Meat Processing Plant Expansion Made Simple With CO₂ Expertise from Hillphoenix

FACTS

Segment: Food & Beverage Processing E

End-User: Meat Processor & Packager

Goals:

- Expand existing facilities to double capacity without introducing safety risks and regulatory hassles of ammonia
- Improve efficiency by replacing multiple synthetic units and implementing heat recovery

Challenges:

- Maintaining the correct temperature conditions in a hygienic environment where employees are working
- Implementing a single refrigeration system that supports higher volumes and multiple applications

SOLUTION:

Thanks to expertise from Hillphoenix, the enduser successfully expanded operations with an efficient, sustainable CO_2 system that supports all the plant's processing needs. Heat from the CO_2 system is recovered and used for the facility's hot water needs, further driving efficiency.





EQUIPMENT:

- 348-ton/20°F SST transcritical CO₂ system
- Two racks in a double-wide, fully enclosed mechanical center
- Three hygienic rooftop Critical Process Air (CPA) units
- Penthouse and hanging air unit evaporators
- Glycol chilling heat exchangers to cool brine

