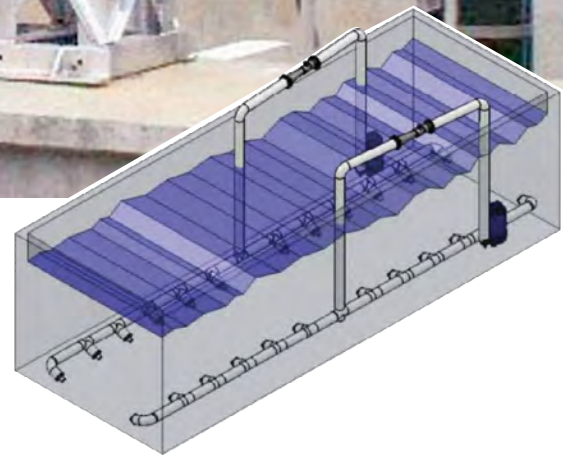




## VENTURI WASTEWATER AERATION SYSTEMS

For Wastewater  
Aeration and  
Odor Control

*World Leader  
in Mixing and  
Contacting  
Technologies*



### **Mazzei Venturi Wastewater Aeration System...The Efficient, Low Cost, Quiet Solution**

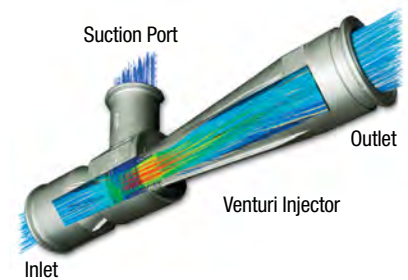
Wastewater is circulated through Mazzei® venturi injectors, creating a vacuum to draw air into the wastewater. The aerated process water is discharged back into the tank through Mazzei Mass Transfer Multiplier™ (MTM) mixing nozzles for additional oxygen transfer and mixing.

#### **Benefits**

- ▶ Energy efficient
- ▶ Quiet operation – no blowers or compressors
- ▶ Low system maintenance
- ▶ No maximum depth limitations
- ▶ Low operating pressure
- ▶ Low installation cost
- ▶ SOTR tested per ANSI/ASCE 2-91
- ▶ Validated process water efficiencies

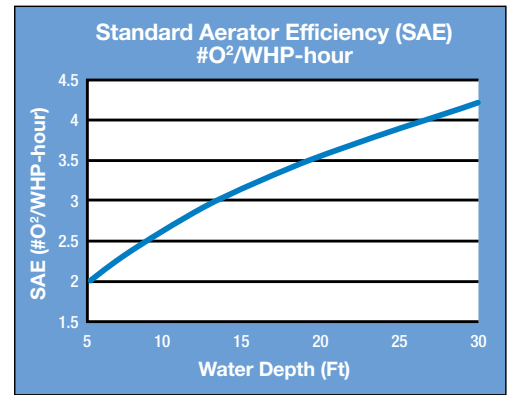
#### **Applications**

- ▶ BOD/TOC reduction
- ▶ Odor control
- ▶ Aeration basin
- ▶ Activated sludge digester
- ▶ Sewer main aeration
- ▶ Ponds or lagoons
- ▶ Post-treatment aeration
- ▶ Air or oxygen injection



**Easily Adapts For  
Multiple Applications**

- ▶ Easily installed in any aeration tank or basin
- ▶ Perfect for supplemental D.O. or to replace existing coarse bubble diffusion systems
- ▶ More oxygen transferred per horsepower than other aeration technologies as basin depths increase



Aerator efficiency increases with greater depths



### Industrial Wastewater Systems

Calculations based on BOD Reduction from 1500 to 200, MLVSS=4000, Water Depth=20 ft.

Water Flow (GPD)	Actual O <sup>2</sup> Trans (lbs O <sup>2</sup> /hr)	Power (Water HP)	Circulation Rate (GPM)	Air Suction (SCFM)	Injector(s) x Model Number	Nozzle Manifold
10,000	4.52	2.4	223	20	1 x 4091	N45-2
50,000	13.56	7.2	670	60	3 x 4091	N45-6
100,000	31.65	16.8	1563	140	7 x 4091	N45-14
200,000	64.61	33.6	3118	300	3 x 8095	N60-12
350,000	95.15	54.4	5051	400	2 x 12050	N60-16

### Municipal Wastewater Systems

Calculations based on BOD Reduction from 350 to 10, MLVSS=2000, Water Depth=20 ft.

Water Flow (MGD)	Actual O <sup>2</sup> Trans (lbs O <sup>2</sup> /hr)	Power (Water HP)	Circulation Rate (GPM)	Air Suction (SCFM)	Injector(s) x Model Number	Nozzle Manifold
1/2	43.1	22.4	2078	200	2 x 8095	N60-4
1	95.1	54.4	5051	400	2 x 12050	N60-16
2	110.3	108.8	10101	600	3 x 12050	N60-24
5	428.2	244.8	22728	1800	9 x 12050	N60-72

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Contact us today.

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