

List of references for „FlocFormer“

Updated: 01.09.2015

Built-in FlocFormers on sewage works

Company	Installed FlocFormer
Germany	
Stadtentwässerungswerke Lindau (B), Bavaria (population: 25,000)	<ul style="list-style-type: none"> FlocFormer 3L
Wasser- u. Bodenverband Wahn, Cologne, Northrhine-Westphalia (population: 92,000)	<ul style="list-style-type: none"> Two FlocFormer 4L
Stadtentwässerungsbetriebe Cologne AöR, Northrhine-Westphalia, sewage works Cologne-Langel (population: 120,000)	<ul style="list-style-type: none"> FlocFormer 5L
Sewage works Rüsselsheim, Hesse (population: 60,200)	<ul style="list-style-type: none"> FlocFormer 5L
EURAWASSER Betriebsführungsgesellschaft mbH, sewage works Goslar, Lower Saxony (population: 40,700)	<ul style="list-style-type: none"> FlocFormer 5L
Samtgemeinde Oberharz, sewage works Innerstetal, Langelsheim, Lower Saxony (population: 11,900)	<ul style="list-style-type: none"> FlocFormer 3L

Wasserver- und Entsorgungsgesellschaft Kreiensen mbH, sewage works Kreiensen, Lower Saxony (population: 2,500)	<ul style="list-style-type: none"> • FlocFormer 3L
Stadtentwässerungsbetriebe Cologne AöR, Northrhine-Westphalia, sewage works Weiden (population: 88,000)	<ul style="list-style-type: none"> • FlocFormer 4L
Stadtentwässerungsbetriebe Cologne AöR, Northrhine-Westphalia, sewage works Rodenkirchen (population: 88,000)	<ul style="list-style-type: none"> • FlocFormer 4L (September 2015)
Infraserv GmbH, Industriepark Höchst Frankfurt (population: 1,000,000; industrial sewage)	<ul style="list-style-type: none"> • 7 FlocFormer 7L
<i>Switzerland</i>	
Biorender AG, Münchwilen, Thurgau (population: 4,900)	<ul style="list-style-type: none"> • FlocFormer 3L
<i>Japan</i>	
Shimizu (population: 350.000)	<ul style="list-style-type: none"> • 2 FlocFormer 3L
<i>Indonesia</i>	
PT Gudang Garam Tbk., Surabaya-Indonesia	<ul style="list-style-type: none"> • FlocFormer 4L
<i>China</i>	
Dalian Yooqi Water Treatment Technology Co., Ltd.	<ul style="list-style-type: none"> • FlocFormers

Realized pilot tests on sewage works

Company	Dewatering unit	Type of sludge	Ambition	Result
Germany				
Entsorgungsbetriebe Stadt Konstanz, Baden-Württemberg (population: 280,000) <ul style="list-style-type: none"> Pilot test of FlocFormer 3L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content Retrenchment of polymer 	<ul style="list-style-type: none"> Increase of dry mass content about 2% Retrenchment of polymer: 25%
Erftverband, sewage works Kenten Northrhine-Westphalia (population: 60,000) <ul style="list-style-type: none"> Pilot test of FlocFormer 5L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content Retrenchment of polymer 	<ul style="list-style-type: none"> Increase of dewatering performance from 26,33% TR to 27,55% TR \triangleq 5% Retrenchment of polymer: 20%
Anklam Bioethanol GmbH, Mecklenburg Western Pomerania (population: 12,930) <ul style="list-style-type: none"> Pilot test of FlocFormer 3L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Digestate 	<ul style="list-style-type: none"> Increase of dry mass content 	<ul style="list-style-type: none"> reduction of suspended solids in centrifuge effluent of 50%
Sewage works Neuss-Ost, Northrhine-Westphalia (population: 151,000) <ul style="list-style-type: none"> Pilot test of FlocFormer 5L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content 	<ul style="list-style-type: none"> Increase of dry mass content about 1-3%
Stadtentwässerungswerke Lindau (B), Bavaria (population: 60,000) <ul style="list-style-type: none"> Pilot test of FlocFormer 3L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content Retrenchment of polymer 	<ul style="list-style-type: none"> Retrenchment of polymer about from 18 kg/t to 11,2 kg/t \triangleq 35% Increase of dry mass content from 20,67 to 23,35 (2,68%) \triangleq 13%

<p>Sewage works Bremen/Farge (population: 160,000)</p> <ul style="list-style-type: none"> Pilot test of FlocFormers 5L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content 	<ul style="list-style-type: none"> Increase of dry mass content from 22,6% to 26,59% (3,9%) \cong 17%
<p>Tönnies Lebensmittel GmbH & Co. KG, sewage works Rheda-Wiedenbrück, Northrhine-Westphalia (population: 46,850)</p> <ul style="list-style-type: none"> Pilot test of FlocFormer 3L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Municipal digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content 	<ul style="list-style-type: none"> Increase of dry mass content from 21,33% to 23,62% (+ 2%) \cong 10% Clean centrifuge effluent
<p>Urban drainage Achim, Lower Saxony (population: 42,000)</p> <ul style="list-style-type: none"> Pilot test of FlocFormer 3L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Municipal digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content Reduction of phosphor in centrifuge effluent 	<ul style="list-style-type: none"> Increase of dry mass content from 21,13% to 23,19% (+ 2 %) \cong 10% Reduction of phosphor about - 27%
<p>Sewage works Ratekau, Schleswig-Holstein (population: 50,000)</p> <ul style="list-style-type: none"> Pilot test of FlocFormer 3L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content 	<ul style="list-style-type: none"> Increase of dry mass content from 22,15% to 25,32% (+ 3 %) \cong 14%
<p>Sewage works Winterhausen, Bavaria (population: 95,000)</p> <ul style="list-style-type: none"> Pilot test of FlocFormer 3L 	<ul style="list-style-type: none"> Screen filter press 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content 	<ul style="list-style-type: none"> Increase of dry mass content from 17,45% to 20,49% (+ 3 %) \cong 17%

