



## Hydraulic equipment / Projects

# Replacement of the head intake sluice gates of the Urgell canal in Ponts

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### Client

Comunitat General de Regants dels Canals d'Urgell

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### Location

Lleida

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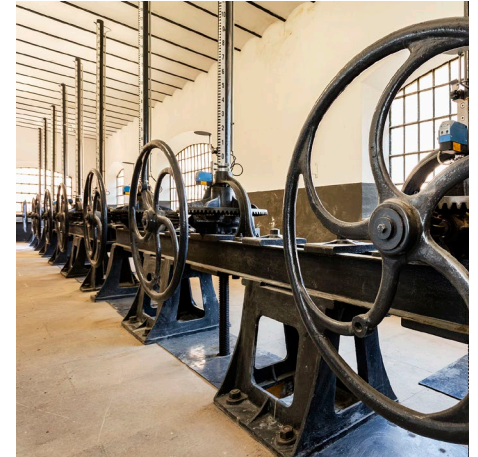
### Work period

January – February 2022

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### Scope

Disassembly of old structures and subsequent adaptation work and installation of new sluice gates for the Urgell canal, a hydraulic system that allows for the irrigation of 70,242 hectares, undertaken by Coutex, Sorigué's hydraulic projects and equipment company.



## Description of the work

Considered one of the most important hydraulic engineering works in Europe in the 19th century, the Urgell canal brought about a true transformation of the environment, on a natural, economic and social level. Located on the left bank of the River Segre, this infrastructure carried water to the crop fields of various towns in the regions of Urgell, El Pla d'Urgell, La Noguera, El Segrià and Las Garrigues.

To be precise, there are two canals and four main irrigation ditches. The main canal, connecting the town of Ponts with Montoliu de Lleida, is 144.2 km long and the four main irrigation ditches branch off from it. The secondary canal, which is 76.6 km long, runs from the Sant Llorenç de Montgai reservoir until joining the main canal in the municipality of Artesa de Lleida. A hydraulic system that allows for the irrigation of 49,490 farms spread over an area of 70,242 hectares for the

benefit of some 77,000 inhabitants.

With just three weeks to execute this project, it was necessary to carefully consider the specific characteristics of the existing gates: age; interior location; and inaccessible concrete frames. There are nine 1,500 x 3,000 mm wall-mounted sluice gates in 316L stainless steel.

Once the existing gate elements were disassembled, the spindles were taken to the workshop to be adapted to the new panels. Despite the short amount of time available, it was necessary to modify the civil works in order to install the new gates. Once assembled, the equipment was tested and it was possible to put it into operation in time for the canal to resume its activity.

## Main service details

### Resources

Crane truck:  
Removal and installation of panels.

Spider crane:  
For manoeuvres inside the gate house.

Cutting and demolition tools

### Sluice gate details

Dimensions:  
Width: 1,500 mm  
Height: 3,500 mm

Material:  
316L stainless steel