

QUESTIONNAIRE



RUDOLF MESSNER UMWELTTECHNIK

Contact details

Company / Municipality: _____

Name / Department: _____

Zip Code / City: _____ Street: _____

Telephone: _____ Mobile: _____

E-Mail: _____ Fax: _____

WWTP: _____

mainly municipal waste water mainly industrial waste water
 _____ % municipal _____ % industrial (industry: _____)

Plant capacity: _____ PE Current load: _____ PE

Height above sea level _____ m

Plant specific data

Pre clarification	Pcs.	V in m ³	L/oD in m	W/iD in m	WD in m
Bio-P tank	Pcs.	V in m ³	L/oD in m	W/iD in m	WD in m
Denitrification tank	Pcs.	V in m ³	L/oD in m	W/iD in m	WD in m
Swing tank	Pcs.	V in m ³	L/oD in m	W/iD in m	WD in m
Nitrification tank	Pcs.	V in m ³	L/oD in m	W/iD in m	WD in m
Secondary clarification	Pcs.	V in m ³	L/oD in m	W/iD in m	WD in m
Others					

V = Volume, L = Length, oD = outer Diameter, W = Width, iD = inner Diameter, WD = Water depth

Denitrification process	<input type="checkbox"/> upstream	<input type="checkbox"/> recirculation	<input type="checkbox"/> intermittent	<input type="checkbox"/> simultaneous
Nitrification process	<input type="checkbox"/> fully mixed	<input type="checkbox"/> with mixers	<input type="checkbox"/> cascades	

Sludge treatment	<input type="checkbox"/> aerobic stabilization	<input type="checkbox"/> digestion
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Sludge press	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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Digester	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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Measurements	Influent values	Process water
COD	mg/l	mg/l
BOD ₅	mg/l	mg/l
TSS	mg/l	mg/l
N _{total}	mg/l	mg/l
NH ₄	mg/l	mg/l
NO ₃	mg/l	mg/l
PO ₄	mg/l	mg/l
dry weather flow	l/s	l/s
storm weather flow	l/s	l/s
external water	l/s	

Current effluent values		
N _{total}		mg/l
NH ₄		mg/l
NO ₃		mg/l
PO ₄		mg/l

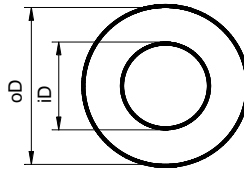
Effluent limits		
P		mg/l
N _{total}		mg/l
NH ₄		mg/l
COD		mg/l
storm weather flow		l/s

Acid capacity		mmol/l
pH-value		-

MLSS _{summer}		g/l
MLSS _{winter}		g/l

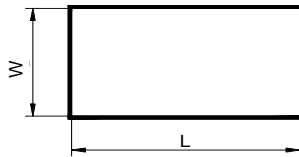
Dimension of Aeration Tank

Circular tank
Number: _____



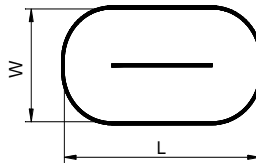
outer Diameter oD: _____ m
inner Diameter iD: _____ m
Water depth WD: _____ m
Volume V: _____ m³

Rectangular tank
Number: _____



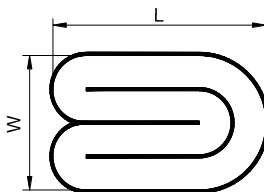
Length L: _____ m
Width W: _____ m
Water depth WD: _____ m
Volume V: _____ m³

Oxidation ditch
Number: _____



Length L: _____ m
Width W: _____ m
Water depth WD: _____ m
Volume V: _____ m³

Carrousel tank
Number: _____



Length L: _____ m
Width W: _____ m
Water depth WD: _____ m
Volume V: _____ m³

Please fill the following information into the sketch drawing:

- aeration grids
- in- and outlet
- mixers (if applicable)

Blower configuration

Blower No.	Brand	Type	Serial No.	Construction Year	P _K kW	n 1/min	Q ₁ m ³ /min	p ₁ bar	Δp mbar	P _{Mot} kW	Control 1-/2-step/FC

P_K clutch power
n rotation speed
Q₁ air volume at Δp

p₁ inlet pressure
Δp differential pressure
P_{Mot} nominal motor power
Control blower control (1-step, 2-step or frequency converter)

Others
