

Ozone Generation System



Case Study Details

Design Criteria for Ozonator: Ozone Output per generator: 66 kg/day at 10% by weight.

The City of Bécancour, Quebec, needed to replace its two old air-fed Ozone generators that were underperforming while getting costier every year to maintain and operate. After thoroughly reviewing, studying and appreciating Pinnacle's new Quadblock technology that provides efficient, linearly variable power usage from 0 to 100% with small increments, the owner and his engineer decided to allow Pinnacle to bid and compete with other well known manufacturers. Pinnacle was low on capital and on installation costs.

The Pinnacle ozonators, fed in 93% pure oxygen from a PCI VSA concentrator system supply Ozone to two different points in the plant through custom designed injectors also provided by Pinnacle. A Pinnacle ozone destructor is also part of the project.

1.- Pre-ozonation: ozone is delivered to the raw water to reduce organic matter and very heavy colour specially during the thaw period as the quality of the water from the Bécancour river, that is fed directly to the filters, deteriorates significantly.

2.- Post-ozonation/disinfection: ozone is delivered to the treated water after filtration to ensure proper disinfection prior to adding the residual chlorine for distribution.

Engineering Consultant: Dessau

Installation Contractor: Filtrum

Start-Up: 2012