

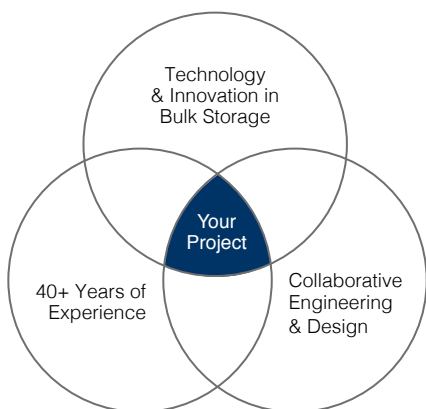


Scope of Work:

- 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:

- 6 Domes: Two, 36.6m (120ft) Wide x 18.3m (60ft) Tall; One, 54.9m (180ft) Wide x 27.4m (90ft) Tall; Two, 46.3m (152ft) Wide x 23.2m (76ft) Tall; One, 39.6m (130ft) Wide x 19.8m (65ft) Tall;
- 30,000 Metric Tons (Total), Cement
- 130,000 Metric Tons (Total), Potash



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



Replacing existing flat storage, a series of 'storm ready' domes were chosen for the harsh weather of New Mexico.



Elimination of deep foundations allowed these dome structures to be built on top of existing tunnel systems.

Overview:

After a microburst damaged Intrepid Potash's warehouse in Carlsbad, New Mexico, the company needed storage that could sustain weather-related events. They chose a series of domes that continue to stand strong after a decade of operation.

Intrepid Potash stores two different product lines—sylvite/potash and langbeinite—in three different associated sizes each, so keeping product separate was key. While making the change in storage facility, the company opted for six domes, an improvement over the previous large warehouse with divisions inside. With multiple domes, product could be kept separate and distinct.

Dome placement was key, and "the big thing was to fit the current application. The domes had to overlay in one set of previous tunnel networks—that was a key requirement," said Robert Baldrige, Intrepid Potash general manager for New Mexico operations. Careful design made that request possible and productive.

Quality control was a major consideration and one that stood out to Baldrige. For instance, rather than bringing in concrete material by truck, Dome Technology set up a batch plant onsite. Making its own concrete was better "from a convenience standpoint and a cost standpoint," said Dome Technology vice president of construction Bryan Butikofer. "When you batch your own concrete, you're guaranteed to get fresh concrete at any time you need it."

In Carlsbad today, the raw product is mined, then refined in a processing facility to remove waste before being moved to the appropriate dome for storage before sale. From the domes, conveyors transport potash to a rescreening facility that ensures product size and quality before transport.

"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/1036