

Fine Bubble Aeration





bosman)))) plate aerator™



Unrivaled Efficiency Unprecedented Longevity Unparalleled Performance

Fine bubble aeration in activated sludge wastewater treatment has unquestionable advantages over coarse and medium bubble aeration regarding oxygen transfer efficiency and lower power consumption. Fine bubble aeration holds the promise of paying for itself in power costs only after a few years of operation.

Unfortunately, there are common disadvantages, such as orifice clogging, biofouling, and power robbing performance degradation that necessitates ongoing diffuser maintenance, basin down time, and replacement costs. Regrettably, many of these issues are normally only discovered after the investment has been made and the system installed.

The **Bosman[®] Plate Aerator[™]** system overcomes these difficulties by combining an innovative design with a special membrane that resists fouling and maintains optimal efficiency many times longer than even the most robust materials used by other manufacturers. Since plasticizers are not used in this membrane, it is not subject to becoming brittle over time as are most fine bubble diffusers. The backing plate is 316 stainless steel plate and hardware is 316 stainless also, providing the highest level of structural integrity and corrosion resistance available.

The unique design of the Bosman[®] Plate Aerator[™] allows for the highest submergence available, with the air release point only **1-1/2 inches** from the basin floor. This additional submergence provides as much as 10% greater efficiency than disc, dome, tube or panel diffusers.



Since the Bosman[®] Plate Aerator[™] sits on the basin floor, volume and oxygen robbing grit and other detritus do not settle underneath and around it, as is common with nearly every other aeration system. This results in less basin downtime and maintenance.

The design of the Bosman[®] Plate Aerator[™] dramatically reduces the number of air supply connections required, as compared with other types of aeration systems. This results in an easier and less expensive equipment installation. The fewer connections also provide fewer places that leakage problems can occur.

The system design facilitates taking a single Plate Aerator[™] offline if necessary without dewatering, while leaving all the others in service.



Every Bosman[®] Plate Aerator^M is fully tested and serialized before it is shipped. Worldwide, there are over 10,000 plates installed. We are so confident in our Plate Aerator^M, we offer a **full five year warranty** as standard.



The Bosman[®] Plate Aerator^{imessilon} has been retrofitted many different basins that previously used other types of aeration. Results of up to 50% energy savings have been achieved. Design and performance data is available for these retrofits.

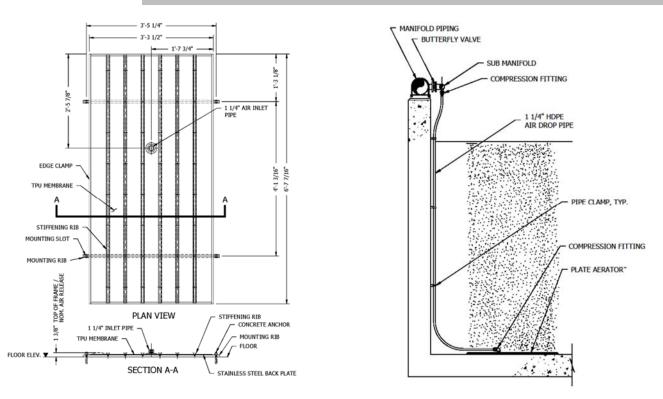
Additionally, PB Equipment can provide drop-in units are available that allow installation without removing the basin from service, or for unique applications.



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Plate Aerator™ Weight:	Approximately 75 pounds
Plate Aerator™ Length:	80″
Plate Aerator [™] Width:	40″
Plate Aerator™ Height:	1 1/2" nominal to mounting surface
Air Flow Rate:	Up to 50 scfm per plate aerator
Membrane Material:	Thermoplastic Polyurethane, Plasticizer-free
Membrane Life:	20+ years
Frame & Hardware Material:	Type 316 Stainless Steel
Efficiency:	Up to 11 pounds O2 / kW Hour



Since its incorporation in 1929 in Piershil, The Netherlands, Bosman Watermanagement, B.V. has focused on the design and construction of pumping and wastewater treatment products. PB Equipment Inc. is the exclusive distributor of the Bosman Plate Aerator™ in the United States.



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