DOME TECHNOLOGY®

Wood-Pellet Storage

Enviva | Port of Pascagoula, Mississippi, USA

Each dome is capable of storing 45,000 metric tons of pellets.

The domes have sophisticated headhouses for conveyance systems.

The Pascagoula domes are the fifth and sixth storage structures Dome Technology has built for Enviva.

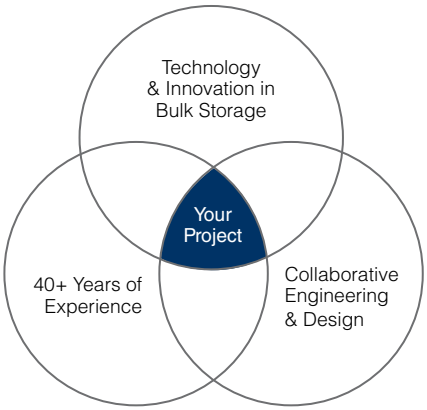
Scope of Work

- ○ 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

- 2 domes: 51.8m (170ft) wide × approx. 50.3m (165ft) tall
- 45,000 metric tons each, wood pellets
- 75 percent live reclaim



Overview

Dome Technology has completed two more domes for wood-pellet powerhouse Enviva, bringing the total domes built for the company to six.

As Enviva expanded their pellet production in the southern United States, company leadership identified the Port of Pascagoula in Mississippi as the ideal shipping port. According to industry insider Fastmarkets, Enviva set a goal to take production from 6.2 million metric tons a year to 13 million; part of that effort included the construction of two new domes capable of storing 45,000 metric tons with 75 percent live reclaim, each measuring 170 feet in diameter and 165 feet high. The domes are fitted with typical sensor arrays and cables.

Floor aeration designed to cool the pellets was customized for these domes. Floor grates must be robust enough to withstand machinery driving on top, and the larger the grate, the greater the cost to build it. So rather than installing standard troughs five feet wide and two feet deep with a grate to match, Dome Technology's team proposed troughs two feet wide and five feet deep. This meant the cost of the floor grates could be dramatically reduced while providing the same degree of aeration for reclaim.

The waterfront site posed challenges common for portside locations. Dome Technology helped Enviva shave costs by proposing the domes be built upon an innovative deep-foundation solution. Tunnels were constructed on grade because of the high water table.

The two Pascagoula domes follow a similar building pattern for Dome Technology and Enviva projects. In 2011 and 2012 the two companies collaborated to build a duo of domes at the Port of Chesapeake in Virginia. At the end of 2016 the Dome Technology team completed two more domes for biomass manufacturer Enviva at Port of Wilmington, North Carolina.

"It's an honor that they have selected us repeatedly to build six domes for them," said Dome Technology sales manager Lane Roberts.

Read more about this project at this link.