, communities, etc., as well as in industrial and mining enterprises, remote villages, border posts, tourist areas, etc. Various types of industrial wastewater: such as from hospitals, pharmaceuticals, laundries, food processing, slaughterhouses, dairy products, etc.

MBBR生物填料 MBBR biological filler

MBBR（移动床生物膜反应器）的核心是悬浮生物填料
填料特性：
高比表面积：通常 200–800 m^2/m^3，为微生物附着提供充足空间。
多孔结构：表面微孔，促进生物膜形成，提升污染物降解效率。
密度接近水：填料密度 0.94–0.98g/cm^3，确保在反应器中均匀流化避免堆积
抗老化设计：耐UV、耐酸碱（pH 3–10），寿命可达 10年以上

MBBR Key Component: Suspended Biofilm Carriers
Carrier Properties:
High specific surface area: 200–800 m^2/m^3, providing ample space for microbial attachment.
Porous structure: Micro-pores (10–500 μm) enhance biofilm formation and pollutant removal.
Near-water density: 0.94–0.98 g/cm^3 ensures uniform fluidization without settling.
Aging-resistant: UV/acid/alkali resistant (pH 3–10), service life >10 years.



Engineering project site
工程类项目现场

01. 民用建筑废水-萨尔瓦多
Civil construction wastewater-El Salvador




★★★★★ 土建MBBR污水处理工艺 Civil engineering MBBR sewage treatment process

02. 棕榈油加工废水-科特迪瓦
Palm oil processing wastewater - Côte d'Ivoire




★★★★★ 电絮凝+MBBR+过滤工艺 Electrocoagulation +MBBR+ filtration process

03. 垃圾渗滤液废水-柬埔寨
Landfill leachate wastewater - Cambodia




★★★★★ 电絮凝+MBBR+过滤工艺 Electrocoagulation +MBBR+ filtration process

04. 牛奶加工废水-马来西亚
Dairy processing wastewater - Malaysia




★★★★★ SBR污水处理 SBR wastewater treatment

05. 锅炉废水-新加坡
Boiler wastewater -Singapore




★★★★★ 絮凝+沉淀+过滤处理 Flocculation + sedimentation + filtration treatment

06. 棕榈油废水-马来西亚
Palm oil wastewater-Malaysia




★★★★★ 电絮凝MBBR处理工艺 Electrocoagulation MBBR treatment process

DAF dissolved air floating machine
溶气气浮机









概况 SURVEY

溶气气浮机采用新型高效的溶气设备——微气泡发生器，代替传统的引气设备向水中溶气，包括箱体、刮渣机、螺旋出料机共同组成一个完整气浮净水装置，通过溶气和释放系统在水中产生大量的微细气泡，使其粘附于废水中密度与水接近的固体或液体微粒上，造成整体密度小于水的状态，并依靠浮力使其上升至水面，从而达到固—液或液—液分离的目的。

This system utilizes a high-efficiency micro-bubble generator (replacing traditional aeration devices) to dissolve air into water. Comprising a tank, scum scraper, and screw conveyor, it forms a complete flotation system. The air dissolution and release process generates fine bubbles that attach to suspended solids or liquid particles (with density close to water), reducing their overall density below water. Buoyancy then lifts them to the surface, achieving solid-liquid or liquid-liquid separation.

设备特点 Equipment Features:

溶气泵边吸水边吸气，泵内加压混合、气液溶解效率高、细微气泡≤30um。
低压运行，溶气效率高达99%，释放率高达99%。
微气泡与悬浮颗粒的高效吸附，提高了SS的去除效果。
溶气水溶解效率80-100%，比传统溶气气浮效率高3倍。
压力-容量曲线平坦，容易实现自动控制，易操作易维护、噪音低

Dissolved air pump edge bibulous the edge is inspiratory, pump pressurized mix within, gas to liquid efficient dissolving, small bubbles than 30 um.
Low voltage operation, the dissolved gas efficiency is as high as 99%, release rate as high as 99%.
Tiny bubbles and suspended particles of efficient adsorption, improve the SS remove effect.
Dissolved gas water dissolving efficiency 80-100%, than traditional dissolved gas floating high efficiency three times.
Pressure-capacity curve smooth, easy to achieve automatic control, easy to operate, easy maintenance, low noise.

