

KINGSLEY™

COUNTRY'S LEADING WASTEWATER SOLUTIONS

PACKAGED SEWAGE TREATMENT PLANT



Technology for a sustainable future

PACKAGED SEWAGE TREATMENT PLANT

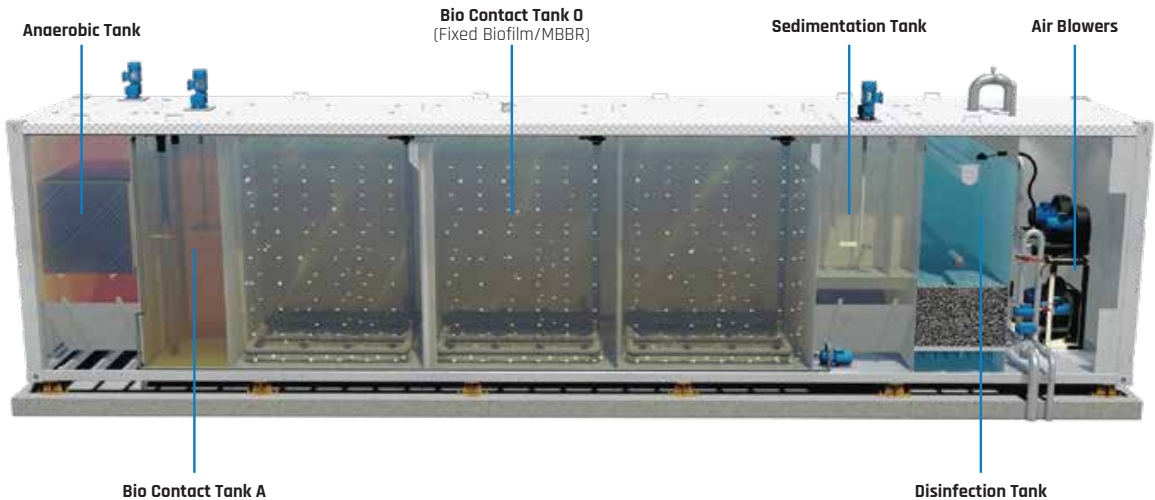
Sewage treatment is the process of removing pollutants from domestic and municipal wastewater, containing mainly household sewage plus some industrial wastewater. Whereas, the self-contained sewage treatment is covered, single piece packaged treatment system for onsite wastewater treatment. Package STPs are innovative and truly versatile systems for effective treatment of wastewater, including nutrient removal. Those can be configured for BOD reduction, suspended solids reduction, Ammoniacal and/or total Nitrogen reduction and Phosphorus reduction.

Features

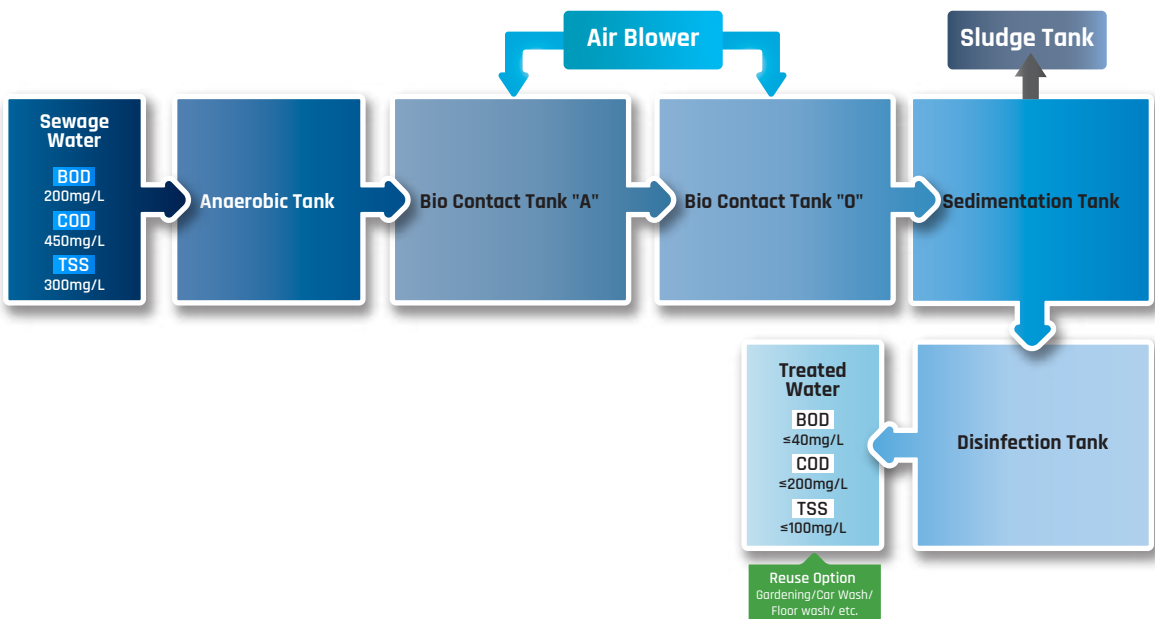
- ✓ Leading Edge package sewage treatment plant
- ✓ Idea for sites where water reuse is premium
- ✓ Suitable for achieving LEED certification
- ✓ Odorless Treatment
- ✓ Small Foot Prints
- ✓ Reduce sludge yield
- ✓ Stable and reliable technologies
- ✓ Cost-effectiveness
- ✓ Automated operation
- ✓ Easy maintenance
- ✓ Non-occupation of surface land
- ✓ No structures or buildings required as well as no heating or insulation required



