FAGGIOLATI®

WASTEWATER TREATMENT EQUIPMENT

污水处理设备

Always Be Better

FAGGIOLATI®

FAGGIOLATI national service hotline：400-822-5278
FAGGIOLATI official website: www.faggiolatipump.com
Email：hotline@faggiolatipump.com

This manual is a general statement only and does not provide any type of warranty or guarantee. For further information, please contact FAGGIOLATI.
Serial number£©:IM030 Rev.1) FAGGIOLATI All rights reserved.
*Contents are subject to change without notice.

目录
CONTENT

FTP Purification Tank

MBR Integrated treatment equipment

• FTP johkasou

• Buried integrated sewage treatment equipment

• Above-ground integrated wastewater treatment equipment

PROVIDING YOU WITH SOLUTIONS FOR RURAL
SEWAGE AND INDUSTRIAL WASTEWATER TREATMENT

FTP Purification Tank

Characteristic And Advantages

High degree of integration and flexible selection

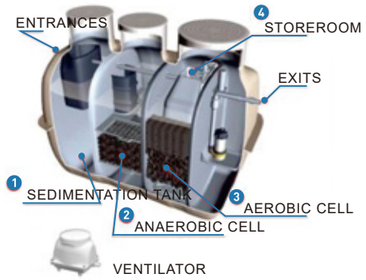
According to the water volume of 0.5-100t / d flexible selection, the equipment will be integrated in a tank of sewage biochemical treatment unit, modular integration, standardized assembly, intelligent control and operation, without the need for personnel on duty to achieve the intelligent management of regional sites, maintenance is more convenient.

SMC molding process, high strength and long service life

Foreign advanced technology, the use of porous gel packing, hanging film specific surface area is 4 times the ordinary packing, improve the volumetric load. The surface of the equipment adopts corrugated reinforced design, high structural strength, reliable impact resistance and longer mission life.

Advanced technology and significant processing efficiency

Micro-power, low energy consumption, stable and reliable process. The treatment effect is remarkable, the treatment capacity of unit tank capacity reaches 2-3 times of activated sludge method, while the sewage sludge volume is about 30% of activated sludge method. Pre-anaerobic section will hydrolyze macromolecules into small molecules, improve biochemistry, can degrade macromolecules of organic matter, organic matter degradation is more thorough.



Remote management, intelligent operation and maintenance

Adoption of intelligent operation and maintenance cloud platform, centralized unattended, expert remote management, can achieve long-term sustainable operation and maintenance.

Fast construction, small footprint, environmentally friendly

According to customer requirements, the equipment is prefabricated in the factory, and on-site installation is quick and easy, greatly reducing the construction period. Fully buried construction, not affected by terrain and climate temperature, land-saving and environmentally friendly.

Application

Municipal and industrial wastewater treatment plants

Drinking water source protection areas, Ecological Reserve Sewage Treatment

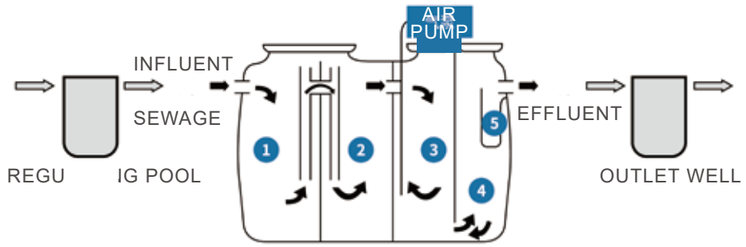
Rural domestic sewage treatment

Enclosed, semi-enclosed sensitive water body sewage treatment

Urban villages/demolition building sites, etc. Temporary Plots

Sewage treatment for commercial buildings, hotels, etc.

Process Introduction



FTP intelligent johkasou sewage treatment equipment is mainly used for decentralized sewage treatment in rural areas and other decentralized domestic sewage treatment, its main treatment process is the use of mature and stable A2O biochemical treatment technology, debugging to provide a special bacterium, the water quality parameters refer to the general domestic sewage.

