

OZONE APPLICATIONS

Micropollutants

Urban waste waters are increasingly contaminated with organic substances such as biocides, endocrine disruptor compounds (EDCs), personal care products (PCPs) and pharmaceutical substances. These contaminants, with their known or potential harmfulness for aquatic ecosystems and human health, have become a major issue for the Water Utilities. Indeed, the actual facilities struggle to eliminate those pollutions, additional treatment processes will therefore be required. Thus, Ozonia developed a large and safe range of application to answer this emergent question.

Drawing on its long experience in the field of municipal waste water treatment using oxidation technologies, Ozonia can offer the most powerful solution available to water process engineers for the elimination of micropollutants in urban waste water. Ozonia became a world leader on that topic thanks to years of researchs and piloting in support of its parent company, Suez Environnement.

Ozone-based treatments demonstrated their effectiveness in all conditions to remove the trace compounds, and provide with them welcome side-effects. Indeed ozonation presents economical and energetical benefits compared to all the others treatment solutions, in addition to consequent water quality improvement. Ozonia has grown in years a know-how allowing to ensure those benefits, thanks to it's state of the art and unique patended technology.

References:

Dübendorf

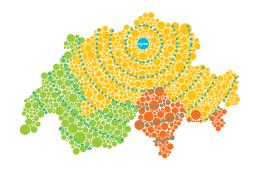
Sophia - Antipolis

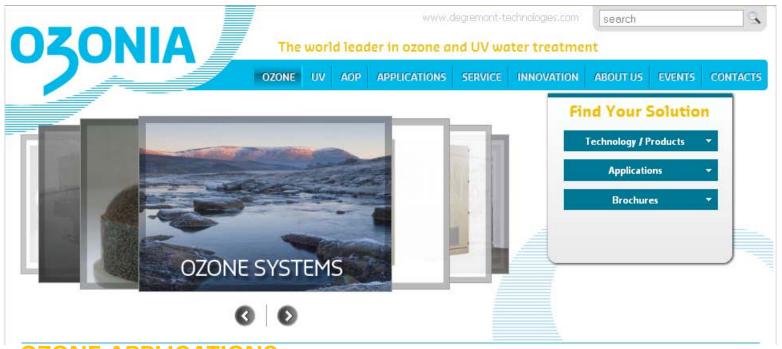
Additional Reading



AMPERES Research
POSEIDON Research
Strategy Micropoll
(Switzerland)
Swiss legislation

Local Service





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WWTP NEUGUT - DÜBENDORF, SWITZERLAND

The "Neugut" water treatment plant in Dübendorf (Zürich) was one of the first Swiss pilot plants for micropollutant elimination.

After reviewing the results, the municipality choose OZONIA to supply the full-scale plant that will be build for spring 2013. This sewage plant will be the first to comply with the new Swiss regulation on trace compounds treatment.

The Neugut facilities will be designed to treat up to 1'455 m³/h, and will be supplied by OZONIA as a turnkey treatment stage. The system will include ozone generation, dome diffusion, vent ozone destruction and instrumentation. With this innovative and forward-looking building willing to protect the receiving environment, a key cleaning-compound will be added to the "Neugut" Water Treatment Plant.

The city of Dübendorf awarded the Neugut project to OZONIA based on the extensive know-how, experience and reliability that OZONIA is known for around the world. The Neugut sewage plant will be used as a foundation for future projects in Switzerland.

Additional Reading



CFV Series

Dome diffusers

Ozone Destruct

Strategy Micropoll (Switzerland)

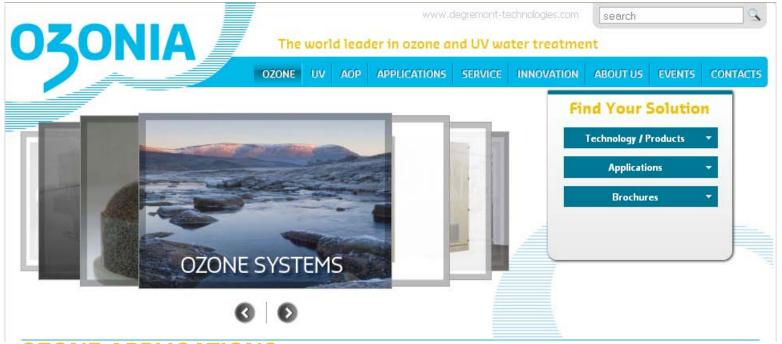
Swiss legislation

ARA Neugut









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WWTP SOPHIA ANTIPOLIS - FRANCE

In the summer of 2012, the Sophia Antipolis wastewater treatment plant became the first French sewage plant to treat micropollutants. This plant not only preserves its direct environment, but also protects, the upstream Antibes' drinking water source.

When the municipality resolved to enlarge and improve its sewage plant, they decided to upgrade the treatment line by including an ozone stage. Using an ozone generator, the plant now benefits from a high-performance device combining flexibility and ease-of-use. Located between the biological treatment stage and the biofiltration stage, the ozonation treatment step fits ideally in the existing process train.

OZONIA offered a solution including a CFV-10 generator, allowing the sewage plant to adapt the ozone system to current and future requirements. In 2030, a population equivalent of 50'000 is expected (7'500 m³/day).

As the first micropollutant treatment reference in France, the municipality made a forward-looking investment perfectly framed for its sustainable development objectives.

Additional Reading



CFV Series

Dome diffusers

Ozone Destruct

Water Framework Directive

Video report on the WWTP



