

Water Treatment

Presentation



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Preface

Water resource is one of the most precious resources in the world. With more than 10 years of operation experience in the pre-treatment equipment, seawater desalination and waste water re-use sector, Grason Technology has been constantly working to develop new technology, innovative equipment and discovering new applications to meet different requirements of customers

- around the globe.

Company Profile

Grason Technology Co., Ltd is established by Anjene Group, where we have been cross-investing in the business sectors of water treatment, tires, lubricants, rubber chemicals and agri-technology in China.

Grason Technology has been participating in the water treatment sector for over 10 years, particularly in the development of pre-treatment equipment, all-in-one module seawater desalination solutions as well as integrated sewage water treatment solutions. We have been working with several academic institutes and achieved a breakthrough in the pre-treatment filtering equipment with less required space, much higher filtering efficiency, zero maintenance and etc.

“Your Success Is Our Motivation” has been our motto and goal that Grason has been striving for. We are continuing to excel, creating valuable opportunities, and utilizing years of industry resources and professional knowledge to establish interacting business platform, one-stop solution, and leading to a mutual beneficial business model.

Core Advantage



LOW OPERATION COST

The patented process route and exclusive optimization design can reduce the operation cost of the system by 15% - 40% compared with similar systems.



MONITORING SERVICE

Remote video diagnosis and upgrade of the system ensure that the fault can be quickly diagnosed within 1 hour, so that users can have no worries.

Automatic High-Speed Filter

Pre-treatment filtration system

PATENT INNOVATION

The successful research and development of GT high-speed filter is designed to remove SS and suspended solids during the pre-treatment process. It completely overcomes several limitations of traditional sand filter:

- Slow filtration speed
- easy agglomeration & bias flow
- layer misplaced from backwashing
- Waste of backwashing water

TOTAL UPGRADE



Automatic High-Speed Filter

MULTICOMPONENT FIBER FILTERING MATERIALS

Replacing

SAND FILTERING

Shape: multi-angle floating MCF filter

Size: 5mmX5mmX3mm

Main Synthetic Material:PP,PBS PE

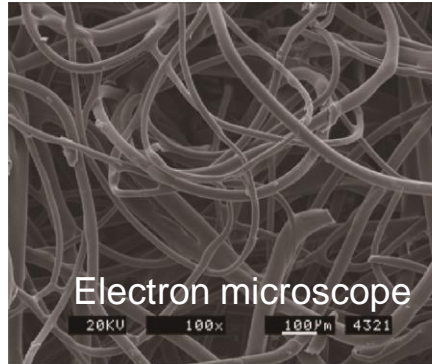
Porosity: 90-94%

Pore size: Φ 5-70 μ m

Specific gravity: 0.85-0.95

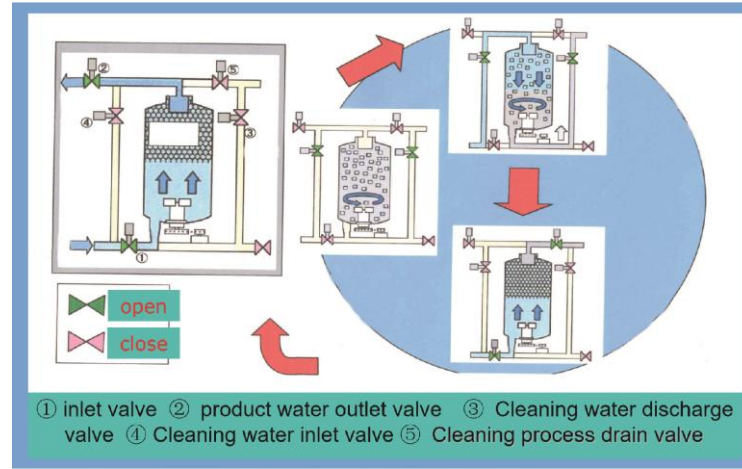
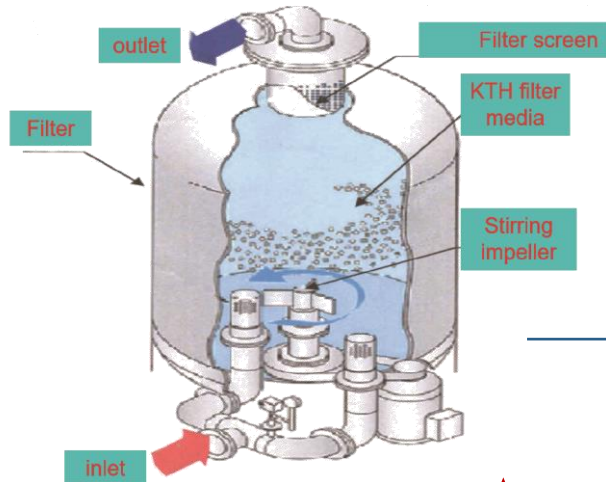
Rate of the nurgle:10Kg-SS/m³