■ grease trap and sand filter

Utilizing gravity (the difference in specific gravity between oil and water), the suspended oil in the sewage is separated from the water. The equipment has good sealing performance, will not leak to cause secondary pollution, can effectively isolate suspended substances, large particles of garbage, etc..

■ anaerobic cell

Degradation of macromolecules in an anaerobic environment reduces the concentration of organic matter, and the sludge from the settling tank is returned to the flow, and the polyphosphorus bacteria release phosphorus in the anaerobic environment, transforming the easily degradable COD and VFA into PHB, and at the same time ammoniating some of the ammonia-containing organic matter.

■ Oxygenated tank

The primary function of the reactor is to carry out nitrogen removal, and at the same time as a pretreatment for the aerobic biochemical treatment later. Nitrate nitrogen is transferred in from the aerobic reaction area through the internal circulation of the mixture, and some organic matter is removed by denitrifying bacteria under the action of denitrification using nitrate as an electron acceptor. The aerobic tank is equipped with spherical filler.

■ Aerobic tank

The effluent from the partially aerobic tank flows to the aerobic tank, where most of the organic matter in the raw sewage is degraded and purified. The aerobic bacteria take the filler as the carrier and use the organic matter in the sewage as the food to decompose the organic matter in the sewage into inorganic salts, and at the same time, nitrification of ammonia and nitrogen and phosphorus are absorbed, so as to achieve the purpose of purification. Nitrate nitrogen in the mixture flows back to the partially oxygenated tank, and the excess phosphorus absorbed in the sludge is excluded through the residual sludge.

■ sedimentation tank

The effluent from the biological contact oxidation tank flows into the sedimentation tank, which further precipitates to remove the detached biofilm and some organic and inorganic particles. The lower part of the sedimentation tank is equipped with a conical precipitation area, and according to the principle of gravity, the sludge is transported to the anaerobic tank by reflux type.

■ Ecological treatment unit (optional)

This unit utilizes the unique artificial media, as well as the physical, chemical and biological synergies of plants and microorganisms to further treat wastewater. It mainly includes microbial decomposition, transformation, plant shading, adsorption, filtration and oxidation-reduction.

