



The DomeSilo is 171.5 feet tall and 165 feet in diameter, maximizing storage on a small footprint.



The FLSmith Ful-Floor™ center discharges to the tunnel.



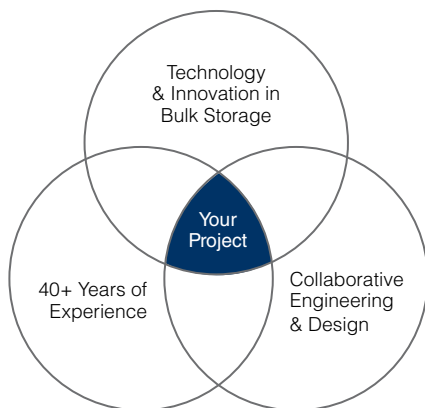
Increased storage capacity will reduce CCC's demurrage costs on the river.

## Scope of Work

- FEED Study
  - Value Engineering
  - Geotechnical Analysis
  - Material-Handling Systems Engineering
  - Structural Engineering
  - Mechanical Engineering
  - Electrical Engineering
  - Procurement & Subcontract Management
  - Dome Construction
  - Tunnels Construction
  - Material-Handling Systems Installation
  - Additional Steel & Concrete Construction
- None    Some    All

## Storage & Reclaim

- 1 dome: 50.3m (165ft) wide x approx. 52.3m (171.5ft) tall
- 125,000 short tons, cement
- 99+ percent live reclaim



## Overview

Continental Cement Co., a Summit Materials company, has built another DomeSilo with Dome Technology, this time at its Davenport, Iowa, USA facility.

The DomeSilo can store 125,000 short tons of cement powder, and according to Dome Technology's records, the structure is among the largest-capacity cement storage facilities in the world, said sales manager Lane Roberts.

The dome size is a response to demand that's been building for the past decade. CCC Davenport ran short on storage for many years, resulting in cement being loaded on barges and stored on the river. Over the past decade, CCC has stored significant amounts of cement each year, resulting in substantial demurrage costs. With demand for cement and barge demurrage costs increasing each year, Summit Materials and Continental Cement were confident that now was the time to invest in larger, more permanent storage.

"CCC will reduce its demurrage costs for cement storage on the river and eliminate the need to curtail production or shut down the plant. This helps to ensure we have sufficient cement to ship coming out of the winter months into the busy spring and summer seasons," Continental Cement Co. plant manager Shawn Mages said.

The DomeSilo is 165 feet in diameter and 171.5 feet tall. An FLS Ful-Floor™ pneumatic reclaim system moves product, and the dome's floor is faceted with slopes in four directions, moving cement to the center of the dome to a single tunnel that is 14 feet wide and 12 feet tall. The cement is reclaimed at 350 stph.

Dome Technology's scope of work also included construction of a mechanical/electrical building and overseeing site preparation and earth work. The team demolished three bays of an existing building to clear way for the dome and the new mechanical/electrical building.

Read more about this project by clicking [here](#).