适应范围 Application Scope

溶气气浮机可以有效地去除废水中难以沉淀的轻浮絮体。处理能力大、效率高、占地少、使用范围广。被广泛应用于石油、化工、印染、造纸、炼油、皮革、钢铁、机械加工、淀粉、食品等污水处理。

The dissolved air flotation (DAF) unit can effectively remove light floating flocs from wastewater that are difficult to settle. It features large treatment capacity, high efficiency, compact footprint, and broad applicability, making it widely used in wastewater treatment across industries such as petroleum, chemical, dyeing, papermaking, oil refining, leather, steel, mechanical processing, starch, and food processing.

技术参数 Technical parameters

数据仅供参考，具体需根据出水水质要求
Note: Data for reference only. Specific adjustments required based on effluent quality standards.

型号 MODEL	处理能力 DISPOSAL CAPACITY(M3/H)	设备尺寸 EQUIPMENT SIZE (M)	溶气水量 DISSOLVED AIR WATER VOLUME	容器尺寸 AIR VESSEL SIZE (MM)	电机功率 WITH MOTOR POWER	设备净重 EQUIPMENT TOTAL WEIGHT	刮沫机功率 SHAVING FOAM MACHINE POWER	高压泵功率 MODEL OF HIGH PRESSURE PUMP
ST-RF-3	3	1.0mx0.8mx1.0m	1.5-2	Φ300 x h1000	1.5	800	0.55	3
ST-RF-5	5	1.7mx1.2mx2.0m	2-3	Φ300xh1500	2.2	1200	0.55	4
ST-RF-10	10	2.5mx1.5mx2.0m	3.5-5	Φ400xh3000	2.2	2000	0.55	5.5
ST-RF-20	20	4.6mx1.7mx2.0m	5-7	Φ400 xh3000	4.0	3200	0.55	4
ST-RF-30	30	6.0mx2.0mx2.0m	6-10	Φ500x h3000	4.0	4500	0.55	5.5
ST-RF-40	40	7.2mx2.0mx2.1m	8-13	Φ500 xh3000	5.5	6000	0.75	7.5
ST-RF-50	50	8.3mx2.8mx2.2m	15-20	Φ600xh3000	5.5	7100	0.75	7.5
ST-RF-60	60	9.3mx3.2mx2.2m	18-27	Φ600 x h3000	7.5	8500	0.75	7.5
ST-RF-80	80	11.2mx3.5mx2.5m	24-32	Φ800 x h3000	7.5	9000	0.75	7.5

Lamella clarifier
斜板沉淀器









概况 SURVEY

斜管沉淀器，是在泥渣悬浮层上方按装倾角60度的斜管组建，便原水中的悬浮物，固体物或经投加混凝剂后形成的絮体矾花，在斜管底侧表面积积聚成薄泥层，依靠重力作用滑回泥渣悬浮层，继而沉入集泥斗。由排泥管排入污泥池另行处理或综合利用。上清液逐渐上升至集水管排出，可直接排放或回用。

Inclined Tube Settler utilizes 60° inclined tubes installed above the sludge layer. Suspended solids or flocs (from coagulants) accumulate on the tube surfaces, form a thin sludge layer, and slide back into the sludge zone by gravity, settling into the sludge hopper. The sludge is then discharged via a pipe for further treatment/reuse. Clarified water rises to the collection pipe for discharge or recycling.

设备特点 Equipment Features:

斜板装置将沉淀区分为多层，显著增加了有效沉淀面积，单位面积处理能力远超传统平流沉淀池。
颗粒只需沉降极短的垂直距离，沉降时间大幅减少，效率提升。
紧凑结构，占地面积小
适应性强，可通过调整斜板角度、板距或板长来适应不同水质（如高浊度水、工业废水）和水量变化。

The inclined plate module divides the sedimentation zone into multiple layers, significantly increasing the effective sedimentation area. Its treatment capacity per unit area far exceeds that of traditional horizontal flow sedimentation tanks.
Particles only need to settle over a very short vertical distance , greatly reducing sedimentation time and improving efficiency.
Its compact structure requires a small footprint.
It offers strong adaptability, as the inclination angle (typically 55°–60°), plate spacing, or plate length can be adjusted to suit different water qualities (e.g., high-turbidity water, industrial wastewater) and flow variations.

