

WORLD-SCALE NITROGEN FERTILIZER COMPLEX EPFC

CLIENT - Confidential LOCATION - Midwest U.S. COMPLETED - 2017

DESCRIPTION

Matrix Service provided engineering, procurement, fabrication, and construction (EPFC) for the first world-scale fertilizer plant built in the United States in nearly 25 years. The first contract required the construction of two double-wall full containment ammonia storage tanks and three single wall urea ammonium nitrate storage tanks. The second contract included the construction of the refrigeration system, pipe rack through the tank farm area, utility service piping, and fill lines through the pipe rack and the earthworks.

PRINCIPAL FEATURES

- 2 ea 50,000 MT double wall full containment ammonia storage tanks
- 3 ea 40,000 MT single wall urea ammonium nitrate tanks

- 2 ea 2,300 yd3 elevated concrete pile cap storage tank foundations poured monolithically on auger pressure grouted piles
- 3 ea ringwall storage tank foundations on vibratory stone columns
- 2 ea ammonia refrigeration systems in a pre-engineered building
- 2 ammonia flares
- Associated transformers, MCCs, and switchgear for the refrigeration system along with with a pre-engineered building to house the equipment
- 31,000 LF carbon and stainless steel piping
- Containment berms and grading of the tank farm areas
- 351 tons of structural steel installation and material supplied by OEC
- 3,000 yd3 of miscellaneous concrete foundations in addition to the tank foundations
- The plant is up and running with an output of 1.5-2 million tons of fertilizer a year. American farmers benefit from this new plant by saving millions annually.



