# Flocculating sediment prior to TenCateGéotube® dewatering

Orléans Métropole France

### Dewatering sediments from dredging a body of water

**JUANTIT** 

SETTINGS

**ADDITIVES** 

PRESSURE

**PTIONS** 

#### **Ile Charlemagne Leisure Centre** (Orléans Métropole- FRANCE)

In 2019, Orléans launched a project to redevelop the Île Charlemagne leisure centre's lake, with the aim of cleaning up a large part of the sediment that has accumulated there.

For technical and environmental reasons, they opted for a hydraulic dewatering system using a self-propelled barge and land-based sediment dewatering.

The selected dewatering technique involves the use of dewatering tubes, which allows the extracted sludge to be processed at a high flow rate (100-150 m3/h) with the lowest possible level of re-suspension in the lake.

The dehydrated vases in TenCateGéotube® will be reused after drying for the reconstitution of the reed beds planned as part of the redevelopment.

The high processing rates and the variations in dryness of the vases require the implementation of in-line flocculation with a rapid adaptation of the production of diluted flocculant.



#### **Polymer dosing**

1 pump PU1 D25WL2IEPO from 0,2% to 1%

> SNF Polymers Flopam EM 840 HIB dosed at 8g/L

> > from 0.3 to 6 Bar

**Dynamic Mixer** 

#### Reliable installations



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



TenCateGéotube<sup>®</sup> dewatering



## **Our Solution**

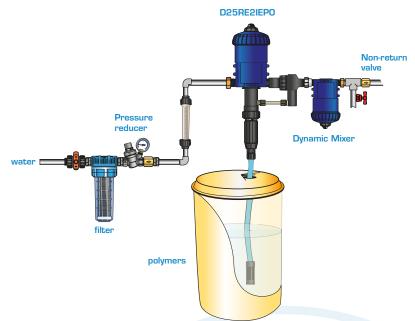
GEB Conseil was commissioned to implement the flocculation process and opted for a Dosatron system. It includes a PU1D25WL2IEPO dosing pump, capable of pumping high viscosity liquids, paired with a DYNAMIC MIXER, which quickly mixes the water/polymer solution.

This solution allows GEB Conseil to overcome the problem of a lengthy maturation time by using an ABS cabinet, which can be mounted directly on the pure flocculant injection unit.

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.

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