适应范围 Application Scope

该设备可广泛应用于，市政污水处理、矿业、食品、饮料、化工、制药、纺织、印染，去除有机悬浮物，分离高浓度悬浮物或化学沉淀物，其他特殊领域包括，水产养殖：保持水体清洁，循环利用养殖用水。河道治理，用于景观水体或黑臭水体的预处理

This equipment can be widely applied in municipal sewage treatment, mining, food, beverage, chemical, pharmaceutical, textile, dyeing and printing, to remove organic suspended solids, separate high-concentration suspended solids or chemical precipitates. Other special fields include aquaculture: maintaining water cleanliness and recycling aquaculture water. River course management, used for the pretreatment of landscape water bodies or black and odorous water bodies

技术参数 Technical parameters

数据仅供参考，具体需根据出水水质要求
Note: Data for reference only. Specific adjustments required based on effluent quality standards.

型号 MODEL	ST-LTS1-001	ST-LTS1-003	ST-LTS1-005	ST-LTS1-010	ST-LTS1-020	ST-LTS1-030	ST-LTS1-040	ST-LTS1-050
处理能力 capacity	1	3	5	10	20	30	40	50
污泥出口 Sludge outlet	50	50	50	50	50	50	50*2	50*2
外形尺寸 Appearanle Size	1.6x0.82x2.0m	1.6x1.1x2.0m	20.6x1.62x2.9m	3.4x1.8x3.6m	3.4x2.2x3.6m	4.2x2.2x4.0m	5.3x2.2x3.6m	6.3x2.2x3.8m

斜管填料 Inclined Tube Media

形状：正六边形蜂窝状结构，单元管径一般为25~80mm
倾斜角度：通常安装倾角为60°，以利于污泥滑落

高效沉淀：表面负荷可达5~10 $m^3/(m^2 \cdot h)$，是普通沉淀池的3~5倍。
占地面积小：通过增加沉淀面积（斜管投影面积）节省空间。
抗冲击负荷：适应水质、水量波动。
使用寿命长：耐腐蚀、抗老化，一般可达5~10年。

Shape: Regular hexagonal honeycomb design, with unit tube diameter typically 25–80mm.
Inclination: Installed at 60° to facilitate sludge sliding.
Advantages:
High-efficiency sedimentation: Surface loading rate of 5–10 $m^3/(m^2 \cdot h)$, 3–5 times higher than conventional settling tanks.
Compact footprint: Saves space by increasing effective settling area (projected area of inclined tubes).
Shock load resistance: Adapts well to fluctuations in water quality and flow rate.
Long service life: Corrosion-resistant and durable, with a lifespan of 5–10 years.



Rotary type mechanical bar screen
回转式机械格栅除污机









概况 SURVEY

回转式格栅主要由驱动装置、耙齿机构、清刷机构等组成，由一种独特的耙齿装配成一组回转格栅链。在电机减速器的驱动下，耙齿链进行逆水流方向回转运动，当耙齿把流体中的固态悬浮物分离后可以保证水流畅通流过。整个工作过程是连续的也可以是间歇的。

The rotary rake bar screen primarily consists of a drive unit, rake teeth mechanism, and cleaning brush assembly. Its unique rake teeth are assembled into a rotating screening chain. Driven by a motor reducer, the rake chain rotates counter-flow to separate solid suspended matter from the liquid while maintaining unimpeded water flow. The entire process can operate either continuously or intermittently as required.

适应范围 Application Scope

应用于城市污水处理、自来水行业、电厂进水口，同时也可以作为纺织、食品加工、造纸、皮革等行业生产设施中飘浮物的拦截和清除

It is widely used in municipal sewage treatment, water supply systems, and power plant intakes, while also serving to intercept and remove floating matter in production facilities across industries such as textiles, food processing, papermaking, and leather.

