



## Building / Industrial

# Construction of a new industrial unit for the energy recovery plant in Campdorà, Girona

### Client

Tratamiento de Residuos y Aguas Residuales del Sistema de Girona, S.A.- TRARGISA

### Cost

€1,600,000 (excluding VAT)

### Location

Girona

### Work period

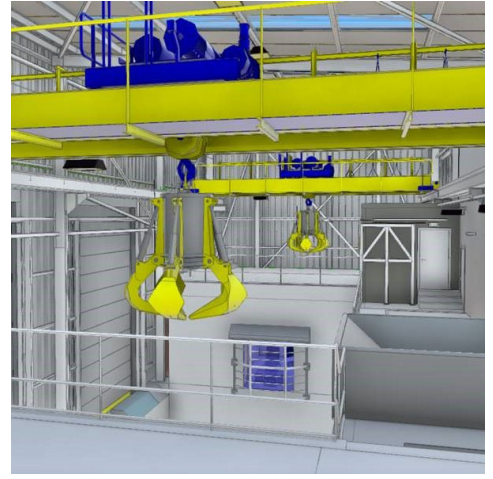
February-September 2021

### Planner

Acsa, Obras e Infraestructuras

### Scope

Construction of a new structure for the pit building of the waste-to-energy plant in Campdorà, Girona, and the assembly of two bridge cranes and an urban waste compactor.



## Description of the work

The transformation of the incinerator in Campdorà, Girona, at an energy recovery plant required the demolition of the existing structure to create a new building that meets European regulation requirements.

Designed from bolted laminated steel, the new structure is accompanied by three composite slabs for the maintenance of the bridges and an envelope in corrugated sheet metal with sandwich panel on the roof. At the same time, two 3.2-tonne semi-automatic bridge cranes with a lifting speed of 50 m/min have been installed to transfer the urban waste from the pit to the future incinerator.

A hopper and chute waste transfer system has also been installed leading to a new 40-tonne compactor that feeds four new 20-tonne containers. All made of wear-resistant steel. In addition, two new 7x5 m<sup>2</sup> high-

speed doors for C5 winds have been installed, as well as a new command post with desk and CCTV system to control the entire plant operation.

To protect the new structures from possible corrosion, specific treatments have been applied to withstand an aggressive C4 environment and the new electrical switchboard room has been pressurised.

Drafted by the Technical Office of Acsa, Obras e Infraestructuras, the project was developed using BIM technology and the same tool was used during its execution for the analysis of construction details and the presentation of new alternatives and solutions to the client. DO was also used to extract measurements, control of proformas and certifications and to deliver an As-Built with a higher degree of digitalisation.

## Main service details

<b>Industrial unit surface area</b>	390 m <sup>2</sup>
<b>Waste pit volume</b>	1,500 m <sup>3</sup>
<b>Laminated steel assembled</b>	48,000 kg
<b>Intumescent paint RF90</b>	800 m <sup>2</sup>
<b>Bridge crane load</b>	3,200 kg

<b>Bridge axes span</b>	10.02 m
<b>Crane lifting speed</b>	50 m/min
<b>Bridge crane capacity</b>	1.25 m <sup>3</sup>
<b>Compacting force</b>	40 t
<b>Compacting volume</b>	3.5 m <sup>3</sup>