

The latest news fresh from the pipeline

2018 | 07

# Amiblu<sup>®</sup> *Stream*

AMIBLU AT THE IFAT  
WORLDWIDE SUCCESSES  
WITH HOBAS & FLOWTITE



# Amiblu® Stream



Pierre Sommereijns, CEO Amiblu Group

## Message from the CEO

*First of all, I would like to thank all employees of Amiblu for their warm welcome. I'm proud to be the CEO of a company that develops one of the most essential infrastructure systems of our civilizations. The denser the population, the more our health, the wellbeing of our economies, and our environment depend on reliable piping systems. We need them for potable water supply, irrigation, sewage discharge, for road, tunnel, and bridge drainage, to convey water to and from industries, and for producing green energy. We should also not forget other applications such as rehabilitation and jacking.*

*I've been in the GRP business for the past 20 years and I have full confidence that our material is superior to all other pipe materials in all our applications. The adaptability of our products makes them ideal for many vital future investments: The growing challenges with regard to climate change – think of increasing draughts and floodings – as well as aging urban infrastructure, meaning that several old pipe systems need to be renewed or rehabilitated.*

*Amiblu pipe systems have the lowest lifetime cost and present the ideal solution for any industry, municipality, and city that faces these challenges. I hope you enjoy browsing through the many projects and news in this issue of Amiblu Stream that will take you on a journey into a range of countries.*

*Kind regards from Klagenfurt,  
Pierre Sommereijns*

## THIS product innovation award for Amiblu

At the THIS congress for civil engineering, which took place in the German city of Kassel in June, a few companies were presented with the THIS civil engineering award for outstanding performances in four different categories. Amiblu came in fabulous second in the category "best product innovation" for the highly efficient Amiscreen GRP solutions. "Our industry needs smart new product and system solutions in order to meet the constantly growing demands in civil engineering. We must find innovative ways to tackle global challenges such as climate change and growing digitalization", the organizers state. Congratulations to the team on this great success!

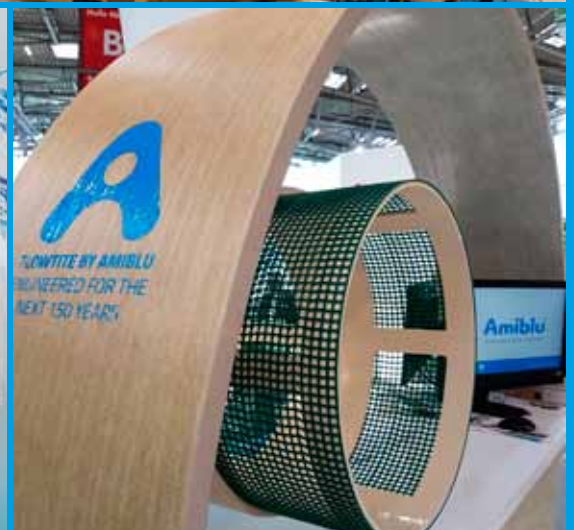
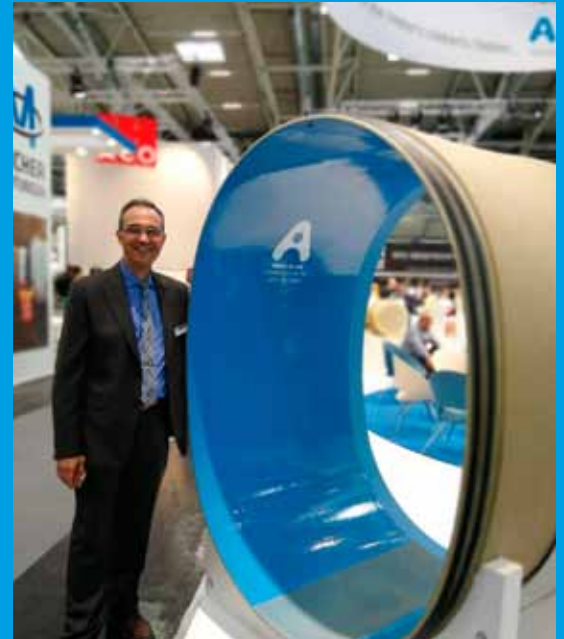