Specific surface area : 8000m²/m³



Automatic High-Speed Filter

OPERATION PRINCIPLE



★ GT automatic
high speed
filter
Traditional
mechanic
filter
(Sand Filter)

Filter Speed (m/h)	Filter Layer Thickness (m)	Backwashin g time/cycle	Raito of backwashing water & daily output water %	SS elimination rate %	50000T/D Land Occupancy m2G
40-70	1	8mins/24H	0.5	98.5 +	75
6-10	1	20mins/36H	5-6	85-95	240

Automatic High-Speed Filter

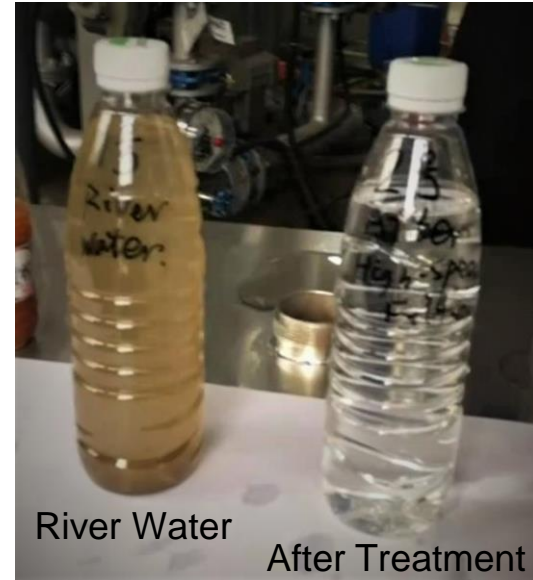
TECHNICAL PARAMETERS

- **Water inlet** : $\text{NTU} \leq 30$; $\text{SS} \leq 100 \text{ mg/L}$
- **Water outlet** : $\text{NTU} \leq 1$; $\text{SS} \leq 10 \text{ mg/L}$
- **Inflow** : (20T-400T) /H , Base on different specifications



SCOPE OF APPLICATION

- ◆ Upgrading of municipal sewage treatment plant
- ◆ Water purification project for river basin treatment
- ◆ Various industrial circulating water filtration treatment systems
- ◆ Pretreatment system of reverse osmosis system



Seawater Desalination Module



Container type seawater desalination equipment and skid mounted seawater desalination device, with the characteristics of simple transportation and installation, convenient operation and maintenance, are more and more liked and trusted by Southeast Asia and South America customers for many years.

The system is mainly composed of the following modules: water intake device, maintenance free pretreatment device, dosing device, RO host system, electrical control system, cloud control module.

The power supply mode of the system can be customized: diesel generator module, solar power generation module, wind power generation module, etc.

We have launched the cloud data support service to help customers remotely handle technical problems and answer technical questions, greatly saving customers' labor costs.

★ CUSTOMIZATION MODE

Professional technical team designs according to local conditions to ensure the high stability and matching degree of the system after operation

★ LOW ENERGY CONSUMPTION

The patented process route and exclusive optimization design can reduce the operation cost of the system by 15% -40% compared with similar systems.

Seawater Desalination Module

TECHNICAL PARAMETERS

Scope of application: $\text{TDS} \leq 45000\text{mg / L}$;

Output water quality: $\text{TDS} \leq 600\text{mg / L}$, meet the "World Health Organization (WHO) drinking water quality standard", or manufacturing according to customer requirements.

Desalination rate: $> 98\%$;

Suitable seawater temperature: $5-40\text{ }^{\circ}\text{C}$

Our company uses American Eri Company High Efficiency Energy Recovery System, efficiency of 98% , at the same time select the world's top quality high-pressure pump, the overall optimization design makes energy consumption greatly reduced.



Seawater Desalination Module

Applications



Drinking water
and domestic water for
coastal resort, Island
Resort Hotel and
island residents



Drinking water
and domestic water for
field troops · disaster
zones



Drinking water
and domestic water in
mariculture base



Drinking water
and domestic water
for deep sea
military/civil vessels

Integrated Sewage Water Treatment Device

The new integrated sewage equipment product is a patent product of high efficiency sewage treatment developed in combination with domestic and foreign domestic sewage quality conditions. The module device has the characteristics of compact structure, low noise, shock resistance, low energy consumption, simple maintenance and unattended. It is especially suitable for small and medium flow domestic sewage treatment in villages, towns, scenic spots, islands and remote areas. The equipment can be quickly deployed to the required areas, and be installed in place within one day. It can produce normal water within 1-5 days, and can be unattended or remotely controlled.

