



YANN
Senior project manager,
At REEL COH

In 2024, REEL COH installed two new gantry cranes on a Dam in Washington, for one of our long-standing customer. The water intake gantry crane has a special feature, namely a turret at the top.

Installation of a turret gantry crane for an US client



Chief Joseph,
Washington
State
United States

In 2020, one of our customer entrusted us with the replacement of the two gantry cranes, on the upper Columbia River. REEL COH's technical expertise played a major role in that customer's choice, as the water intake gantry crane presents a number of technical challenges.

First of all, the gantry crane is required to perform a large number of lifting and travel functions in a restricted space. This requires optimised design in

order to incorporate all these functions within limited dimensions, in particular because of the high-voltage power lines overhanging the dam. Secondly, this gantry crane has two operator cabs, to keep blind spots around the crane to a minimum.

In addition, the gantry crane is topped with a rotating turret, operating in a similar way to a conventional crane boom, and designed to transport various dam components, including boats for launching from the



Water intake gantry crane stationed at the end of the dam



New water intake gantry crane with the old one behind



Louis-Philippe, site supervisor, in front of the water intake gantry crane

dam bridge. It can also be used to rotate parts in order to lay them on the bridge.

We worked in partnership with our colleagues at the Large Systems and Cranes BU in the Netherlands to design the slewing ring turret rotation system. This synergy enabled us to benefit from our colleagues' experience with rotating floating cranes.

Lastly, the brief required that one of the winches should be able to lift personnel. We thus fitted a safety winch to the main trolley.

It should be noted that this dam, located on the edge of an Indian reservation, is subject to several contractual clauses relating to First Nations people. For example, we had to guarantee access to the downstream apron of the dam during the fishing season.

In addition to the technical aspects, the major challenge of this project was managing the supply chain and the budget during the recent inflationary period.

This adaptation was not without difficulty, as the specific nature of our product and the stringent quality requirements necessitated increased support from suppliers. We had to find solutions to contain the cost increases due to inflation.

Running the project was not without its challenges.

The impression made during the factory tests, and then when the gantry cranes were installed on the dam, quickly gave way to the satisfaction of seeing the two machines in operation. Comparison with the old gantry cranes left no doubt as to the quality of our products.



Downstream gantry crane