*The successful Amiblu Team with the award at the THIS congress in Kassel*

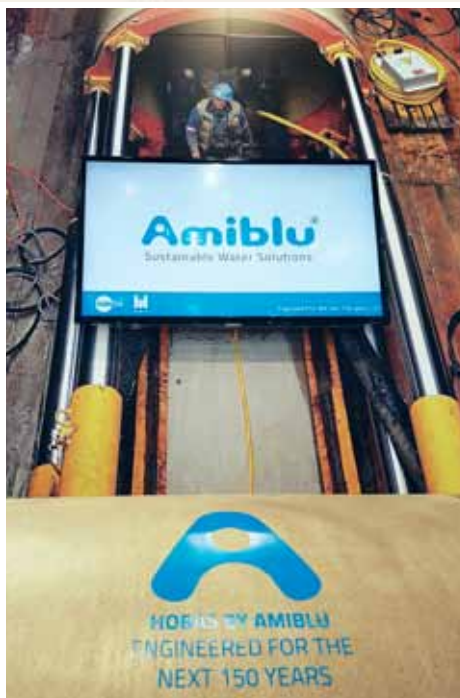
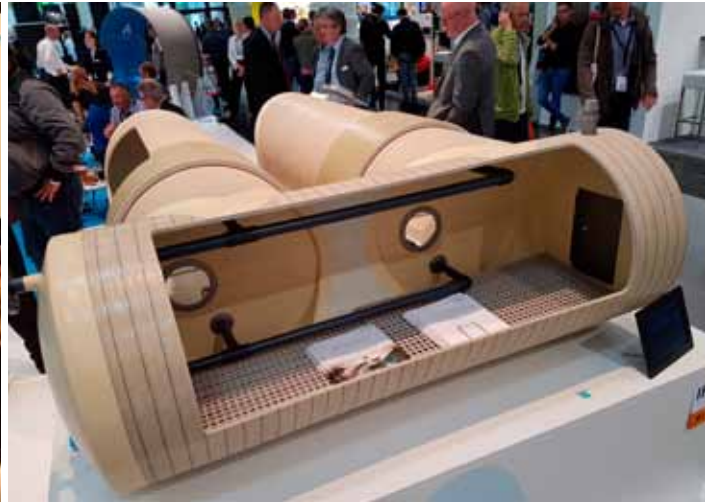
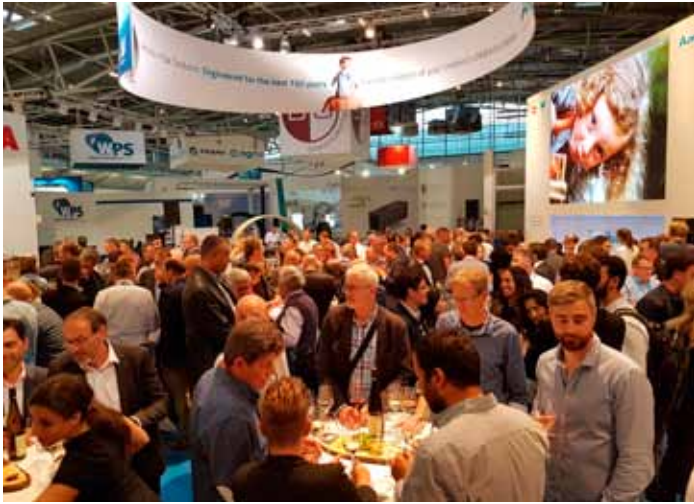


## Amiblu debut at the IFAT 2018

We would like to thank all our clients who generously supported the event and visited us at the IFAT. The IFAT has become the stage for water and wastewater management in Europe and beyond. This year we saw the latest solutions for rehabilitation, trenchless, smart infrastructure management, and investment. It was the ideal platform for the first public exhibition of Amiblu's solutions, combining the best of Hobas and Flowtite with the world's largest GRP pipe service team. The clear high performance liner was shown as the new standard in Hobas gravity and jacking applications. Flowtite Grey is becoming the new standard in Flowtite pressure pipes, offering unrivalled impact protection. We showcased next generation liner technologies with Flowtite Orange and Hobas PU Line, both offering extreme abrasion resistance suitable even for industrial slurries. Amiblu is all about sustainable water solutions. For us this means systems that last longer and operate more efficiently. "Engineered for 150 years, for the children of your children's children's children", was the theme we built the exhibition around. This clearly resonated in an industry that needs to invest more and more in refurbishment and replacement of traditional materials that did not stand the test of time. Some highlights from the Amiblu IFAT week:











