



Off-grid Community Container Sewage Treatment System

PRODUCT FEATURES

Standard Types	Model	Handling Capacity/ Day	Installation Mode	Size (m)	Rate Power (KWh)	Volts/ Phase	Capacity/ People
Types 1	Sewer-C20-50	50m³ (11,000Gal)	Above/ Below Ground	6.058 x 2.438 x 2.896 (20ft x 8ft x 9ft6in)	27	240V/3P	300
Types 2	Sewer-C40-100	100m³ (22,000Gal)	Above/ Below Ground	12.192 x 2.438 x 2.896 (40ft x 8ft x 9ft6in)	38	240V/3P	600
High Quality	High biological stability, robust shock load resistance.						
Reliable Performance	Operate autonomously for 6 months even under extreme conditions.						
Self-recovery	Automatically recovers within 3 days of no wastewater inflow.						

High Anti-corrosion Enclosure High C5-M grade anti-corrosion coating for anti-corrosion at Corten steel structure.

Bill of Sewer-C40-100 Materials

No.	Description	Specification	Unit	QTY (Unit)	Remark
1	Container AO Reactor	40ft x 8ft x 9ft6in	Set	1	IP Rating: IP65
2	Pipe/Valves	PVC	Set	1	
3	Microporous Aerator	Φ270	pcs	18	
4	Rotary Blower Ainer	N=0.75kw, Q=0.63m³/min (3000mmAQ)	Set	2	
5	Submersible Mixer	N=0.2kw	Set	2	
6	Phosphorus Removal Dosing System	V=200L P=0.37kw	Set	1	
7	Carbon Source Delivery System	V=200L P=0.37kw	Set	1	
8	Disinfection System	UV or NaClO	Set	1	
9	Electrical Cabinet	LxWxH: 600 x 250 x 700 mm (23.6" x 9.8" x 2')	Set	1	

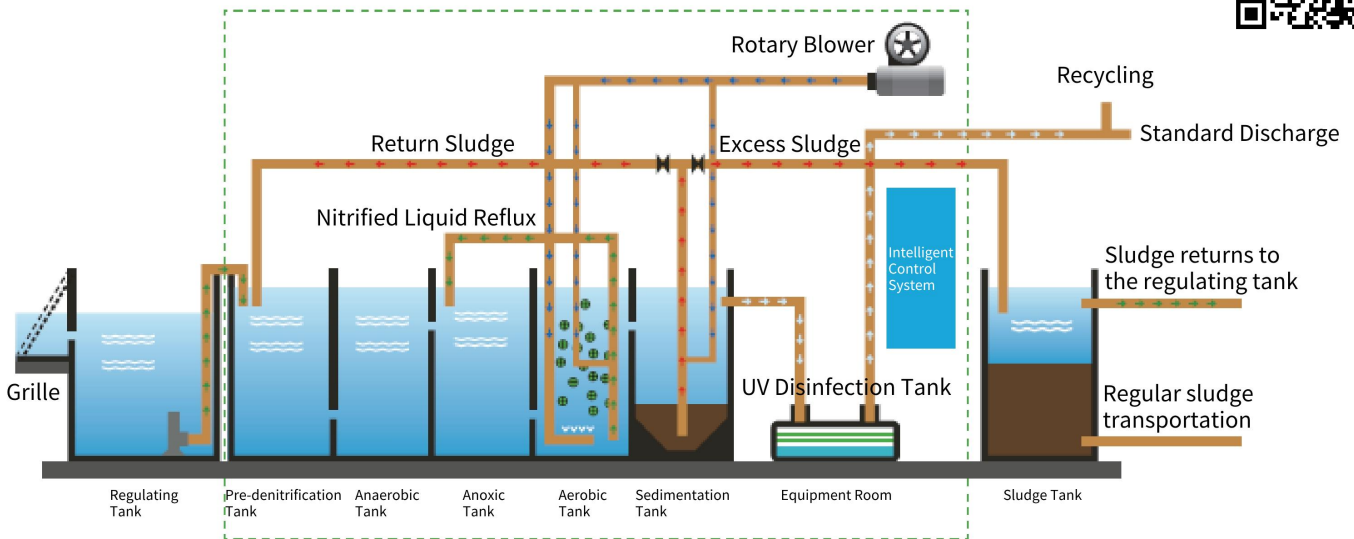
Containerized Sewage Treatment Solutions

- The solutions are modular by containers, fully automatic, plug & play, and can be manufactured by specific requirements or regulations.
- The sewage is processed with a high standard treating process with high water quality output by project requirements.
- Different containerized modules used for different wastewater treatment depend on the specific project requirements and the effluent standards that need to be achieved, such as Mechanical pre-treatment, Sludge treatment, Biological treatment, Filtration, etc.

Water Quality Before and After Treatment

Parameter	Water Quality (mg/L)		Parameter	Water Quality (mg/L)
pH	6.5~8.0	→	pH	6
COD	≤300		COD	≤50
BOD	≤150		BOD	≤10
SS	≤150		SS	≤10
NH3-N	≤30		NH3-N	≤5 (8)
TP	≤7		TP	≤0.5
TN	≤40		TN	≤15





PROCESSING FEATURES

Key Process Advantages

- Gas lift reflux technology saves costs.
Compared with the traditional way of pump reflux, it reduces the operation energy consumption, lowers the operation cost, and has zero reflux equipment failure.
- Gas lift Multi-stage water intake and Gas lift reflux improve high-efficiency nitrogen removal.
- Multi-stage water intake system brings high system stability.
It can distribute the sewage load, reducing the impact of changes in the concentration of pollutants in the influent water due to a variety of reasons.
- Multi-stage water intake carbon source system saves processing cost.
The intake carbon source can make full use of the organic carbon source, saving the dosage of the carbon source.
- Better water quality output.
- High MLSS in reaction pool saves space occupancy.

Application Cases

