

Drive-Thru DomeSilo Cement Storage

Continental Cement Company | Memphis, Tennessee, USA



- Value Engineering
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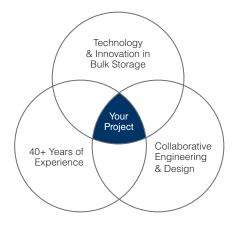
 \bigcirc None \bigcirc Some \bigcirc All

Storage & Reclaim

 $\hfill \square$ 1 Drive-Thru DomeSilo: 15.24m (50ft) wide \times 30.5m (100ft) tall

5,000 metric tons, cement

Reclaim: 100% live, aerated floor



The dome's curvature supports heavy loads associated with bridges, piping, and mechanical equipment.

The fully aerated floor delivers 100 percent reclaim.

The walls on either side of the truck scale house an electrical room and a mechanical room.

Overview

Continental Cement Company was the first to sign on for Dome Technology's newly developed Drive-Thru DomeSilo, a model that fills truck or rail directly from the storage structure and speeds up the process of product reception to delivery.

Continental Cement is pleased with the efficiency of the overall system, said area supervisor Dustin Whited. "We can load trucks at the same time we can replenish our inventory via barge unloading — all of this while being basically dust free, which is important to our customers and to our community," Whited said.

The Drive-Thru was built at a recently acquired Continental Cement site in Memphis. While the existing bolted-steel silo and adjacent scale had not been used for some time, complete upgrades of these assets along with a new barge unloader, dock upgrades, and dome allowed Continental Cement to become the leader in service in the Memphis market.

The Drive-Thru is supplied by barge from any one of Continental Cement's plants. The inbound conveyance pipe can discharge into either the Drive-Thru dome or the adjacent 3,000-ton steel silo. New aeration of the existing silo allows for a muchincreased truck-loading rate. A cantilevered bridge between the Drive-Thru dome and the pre-existing silo makes not only for more efficient access, but more importantly, a safer work environment.

The Drive-Thru delivers 100 percent reclaim using a fully aerated floor. Cement is loaded into the truck using a dual direction loading spout; the same system can also be used in the future for loading railcars, if needed. An in-line lump crusher on the loadout stack-up ensures that lumps passed through the receiving system do not make it into trucks. The dome can receive 350 mtph from the barge unloader and load out at 320 mtph.

"For nearly four decades we've relied on a collaborative approach with companies—they're in the driver seat, and we help navigate. In every project Dome Technology incorporates innovative technology to maximize storage capacity and system performance with an economical solution," Bradley Bateman, CEO, Dome Technology.

Read more about this project at link.dometechnology.com/15988



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