GUNTHER SALT

GUNTHER SALT COMPANY is a distributor of various salt products throughout the Midwest. Due to business growth, they needed a new storage and distribution facility at their St. Louis headquarters.

"We were looking for something that would last and have multiple uses," said Darrin Chapman, plant manager. The building stores a specialized agricultural salt mix, which arrives at the facility via barges and is loaded onto trucks by conveyor belt.





BUILDING OWNER Gunther Salt Company

SAND + SALT APPLICATIONS

St. Louis, MO

MARKET SECTOR Bulk Storage

APPLICATION Agricultural Salt Storage

108 ft x 260 ft (28,080 sq ft)

MISSOUR

SPECIAL FEATURES

Frames designed for 875-lb conveyor + catwalk load

ISTALLATION

Legacy in-house crews



The salt mix must stay dry, which eliminated building styles vulnerable to leaking and corrosion. "We've never worked with fabric before," said Chapman. "We have had experience with several building types that didn't last." Constant exposure to corrosive salt causes steel components to corrode, which eventually causes steel sheets to weaken and thin. Even the small fasteners used in wooden buildings can corrode, causing leaks that compromise the integrity of the moisture-sensitive product stored inside.

After researching and touring Legacy buildings, the team at Gunther Salt was impressed with the design and the options for fighting corrosion. "We liked that the Legacy building used galvanized steel and the solid steel frames without hollow centers. And the fabric seemed to be a less corrosive material, more likely to stand up to the elements," said Chapman.

The frames are made of solid steel that has been hot dip galvanized. This frame design fights corrosion in two ways. Hot dip galvanizing permanently bonds to the steel, creating a barrier that protects the integrity of the steel. And the solid web beams have no hollow centers or invisible areas, so the building owner can monitor for corrosion and quickly prevent permanent damage as needed.

ExxoTec[™] Elite fabric cladding, which is inert to corrosion, covers the roof and walls. The fabric is a PVC material, which is twice as strong as the polyethylene covers used on many fabric buildings.

Even in corrosive environments such as Gunther Salt, ExxoTec™ Elite has a 25-year warranty.

"We liked that the Legacy building used galvanized steel and the solid steel frames without hollow centers. And the fabric seemed to be a less corrosive material, more likely to stand up to the elements."

Legacy guided the team at Gunther Salt on the building design, which meets the storage requirements and allows for additional operations inside. The building measures 108 feet wide by 260 feet long, which gives it a storage capacity of 10,470 tons. Salt is contained in pre-cast concrete bins, which can be reconfigured as operations change. And a loading area with overhead doors allows loading onto trucks without exposure to the weather.

With the building in use, Gunther Salt has noticed some differences between the fabric building and the old wooden storage domes. "Right away we noticed that the inside of the building was very clean, very bright," said Chapman. "The white panels on top really let light come in. It's a nice building compared to the wooden domes." Chapman added that the natural light meant fewer lights installed and powered every day.

With their new facility, Gunther Salt is able to serve an increased number of bulk and retail customers, and provide them with nutrient-rich feed salt.