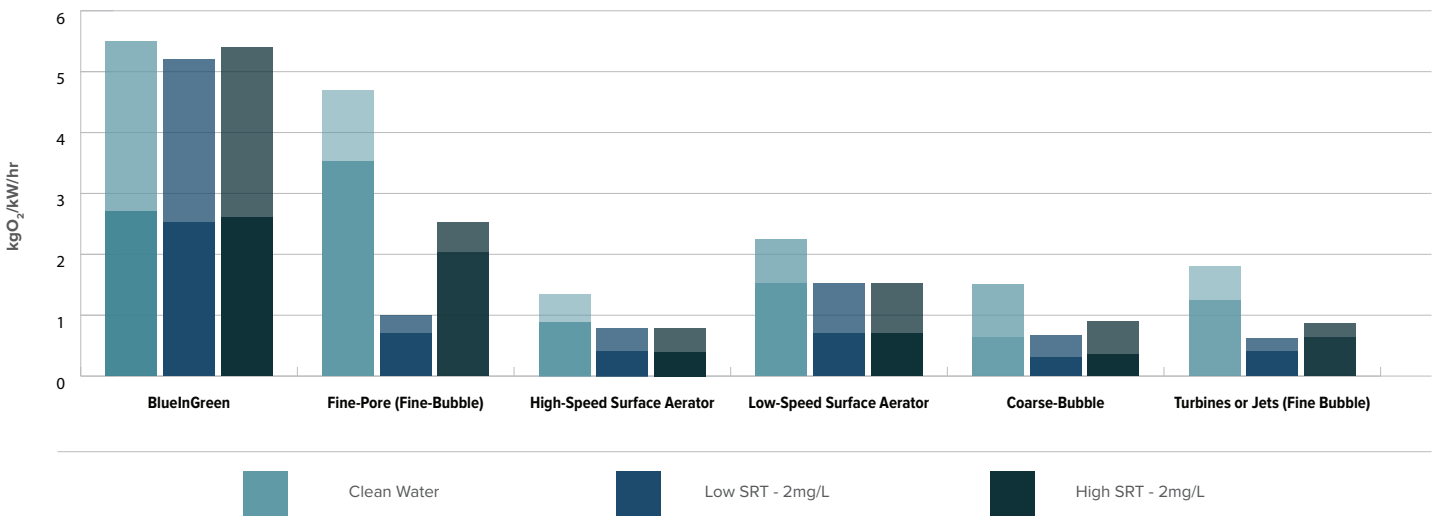


SUPERSATURATED DISSOLVED OXYGEN AERATION COMPARISON

THE BIG DIFFERENCE

The more efficient your aeration system is, the more money you save. Luckily, BlueInGreen solutions are capable of delivering consistently high transfer rates despite initial DO concentrations, depth and solid concentrations, making it an ideal choice for post-aeration, MBRs, aerobic digesters, as well as conventional activated sludge processes. Just take a look at how our solutions stack up against traditional aeration technologies.

Efficiencies of Conventional Aeration Equipment vs. BlueInGreen Solutions



RESULTS

Technology	Clean Water	2mg/L Low SRT	High SRT
BlueInGreen	2.7-5.5 kgO ₂ /kW/hr	2.5-5.2 kgO ₂ /kW/hr	2.6-5.4 kgO ₂ /kW/hr
Fine-Pore (Fine-Bubble)	3.6-4.8 kgO ₂ /kW/hr	0.7-1.0 kgO ₂ /kW/hr	2.0-2.6 kgO ₂ /kW/hr
High-Speed Surface Aerator	0.9-1.3 kgO ₂ /kW/hr	0.4-0.8 kgO ₂ /kW/hr	0.4-0.8 kgO ₂ /kW/hr
Low-Speed Surface Aerator	1.5-2.1 kgO ₂ /kW/hr	0.7-1.5 kgO ₂ /kW/hr	0.7-1.5 kgO ₂ /kW/hr
Coarse-Bubble	0.6-1.5 kgO ₂ /kW/hr	0.3-0.7 kgO ₂ /kW/hr	0.4-0.9 kgO ₂ /kW/hr
Turbines or Jets (Fine-Bubble)	1.2-1.8 kgO ₂ /kW/hr	0.4-0.6 kgO ₂ /kW/hr	0.6-0.8 kgO ₂ /kW/hr

Source Stenstrom & Rosso, 2010 | University of California

NOTES

1 BlueInGreen pre-dissolves oxygen in sidestream, therefore efficiency is unaffected by DO, depth, solids concentrations, etc.

2 Calculations for conventional aeration equipment must be modified as DO levels increase above 2-mg/L, resulting in even lower efficiencies

APPLICATIONS

- Biological Treatment + Nutrient Removal
- Aerobic Digestion
- Effluent Reaeration
- Environmental Remediation of Rivers, Lakes + Reservoirs
- Odor Control