## Hobas and Flowtite "double feature" in the Netherlands

The water authority of Friesland, Wetterskip Fryslan, ordered 3 Amiblu GRP sinker pipelines to upgrade an existing irrigation system. Frequent high groundwater levels posed a problem to the local agriculture and the authority wanted to find a way to better manage its irrigation networks. Amiblu provided the client with a custom-tailored solution: Three GRP pipelines with diameters of DN 1300 (Flowtite), DN 1400 and DN 1600 (Hobas), each around 70 m long, were supplied as fully laminated "turnkey" solutions and each installed in no more than 1/2 day. All preparation and lamination works were executed by the service and installation team from Amiblu

Netherlands. Thanks to the choice of technologies and diameters, the three new GRP sinker pipelines connect several water courses in the most efficient way and thereby improve the irrigation system considerably. The client had previously been familiar with Amiblu GRP for mainly sewer applications, and now is convinced of the material's quality for various other challenging future projects.







## Projects, projects, projects: GRP pipes from Poland tick all boxes

Over the past months, the Amiblu production plants in Poland (Gdańsk and Dabrowa Górnicza) were close to full capacity. Many projects were supplied covering diverse and demanding applications. Here we present four examples: a record sewer jacking installation in Poznań, two sophisticated power plant cooling systems, and an NC sliplining installation in Los Angeles.

### Record sewer jacking in Poznań

The condition of the existing sewer collector "Junikowski" in the Polish city of Poznań had deteriorated over the years. On the section from Samotna street to Głogowska street it could no longer handle the growing demands. Since an expansion was no option, it had to be renewed. Amiblu Poland produced and supplied the required pipes for the project: 505 m jacking pipes OD 1499 / SN 32 000 and 80 000, 111 m jacking pipes OD 1720 / SN 50 000, and 3502 m of pressure jacking pipes OD 750 and 850 / PN 10 in stiffnesses from SN 80 000 to 200 000. The pressure jacking part is the longest ever realized with Flowtite pressure pipes PN 10. 706 m gravity pipes DN 800, DN 1000 and DN 1400 / SN 10 000 for open trench installation as well as a set of GRP wells were also supplied and installed. The project started in December 2016 and was successfully finished in June 2018.



Images left & above: Installation of the new Junikowski sewer section in Poznań.

### THE PRESSURE JACKING PART WAS THE LONGEST EVER REALIZED WITH FLOWTITE PRESSURE PIPES

### Cooling water systems for power plants Opole and Jaworzno

In March 2015, Amiantit Poland received an order for the design and delivery of cooling water pipelines for the power plant Opole in southern Poland. Due to an expansion of the power plant, two independent cooling water systems were needed outside the engine room for the newly built power units No. 5 and 6. 505 m GRP pipes DN 3400, PN 10, SN 10 000 were installed for unit 5, and 225 m pipes of the same dimensions for unit 6, both including fittings, supports and passages through reinforced concrete walls. Deliveries were finished in December 2016.

Due to the extension of the power plant with two new blocks, the Investor also decided to build a new water treatment station and a complementary water system for all blocks. In the years 2014–2018, Amiblu Poland provided approx. 5 km of uni- and biaxial GRP pipes DN 300–1200 for all external networks connected with water transport throughout the entire power plant.





The second major Amiblu energy project in recent times is the supply and design of external cooling water pipelines for the new 910 MW block of the Jaworzno Power Station. In 2016 and 2017, Amiblu already supplied pipes and fittings DN 2600-3600, PN 10, SN 10 000 with a length of 220 m. After implementation of the project, the investor planned the next part of the cooling water system, this time in the engine room building. Still in 2017, Amiblu received the order for supplying a complete cooling water pipe system in a diameter range of DN 1800/2400/3600. The whole system of pipes and fittings in the building required biaxial technology and laminating of all joints. Currently, the last stage of works related to connecting GRP pipes with a condenser is in progress.

