

# REFERENCE LIST

WWTP Operator	<b>Köln-Weiden</b> Stadtentwässerungsbetriebe Köln	<b>Großostheim</b> Markt Großostheim	<b>Moers-Gerdt</b> LINEG
Address	Bonnstr. 1, 50859 Köln	Dellweg 51, 63762 Großostheim	Grafschafter Str. 253, 47443 Moers
Size of the WWTP (PE)	80.000	35.000	200.000
Number of secondary clarifiers	2	2	3
Installed adaptive inlet structures	1	1	3
Settling tank diameter [m]	38	30	44
Year of construction	2007	2009	2010, 2011
Result	Increased loading capacity, decreased suspended solids (2 mg/l in average)	Increased loading capacity (avoided building of a new SST; currently 2 SST), COD-reduction > 20 %	P-reduction by 30 %; COD-reduction by 25 %; suspended solids < 2 mg/l in average; Effluent turbidity < 2 FNU
WWTP Operator	<b>Bad Berleburg-Aue</b> Stadt Bad Berleburg	<b>Dorsten-Wulfen</b> Lippeverband	<b>Köln-Rodenkirchen</b> Stadtentwässerungsbetriebe Köln
Address	L553, between Aue and Berghausen, 57319 Bad Berleburg	Zum Ostendorfer Kamp 23, 46286 Dorsten	Unterer Weißer Weg 2, 50999 Köln
Size of the WWTP (PE)	5.800	25.000 – 30.000	88.000
Number of secondary clarifiers	1	3	3
Installed adaptive inlet structures	1	1	2
Settling tank diameter [m]	18	24	36
Year of construction	2009	2010	2010, 2011
Result	Clear effluent (< 1FNU), almost no scum on water surface	Clear effluent	Less backwashing of the sand filter because of significantly less suspended solids in effluent, finally sand filtration switched off
WWTP Operator	<b>WWTP Köln Porz-Wahn</b> Stadtentwässerungsbetriebe Köln	<b>WWTP Altomünster</b> Markt Altomünster	<b>WWTP Bad Berleburg City</b> Stadt Bad Berleburg
Address	Poststraße 250, 51147 Köln	An der Staatsstraße 2047 OT Unterzeitbach, 85250 Altomünster	Limburgstr. 82, 57319 Bad Berleburg
Size of the WWTP (PE)	92.000	14.000	18.000
Number of secondary clarifiers	3	1	1
Installed adaptive inlet structures	2	1	1
Settling tank diameter [m]	42	16	28
Year of construction	2011, 2012	2012	2013
Result	Clear effluent, increased loading capacity; allows for an increase of the MLSS in the aeration tank of + 0.5 g/l	Increased loading capacity: surface loading increased to 2 m/h; avoided building of a new SST (currently 1 SST)	Clearly enhanced effluent quality (regarding COD as well as phosphorus)

