

Rainwater Treatment Plant Station 8 – CALAIS Harbour (62)

The port of CALAIS handles towards England freight and passenger traffic of 10 million travellers, 38 million tonnes of freight, 1.8 million private vehicles and 1.6 million lorries. This traffic generates substantial pollution, leached away by rain, and required a putting into conformity with the Water Law. In this context, ICC of Calais, manager of the Port, issued a call for tenders for the catchment area of embarkation station 8, characterised by an active surface of 6.5 ha.



APPRAISAL

The analysis of the project and the regulatory requirements led to retaining a complete treatment of the peak flow, with a nominal flow rate of 325 l/s with a falling speed of 1 m/h, as such aiming for a 85% reduction in annual pollution.

DESIGN

The advantages of this solution are :

- Performance : Horizontal flow settling on aluminium blades
- Accessibility : Dome and technical landing over the entire surface
- Automation : Extraction and management of sludge by the CARIBOU® system and automatic screening system
- Resistance : Mechanical design via modelling with COSMOSWorks
- Remote monitoring: with alarm report

BUILDING

Manufacture :

- Coated steel prefabricated structure with SA 2.5 sanding with cathodic protection.
- Active surface dedicated to settling: 1200 m²
- Radio and magnetic particle inspection of welds by a third-party organisation
- High-performance epoxy coating, resists sea water and oil

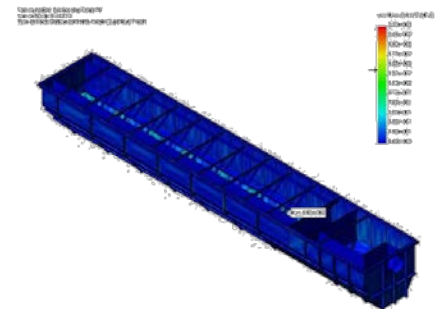
Dimensions :

L x l x H: 27.0 m x 4,5 m x 5,5 m

FOLLOW-UP

Equipment installation and commissioning were carried out by our teams. Remote monitoring allows for real-time follow-up of the operation of the plant. An inspection of the discharges demonstrated the pertinence of the solution implemented. A maintenance contract ensures the operations of the facility.

Date of commissioning	2006
Client	CCI CALAIS
Contractor	CCI CALAIS
Agent	Saint Dizier environnement
Co-contractor	Spie Batignolles Nord



Simulation of mechanical resistance

Parameters	Discharge thresholds
TSS	< 70 mg/l
Oil	< 5 mg/l
COD	< 80 mg/l
Zinc	< 5 mg/l
Lead	< 0.05 mg/l



Inside view of the technical dome