Due to the quality and benefits of Amiblu GRP pipes, the investor also decided to build all sewage utilities at the new power plant with Amiblu technologies. Amiblu received an order for 5 km of pipes DN 300-2500, PN 1, SN 10 000 and 70 GRP manholes. This third project phase started in April 2018 and is expected to be finished beginning of next year. ➔

*Above: GRP cooling water pipeline DN 3400 (upper left) and GRP water treatment pipes DN 300-1200 (upper right) for power plant Opole.*

*Below: External GRP cooling water system with biaxial pipes and fittings up to DN 3600 for Jaworzno power station.*







### NC relining in L.A. with pipes made in Poland

Many of the largest cities in the United States still operate traditional sewer networks constructed from unreinforced concrete, bricks or clay tiles dating back to the early 1900s. By now, most of these sewers have reached the end of their service life and are in need of structural rehabilitation.

This is true in Los Angeles, where several decaying sewer pipelines are made up of non-round brick and mortar tunnels. The City is rehabilitating a number of these sewers by means of sliplining. As part of the design of a recently awarded rehabilitation project, the City of L.A. specified sliplining with non-circular GRP pipes.

**ALL NC PIPES  
WERE MANU-  
FACTURED IN  
ACCORDANCE  
WITH THE  
AMERICAN  
GRP STANDARD  
ASTM D3262**

The NC pipes for this project were designed and manufactured by Amiblu Poland in accordance with ASTM D3262, the American standard specification for fiberglass sewer pipes. Over 3660 m of NC relining pipes in 2.7 m long sections have been delivered to the jobsite and successfully installed. The pipes were connected with a bell and spigot joint system which provides flexibility and sealing to prevent exfiltration of the sewer and infiltration of groundwater. Through this product, the City of Los Angeles is able to retain the sewer's original cross section and minimize the loss of hydraulic capacity while effectively rehabilitating the existing line to prevent future failures.



*Above: 3660 m of non-circular GRP pipes were installed in the course of a sewer rehabilitation project in Los Angeles.*





## 805 m³ storage chamber with Amiscreen installed in Bavaria

The old local rainwater storage basin in the German municipality of Weißenhohe (federal state of Bavaria) had been built over 40 years ago. With a capacity of 540 m³, it was no longer able to handle the growing storage demands. Due to the chamber's location directly underneath the railway station, an extension was not possible. Therefore, the wastewater association Obere Schwabach planned a new storage structure – and, instead of the conventional concrete structure, they opted for a chamber made of GRP.

The solution provided by Amiblu has earned an innovation award for its cutting-edge technology: A complete, prefabricated storage solution based on GRP with integrated stormwater overflow and additional cleaning elements for coarse solid content (Amiscreen), as well as an exceptionally short installation time. Since the targeted construction site is located near an environmentally sensitive body of water, these concerns were paramount. And environmental friendliness is inherent in GRP, as the material has an extremely long lifetime, and is completely leak-tight. The Amiscreen system which is integrated in two pipelines ensures that only clean water is released from the chamber. Weißenhohe's new rainwater collector was built of Flowtite GRP pipes DN 3000, SN 2500, PN 1, and has a capacity 805 m³.

Click [HERE](#) to learn more about the Amiblu storage chamber with Amiscreen.



## Hydropower plant Schanielabach built with Flowtite Grey

Hydropower is on the rise in the Swiss canton of Grisons! In the middle of May, construction works for the hydropower project "Schaniela", involving the local river of the same name, started in the small municipality of Luzein. The penstock is being built out of highly impact and abrasion resistant Flowtite Grey pressure pipes by Amiblu. Designed for a flow rate of 2 m³/s and a head of 133 m, the new hydropower plant at the Schaniela river will have an annual output of 7,4 GWh. As of mid-2019, it will supply electricity to 1500 local households.







## Amiblu secures sugar cane crop in Cameroon

More than 16 km of GRP pipes and fittings DN 350 to 800, PN 10 to 25 have been successfully installed for the irrigation of sugar cane in Central Africa. 1500 ha of land around the city of Mbandjock in Cameroon, are cultivated with this much demanded plant and needed an efficient, reliable irrigation network. The open trench installation of Amiblu GRP pipes started in August 2017, a pressure test was successfully conducted in February 2018. Amiblu experts professionally supported the construction staff on site and helped realize a sustainable agriculture solution.