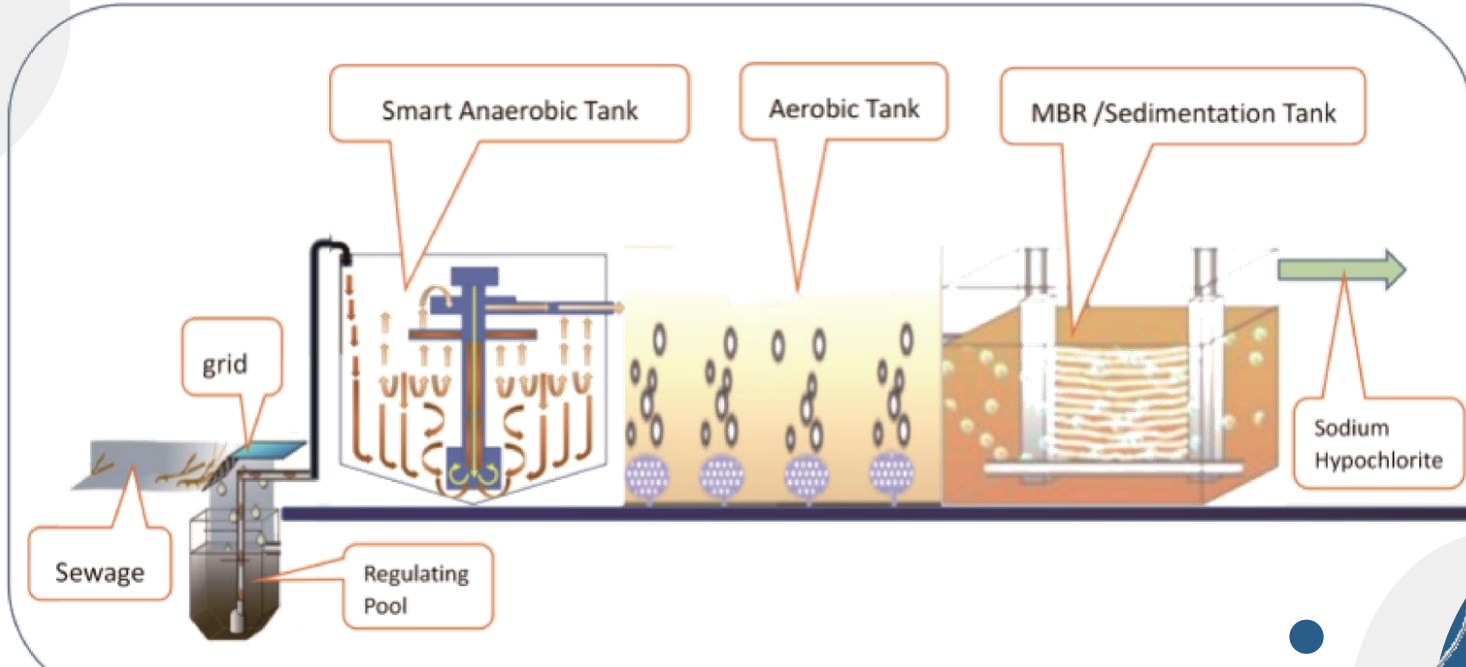
The equipment has high biochemical efficiency and good precipitation effect. Without filter and additional chemicals, it can achieve:

1. cod less than 50 mg / L
2. total nitrogen less than 15 mg / L
3. ammonia nitrogen less than 5 mg / L
4. BOD and SS less than 10 mg / L



Integrated Sewage Water Treatment Device

PROCESS FLOW CHART



Integrated Sewage Water Treatment Device

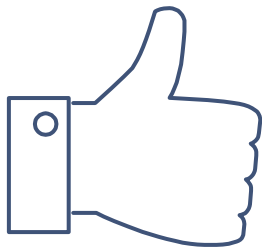
CHARATERISTICS AND APPLICATIONS



The equipment can operate continuously or intermittently, it is highly tolerable for unstable water quality and fluctuated water volume.



The produced water can be directly discharged or used for greening. In addition, the equipment is also suitable for the treatment and reuse of living sewage in residential areas, island tourism areas, hotels, restaurants, public toilets, construction sites, disaster relief, etc.



THANKS!

Any questions?
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