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Project
Manager /
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Building on several major projects delivered for one of our best customers, REEL COH was awarded the contract for the complete replacement of the water intake gantry crane at a dam in Montana.

A new intake gantry crane for the USA



Montana
United States

This new contract, linked to a previous project, builds on the relationship of trust developed over the years with our client, who recognizes REEL COH for its expertise in complex gantry crane design and the quality of its final product.

Under this contract, REEL COH was responsible for the design, manufacture, delivery, and site testing of the new 100/70/15-t gantry crane, as well as five new lifting beams that interface with the various

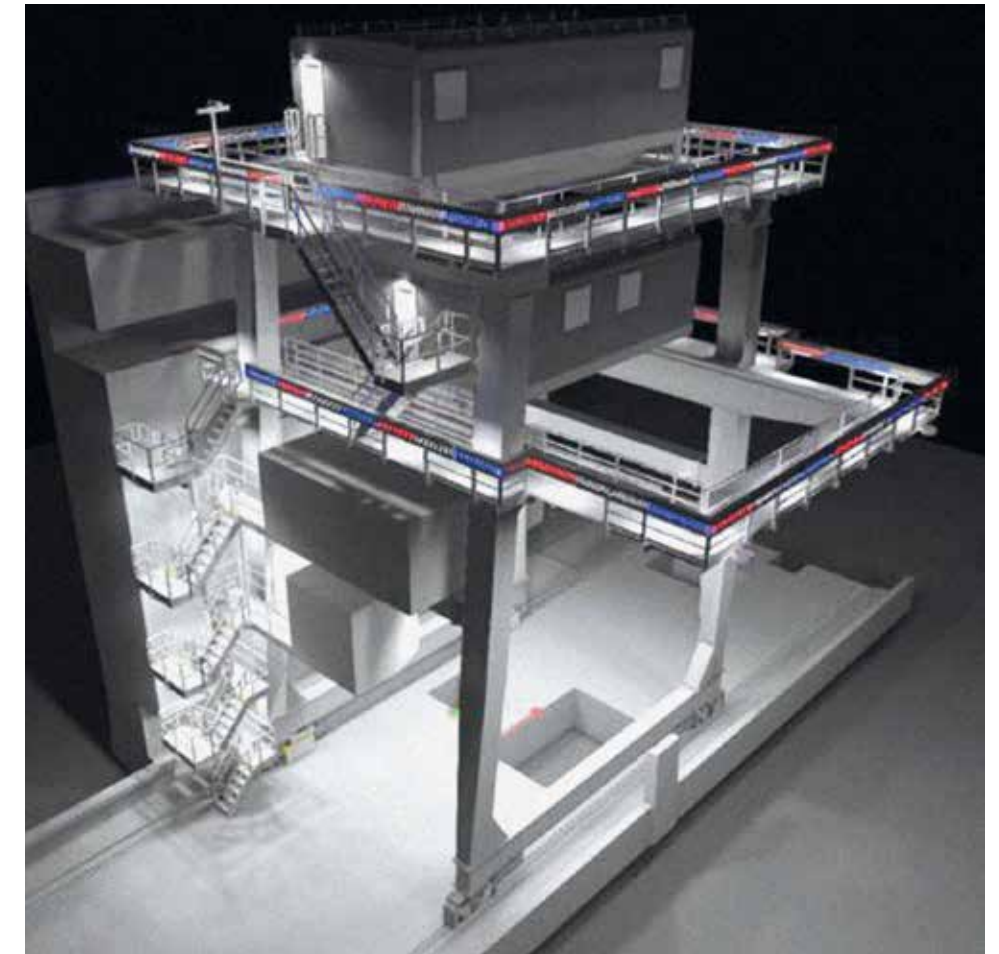
gates handled regularly during maintenance work or operations at the hydropower dam.

A PROJECT COMBINING MODERN INNOVATION WITH HISTORY

From an engineering perspective, this dam project quickly proved to be a balancing act between modernization and conservation. The new gantry crane had to match the footprint of the old machine to fit the physical constraints of the dam. At the same



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Lighting installation



Installation



Final Product

time, the wheel loads had to remain within very strict limits, as with other projects delivered for the patron, where the structure had to be fully optimised to lighten components without compromising lifting capacity.

Added to this was the obligation to respect the angle of the gantry legs to maintain the historical appearance of the equipment – a requirement already encountered on other dams where it was imperative to retain the same visual outline as the original crane. So, the engineering procedure included a sequence of close cycles for 3D modeling and precise schematics.

A PROJECT IN THE SPOTLIGHT

At the site, our new gantry crane does more than just clear the way for water; with its new lighting system, it is now illuminating the future of the dam. Our team also conceived a "historic" lighting system, which was installed not only along the guardrail but also on the main trolley and auxiliary trolley continuously. This system, specifically requested by the customer to reflect the iconic and patriotic nature of the site, was designed to display red, white and blue light sequences, with the ability to dynamically alternate between colors.

A HIGHLY COMPLEX MODERNISATION PROJECT

The complete modernisation of the handling system on a dam of this scale brings its own share of technical challenges, making coordination with the various stakeholders even more critical. The new gantry crane had to integrate perfectly with the rails, clearances, and surrounding environment, while complying with the technical specifications set out in the project brief. Testing and commissioning for the project also proved to be demanding due to the number of lifting beams that had to be operationally tested within the dam openings, in addition to standard testing activities. REEL COH and its installation partner BCI Constructions USA, Inc., were also required to replace the rail heating elements along the entire 890-foot length of the dam.

This project strengthens REEL COH's presence in the North American hydropower market and confirms once again the company's ability to deliver complex replacement projects on strategic assets.

Want to know more about us?
Come see us at **Clean Currents**, booth **1416**.
Or: www.reelinternational.com