



## Mazzei Injector Corporation AirJection System

### Oxygen Transfer Requirement Calculation

Customer:  
 Project:  
 Purpose For Aeration:  
 Process (SBR, Lagoon etc.)

The following information is needed for design of an aeration system for an Activated Sludge Wastewater Treatment Process. Please try to provide as much of the information as possible. When you have finished filling in the information below, please save the file and e-mail it to [wastewater@mazzei.net](mailto:wastewater@mazzei.net)

#### Design Parameters

Average Design Flow, ADF	MGD		
Influent Loading, @ ADF, BOD5	mg/l		
Total Kjedahl Nitrogen, TKN	mg/l		
Peak Flow, PF	MGD		
Influent Loading, @ PF, BOD5	mg/l		
Total Kjedahl Nitrogen, TKN	mg/l		
Effluent Loading, BOD5	mg/l		
Total Kjedahl Nitrogen, TKN	mg/l		

#### Aeration Basin Dimensions

Aeration Basin Volume	Gallons		
Aeration Basin Water Depth	ft		
Aeration Basin Length/Width	ft		
Aeration Basin Slope of Sides			Horizontal/Vertical

#### Process Operating Parameters

Water Temperature	C		
Operating Dissolved Oxygen	mg/l		
Available Aeration Time	hr/day		
Site Elevation	ft		

Reference: Wastewater Engineering, Metcalf & Eddy, Third Edition