Precision drum filter
转鼓精密过滤器









概况 SURVEY

旋转鼓式过滤器能够去除水中直径大于0.25毫米的细微颗粒，污水经由入口阀进入水箱，并通过缓冲分配箱的隔板上升至过滤水位线。净化后的水，通过格栅的间隙进入储水箱主体，并被导向底部,在抽吸的同时进行格栅的清洗.

Rotary Drum Filter removes fine particles larger than 0.25 mm from water. Wastewater enters the tank through the inlet valve and rises to the filtration level via the baffle of the buffer distribution box. The purified water passes through the screen gaps into the main storage tank and is directed to the bottom. The screen is cleaned simultaneously during suction.

适应范围 Application Scope

广泛应用于污水处理项目中的格栅分离、家禽屠宰中的毛发分离、冶金、建材、化工、粮食、医药、磨料和肥料等行业的干粉或颗粒状物料的筛分

This is widely used in wastewater treatment projects for bar screen separation, in poultry slaughtering for hair separation, and in industries such as metallurgy, building materials, chemicals, grain, pharmaceuticals, abrasives, and fertilizers for the screening of dry powder or granular materials.

Drum microfiltration machine
转鼓微滤机









概况 SURVEY

该设备是一种鼓式筛网过滤装置。鼓上附有过滤网。当滚筒浸入水中时，有五分之二的过滤网被淹没在水里，处理后的废水沿着轴向方向进入滚筒，然后通过筛网流出。水中的杂质(细悬浮物、纤维、纸浆等)被截留在滚筒内过滤网的内表面上。当被截留的杂质在滚筒的旋转作用下被带到过滤网的上部时，筛网外侧的反冲洗水被冲洗入排水箱，然后流出，从而实现固液相的分离。

This equipment is a drum-type screen filtration device. The drum is equipped with a filter mesh. When submerged in water, two-fifths of the mesh remains immersed. The treated wastewater flows axially into the drum and exits through the mesh, while impurities (fine suspended solids, fibers, pulp, etc.) are retained on the inner surface. As the drum rotates, the trapped impurities are lifted to the upper section, where reverse wash water flushes them into a discharge tank, achieving solid-liquid separation.

Hydraulic Static Screen
静态水力筛







概况 SURVEY

适用于各种不同类型、不同规模的污水处理工程。去除漂浮、悬浮物、重心等，作为一次处理，替代池塘，减少后处理工作强化畅通的生物处理过程，节约操作成本。

Suitable for a variety of different types, different sizes of wastewater treatment project. Remove floating, suspended solids, center of gravity, etc., as a primary treatment, the alternative to the pond, reduce post-processing work, strengthen the unblocked biological treatment process, save operating cost. Also used in a variety of solid-liquid mixture concentration;

Fully Automatic Dosing Machine
全自动加药机









概况 SURVEY

自动加药装置是集溶药、熟化、投加于一体的全自动加药系统。该设备根据所需药液的浓度，控制投加的药剂量，自动将絮凝剂进行搅拌、溶解、熟化，再由加药泵投加到处理水中大大降低了絮凝剂使用过程中的复杂程度，并使投加过程自动、准确，而且节省药量。

Automatic Dosing Device is an all-in-one system for dissolving, aging, and dosing chemicals. It automatically mixes dissolves, and matures flocculants based on desired concentration, then precisely injects them into treated water via a dosing pump. This significantly simplifies flocculant application, ensures accurate and automated dosing, and reduces chemical consumption.



净水设备
Water purification filtration

多介质机械过滤器、RO反渗透、海水淡化
Multi-media mechanical filters, RO reverse osmosis, seawater desalination

Water Purification Filtration
机械过滤器







概况 SURVEY

机械过滤器也称为多介质过滤器.是纯水制备前期预处理、水净化系统的重要组成部分,材质有钢制衬胶或不锈钢，根据过滤介质的不同分为天然石英砂过滤器、多介质过滤器、活性炭过滤器、猛砂过滤器等，根据进水方式可分为单流式过滤器、双流式过滤器，根据实际情况可联合使用也可以单独使用。

Mechanical Filter (also called Multi-media Filter) is a key component in pure water pretreatment and water purification systems. Constructed with rubber-lined steel or stainless steel, it comes in different types based on filter media: natural quartz sand filter, multi-media filter, activated carbon filter, and manganese sand filter. Depending on the inflow method it can be classified as single-pass filter or dual-pass filter. These filters can be used individually or in combination according to specific requirements.

