



Scope of Work

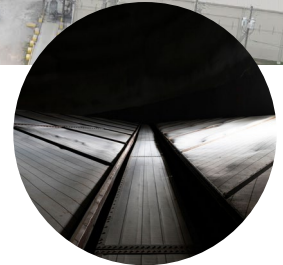
- FEED Study
 - Value Engineering
 - Geotechnical Analysis
 - Material-Handling Systems Engineering
 - Structural Engineering
 - Mechanical Engineering
 - Electrical Engineering
 - Procurement & Subcontract Management
 - Dome Construction
 - Tunnels Construction
 - Material-Handling Systems Installation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



Dome Technology's team fabricated the stair tower and bridge.



A single tunnel under the DomeSilo houses the aeration valves and pipes.



The DomeSilo features an FLS Ful-Floor system with double side discharge.

Storage & Reclaim

- 1 dome: 38.1m (125ft) wide x approx. 41.9m (137.5ft) tall
- 50,000 metric tons, cement
- FLS Ful-Floor with two-sided discharge



Overview

After considering all options, Argos leadership determined a DomeSilo was the best option for its Houston, Texas, site.

“The dome gives Argos a great amount of storage in a relatively small footprint and an economical storage price per ton relative to typical silos,” said Argos project manager Steve Andersen, who oversees terminal operations.

Argos, which has since combined with Summit Materials, contracted with Dome Technology partly because the team could oversee so many aspects of the project. “The big request that really appealed to them was that we could coordinate the ship unloading system and could take care of the dome and the reclaim too,” said Dome Technology sales manager Lane Roberts.

The DomeSilo stores up to 50,000 metric tons of cement and is 125 feet in diameter and 137.5 feet tall. The Houston site brings in cement via ship, and because the dome stands so close to the river, mechanical screws run from the ship unloader to the side of the dome and up to the apex. According to Roberts, this model provides speedy loading—up to 1,200 tons per hour.

The DomeSilo features an FLSmith Ful-Floor System with a double side-discharge floor that feeds product to the truck-loading system using an FLS Fuller-Kinyon pump, where it is made ready for delivery to United States customers.

Argos also operates a 2,000-metric-ton silo on site, and daily sales often exceed that capacity. Being able to rapidly fill the DomeSilo allows the company to increase sales, Andersen said, noting the dome's capacity results in more attractive freight rates by allowing for larger cargo volumes, which reduces freight costs.

Andersen said Argos expects more environmentally friendly storage and manpower savings from the elimination of front-end loaders. Also, filling will be faster; front-end loaders can fill a structure at 90 to 100 tph, but the DomeSilo can be filled at 400 to 500 tph, he said.

Read the complete project summary [here](#).