

TOPAS S 450 – 500



SUITABLE FOR

Family houses, recreational facilities, guest houses, restaurants, schools, small communities and small biowaste production facilities.



STANDARD EQUIPMENT

Control unit, equalizing tank, bioreactor, sludge tank, blower, equipment for decanting of treated water (decanter).



PATENT PROTECTION

Decanting equipment (EP-2552838B1)
Sand filter (EP-2554230)
Method of wastewater treatment (PV2012-227)
Steel-plastic construction (PV2010-266)



CERTIFICATION

Certified by SZÚ s.p. Brno, according to Government Regulation No. 163/2002 Coll. and according to Directives 2014/35/EU (Low Voltage) and 2014/30/EU (Electromagnetic Compatibility)



ADDITIONAL EQUIPMENT

Chemical dosing, sand filter, UV lamp, GSM module.



MATERIAL STRUCTURE

Patent-protected combination of steel profiled sheets that carry static loads and thermoplastics and that protect steel from corrosion. The thickness of the panel is 70 mm.

PRINCIPLE OF TECHNOLOGY

Biological wastewater treatment using activated sludge (SBR technology)

ADVANTAGES OF TECHNOLOGY

- + Built-in separate sludge tank with aerobic sludge stabilization
- + Equalizing and pumping tank
- + The technology allows the capture of wet wipes
- + Automatic sludge removal from the bioreactor
- + Stable self-supporting steel- plastic tanks
- + The construction is also suitable for installation below the groundwater level
- + Control unit with special software with WiFi connection
- + Suitable for continuous monitoring, connected to the central dispatching for control and management of the obtained data



TECHNICAL SPECIFICATIONS

Type	TOPAS 450	TOPAS 500
Number of inhabitant	90-450	100-500
Flow [m ³ /day]	67,50	75,00
Load BOD ₅ [kg/day]	27,0	30,0
Power consumption* ¹ [kWh/day]	72,0	72,0
Weight (without sand) [kg]	10 500	11 000
Number of tanks	5	6
Dimensions (w × l × h) [m]	12,3 × 6 × 3,0	12,6 × 7,3 × 2,8

*¹) electricity consumption at 100% load

EFFICIENCY ACHIEVED WITH CE CERTIFICATION

Parameter	COD _{Cr}	BOD ₅	SS	P _{tot}	N _{tot}	N _{NH₄}
Efficiency [%]	96 %	99 %	97 %	76% (99%)*	81 %	85% (98%)*

*¹) value reached only for the variant TOPAS Plus

MAXIMUM GUARANTEED PARAMETERS*¹:

Parameter	COD _{Cr}	BOD ₅	SS	P _{tot}	N _{tot}	N _{NH₄}
Value [mg/l]	130	30	30	8	20	20

*¹) applies to all types of TOPAS WWTPs which are loaded to the designed capacity and operated in accordance with the operating rules

AVERAGE ACHIEVED PARAMETERS OF WWTP TOPAS Plus¹):

Parameter	COD _{Cr}	BOD ₅	SS	P _{tot}	N _{tot}	N _{NH₄}
Value [mg/l]	30	8	8	0,2	-	0,5

*¹) TOPAS Plus is a comfortable variant of the treatment plant which is equipped with a sand filter and dosing of chemicals