



CO2 Transcritical



Cold Food Storage Facility

Installing One Of The Largest Transcritical CO2 Systems in the U.S.

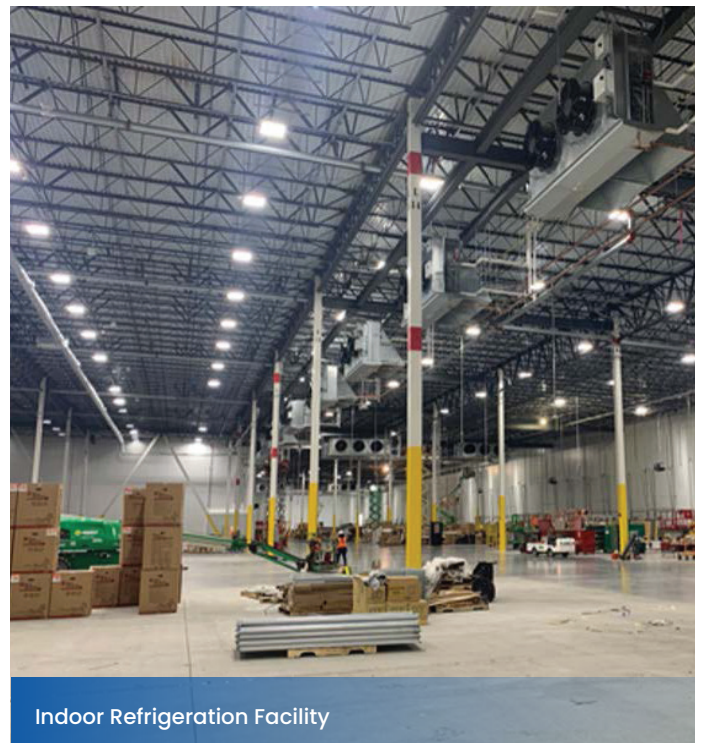
To Create a Cold Storage Facility in Maryland.

The Problem:

A worldwide e-commerce giant was growing its physical retail presence, transitioning from dozens of hyper-local basket-grocery stores to more than 450 organic supermarkets nationwide. To facilitate this swift growth, the company required new distribution centers capable of handling substantial orders of fresh and frozen foods, with one site located in Maryland.

Plans were designed to transform an empty facility into an integrated refrigerated distribution center, yet much remained to be accomplished.

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Indoor Refrigeration Facility

The Solution:

Collaborating seamlessly, the CoolSys engineering, mechanical equipment sourcing, project management, and equipment installation teams joined forces to procure, deliver, install, and calibrate all refrigeration and EMS control systems.



The Impact:

The client expressed high satisfaction with CoolSys' expert teams, so much so that the success of this project pioneered the advancement of CO2 into their design and future portfolio. In addition, it resulted in CoolSys being chosen to undertake several multi-million-dollar CO2 projects.



Co2 System



Co2 System

CoolSys has now been recognized as a key partner for the client's innovative cold storage initiatives.

Project Highlights:



1,320 TONS
CAPACITY



2,350 HP
CO2 SYSTEM



2
SPLIT TEMP
COMPRESSORS



5
ADIABATIC
GAS COOLERS



5 OUTDOOR
MACHINE HOUSES



64
EVAPORATORS



57
COMPRESSORS

ENERGY SAVING COMPONENTS



EC Evaporator Fan



Gas Cooler Motors

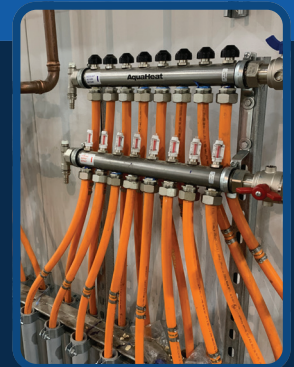
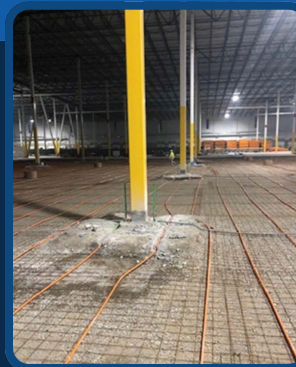


PARALLEL COMPRESSION FOR HIGH AMBIENT PEAKING



UNDERFLOOR UPGRADES

- Underfloor heating system with reclaimed heat from one rack, encompassing freezer and meat cooler spaces.
- Underfloor PEX system with multiple manifolds, main rooftop heated fluid distribution.



Approximately 108,000 SF of under slab heated area or freezer and meat cooler.