<p>e4 Umwelt & Service GmbH Dissen, Lower Saxony (population: 50,000)</p> <ul style="list-style-type: none"> Pilot test of FlocFormer 3L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content 	<ul style="list-style-type: none"> Increase of dry mass content from 23,61% to 25,43% (+2 %) \cong 7%
<p>Infraserv GmbH & Co. KG, Industrial Park Höchst, Frankfurt am Main, Hesse (population: 687,500)</p> <ul style="list-style-type: none"> Pilot test of FlocFormer 5L 	<ul style="list-style-type: none"> Chamber filter press 	<ul style="list-style-type: none"> Industry digested sludge Industry primary and secondary sludge in relation 1:1 	<ul style="list-style-type: none"> Better dewatering performance of chamber filter press 	<ul style="list-style-type: none"> Dewatering result increase from 27,4% TS to 32,4% TS (+5%) \cong 18% High annual savings
<p>Abwasserbetrieb Warendorf, Northrhine-Westphalia (population: 37,000)</p> <ul style="list-style-type: none"> Pilot test of FlocFormer 5L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content 	<ul style="list-style-type: none"> Increase of decanter's hinge moment Increase of dry mass content from 21,4% to 26,3 (+5%) \cong 22% Clean centrifuge effluent
<p>Herforder ABWasser GmbH Herford, Northrhine-Westphalia (population: 250,000)</p> <ul style="list-style-type: none"> Pilot test of FlocFormer 5L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content 	<ul style="list-style-type: none"> Increase of dry mass content from 30% to 35,7% (+5%) \cong 19%

<p>Sewage works Rüsselsheim, Hesse (population: 60,200)</p> <ul style="list-style-type: none"> Pilot test of FlocFormer 3L 	<ul style="list-style-type: none"> membrane filter press 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content Retrenchment of polymer 	<ul style="list-style-type: none"> Increase of dewatering performance from 23,3% to 26,4% (+ 3%) \cong 13% Increase of filling volume of chamber filter press about + 24 %
<p>Energieversorgung Sylt GmbH, Sylt/Westerland (population: 100,000)</p> <ul style="list-style-type: none"> Pilot test FlocFormer 5L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content Retrenchment of polymer 	<ul style="list-style-type: none"> Increase of dry mass content from 21,5% to 22,5% (+ 1%) \cong 5% Retrenchment of polymer to 6 kg / t Better quality of centrifuge effluent
<p>Stadtentwässerungsbetriebe Cologne AöR, Northrhine-Westphalia Sewage works Weiden (population 88,000)</p> <ul style="list-style-type: none"> Pilot test of FlocFormer 3L 	<ul style="list-style-type: none"> Chamber filter press 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content 	<ul style="list-style-type: none"> Increase of filling volume of chamber filter press Increase of dewatering performance from 23,3% to 28 % (+4,7%) \cong 20%
<p>Stadtentwässerungsbetriebe Cologne AöR, Northrhine-Westphalia Sewage works Rodenkirchen (population 88,000)</p> <ul style="list-style-type: none"> Pilot test FlocFormer 3L 	<ul style="list-style-type: none"> Decanter 	<ul style="list-style-type: none"> Digested sludge 	<ul style="list-style-type: none"> Increase of dry mass content 	<ul style="list-style-type: none"> Increase of dry mass content from 30 % to 32% (+2%) \cong 6%

<p>Wasser- und Bodenverband Wahn, Cologne, Northrhine-Westphalia (population: 92,000)</p> <ul style="list-style-type: none"> • Pilot test FlocFormer 3L 	<ul style="list-style-type: none"> • Chamber filter press 	<ul style="list-style-type: none"> • Digested sludge 	<ul style="list-style-type: none"> • Increase of dry mass content 	<ul style="list-style-type: none"> • Increase of filling volume of chamber filter press • Gaining influence of flocculation
<p>Schill & Seilacher GmbH, Böblingen, Baden-Württemberg (population: 45,000)</p> <ul style="list-style-type: none"> • Pilot test FlocFormer 3L 	<ul style="list-style-type: none"> • Chamber filter press 	<ul style="list-style-type: none"> • Industry sludge 	<ul style="list-style-type: none"> • Better dewatering performance of chamber filter press 	<ul style="list-style-type: none"> • Better attitude of sedimentation
<p>Switzerland</p>				
<p>Biorender AG, Münchwilen, Thurgau (population: 4,900)</p> <ul style="list-style-type: none"> • Pilot test FlocFormer 3L 	<ul style="list-style-type: none"> • Decanter 	<ul style="list-style-type: none"> • Digestate 	<ul style="list-style-type: none"> • Increase of dry mass content 	<ul style="list-style-type: none"> • Better quality of centrifuge effluent • Increase of decanter's hinge moment