

October 11th, 2021

John Cockerill innovates in wastewater treatment with BeFlow®, a new process combining efficiency and eco-responsibility

Wastewater treatment is a major challenge for our society: quality water is crucial for preserving both our health and our environment. Determined to contribute to the essential preservation of natural resources, John Cockerill innovates on a daily basis in wastewater treatment technologies in order to return cleaned water back to the natural environment or to allow its reuse in industrial or agricultural processes. Today, he presents BeFlow®, his 100% biological, compact and energy-efficient treatment solution.

With BeFlow®, John Cockerill contributes to the preservation of natural resources and positions itself as a solution provider for an eco-responsible future, based on wastewater treatment that is at the same time smart, efficient, compact, economical and 100% organic.

BeFlow® is a very promising wastewater treatment technology based on an aerobic granular activated sludge process this technology is allowing for a continuous flow treatment that does not require any chemical reagent and is therefore 100% biological. It applies to a wide variety of liquid effluents, whether from municipal or industrial facilities, and considerably reduces their environmental footprint. More compact than traditional treatment facilities, and also more energy efficient, it is able to handle both high and variable flow rates and therefore allows to cope with water flow peaks. This is particularly useful for municipal wastewater and certain industries.

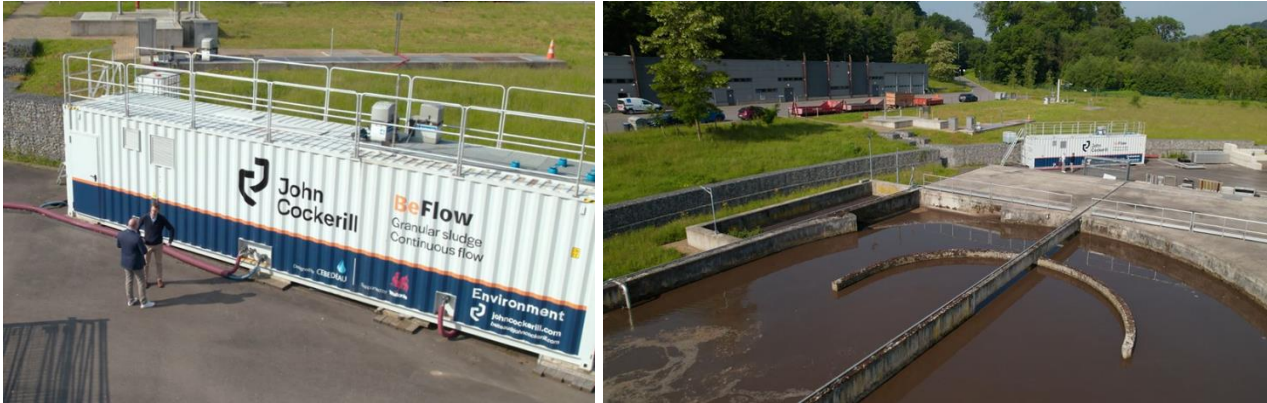
BeFlow® has already proven its worth: Thanks to a pilot installation at the Namur wastewater treatment plant (Belgium) it has been validated in real world conditions. Thirteen months of operation on an urban effluent treatment station made it possible to demonstrate that BeFlow® complies with all discharge standards while significantly reducing the volumes of the biological reactor and the settling surfaces. BeFlow® thus offers a competitive alternative to current biological purification processes.

The Namur pilot project has been put in place with the help of the CEBEDEAU, the Walloon reference center for water treatment, and is also supported by the Walloon Region.

Beyond the industrial qualification of BeFlow®, the pilot plant has also enabled John Cockerill to develop a "Smart monitoring" of the installation: The pilot has been equipped with a large number of sensors that provide information on the proper functioning of the treatment in real-time, helping the operator to efficiently run the installation. This intelligent data monitoring also allows John Cockerill to develop artificial intelligence models to predict the evolution of key process parameters.

Christophe Cassant, President of John Cockerill Environment: "BeFlow® is offering significant opportunities not only for companies and municipalities that encounter problems with their installations being overloaded, but it also offers considerable advantages in the framework of the

construction of new treatment stations, by rendering the related infrastructures both more compact and less expensive. With BeFlow®, John Cockerill contributes to the preservation of natural resources and positions itself as a solution provider for an eco-responsible future, based on wastewater treatment which is, at one and the same time, smart, efficient, compact, economical and 100% organic.”



John Cockerill Environment provides responses to the needs of our time

Because the urgency of the climate crisis reminds us on a daily basis that we must act to protect future generations, and because taking care of water, waste and emissions makes good commercial sense, John Cockerill Environment supports its clients with cutting-edge technological solutions with the stated objective of considerably reducing the environmental footprint of their facilities.

As a unique expert in sustainable and innovative technologies ranging from the pumping, treatment and purification of drinking and wastewater, to the treatment of air, odors, and gases, as well as solids and waste, John Cockerill Environment goes a step further by providing its clients with high added value and personalized solutions. As such, we are offering our clients a complete range of environmental solutions combining performance, quality and local services throughout their life cycle.

johncockerill.com/environment

John Cockerill, enabler of opportunities

Driven since 1817 by the entrepreneurial spirit and passion for innovation of its founder, the John Cockerill Group develops large-scale technological solutions to meet the needs of its time: preserving natural resources, contributing to greener mobility, manufacturing sustainably, combating insecurity and facilitating access to renewable energy.

Its offer to businesses, governments and communities consists of services and associated equipment for the sectors of energy, defence, industry, the environment, transport and infrastructures.

In 2020, the Group achieved a turnover of 1.01 billion euro in 19 countries on 5 continents.

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