

ACTIFLO® CARB

Optimum treatment for natural organic matter and micropollutants/Water purification and refinement

Highly effective treatment

Designed to treat and refine water, **Actiflo Carb** combines the fast flocculation and sedimentation performance of Actiflo with the adsorption capacity of **Powdered Activated Carbon (PAC)** to eliminate substances resistant to the clarification process.

The adsorbent properties of PAC offer an effective solution for **the elimination of non-flocculable Natural**

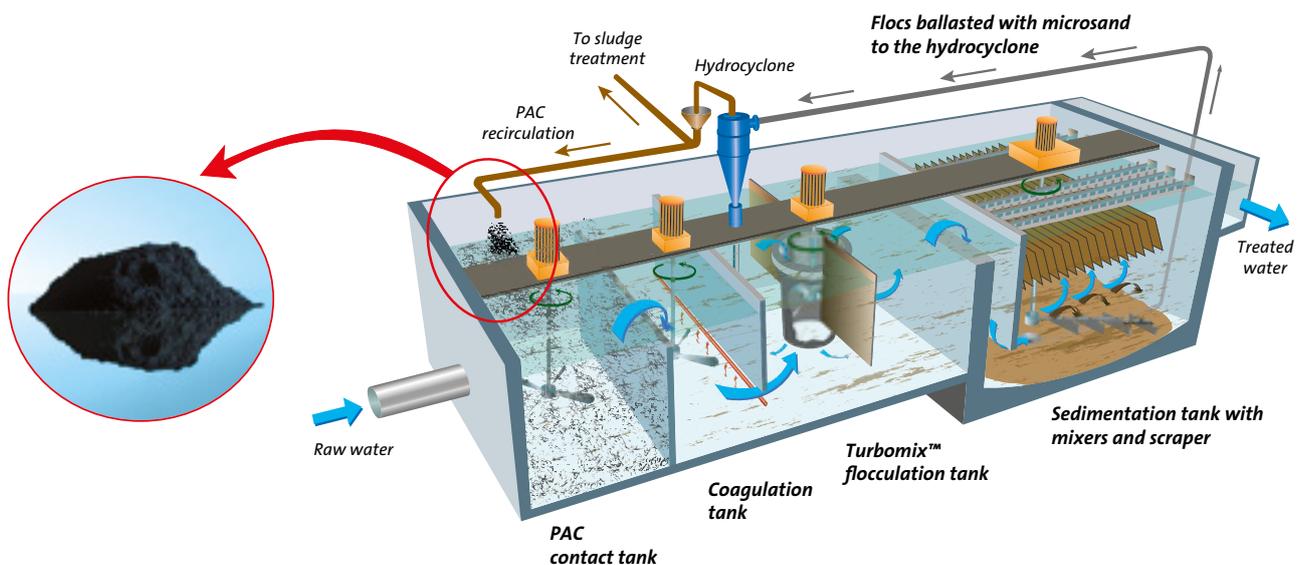
Organic Matter (NOM), micro-algae, flavors and odors, pesticides, endocrine disruptors and other emerging micropollutants in the water to be treated.

The unparalleled performance of Actiflo Carb produces water of very high quality.

The Actiflo Carb process

The operating characteristics of Actiflo Carb are identical to those of Actiflo, giving it the advantages of fast, high-performance treatment. Upstream of the **coagulation, flocculation and sedimentation basins**, Actiflo Carb has a **PAC contact tank** to adsorb pollutants resistant to chemical clarification.

A recirculation circuit with a specific hydrocyclone recovers clean microsand, returns the PAC to the contact tank and purges excess sludge from the process.



Advantages

- Advanced PAC treatment
- Maximum elimination of NOM and emerging micropollutants
- Refinement of the treated water
- Compatible with other clarification processes upstream: Actiflo, Multiflo™, Spidflow® and other sedimentation flotation tanks
- High sedimentation speed: ≥ 30 m/h
- Small footprint
- Simple to commission: start-up in a few minutes
- Easy, low-cost upgrading of existing installations

Applications

Actiflo Carb is recommended for:

- Drinking water: for the treatment of NOM resistant to clarification, pesticides, emerging micropollutants, micro-algae, flavors and odors
- Process water: for refining and treating resistant NOM
- Sewage: to eliminate hard Chemical Oxygen Demand (COD) and other compounds resistant to chemical or biological treatment systems
- “Reuse”: for the advanced tertiary treatment and refinement of treated sewage

Actiflo Twin Carb, a dual-stage treatment

Depending on the quality of the water to be treated and the performance to be achieved, the Actiflo Carb process is also available in an **Actiflo Twin Carb** version. This unique configuration consists of a dual-stage treatment in series, amplifying the elimination of NOM and reducing the footprint.

This dual-stage treatment involves an Actiflo clarification stage followed by an Actiflo Carb refinement stage. Particularly well-suited to treating water with a high pollutant content, Actiflo Twin Carb can reduce a Total Organic Carbon (TOC) level of 15 mg/l in the raw water to less than 2 mg/l in the treated water.

REFERENCES

ACTIFLO® Carb

- > Harpeth Valley UD, Nashville, TN, USA - 90,000 m³/day (2015)
- > DSM Nutritional Products, Village-Neuf, France - 2,400 m³/day (2014)
- > Raffineria di Milazzo, Italy - 7,200 m³/day (2014)
- > La Chesnaie, France - 12,000 m³/day (2013)
- > Fuyang, Zhejiang, China - 250,000 m³/day (2012)
- > Medias, Romania - 16,000 m³/day (2012)
- > TW Moses, Indianapolis, IN, USA - 91,000 m³/day (2011)
- > Montry, France - 11,000 m³/day (2010)
- > Huntsman, Qingdao, China - 1,000 m³/day (2009)

ACTIFLO® Twin Carb

- > Nantes La Roche, France - 160,000 m³/day (2016)
- > Parker WSD, CO, USA - 38,000 m³/day (2015)
- > Vitré La Grange, France - 14,000 m³/day (2014)
- > Cholet, France - 34,000 m³/day (2014)
- > Mervent, France - 24,000 m³/day (2013)
- > Pont-Scorff, France - 6,000 m³/day (2012)
- > Durtal, France - 4,800 m³/day (2011)
- > Aire-sur-la-Lys, France - 109,000 m³/day (2010)
- > Perros-Guirec, France - 10,000 m³/day (2009)
- > Lucien Grand, La Rochelle, France - 72,000 m³/day (2009)