



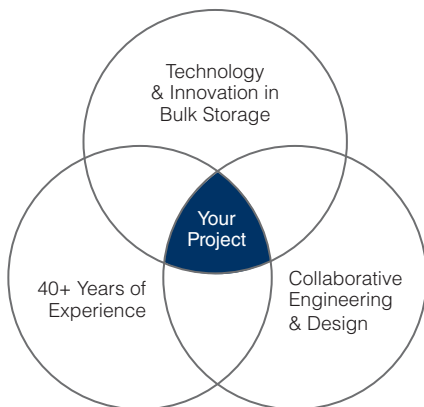
Scope of Work

- 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 DomeSilos: 36.5m (120ft) wide x 39.9m (131ft) tall
- 21,000 metric tons each, wood pellets
- 1 tunnel



The outbound conveyor measures 796 feet (242.6m) to load ships in the harbor.



Truck drivers can unload product quickly at the new facility; the domes can be filled at a rate of 250 metric tons per hour.



Portside availability was limited, so domes were chosen to store more within a smaller footprint.

Overview

Wood-pellet producer Barrette-Chapais first contacted Dome Technology about a ship-loader project for a new transload facility in Quebec, Canada, but when portside availability changed, so did their plans.

Flat storage was Plan A for the Port of Saguenay site, but after weighing a reduction in available space against storage requirements, the decision was made to shift to a dome, said Granule 777 general manager Yann Sellin.

Dome Technology was contracted to build two DomeSilos, measuring 120 feet (36.5 m) in diameter and 131 feet (39.9 m) tall and each capable of storing 21,000 metric tons. Because of their geometry, DomeSilos are able to store more product in a smaller footprint, stacking pellets deeper and storing them all the way to the structure's apex.

According to Dome Technology sales manager Cameron High, one of the customer's main requests was the ability for truck drivers to pull in, unload product, and return to the pellet plant without interruption and on repeat. "They wanted from start to finish a fully automated system," he said.

Dome Technology also acted as construction manager, supervising Canadian crews on all equipment installation—load-out system, bucket elevator, and conveyance. The Bruks conveying system is the most exciting feature for the company, Sellin said.

Pellets are produced at a Granule 777 pellet plant nearby. Upon arrival at the facility, they are dumped into a truck-unloading hopper and conveyed to a bucket elevator, which delivers them to a reversing conveyor on top of the domes.

The outbound conveyor on the reclaim side is 1,153 feet (351.4m) long, reaching 357 feet (108.8m) to collect product underneath both domes and stretching 796 feet (242.6m) to ships that will deliver it to Europe.

Construction is tricky in such a cold climate, but the weather-resistant domes will protect pellets and last indefinitely with little maintenance. The dome was an optimal choice considering the extreme weather common in northern Quebec, High said.

Read more about this project at link.dometechnology.com/20469