



**CONESTOGA
COLD STORAGE**



Conestoga Selects Custom Industrial CO2 System for High-Rise Freezer Installation

Project Size: 140ft tall high rise with 64 million cubic feet storage volume.

Refrigeration System: Indoor transcritical CO2 package, complete with six low-temperature compressors and eight high-temperature compressors

Refrigeration Capacity: 45 TR (158 kW) on high-temp and 250 TR (879 kW) on low-temp.

Overview

To expand its business in this region, Conestoga recently increased its freezer storage capacity and handling capabilities at this facility. A 140 ft (42.6m) tall high-rise freezer with a fully automated robotic picking system, refrigerated dock, and blast freezing capabilities were added to the existing facility.

The Solution

CIMCO designed and installed one of the first high-rise freezers for a distribution warehouse to use CO2. It serves the 22,930 ft² (2,130 m²) of freezer space as well as the 20,634 ft² (1,917 m²) dock/staging area. The new system was started in March 2022.

CO2's Future in Industrial Applications

Conestoga has plans to expand the existing freezer capacity in the future and has made provisions to accommodate the CO2 equipment. Preliminary steel has been put in place to support another penthouse evaporator as well as piping lines for a second CO2 rack and gas cooler.

"We are happy with our decision to go with a CO2 system at our Calgary facility," said Gavin Sargeant, Executive Vice President of Conestoga. "We are hopeful the projected energy savings will be realized in the long term. System reliability, durability, and safety are key factors in our decision to go with CO2 for the Calgary installation. If the system continues to perform well, we will consider expanding our western regions systems in the future."