Cross-section Perspective



Flow Process



Technical Specification

Sizes	Treatment Capacity (m³/day)	Equivalent Population (Person)	ISTP Area (m²)	Operation (Hours)	Module Weight (Ton)
KESC50	50	up to 1000	35	10	12.0
KESC100	100	up to 2000	70	10	21.0
KESC200	200	up to 4000	55	24	18.0
KESC250	250	up to 5000	70	24	21.5
KESC300	300	up to 6000	85	24	25.0
KESC500	500	up to 10,000	140	24	39.5
KESC1000	1000	up to 20,000	285	24	75.0

Benefits & Areas of Application

Kingsley Clear

Basic Module (AAO Process)

- Low energy consumption
- Low maintenance cost
- Minimum Space requirement
- Modular
- Standard water quality

Discharge as per legal standard

40
BOD

120
COD

50
TSS

Kingsley Advanced

Kingsley Clear+MBR



- Low energy consumption
- Low maintenance cost
- Modular
- High water quality
- Suitable For LEED Gold

Irrigation of Landscape, vegetation, Car Washing, Cooling towers, Concrete Mixing & Toilet flushing Purposes

20
BOD

50
COD

20
TSS

Kingsley Ultra

Kingsley Advanced+Ultrafiltration



NE

- Low energy consumption
- Low maintenance cost
- Modular
- Superior water quality
- Suitable For LEED Platinum

Reuse for Service water

≤10
BOD

≤30
COD

≤10
TSS

MBBR Technology in Waste Water Treatment

MBBR is a biological treatment process which combines biofilm media and conventional activated sludge process that involves floating high-capacity microorganism bio chips media within the aeration and anoxic tanks. The media used in the process provides adequate surface area to biological microorganisms for growing. This increased surface area reduces footprints of the tank used for treating wastewater.



Advantages of MBBR System

- ✓ Low weight
- ✓ Large active surface area
- ✓ Compact materials
- ✓ Easy to upgrade of existing plants
- ✓ Durable & long-life
- ✓ High BOD⁵ reduction (up to 90%) and nitrification
- ✓ Corrosion resistant components
- ✓ High volume load
- ✓ Simple to extend
- ✓ Low CAPEX and OPEX



MBR Technology in Wastewater Treatment

MBR Systems are considered as advanced active sludge treatment systems. They utilize micro pores within the membranes to separate liquid and solid particles in the water by pressure. As a result of this process, secondary treatment is not required. Moreover, MBR systems also offer attractive solutions for wastewater by providing filtration at a 0.01 µ-micron level.

Advantages of MBR System

- ✓ Space savings: **60%** than conventional
- ✓ Energy savings: **50%** than conventional
- ✓ Chemical savings: **60%** than conventional
- ✓ Fully automatic operation
- ✓ Online monitoring system
- ✓ Low and easy operation cost and maintenance perspective
- ✓ Renovation & up-gradation for recycle of existing STP's are possible
- ✓ Effective barrier against solids, organic pollutants and microorganisms
- ✓ Sludge yield reduced by 60-80% than conventional systems
- ✓ No clogging of sludge
- ✓ Minimal backwash required



Flagship STP projects



Independent University, Bangladesh
Educational Institution



Cityscape Tower
Commercial Highrise
LEED Platinum Certified

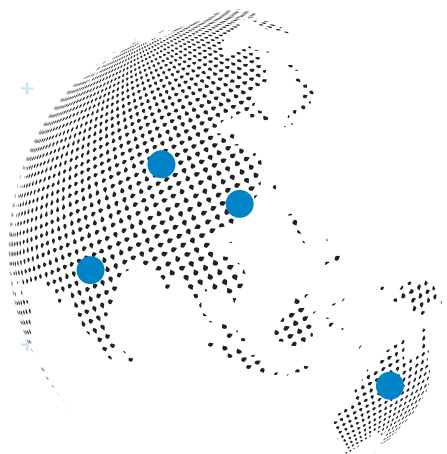


BGMEA Complex
Commercial building
(to be applied for LEED Certified Green)



Bijoy Rakeen City
Condominium Complex





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