

Airmaster Aerator “Infusion Aeration Technology”

Airmaster Aerators incorporate "infusion aeration technology" -- a new innovation in wastewater treatment – making them the most advanced and efficient aerators available in the world today.

How It Works:

In operation, wastewater is pulled into the Airmaster Aerator by a water impeller and the wastewater is then pressurized in the aerator’s discharge manifold. Air from the turbo air blower is forced through the air manifold, and into the discharge manifold. The air infusion tube is terminated on the outside of the discharge manifold. Inside the discharge manifold is a pair of spiraling vanes that makes the wastewater spiral around the air infusion tube. When the oxygen generator tubes are bolted on the discharge manifold, this creates a negative pressure zone. At this point, the aerator is able to disrupt the molecular structure of the wastewater and infuse air into the wastewater. The air infused wastewater is then discharged from the right and left side of the aerator and mixed from the top of the basin to the bottom. This creates a complete mix of air infused wastewater in the basin, without increasing the temperature of the wastewater.

The “TURBO X-TREME” And The “TURBO X-TREME MAGNUM”

Our Airmaster Aerator “Turbo X-Treme” 25 hp aerator and Aerator “Turbo X-Treme Magnum” 50 hp aerator incorporate a turbo air blower to achieve the maximum oxygen transfer available. The Airmaster Aerator “Turbo X-Treme” aerator and the Airmaster Aerator “Turbo X-Treme Magnum” aerator can achieve an oxygen transfer rate of 3.0 lbs. of oxygen per name plate horsepower per hour under normal conditions. Airmaster Aerators offer distinct advantages -- aeration, mixing, ammonia reduction, odor reduction, sludge reduction, B.O.D. reduction, T.S.S. reduction, CO2 reduction, controlling short circuiting by distinct mixing patterns, heat reduction, and de-foaming qualities. This aerator has proven to replace aerators up to three times the horsepower, resulting in substantial electrical energy savings and maintenance cost savings. The Airmaster Aerator offers the benefits of thorough mixing, ammonia reduction, and nutrient oxidation.