



Flocculation prior to TenCateGéotube® drainage

Châtres - France (77)



Dewatering sludge from sewage treatment plants

Sewage treatment plants in Châtres (77)

This plant uses a biological treatment process, “extended aeration activated sludge”, followed by a water clarifier. Up until May 2018, the sludge was treated using a dozen or so drying beds, which involved a number of manual operations.

The local authorities decided to use a sludge dewatering system with dewatering tubes. This method optimises the treatment surface and eliminates the tedious operations required to operate the drying beds during the winter months.

This solution also means that the sludge treated in the TenCateGéotube® can be stored before final disposal in a composting plant.

However, with this type of treatment, the sludge needs to be flocculated before being transferred to the TenCateGéotube®.

Without good flocculation, the sludge cannot be filtered properly and the geo-membrane can become blocked.

The Châtres plant can manage a population-equivalent of **approximately 400 people.**



Polymer dosing

QUANTITY	1 pump PU1 D25WL2IEPO
SETTINGS	from 0,2% to 2%
ADDITIVES	SNF Polymers Flopan EM 840 HIB dosed at 3g/L
PRESSURE	from 0.3 to 6 Bar
OPTIONS	Dynamic Mixer

Reliable installations

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

PU1D25WL2IEPO + Mixer



TenCateGéotube® dewatering



Our Solution

The Châtres Town Council commissioned GEB Conseil to provide it with an integrated solution, including:

- A flocculating agent mixing cabinet, with integrated pumping, dilution, and treatment flow rate control
- Treatability tests and an option to select the mixture to be used,
- Set-up and start-up on site,
- Training for council workers.

GEB Conseil, together with the local authorities, opted for the Dosatron PU1D25WL2IEPO dosing pump.

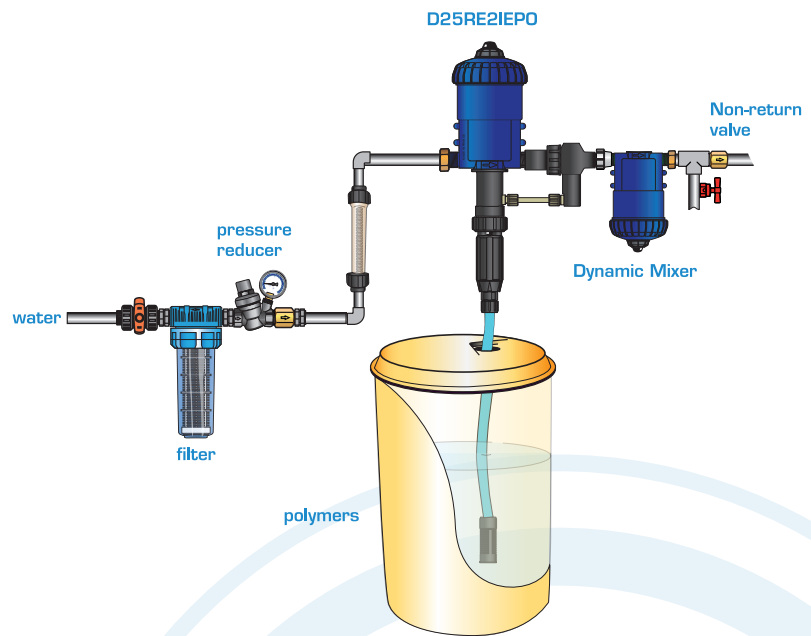
They chose a polymer dosing pump that mixes the polymer with the water to obtain a homogenous solution before being injected into the sludge transfer pipe towards the TenCateGéotube®.

This technique optimises the treatment capacity of the old drying beds (10 to 15 times greater capacity), without any major work. The filtered water is collected using the existing drying bed drainage system.

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.



GEB Conseil decided to prepare its additives using DOSATRON equipment. This simplifies polymer mixing and improves the quality of sludge dewatering