

Package Wastewater Treatment Plant - SEWAGE-ENP

enki's containerized sewage treatment plant are available from 10 to 2.000 cubic meter per day. Our standard biological containerized sewage treatment plant is completely assembled and ready for use

Key Features

- Epoxy coated carbon steel
- High treatment efficiency
- Economically operation
- Easy to transport
- Treated water can be used for irrigation
- Short manufacturing and delivery time
- Need very less place
- Require very less maintenance
- Automatic plant do not need to operator
- Easy to increase the capacity with modular unit
- Very less mechanical installation Works
- Fulfill Regulatory Requirements

Typical Applications

- Small communities
- Mining construction camps
- Pulp & Paper Construction Camps
- Schools
- Hotel motel and resorts
- Golf Courses
- Military camps
- Hospitals
- Industrial Parks and Factories
- Shopping Malls

Optional Equipment

- Blower for equalization basin
- Stainless steel container
- Stainless steel piping
- Spare pump and blower
- Isolation and heating in cold places
- Automatically screen
- Chlorine dosing unit or UV sterilizer
- Media Filter
- Sludge dewatering unit



Operation Principle

Wastewater comes initially to a coarse screen placed at the inlet of the equalization basin, which holds the solid matters that would cause blocking of the pumps and other stages of the unit. This screen is cleaned manually. The wastes kept in the screen can be disposed with other domestic wastes. Wastewater, separated from solid matters, flows to the equalization basin.

The pollution and flow characteristics of domestic wastewater show variation during the day. The wastewater is collected in the equalization basin in order to feed the system under controlled and constant conditions by means of hydraulics and pollutant loading, thus improving the efficiency of the treatment. This basin can be also used as reserve volume against peak loading conditions.

The principle of biological treatment applied in package treatment units is the SBR (Sequencing Batch Reactor) method, where aeration and sedimentation processes are taking place in the same volume. During the blower operation time, the tank works as the aeration reactor. In the non-operating period of the blower, the tank becomes a sedimentation basin, where the bacterial floc can settle at steady hydraulic conditions and form a sludge layer at the bottom. In order to supply the necessary oxygen for the activated sludge process, an uniform air mixture is supplied via diffusers from the blower and moreover a complete mixing is maintained and the settling of the bacterial flocks is prevented. The treated water at the upper part of the tank, is discharged by the integrated pump. If needed disinfection of the treated water is achieved by means of chlorine dosing into the discharge pipe.

The settled sludge is kept in the tank to maintain constant microorganism concentration. If there are not any sludge dewatering system, excess sludge will be removed time to time by customer.

According to requirements of our customer biologically plants will be supplied as concrete structure or steel package plants. We supply package plant cylindrical (ENC) or prismatic (ENP). The specification of cylindrically package plant is given below in table.

Package Wastewater Plant Selection Table

Type	Capacity (m ³ /day)	Person (pc)	Treatment Capacity (Kg BOD/day)	Number of Tank (pc)	Dimension (L x W x H cm)
SEWAGE_ENP-0050	10	50	3	1	250x200x250
SEWAGE_ENP-0100	20	100	6	1	450x200x250
SEWAGE_ENP-0200	40	200	12	1	750x200x250
SEWAGE_ENP-0300	60	300	18	1	1.050x200x250
SEWAGE_ENP-0400	80	400	24	1	1.150 x235x250
SEWAGE_ENP-0500	100	500	30	1	1.250 x235x270
SEWAGE_ENP-0600	120	600	36	1	1.350 x235x270
SEWAGE_ENP-0700	140	700	42	2	1.000x235x250
SEWAGE_ENP-0800	160	800	48	2	1.150 x235x250
SEWAGE_ENP-0900	180	900	54	2	1.150 x235x270
SEWAGE_ENP-1000	200	1000	60	2	1.250 x235x270

enki reserves the right to change the specification referred to in this table at any time, without prior notice