

Wastewater Treatment Plant Pilot Application

Moving Bed Bioreactor (MBBR) Process with CFM• Ceramic Membranes

Mobile Container Pilot Plant

Installed and operated at ISKI's Atakoy waste water treatment plant.

Target of Treatment

Solid-free effluent with no germs and bacteria that enables a direct re-use of the treated water for e.g. irrigation.

System Engineering Data

Plant capacity	45 m ³ /d
Pore size:	200 nm
Membrane surface:	64 m ²
Membrane flux:	30 l/h·m ²

Biological Parameters

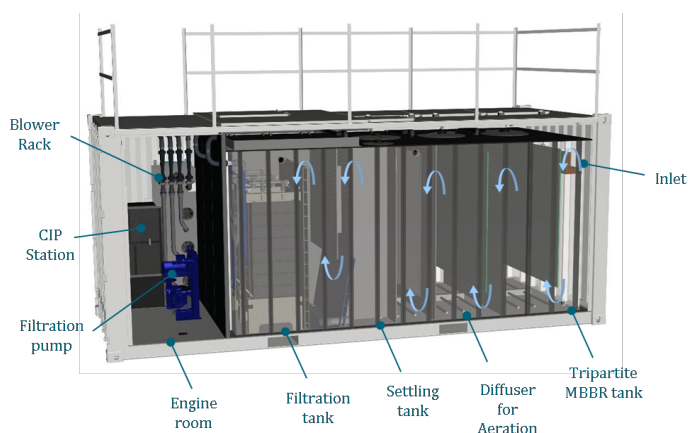
	Inlet	Outlet
TSS [mg/l]	442	< 5
BOD ₅ [mg/l]	371	< 4
COD [mg/l]	620	< 36
Fecal Coliform	-	< 10

Pilot has demonstrated that:

- ✓ Stable Flux of 30 l/m²h
- ✓ Sustainable Flux (no irreversible blockage during 1 year of operation)
- ✓ Stable effluent results meeting requirements
- ✓ Sludge reduction up to 88%
- ✓ Substandard energy consumption

Application / High Performance

Treatment of domestic wastewater by using MBBR technology integrated with flat sheet ceramic membranes with sustainable high flux.



Atakoy WWTP – MBBR Pilot Container

Moving Bed Ceramic Reactor