适应范围 Application Scope

机械过滤广泛用于水处理过程中，主要用于给水处理除浊，反渗透、以及离子交换软化除盐系统的前级预处理,也可用于地表水、地下水除泥沙。进水浊度要求小于20度,出水浊度可达3度以下

Mechanical filtration is widely used in water treatment, primarily for turbidity removal in feed water, as pretreatment for reverse osmosis and ion exchange desalination systems, and for sediment removal in surface/groundwater. The influent turbidity should be <20 NTU, with effluent reaching <3 NTU.

RO Reverse osmosis
RO反渗透









概况 SURVEY

渗透技术是当今最先进和最节能有效的膜分离技术。反渗透膜、钠滤设备、PP 棉等其原理是在溶液渗透压的作用下，依据其他物质不能透过半透膜而将这些物质和水分离开来。由于反渗透膜的膜孔径非常小(仅为 10A左右)，因此能够有效地去除水中的溶解盐类、胶体、微生物、有机物等(去除率高达 97 ~ 98%)。系统具有出水水质好、耗能低、无污染工艺简单、操作简使等优点。

Osmosis technology is the most advanced, energy-efficient membrane separation method today. Reverse osmosis (RO) membranes, nanofiltration systems, and PP filters work by allowing water to pass through a semipermeable membrane while blocking dissolved solids, colloids, microbes, and organics (removal rate: 97–98%). With an extremely small pore size (~10Å), RO membranes effectively remove salts and impurities. The system offers high-quality output, low energy consumption, eco-friendliness, simplicity, and easy operation.

设备特点 Equipment Features:

高效过滤精度，膜孔径极小（约0.0001微米）可去除水中99%以上的溶解盐、胶体、细菌、病毒、有机物等杂质，接近纯水标准。
脱盐率高：通常可达95%-99.9%，尤其适用于高盐分水（如海水）。
模块化设计，采用标准化膜元件（如卷式、中空纤维式），可根据需求灵活组合，适应不同规模（家用、工业、市政）
自动化运行，配备PLC或智能控制系统，实现自动启停、冲洗、压力调节、水质监测及故障报警。减少人工干预，适合连续运行。

High-Efficiency Filtration Precision，the membrane pores are extremely small (approximately 0.0001 microns), capable of removing over 99% of impurities in water, including dissolved salts, colloids, bacteria, viruses, and organic matter, producing water close to pure water standards.
High Desalination Rate: Typically achieves 95%-99.9%, making it particularly suitable for high-salinity water (e.g., seawater).
Modular Design，Utilizes standardized membrane elements (e.g., spiral-wound, hollow fiber), allowing flexible configuration to meet different scales (household, industrial, municipal).
Automated Operation，Equipped with a PLC or intelligent control system for automatic start/stop, flushing, pressure adjustment, water quality monitoring, and fault alarms. Reduces manual intervention, making it ideal for continuous operation.

适应范围 Application Scope

该设备应用于：饮用水处理家用/商用净水器、瓶装水生产、电子、制药、工业废水、市政污水、海水淡化、食品与饮料、医药与生物技术等领域

This equipment is used in:
Drinking water treatment (household/commercial purifiers, bottled water production), electronics, pharmaceuticals, industrial wastewater, municipal sewage, seawater desalination, food & beverage, and medical & biotech fields.

技术参数 Technical parameters

数据仅供参考，具体需根据出水水质要求
Note: Data for reference only. Specific adjustments required based on effluent quality standards.