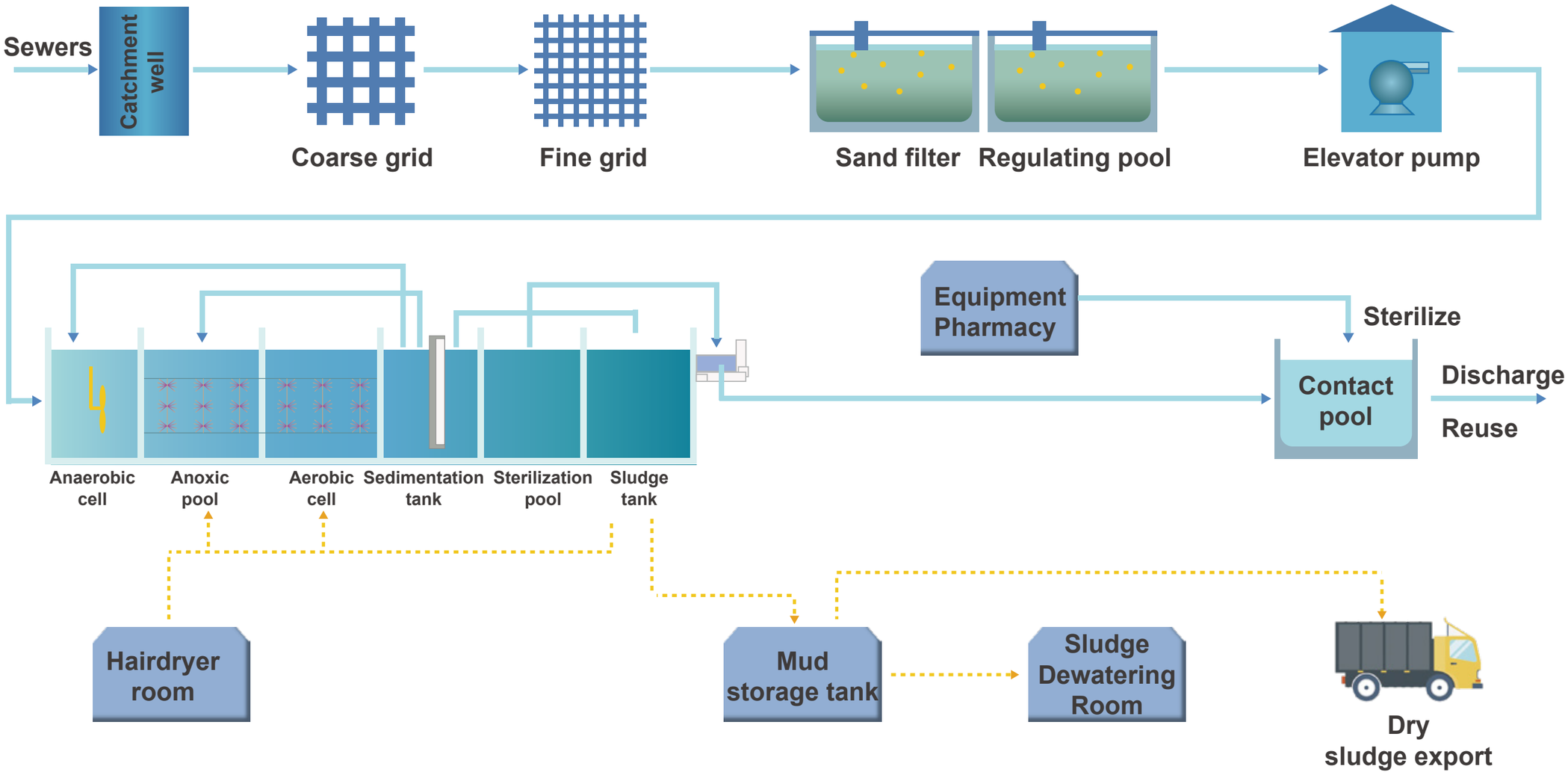
■ Smart Management Cloud Platform

This unit utilizes the unique artificial media, as well as the physical, chemical and biological synergies of plants and microorganisms to further treat wastewater. It mainly includes microbial decomposition, transformation, plant shading, adsorption, filtration and oxidation-reduction.

Equipment Model

Type	Throughput m^3/d	Dimensions mm	Peephole mm	Power kW	Manufacturing process
FTP-1	1	2400×1300×1400	Φ400×2	0.045	SMC MOLDED
FTP-3	2-3	2130×1150×1650	Φ630×2	0.055	SMC MOLDED
FTP-5	5	2420×2010×2000	Φ630×2	0.110	SMC MOLDED
FTP-8	8	3420×2010×2000	Φ630×3	0.110	SMC MOLDED
FTP-10	10	4420×2010×2000	Φ630×4	0.170	SMC MOLDED
FTP-15	15	5420×2010×2000	Φ630×5	0.220	SMC MOLDED
FTP-20	20	7420×2010×2000	Φ630×6	0.350	SMC MOLDED
FTP-25	25	8420×2010×2000	Φ630×6	0.470	SMC MOLDED
FTP-30	30	10420×2010×2000	Φ630×6	0.470	SMC MOLDED
FTP-40	40	Φ2500×8500	Φ630×6	0.750	GRP
FTP-50	50	Φ2500×10500	Φ630×6	1.5	GRP

Oil Separator



Technological Process

The sewage of each resident is collected centrally by the sewage network after passing through a septic tank. Among them, farmhouse sewage must first pass through a grease trap to remove animal and plant oils before entering the sewage network.

