

CEMENT KILN UPGRADES CASE STUDY

THE CHALLENGE

Lafarge Holcim, which specializes in cement, construction aggregates and concrete, operates two cement kilns out of their Paulding, Ohio location. Each kiln measures 800-feet long and 12-feet in diameter, and the inside contains over a thousand chains weighing over 90 pounds each. Each chain is hung by tombstones welded into the steel walls of the kiln. When turned on, the chains slowly rotate, crushing the mined rock, which is then heated to 1,500 degrees Celsius and continues to rotate until the rocks are crushed into fine dust.

Over time, the chains on the interior of the kilns become worn and need to be replaced. Lafarge Holcim contacted Lee Contracting to remove and replace nearly 600 chains in a nine-day window – which is no small feat. The kilns had uneven flooring, the chains created a trip hazard, limited space, no lighting and the dusty conditions.

LOCATION

Paulding, Ohio

DEPARTMENTS INVOLVED

Fabrication and Rigging

THE RESULTS

To remove the heavy chains from the cement kiln, Lee Contracting's teams attached them to a crane and raised the chains through a 26-inch manway on the side of the kiln. The team was also tasked with removing any worn tombstones and welding new ones in place in a precise pattern. The Lee Contracting rigging team then lowered new chains into the kiln, which were reattached to the tombstones.

At the end of the project, the client was pleased with the crew's teamwork and for Lee providing a cost-effective and timely solution for this project.