### PROJECT PARAMETERS

Year of construction	2017/2018
Country (City)	Cameroon (Mbandjock)
Application	Irrigation pipe system
Total length	16 260 m
DN	350/500/700/800 mm
PN	10/16/25 bar
SN	5000 N/m <sup>2</sup>
Client	SOSUCAM (Société du Sucre du Cameroun)
Contractor	SCP (Société du canal de Provence)







## First CSO chamber on Austrian soil successfully installed

This is a chamber over 10 m in length consisting of a CC-GRP pipe DN 1200 and an overflow pipe DN 900, plus two manholes of DN 800. Six integrated, self-cleaning GRP screening elements ensure that suspended solids are very effectively separated from the sewage and only cleaned water enters the receiving water course. During heavy rainfall, the GRP chamber can handle inflows of up to 2900 l/sec. The chamber has been successfully installed in Mautern, Lower Austria. Installation time was just a matter of hours!

### PROJECT PARAMETERS

Application	Overflow structure for combined sewer
Total length	> 10 m
DN	1200 mm (main pipe) 900 mm (inlet & overflow) 800 mm (manholes) 600 mm (throttled outlet)

PN	1 bar
SN	10 000 N/m <sup>2</sup>
Special feature	6 self-cleaning GRP screening elements
Max. inflow rate during heavy rain	2900 l/s
Design / Production	Amiblu Austria (2017) / Amiblu Poland (2018)







## GRP solutions with Amiscreen for German city sewers

**Amiscreen products by Amiblu have proven their worth many times already. The combined sewer storage systems with stormwater overflow and additional cleaning element for coarse solid content outperform comparable traditional solutions in a number of aspects. In the German states of Saxony and Hesse, two custom-tailored Amiblu GRP chambers with Amiscreen have been installed to upgrade the existing sewer networks.**

An impressive Amiblu sewer channel with 250 m³ storage capacity and overflow, throttled chamber, and integrated Amiscreen system was successfully installed in the German city of Zwickau. The 30 m long sewer channel has a diameter of 3000 mm and features two inspection chambers DN 1000 as well as a rainwater overflow shaft DN 3200. It is equipped with two 28 m long screening elements DN 800 for solids retention, adding up to a total screening surface of 141 m². The new Amiblu sewer solution with Amiscreen features a cleaning capacity of up to 3161 l/s.

In the municipality of Künzell, a 23 m long Amiblu storage chamber with a capacity of 57 m³, overflow and integrated Amiscreen was implemented as part of a combined sewer. A screening surface of 50 m², realized by two 20 m long circular rakes DN 400 with 8 mm filter size, ensures that only cleaned water is released from the chamber. The chamber DN 1800 is complemented by a rainwater overflow shaft DN 3000 with a DN 1200 overflow, as well as a throttled shaft DN 2000. The new Amiblu storage chamber with Amiscreen cleans up to 1000 liters of water per second.

Both project holders, the water supply company Zwickau and the wastewater association Fulda, opted for Amiblu due to a number of benefits: the convenient and complex prefabricated structure, the corrosion-resistant material, and the highly efficient solids retention and cleaning system of the Amiscreen technology.



