



Mazzei Injector Company, LLC 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

Design Parameters

Average Design Flow, ADF	m ³ /day		
Influent Loading, @ ADF, BOD5	mg/l		
Total Kjedahl Nitrogen, TKN	mg/l		

Peak Flow, PF	m ³ /day		
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	m ³		
Aeration Basin Water Depth	m		
Aeration Basin Length/Width	m		
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	m		

Reference: Wastewater Engineering, Metcalf & Eddy, Third Edition