# REFERENCE LIST

<b>WWTP Operator</b>	<b>WWTP Kevelaer-Weeze</b> Niersverband	<b>WWTP Weißenfels</b> Abwasserbeseitigung Weißenfels	<b>WWTP Hünfeld</b> Stadtwerke Hünfeld GmbH
<b>Address</b>	Hüdderath 1, 47623 Weeze	Am Klärwerk 1, 06667 Weißenfels	Zur Kläranlage, 36088 Hünfeld
<b>Size of the WWTP (PE)</b>	35.000	76.500	35.000
<b>Number of secondary clarifiers</b>	3	2	2
<b>Installed adaptive inlet structures</b>	1	2	2
<b>Settling tank diameter [m]</b>	26	29	30
<b>Year of construction</b>	2013	2014	2014
<b>Result</b>	Enhanced effluent quality	Enhanced effluent quality; suspended solids < 3 mg/l; avoided building of a new SST (currently 2 SST)	Higher loading capacity; less turbidity in effluent
<b>WWTP Operator</b>	<b>WWTP Erlangen</b> Entwässerungsbetrieb Erlangen (EBE)	<b>WWTP Markt Indersdorf</b> Markt Indersdorf	<b>WWTP Dresden Kaditz</b> Stadtentwässerung Dresden
<b>Address</b>	Bayreuther Str. 105, 91054 Erlangen	Am Wehr 8, 85229 Markt Indersdorf	Scharfenberger Str. 152, 01139 Dresden
<b>Size of the WWTP (PE)</b>	270.000	20.000	740.000
<b>Number of secondary clarifiers</b>	3	2	6
<b>Installed adaptive inlet structures</b>	2	2	6
<b>Settling tank diameter [m]</b>	55	20	50
<b>Year of construction</b>	2014	2014	2015, 2016
<b>Result</b>	Operation started in spring 2015; measurement results: mean suspended solids in effluent appr. 3 mg/l; sand filtration switched off	Clear effluent, higher loading capacity	Significant less turbidity, less precipitants; Phosphorous in WWTP-effluent drastically reduced; avoided building of 2 new SST (currently 6 SST)
<b>WWTP Operator</b>	<b>WWTP Odelzhausen</b> Gemeinde Odelzhausen	<b>WWTP Jeddah Airport (Saudi Arabien)</b> Bilfinger Water Technologies GmbH	<b>WWTP Ludwigsburg - Hoheneck</b> Stadtentwässerung Ludwigsburg (SEL)
<b>Address</b>	Dorfstr. 61, 85235 Taxa	King Abdulaziz International Airport, Dschidda 23631, Saudi- Arabien	Am Neckar 45, 71642 Ludwigsburg
<b>Size of the WWTP (PE)</b>	8.000	-	167.000
<b>Number of secondary clarifiers</b>	1	8	2
<b>Installed adaptive inlet structures</b>	1	8	2
<b>Settling tank diameter [m]</b>	21	52	45
<b>Year of construction</b>	2015	2016	2015
<b>Result</b>	Less precipitants required	Higher loading capacity; avoided building of 2 - 4 new SST (currently 8 SST)	Higher loading capacity

# REFERENCE LIST

<b>WWTP Operator</b>	<b>WWTP Meckesheim</b> Abwasserzweckverband Meckesheimer Cent	<b>WWTP Haimhausen</b> Gemeinde Haimhausen	<b>WWTP Stadtlohn</b> Stadt Stadtlohn
<b>Address</b>	Mauermer Weg 10, 74909 Meckesheim	Amperpettenbacher Str. 10, 85778 Haimhausen	Bockwinkel 5, 48703 Stadtlohn
<b>Size of the WWTP (PE)</b>	44.000	8.800	30.500
<b>Number of secondary clarifiers</b>	2	1	2
<b>Installed adaptive inlet structures</b>	2	1	2
<b>Settling tank diameter [m]</b>	30	20	22
<b>Year of construction</b>	2016	2016	2016, 2017
<b>Result</b>	Finished	Finished, 80 % figure of the mean suspended solids: < 2 mg/l	Finished
<b>WWTP Operator</b>	<b>WWTP Bad Marienberg</b> Verbandsgemeinde Bad Marienberg - Eigenbetrieb Abwasserbeseitigung	<b>WWTP Chemnitz</b> Entsorgungsbetrieb der Stadt Chemnitz (ESC)	<b>WWTP Wuppertal-Kohlfurth</b> Wupperverband
<b>Address</b>	Im Wiesengrund, 56470 Bad Marienberg	Heinersdorfer Str. 42, 09114 Chemnitz	Unterkohlfurth 4, 42349 Wuppertal
<b>Size of the WWTP (PE)</b>	11.500	400.000	156.000
<b>Number of secondary clarifiers</b>	2	4	3
<b>Installed adaptive inlet structures</b>	2	4	2
<b>Settling tank diameter [m]</b>	24	56	49
<b>Year of construction</b>	2017	2017	2017
<b>Result</b>	Finished	Under construction (three tanks are finished)	Finished
<b>WWTP Operator</b>	<b>WWTP Marburg</b> Abwasserverband Marburg	<b>WWTP Leuzbach</b> Verbandsgemeindewerke Altenkirchen	<b>WWTP Halle-Nord</b> Hallesche Wasser- und Stadtwirtschaft GmbH
<b>Address</b>	Umgehungsstr. 47, 35043 Cappel	Raiffeisenstraße, 57610 Altenkirchen	Zum Teich 6, 06120 Halle-Nord
<b>Size of the WWTP (PE)</b>	155.000	23.000	300.000
<b>Number of secondary clarifiers</b>	4	1	4
<b>Installed adaptive inlet structures</b>	1	1	1
<b>Settling tank diameter [m]</b>	39	30	50
<b>Year of construction</b>	2018	2017	2018
<b>Result</b>	Phosphorous in the effluent dropped below 0.3 mg/l	Finished	Finished
<b>WWTP Operator</b>	<b>WWTP Dülken</b> Niersverband	<b>WWTP Sandhausen</b> Abwasserzweckverband Untere Hardt	<b>GKW Köln-Stammheim</b> Stadtentwässerungsbetriebe Köln
<b>Address</b>	Boisheimer Str. 169, 41751 Viersen	Julius-Becker-Straße 67, 69181 Leimen	Egonstraße 9, 51061 Köln
<b>Size of the WWTP (PE)</b>	72.000	125.000	1,5 Mio
<b>Number of secondary clarifiers</b>	2	2	8
<b>Installed adaptive inlet structures</b>	2	2	4
<b>Settling tank diameter [m]</b>	33	32,5	70
<b>Year of construction</b>	2018	2018	
<b>Result</b>	Under construction	Finished	In planning

