

STP Series Population Areas



Facet's STP Series Sewage Treatment Plants for inland applications have been designed for gravity or pumping treatment of domestic sewage, and built to be installed on the surface. These plants carry out the sewage treatment by biological means. The Plants are of the active sludge aerobic and extended aeration type, without requiring any other kind of dosing or addition.

The Plant is single-built in a closed steel module inside which three chambers (aeration, settling and discharge-disinfection) have been arranged, facilitating their transport and installation. Every chamber has been provided with the necessary access and inspection registers. This modular construction allows the increase of the processing capacity by placing more Plants in parallel.

The air diffusers responsible for the oxygenation and agitation of the water to be treated, are placed within the aeration chamber. The biological filter and the pipes that re-circulate sludge and grease towards the aeration chamber, are located in the settling chamber. The settling is pressurized in this chamber facilitating the deposition of solids.

All the instruments and control elements of the plant are housed inside an anti-vandal cabinet. The connection between the instruments which are inside the cabinet and the plant is throughout pipes of the corresponding section.

Facet's STP Series Sewage Treatment Plants meet the spillage requirements of 91/271/CE regulation. The sound level is lower than 55 dB(A) at 3 metres from the limit of the parcel where it is located. These Plants do not generate sludge, and do not generate

odours either due to their closed modular construction. The Plants are supplied fully pre-assembled and tested, so that they can be installed in their definite location in one day.

STANDARD FEATURES

- Meet the performance requirements of 91/271/CE regulation.
- Sound Level <55 dB(A) at 3 m from the parcel limit.
- No sludge generation.
- No odour generation.
- Automatic operation driven by PLC.
- Inside protection: 250 micron epoxy paint.
- Outer protection: 3 layers of 250 micron paint and RAL 6016 finish.
- Aeration system composed by a blower, an air supply pipe, bubble diffusers, a filter and an air relief valve.
- Automatic sludge recirculation system.
- Access and inspection registers in every chamber.
- Anti-vandal control cabinet internally covered with sound insulating material and with the same outer finish as the Plant. It includes a self-supporting soleplate and hoisting eyes, for their direct installation in the open air.
- IP-55 electric control panel, including operation synoptic panel.

MATERIALS

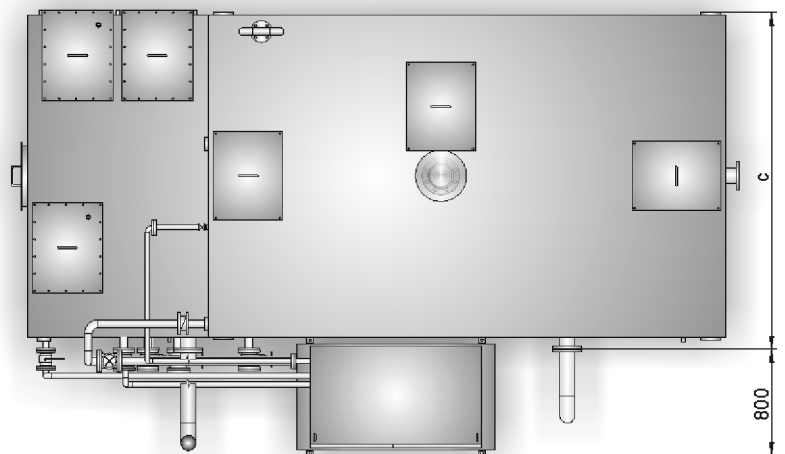
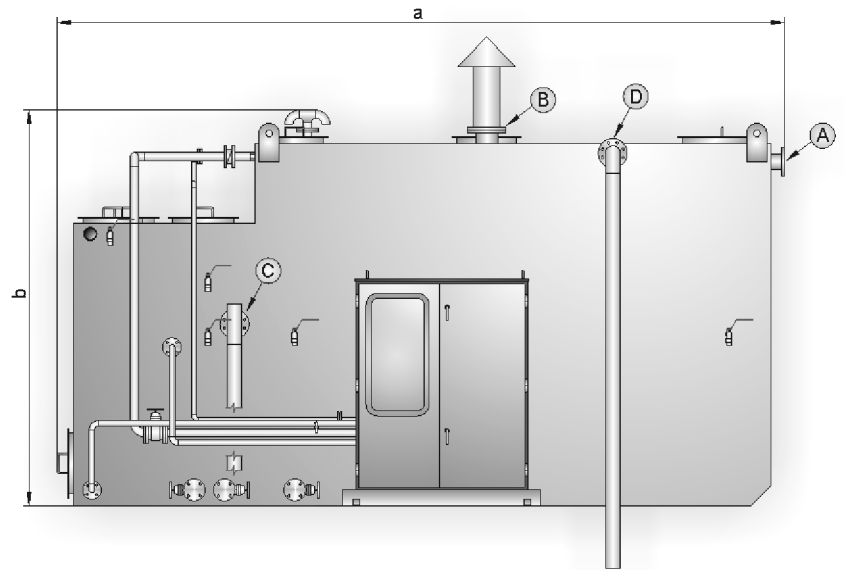
- Vessel: S-275-JR Carbon Steel
- Cabinet and soleplate: S-275-JR Carbon Steel
- Air Diffusers: AISI-304 Stainless Steel
- Air diffuser pipe (within the aeration chamber): AISI- 304 Stainless Steel
- Ozonization Circuit Piping: AISI-304 Stainless Steel (optional).

