

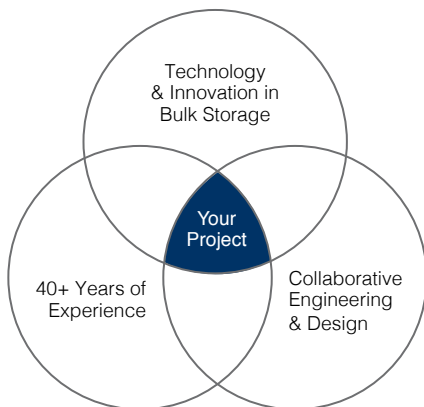


## Scope of Work:

- 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
  - Explosion Relief Installation
  - Additional Steel & Concrete Construction
- None    Some    All

## Storage & Reclaim:

- 1 Dome: 78m (256ft) Wide x 48.2m (158ft) Tall
- 193,000 Metric Tons (Total), Clinker
- 3 Tunnels, 70% Live Reclaim



The Dome was appealing to Lafarge because the cost was less than silos, primarily due to mitigating of deep foundations.



The structural integrity of the DomeSilo™ allows it to support a 50ft headhouse, a restraint system, and a dust collection system all at the apex of the dome.



The Dome is equipped with 3 tunnels which enable product to be reclaimed via gravity and front-end loader.

## Overview:

In 2007 Lafarge Cement Romania contracted with Dome Technology to build what would be the world's largest clinker-storage dome. The dome was completed in 2009, designed to increase capacity at Lafarge's cement-production plant in Medgidia, Romania.

According to Wieslaw Krynicki, who acted as the Lafarge project manager, the company's main requests included capacity, durability, temperature resistance, and cost effectiveness. A dome from Dome Technology was selected "because of (its) innovative and cost-optimized solution," he said. "All requests and expectations were fulfilled. I am rather sure that in case of similar need, Lafarge would go for the same solution."

Storing a large volume of heavy product like clinker requires an appropriate foundation, and "the dome was appealing to (Lafarge) because the cost was less than silos, primarily due to mitigating of deep foundations," said Dome Technology sales manager Lane Roberts. "We were able to do a Geopier foundation system that greatly reduced the cost."

Geopier RAP systems are constructed by applying direct vertical ramming energy to increase the lateral stress and improve surrounding soils. This method results in foundation settlement control and greater bearing pressures for design. The RAP system often results in 20 to 50 percent cost savings compared to supporting a structure on a deep-foundation system, and the construction schedule is also reduced because installation happens more rapidly than other methods.

The dome's ability to sustain large loads at the apex was a boon to the project, which required a 50-foot head house for the filler conveyor and a dust-collection system perched atop the dome.

"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/2717](http://link.dometechnology.com/2717)