CLARICARB®

Micropollutant and Turbidity Treatment

CLARICARB® addresses the operational challenges faced by waters subject to increased turbidity and chronic pesticide pollution. **CLARICARB®** continuously removes turbidity, organic matter, pesticide peaks, biodegradable dissolved organic carbon (BDOC), and other soluble adsorbable pollutants.

During rainy episodes, turbidity is an important indicator of water quality. This turbidity needs to be treated as it consists of suspended particles to which numerous potentially pathogenic microorganisms can attach. Turbidity is often indicative of the presence of micropollutants, substances that, even at very low concentrations in the environment and aquatic systems, can have toxic effects on exposed organisms.

The performance of the CLARICARB® process is achieved within a single facility through a clarification step and water refinement using powdered activated carbon (PAC) technology known as CARBOFLUX®.

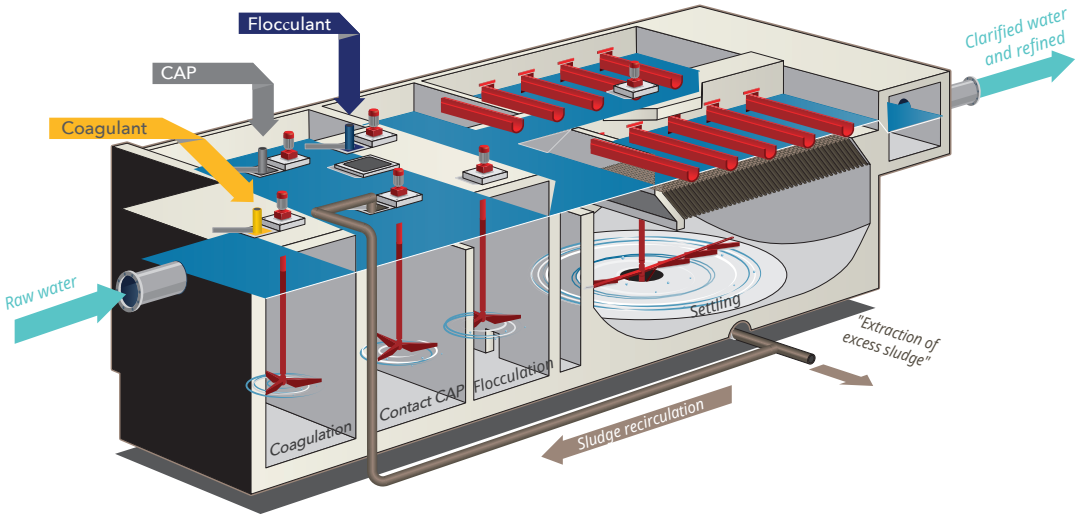
The amount of PAC used in the reactor enhances the treatment of micropollutants (pesticides, pharmaceutical residues, etc.).

APPLICATION AREAS

- Drinking water
  - Alluvial aquifers, karst water, high-quality surface water with organic matter and micropollutants.

CLARICARB®

TREATMENT OF MICROPOLLUTANTS AND TURBIDITY



OPERATION

The first coagulant injection occurs at the coagulator level to remove organic matter and suspended solids. This injection is conditioned by the measurement of turbidity and organic matter at the plant's inlet.

When combined with CARBOFLUX® technology, CLARICARB® ensures a high level of removal of organic matter and micropollutants without operational constraints. Continuous contact between the water and a large quantity of powdered activated carbon guarantees permanent effectiveness.

The carbon can be separated from the water through DELREB® flocculation-decantation to be reused by recirculating it back to the contact reactor. Continuously brought into contact with the water being treated, the powdered activated carbon utilizes its adsorption properties to the fullest extent.
For moderately organic-loaded water, the efficiency of CLARICARB® is enhanced by DENSICARB™, which concentrates the carbon in the reactor.

FEATURES

- Specific coagulation structure
- Specific contact structure with powdered activated carbon
- DELREB® lamellar settler
- Continuous recirculation of activated carbon

PERFORMANCE

- **Maximum reactivity during pollution peaks**
  - Adaptability to flow variations
  - Control and dosage of reagents based on incoming water quality
  - Optimized pollutant adsorption capacity through continuous sludge bed presence
  - Reagent control based on raw water flow rate
- **Treatment guarantees**
  - Organic matter reduction
  - Adsorption of micropollutants (pesticides, endocrine disruptors, etc.)
  - Turbidity reduction
- **Optimized operational balance**
  - Reagent savings: wide range of possible activated carbon types
  - Low energy consumption

RÉFÉRENCES

Le Havre -Radicatel, Angoulême - Pontil, Nevers - Le Peuplier seul, SIVOM Région Minière, Gorses-le Tolerme

stereau

11, chemin de Bretagne
92130 Issy-les-Moulineaux
Tél. 01 30 60 84 00
602 011 918 RCS Nanterre