STANDARD CONNECTIONS

- Inlet: DIN 2576 PN10
- Outlet: DIN 2576 PN10
- Venting: DIN 2576 PN10
- Overflow: DIN 2576 PN10
- Sampling: 1/2" NPT

OPTIONS

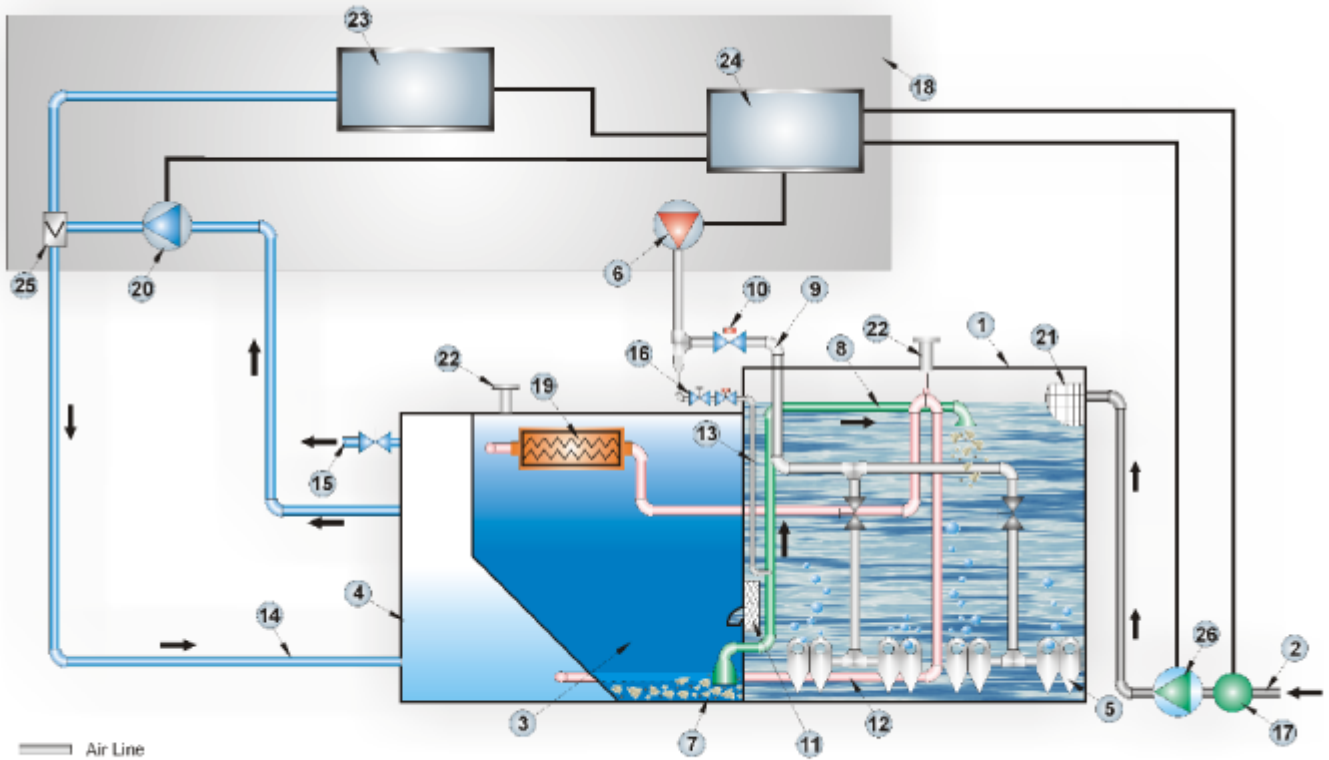
- Elevating grinding-pumping group, with level start up/stop automatic control, and high vacuum protection with vacuostat.
- Flow rate electromagnetic meter.
- Flow totalizer.
- Disinfection circuit by ozonization, composed by a pump, recirculation pipes and an air refrigerated ozone generator.
- Transmission of information about the Plant status via GSM modem.



The dimensions are approx.

MODEL	DIMENSIONS (mm)		
	a	b	c
STP-10	4553	2379	2234
STP-16	5508	2575	2430
STP-25	5508	2988	2540
STP-50	9220	3345	3132

CONNECTION LIST				
MARK	A	B	C	D
SERVICE	inlet	air vent	discharge	overflow
MODEL	TYPE			
STP-10	DN100	DN150	DN80	DN100
STP-16	DN100	DN150	DN80	DN100
STP-25	DN100	DN150	DN100	DN100
STP-50	DN100	DN200	DN150	DN100



- Air Line
- Sludge
- Electrical Control
- Discharge line from Settling Chamber to Disinfection Chamber
- Ozone Supply Line
- Sewage Water Inlet

ITEM	DESCRIPTION
1	Aeration chamber
2	Black water inlet
3	Clarifier chamber
4	Disinfection chamber
5	Air diffusers
6	Blower
7	Sludge
8	Recirculation line
9	Air supply
10	Manual valve (air supply)
11	Baffle
12	Manifold
13	Air injection in return of sludge
14	Ozone supply line
15	Discharge
16	Manual valve
17	Macerator
18	Control cabin
19	Biological filter
20	Circulation pump
21	Grid
22	Vent (to atmosphere)
23	Ozone generator
24	PLC (Program Logic Controler)
25	Ozone ejector
26	Suction pump