*Upper & middle image: Installation in Zwickau, Saxony.*

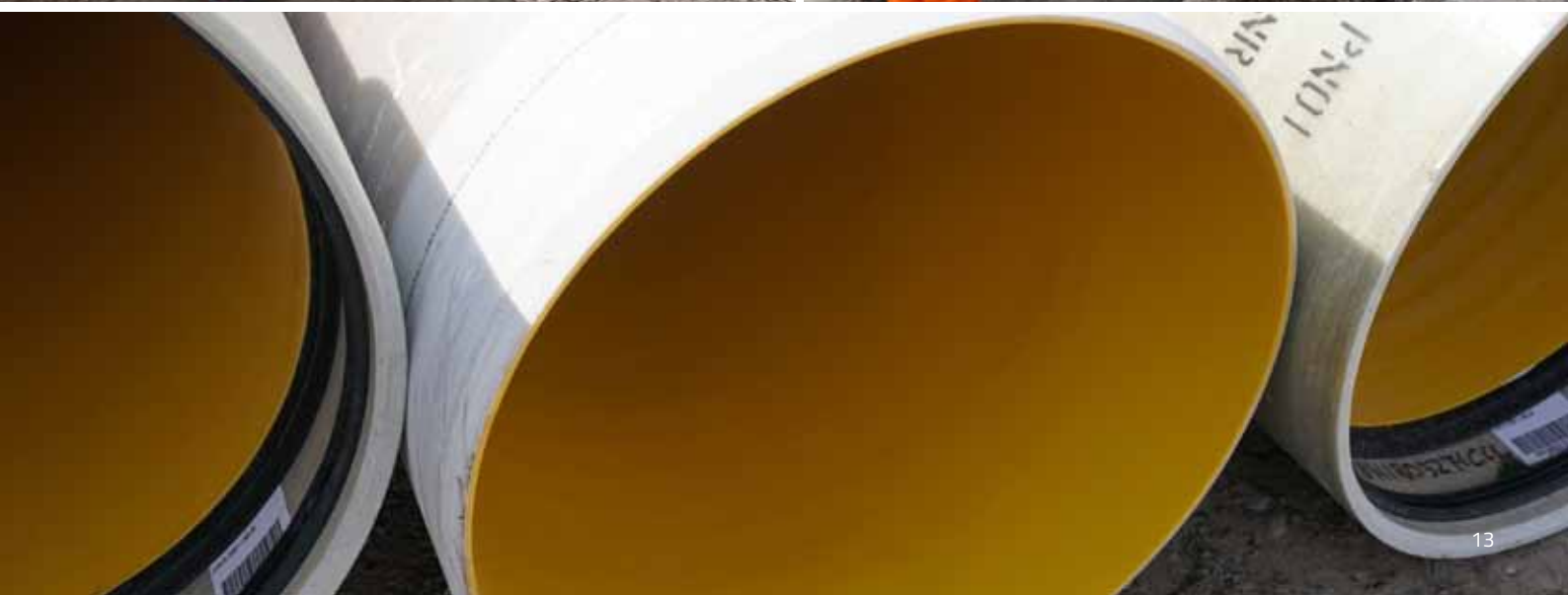
*Bottom image: Installation in Künzell, Hesse.*





## Premiere for Flowtite Orange by Amiblu in Switzerland

In the municipality of Eschenbach in the Swiss canton of St. Gallen, a stream was culverted underground with Flowtite Orange pipes DN 500, SN 5000, PN 1. It is the first time that the highly wear-resistant GRP pipe solution by Amiblu was installed on Swiss soil! The 130 m long culvert was built of pipes and fittings with the special Orange liner and installed with a slope of 12 percent within two weeks only. Flowtite Orange by Amiblu enables the transport of fluids containing highly abrasive solids such as riverbed material (sand, gravel, etc). A second part of the culvert with a length of 150 m will follow in 2019.





## Fresh thinking: Amiblu company video

After its premiere at the IFAT in May, the popularity of our new Amiblu company video has literally taken off: by now, we have it available in four languages! Click on the preview images below to learn more about our mission and how we are set to secure our planet's key resource for the generations to come.



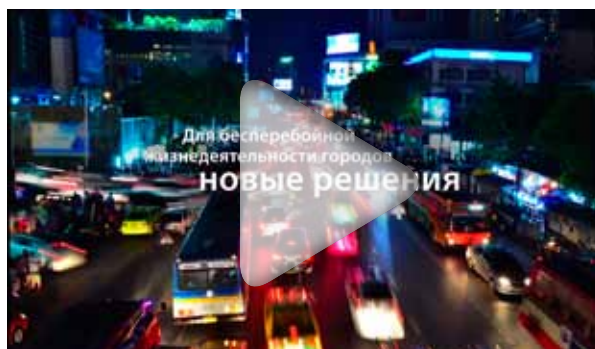
Amiblu company video (English)



Amiblu film korporacyjny (Polish)



Amiblu Unternehmensfilm (Deutsch)



Корпоративный фильм Amiblu (Russian)



Amiblu is a 50:50 joint venture whose goal is to develop and deliver fully sustainable water solutions. Amiblu combines Amiantit Europe and its Flowtite Technology, and Hobas Europe, part of WIG Wietersdorfer Holding, and is the specialist in drinking water, irrigation, wastewater, hydropower and industry.