

MLC300 navigates soft soil and tight quarters to complete kiln lift

- *A Manitowoc MLC300 proved ideal for replacing a 215 USt industrial lime kiln while erected in a narrow alleyway thanks to its small footprint.*
- *The reduced ground bearing pressure made possible by the Variable Position Counterweight (VPC) enabled the MLC300 to work on soft riverbank terrain.*
- *The MLC300's operators only had three inches of vertical clearance in which to maneuver the crane's VPC, but the job was completed without incident in 36 hours.*

One of the most productive features of Manitowoc's Variable Position Counterweight (VPC) is its ability to reduce the ground bearing pressure of cranes that are enabled with the technology — because the cranes need less counterweight for lifts, they weigh less overall, reducing pressure on the ground below, and in turn, the amount of ground preparation required.

This feature proved especially useful for a project to replace an industrial lime kiln at a plant in Wilmington, North Carolina. The plant was located near a river in a coastal region, so the job site's terrain was soft and wet. The lift called for a crane that could fit into a tight space and lift the 215 USt kiln, but could still handle the tricky terrain. A Manitowoc MLC300 proved to be a great solution.

W.O. Grubb Crane Rental, based in Richmond, Virginia, was tasked with the project's lifting duties. Jeff Collins, vice president of engineering and administration for W.O. Grubb, said that he chose the 330 USt MLC300 because of its capacity, small footprint and low ground bearing pressure.

"We had to erect the crane in an alleyway and only had an allowable ground bearing value of 2,000 psf to work with. Without the VPC, we couldn't have made the crane light enough to safely complete the job," he said. "Also, the MLC300 was a good choice for this job because it gave us the size and load capacity on a compact footprint."

The crane's primary job was to lift a 215 USt lime kiln that measured 25 ft in diameter. It needed to be lifted through a 35 ft by 75 ft opening in the roof of a 45 ft-tall structure. The kiln was then placed on storage stands and hauled to a remote laydown area. The MLC300 then lowered a replacement kiln through the same opening so that an engineering team could weld the new unit into place.

"We were working in a very tight spot," Collins said. "The crane had to be positioned within inches of a building wall at one end, with only a three-inch vertical clearance between the top of the counterweight stack and the bottom of a pipe rack under which the counterweights were forced to swing. It was a complex series of lifts, but even working in such tight quarters, the MLC300 performed flawlessly. We were able to finish the turnaround in 36 hours."

W.O. Grubb Crane Rental is one of the premier providers of crane rentals, rigging, heavy hauling, major projects and steel erection in the Mid-Atlantic region. The company is family owned and operated, and has multiple locations in Virginia, Maryland and other surrounding states. W.O. Grubb purchased the MLC300 from Baton Rouge, Louisiana-based H&E Equipment.

Established in 1961, H&E Equipment offers a host of services for all Manitowoc crane brands, including rentals and sales, parts, service and training. The company is also a certified EnCORE partner, providing outstanding service and the highest quality remanufacturing and structural repair work for Manitowoc cranes.

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