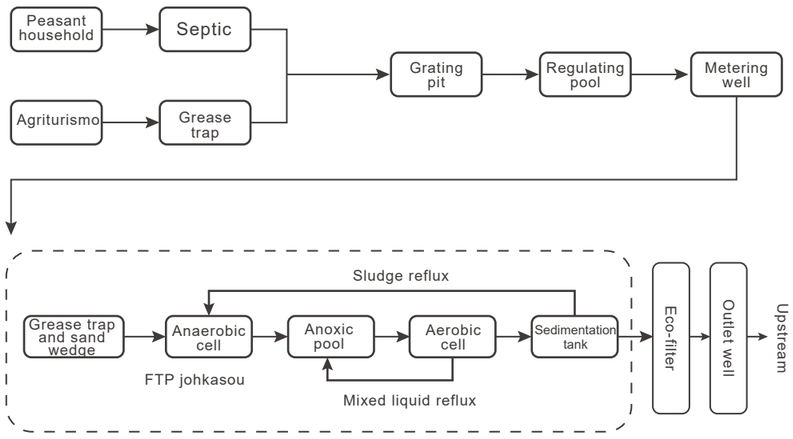
After the centralized collection of sewage network of domestic sewage through the grating well to separate the debris and large particles of solids, to remove slightly larger garbage and debris, to prevent entry into the subsequent sewage treatment process pool, clogging of fillers and pipelines.

Separated by the grating well sewage into the regulating pool, regulating pool is set up to meet the needs of the process water quality and quantity control, so that the water quality and quantity of water into the FTP purification tank more stable.

The sewage in the regulating tank is lifted to the FTP purification tank through the lifting pump, adopting the oil separation and sand sedimentation, anaerobic, partially aerobic and aerobic processes to degrade the COD in the sewage through the action of microorganisms, and at the same time realizing denitrification and denitrogenation.

After the FTP purification tank equipment treatment of sewage into the ecological filter tank for deep treatment, the use of artificial media, plants, microorganisms, physical, chemical, biological triple synergism, the depth of sewage treatment, to ensure that the sewage is stable and meets the standards for discharge. The effluent from the ecological filter tank flows into the nearby water body.

Sludge treatment: The sludge generated in the FTP purification tank is regularly emptied and pumped out manually or by water pumps, and the sludge is regularly transported out for safe disposal (can be utilized in sanitary landfills or composting).

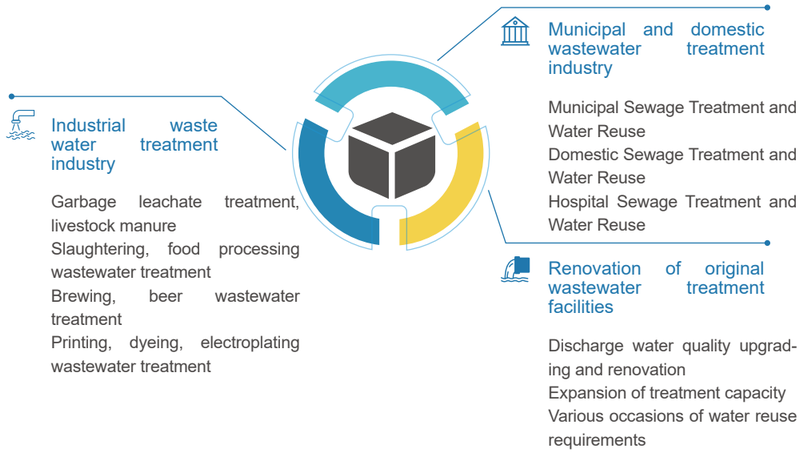


MBR integrated wastewater treatment equipment

Overview

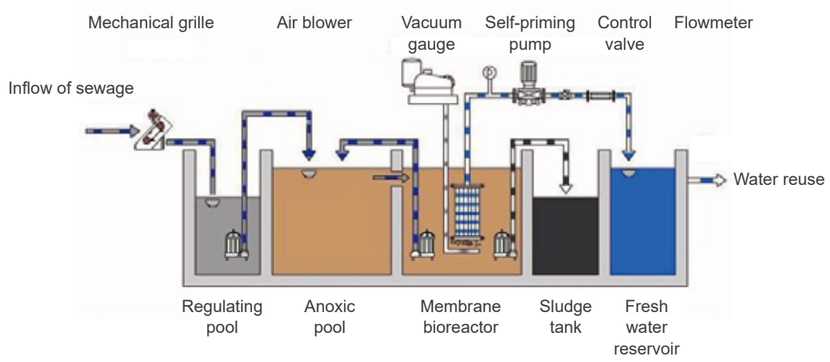
MBR integrated equipment using membrane bioreactor (MBR) for sewage treatment and reuse of integrated equipment, which has all the advantages of membrane bioreactor: good effluent water quality, low operating costs, strong system shock resistance, low sludge, automation and so on. In addition, the equipment covers a small area, easy to integrate, both as a small sewage reuse equipment, but also as a larger sewage treatment plant (station) of the core treatment unit.

