



Store more product in a single building, maximizing port side property.



Waterproofing was applied to the below-grade reclaim tunnels to compensate for Savannah's soggy soils.



As a result of its geometry, a dome can support sizable structures like a headhouse and conveyors at the apex.

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:

- 2 Domes: 61m (190ft) Wide x 30.5m (105ft) Tall
- 50,000 Metric Tons (Total), Wood Pellets
- 2 Tunnels, 55% Live Reclaim

Overview:

Domes really weren't on the radar for Peebles Industries in Savannah, Georgia. The company was seriously considering a 50,000-ton A-frame for storing wood pellets, but an A-frame would require deep foundations that raised financial concern—and there were rumblings that a better option might be on the market.

So Peebles Industries owner Frank Peebles Jr. made contact with Dome Technology, "and they did a lot of things for us. They cheapened our price up because we didn't have to put in a deep pile foundation"—a system that for the A-frame would have carried the same cost as one entire dome, Peebles Industries project manager Brad Orwig said. The company now operates two domes that store and process pellets from producer Georgia Biomass.

Despite Savannah's soggy soils, water levels were managed and the grade brought up, allowing reclaim tunnels to be wrapped in waterproof blanket and installed underground—and that equaled space savings inside and cost savings too, said Dome Technology sales manager Lane Roberts.

But "the hardest part of the job was tying in the new to existing facilities, both inbound and outbound," Orwig said. The company had previously handled bulk products like rock and ore, so it was a must that the domes be built to connect with infrastructure already in place. Even when hurdles arose, the Dome Technology team stayed on schedule, Orwig said, with the domes and tunnels being constructed in 10 months.

"(Dome Technology) is the only dome company we work with now," he said. "I've worked with a lot of contractors, and Dome Technology is by far the most professional and the best contractor I've ever worked with."

"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/75

