MERI SFT Surface Turbine

for Aerobic Biological Effluent Treatment



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for Aerobic Biological Effluent Treatment

Technology

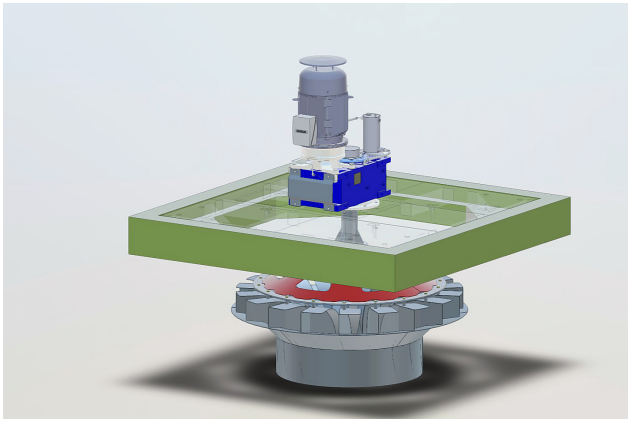
The SFT surface aerator turbine is a mechanical device used in aerobic biological wastewater treatment. It works on the principle of mechanical aeration, where oxygen from the atmosphere is transferred into the wastewater while simultaneously mixing it to maintain a homogenous condition for microorganisms.
The SFT relies on a high-speed rotating turbine impeller placed at the water surface, the turbulence created enhances the oxygen transfer rate (OTR) and promotes efficient biological degradation of organic pollutants, it supports activated sludge or aerobic lagoon systems.

Features

- Turbine/Impeller: Precision-balanced for high oxygen transfer and minimal vibration
- Shaft mounted Gearbox with Direct Drive Motor: Provides mechanical power, optimized for continuous operation
- Float or Bridge Mounted: Can be mounted on a floating system for lagoons or fixed on bridges/tanks
- Splash Guard & Deflectors: Control water spray and direct aeration flow for maximum oxygen dissolution
- Material of Construction: Stainless Steel
- Adjustable Speed/Height Options: For tuning aeration depending on influent load

Why to buy

- Reliable Oxygen Supply: Essential for aerobic bacteria to break down pollutants.
- Cost-Effective: Lower lifecycle cost compared to diffused aeration in some setups
- Flexibility: Suitable for variable effluent loads and shock loads
- Low Downtime: Rugged design minimizes breakdowns and maintenance frequency
- Compliance with Standards: Helps achieve statutory discharge norms for COD, BOD, and TSS reduction





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Typical & Proven Process

- Aeration for Aerobic Biological Effluent Treatment
- Activated Sludge Process (ASP) → aeration basins
- Oxidation Ditches → continuous loop flow with surface aerators.
- Extended Aeration → small to medium plants
- Aerobic Lagoons & Stabilization Ponds → floating surface aerators
- Sludge Holding Tanks → to maintain aerobic condition and reduce odor

See the following Products as well

- Anaerobic Reactors R2s and E2E
- Circular Sedimentation Tank
- Tauro TAL (DAF)
- DeltaPurge (DAF)
- Elephant
- Dinoscreen
- LimeTrap
- Vulcano (DAF)
- GyroSand (Sandfilter)

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