

Checklist CFD.

Flow simulation for aeration tanks.

Data concern only one basin! One form relates to one simulation study!

Type of tank:

- Rectangular tank
- Circular tank
- Annular tank
- Tank with circulating flow
- Meandering tank
- Other (drawing)

Dimensions of tank:

Length _____ m

Width _____ m

Depth of water _____ m

Diameter (of circular- and annular tanks) _____ m

Width of channel (for tanks with annular, circulating and meander flow) _____ m

Length of center wall (for tanks with circulating flow) _____ m

Diameter of invert wall (for tanks with circulating flow) _____ m

Additional built-in components:

Length _____ m

Width _____ m

Height _____ m

Function _____

Position (drawing)

Properties of medium in aeration tank:

Sludge volume index (SVI) _____ ml/g

Total solids _____ g/l

Inflow:

Total volume flow at inlet (afflux of sewage plus recirculation) _____ m³/h

Volume flow at other connections and openings _____ m³/h

Function of additional inlet

Geometry of inlet:

- Pipe diameter _____ m
- Overfall _____ m
- Wall breakthrough _____ m²
- Position of inlet (drawing and designation of height above bottom)

Geometry of additional inlet:

- Pipe diameter _____ m
- Overfall _____ m
- Wall breakthrough _____ m²
- Position of inlet (drawing and designation of height above bottom)

Geometry of outlet:

- Pipe diameter _____ m
- Overall _____ m
- Wall breakthrough _____ m²
- Position of inlet (drawing and designation of height above bottom)

Additional connections and openings:

Dimension _____ m²
 Position (drawing and designation of height above bottom)

Submersible Mixers:

Type _____
 Number _____ pcs
 Diameter _____ m
 Static thrust per mixer _____ N
 Power per mixer _____ kW
 Position and setting angle of the mixers (drawing)
 Height of mixers axis above bottom _____ m

Aeration:

- Disc aerator Ø _____ m
 - Tube aerator Ø _____ m
Length _____ m
 - Plate aerator Length _____ m
Width _____ m
 - Miscellaneous
- Total air admission of aeration tank _____ Nm³/h
 Number of aeration tanks _____ pcs
 Number of aeration discs per aeration field _____ pcs
 Distance of aerators between each other _____ m
 Height of aerators above bottom _____ m

Please send the completely filled checklist to:

WILO SE, Werk Hof
 Group Competence Team Wastewater Treatment
 Heimgartenstraße 1-3, 95030 Hof/Saale, T +49 (0)9281 974-540, ctwwt@wilo.com

Project-/Request number: _____

Company: _____ Name: _____

Street: _____ Postcode / Town: _____

Phone: _____ E-Mail: _____