



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



The sugar's purity is ensured by a protective elastomeric coating on the inside of the dome.



A single tunnel with a specialized waterproofing system encloses the reclaim conveyor.



The foundation system was optimized to accommodate some settlement, drastically reducing project cost.

Storage & Reclaim:

- 1 Dome: 57.9m (190ft) Wide x 38.4m (126ft) Tall
- 54,000 Metric Tons, Refined Sugar
- Reclaim Screw, 1 Tunnel
60% Live Reclaim

Overview:

Dome Technology acted as general contractor for a 60,000-ton beet-sugar dome built for Agrana subsidiary Magyar Cukor, in Kaposvar, Hungary. Completing the project was a sprint to the finish that included players from American and European companies.

The dome was designed to increase the storage capacity of Hungary's only remaining operational sugar factory and was chosen for its ability to store more product while utilizing less real estate.

The catch was that this project had to be done quickly due to the upcoming fall sugar campaign. Selecting quality subcontractors made it possible not only to finish days before deadline but to produce a dome recognized as a key element of the largest project in Hungary in 2013; even the prime minister turned out for the opening ceremony. "It was an important project both economically and a boost for national pride for the Hungarian people," Dome Technology project manager Daren Wheeler said.

The dome's floor incorporates a hopper system that accounts for the live reclaim, and a reclaim screw removes the remaining product. A single tunnel with specialized waterproofing beneath the dome encloses the reclaim conveying system.

The dome and its equipment required additional attention to ensure proper food-handling practices. Since sugar storage and handling requires a smoother finish on surfaces, the team applied a coating to the inside of the vertical wall before applying a food-grade coating—"anywhere the sugar touches an adjacent surface, you have to have food-grade finish or coating," Wheeler said. The coating also needed some elastomeric properties to ensure long-term durability in the completed system.

Bradley Bateman, CEO at Dome Technology 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/2586

