



Maximize port side property by storing more product in a single building.



Mechanical and gravity-fed reclaim by tunnels can increase safety, while decreasing operating costs.



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: 58m (190ft) Wide x 28m (92ft) Tall
- 50,000 Metric Tons, Grain
- 1 Tunnel, 60% Live Reclaim

Overview:

Agri-business leader Parrish & Heimbecker's storage needs aren't static—some seasons the company stores soybeans, the next might be corn, and wheat takes a turn too. For flexible storage, P&H contracted with Dome Technology to build two identical domes in Hamilton, Ontario, Canada.

Flexibility wasn't the only consideration. Domes were selected based on construction speed and ability to build storage facilities on a port without requiring a deep foundation, said Jay Fretz, site manager for the P&H Hamilton Terminal.

P&H dodged expensive foundation costs "based upon our ability to provide a soil analysis and to design the system to accommodate some settlement," said Dome Technology CEO Bradley Bateman.

According to Fretz, P&H requested vessel hatches on top of the dome that would make it possible to move product from the drop-off vessel into the dome, rather than unloading it upon delivery, then loading it onto a secondary conveyor system used to fill the dome, Bateman said.

P&H hoped to achieve necessary throughput and minimize operating costs by selecting a system providing live reclaim and allowing for the use of loaders to push product to tunnel hoppers. Dome Technology oversaw most of the project, including site survey and installing economical tunnels inside the dome floor rather than the ground to combat a high water table. "(The) pace of construction was excellent and is fantastic storage space for our high-volume needs," Fretz said.

Bateman remarked, "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."

Read more about this project at: link.dometechnology.com/2580

