# Flocculation prior to the belt filter Cazaux - France (33)

# Waste water treatment

### Cazaux sewage treatment plant wastewater sludge flocculation (Cazaux - FRANCE (33))

This plant uses a biological treatment process, "extended aeration activated sludge", followed by a water clarifier.

The sludge is treated by a belt filter, which produces a product consisting of 83% water and 17% dry matter.

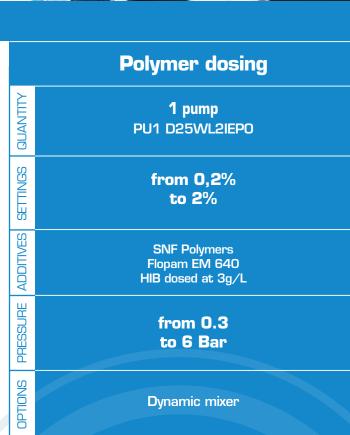
Flocculation is used to improve the mechanical sludge dewatering process. Without good flocculation, the sludge cannot be mechanically thickened and dewatered using a belt filter.

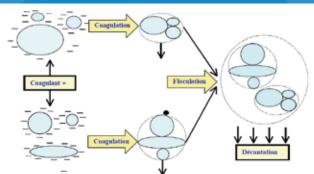
When continuously mixing polymer powder, a precise water/powder ratio is required and there is a risk of lumps forming if the powder wetting and mixing process is not adjusted to the correct and optimal setting.

The Cazaux plant has a 5,000 population-equivalent capacity and was commissioned in 1987.











Founded in **1974**, DOSATRON INTERNATIONAL has been a leading **French** water dosing company for over **45 years** and has many satisfied customers in the water industry.

#### PU1D25WL2IEPO + Mixer



Belt filter



# **Our Solution**

In order to increase efficiency, Eloa Bay (Arcachon) opted for a liquid polymer to treat their sewage sludge.

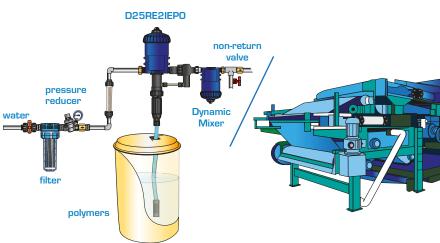
To do this, they had to modify the existing polymer mixing unit by removing the powdered polymer mix and integrating a Dosatron proportional pump that was specifically adapted to the polymer.

They chose a polymer dosing pump that mixes the polymer with the water to obtain a homogenous solution for maturing the sludge before it is sent to the belt filter.

Mounted on a bypass tube, the DOSATRON proportional dosing pump uses the water supply as its energy source.

The pressure and water flow drives the motor piston, which is directly connected to the dosing piston.

The polymer is proportionally dosed and continuously injected with water according to the selected injection ratio.



Eloa chose Dosatron as a way to simplify polymer mixing while simultaneously improving the quality of sludge dewatering.