# REFERENCE LIST

<b>WWTP Operator</b>	<b>WWTP Frankenberg</b> Abwasserwerk Frankenberg	<b>WWTP Regensburg</b> Tiefbauamt Stadt Regensburg	<b>WWTP Rednitzhembach</b> Gemeindewerke Rednitzhembach
<b>Address</b>	Ederstraße 40, 35066 Frankenberg (Eder)	Am Kreuzhof 2, 93055 Regensburg	Staatsstraße 2409 Kreuzung Flurstraße, 91126 Rednitzhembach
<b>Size of the WWTP (PE)</b>	29.000	400.000	7.900
<b>Number of secondary clarifiers</b>	1	6	1
<b>Installed adaptive inlet structures</b>	1	2	1
<b>Settling tank diameter [m]</b>	42	51	20
<b>Year of construction</b>	2018	2018	2018
<b>Result</b>	Finished	Finished	Finished
<b>WWTP Operator</b>	<b>WWTP Schlüchtern</b> Eigenbetrieb Stadtwerke Schlüchtern	<b>WWTP Fürth</b> Stadtentwässerung Fürth	<b>WWTP Northeim</b> Eigenbetrieb Abwasserbeseitigung der Stadt Northeim
<b>Address</b>	Auf der Ape 2, 36381 Schlüchtern	Erlanger Str. 105, 90765 Fürth	Am Kalbesbrook 50, 37154 Northeim
<b>Size of the WWTP (PE)</b>	27.500	310.000	75.000
<b>Number of secondary clarifiers</b>	2	3	3
<b>Installed adaptive inlet structures</b>	2	3	1
<b>Settling tank diameter [m]</b>	28	54	36
<b>Year of construction</b>	2019	2019	
<b>Result</b>	Under construction	Under construction (one tank is finished)	In planning
<b>WWTP Operator</b>	<b>WWTP Bad Harzburg</b> Stadt Bad Harzburg	<b>WWTP Aachen-Soers</b> Wasserverband Eifel-Rur	<b>WWTP Wolfsburg</b> Wolfsburger Entwässerungsbetriebe (WEB)
<b>Address</b>	Radauanger 4b, 38667 Bad Harzburg	Krefelder Straße 299, 52070 Aachen	Zum Stahlberg 1, 88448 Wolfsburg
<b>Size of the WWTP (PE)</b>	40.000	458.333	170.000
<b>Number of secondary clarifiers</b>	3	4	2
<b>Installed adaptive inlet structures</b>	1	4	2
<b>Settling tank diameter [m]</b>	36	52	44
<b>Year of construction</b>			
<b>Result</b>	In planning	In planning	In planning