



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

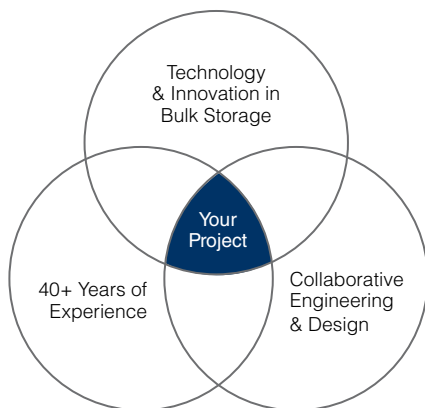
○ None ● Some ● All

Storage & Reclaim

1 DomeSilo: 33m (108ft) wide x approx. 40.9m (140ft) tall

30,000 metric tons, cement

FLSmidth fluidized floor with single side discharge



This photo sequence shows the airform inflation. First, the PVC membrane is attached to the ringbeam foundation.



Second, blowers are turned on to inflate the airform.



Third, the airform begins to take shape and will remain in place permanently to provide waterproofing for the DomeSilo.

Overview

At the Port of Tilbury in Essex, United Kingdom building-materials expert Holcim hired Dome Technology to build a DomeSilo, the backbone component in a project that promises economic and environmental benefits for the region.

Holcim approached Dome Technology after having decided on a dome as their storage model of choice. With anticipated demand in mind, Holcim had set ambitious goals and required a facility able to operate around the clock to meet local-market material demands.

The first item of business was for Dome Technology to figure out how to maximize the portside property—no small task considering the challenging subsurface ground conditions and limited land. With the foundation plan secured, dome engineering continued, followed by construction.

Built at a nine-acre site, the DomeSilo is 40.9 meters (140 feet) tall, 33 meters (108 feet) in diameter and, when completed, will be capable of storing 30,000 metric tons of cement. Cement will be delivered to the site via ship at the Tilbury Port, then conveyed through two units of 16-inch-diameter pneumatic pipelines Dome Technology designed and supplied.

Customization doesn't end there; the pneumatic lines from the ship run under the road from the dock to the dome for seamless integration. Inside the dome, an FLSmidth fluidized floor with a single side discharge will provide reclaim.

The Holcim facility will supply cement across London and southeast England. "With this project, Tilbury joins a small number of pioneering locations in the UK with access to the latest advancements in polymer dome technology, and we are thrilled to join this innovative and elite group," said Holcim project manager Tim Fry. "Once operational, the site will support both local and regional demand for cement and lower-carbon construction materials."

Dome Technology provided the desired storage solution for Holcim by leaning on decades of experience. "It's important to highlight our team's ability to successfully execute a project in the UK, where everything is different from the U.S. and even from continental Europe," Dome Technology business-development manager Victor Ruiz said.

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