Application

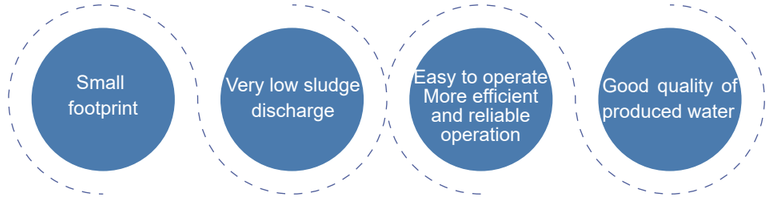


Process Introduction

1. Adopting dual-engine multi-stage AO, biomultiplication, high-efficiency denitrifying bacteria and high-efficiency cold-resistant mixed bacteria inoculation technology. Setting up multi-cell aerobic - partially oxygen adjustable area of the same pool body of a variety of processes coexist, flexible mode of operation. According to the water quality changes can be switched to adjust the AO combination form. Finally achieve the goal of removing pollutants such as carbon removal, nitrogen removal and phosphorus removal.
2. The system effectively solves the technical problems of low concentration of rural sewage, large changes of nitrogen and phosphorus at different times, poor biochemistry, and large changes of water quality and quantity by adjusting the reaction time and proportion of anaerobic, anoxic and aerobic intervals, as well as the gas upflow and reflux method.



Characteristic And Advantages



Small footprint

- In the MBR process, the activated sludge concentration is generally controlled at 7,000 to 18,000 mg/L, which is equivalent to five times the sludge concentration of the traditional sludge system. As a result, the biochemical treatment efficiency of the MBR process is greatly improved, and the reaction tank footprint can be saved by 60%. In addition, because the membrane module instead of clarification and filtration and other depth treatment process, so save the entire sewage treatment plant (station) footprint.

Very low sludge discharge

- In the process of sewage treatment, by cultivating microorganisms to decompose and oxidize pollutants and other biochemical degradation, the ATP obtained in the oxidation process of microorganisms is firstly used to maintain the life activity of microorganisms, and then used to synthesize the cellular components, therefore, the sludge reduction technology of maintenance metabolism is to increase the energy demand used for the maintenance of metabolism, and reduce the energy used for the value-added of the cells, so as to achieve the purpose of sludge reduction. The method mainly realizes the reduction by extending the age of sludge, among which MBR is the most typical process to extend sludge, and the MBR system can strengthen the maintenance metabolism of microorganisms in the system, reduce the production of residual sludge, and even realize the discharge of no residual sludge.

More efficient and reliable

- By removing treatment units such as sedimentation tanks and clarification tanks, MBR is integrated into an integrated process for operation. There is no need for sludge settling or chemical dosing (e.g., flocculants and coagulants), thus eliminating the need for chemical dosing systems that would be required in the conventional case. In addition, by eliminating the sludge settling tanks, which are strongly influenced by sludge concentration and properties, the number of sampling and analytical tests can be minimized. Overall, the MBR process reduces the workload and is easy to operate, stable and efficient, and can be operated directly by the user via remote and on-site controls.

Good quality of produced water

- Generally speaking, the wastewater treated by MBR process has almost undetectable suspended solids and the turbidity is less than 1. Combined with the biochemical treatment process of membrane separation technology, the water produced by MBR can be used in almost all non-drinking reuse areas - agricultural green irrigation, boiler make-up water (RO pre-treatment) process feed water etc. At the same time the MBR process can effectively reduce the presence of primary bacteria, such as E. coli and cryptosporidiosis.