型号 MODEL	生产力 PRODUCTIVITY (T/H)	电机功率 MOTOR POWER(KW)	回收率 RECOVERY RATE(%)	纯水/导电率 PURE WATER CONDUCTIVITY(US/CM)	原水/导电率 RAW WATER CONDUCTIVITY(US/CM)
ST-RO-500L	0.5	1.5	50	≤10	≤300
ST-RO-1000L	1	2.2	50	≤10	≤300
ST--RO-2000L	2	3	50-60	≤10	≤300
ST-RO-3000L	3	4.5	55-65	≤10	≤300
ST-RO-4000L	4	6.5	55-65	≤10	≤300
ST-RO-5000L	5	8	60-70	≤10	≤300
ST-RO-10T	10	18	60-70	≤10	≤300
ST-RO-20T	20	30	65-75	≤10	≤300
ST-RO-30T	30	40	70-75	≤10	≤300
ST-RO-50T	50	70	70-75	≤10	≤300
ST-RO-100T	100	115	70-75	≤10	≤300

Desalination of seawater
海水淡化







概况 SURVEY

大中型海水淡化适用于海岛、驻地及沿海缺水城市。能够有效地去除海水中的无机盐、重金属离子、有机物细菌及病菌等有害成分，将海水淡化为符合国家生活饮用水标准的优质水。该套系统预处理采用当今最先进的全自动多路组合阀，实现全自动大流量反冲洗以及正洗全过程。该套系统的全新壳体，管路全部采用耐腐蚀材料，保证了全套系统的经久耐用。主机 RO 系统是采用了最先进的 RO 系统软件和优质的膜元件，根据设备的产水量结合高效独特的能量回收技术设计而成，保证了系统运行的低能耗。并配有先进的检测监控系统，保证系统运行平稳，产水优质(当产水量超过警戒盐度值时，系统自动打开排泄阀门，将产水导入排废水道)以及为系统的运行状况提供准确的信息。

Large and medium-scale seawater desalination is suitable for islands, military bases, and coastal cities with water shortages. It effectively removes harmful components such as inorganic salts, heavy metal ions, organic bacteria, and pathogens from seawater, converting it into high-quality fresh water that meets national drinking water standards.
The system features advanced pretreatment with fully automatic multi-port valves, enabling high-flow backwashing and forward washing. Its corrosion-resistant housing and piping ensure long-term durability.
The core RO system uses cutting-edge software and high-quality membrane elements, combined with efficient energy recovery technology for low power consumption. An advanced monitoring system ensures stable operation and high-quality output (automatically diverting water if salinity exceeds limits) while providing precise operational data.

Major Project Site
重点项目现场



市政废水处理-菲律宾
Municipal Wastewater-**Philippines**



乳制品加工废水-马来西亚
Dairy processing-**Malaysia**



工业废水-沙特阿拉伯
Industrial wastewater-**Saudi Arabia**



垃圾车清洁-巴林
Garbage truck cleaning-**Bahrain**



塑料废水-秘鲁
Plastic wastewater-**Peru**



生活废水-希腊
Domestic wastewater-**Greece**



油漆废水-约旦
Paint wastewater-**Jordan**



电路板废水-马其顿
Circuit board wastewater-**Macedonia**



水产养殖废水-肯尼亚
Aquaculture wastewater-**Kenya**



食品加工废水-沙特阿拉伯
Food processing-**Saudi Arabia**



鱼粉加工废水-印度尼西亚
Fishmeal processing wastewater-**Indonesia**



塑料废水-巴基斯坦
Plastic wastewater-**Pakistan**

Major Project Site 2
重点项目现场



石油废水-尼日利亚
Petroleum wastewater-**Nigeria**



棕榈油加工废水-科特迪瓦
Palm oil processing-**Coted 'Ivoire**



塑料废水-秘鲁
Plastic wastewater-**Peru**



生活废水-希腊
Domestic wastewater-**Greece**



工业废水-泰国
Industrial wastewater-**Thailand**



工业洗涤废水-马来西亚
Industrial washing wastewater-**Malaysia**



香肠加工废水-乍得
Sausage wastewater-**Chad**



餐厨废水处理-泰国
Food Wastewater Treatment-**Thailand**



厂区生活污水-蒙古
Factory domestic sewage-**Mongolia**



含铬废水-孟加拉国
Chromium wastewater-**Bangladesh**



市政污水-菲律宾
Municipal Sewage-**Philippines**



巴东电力反捞-印度尼西亚
Badong Power Anti Scouring-**Indonesia**

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