



EXPERIENCE: Big Chill 1

Problem: Redesign a large distribution facility to be fully refrigerated and accommodate efficient future expansion.

Solution: During the design phase of the construction, it was necessary to look at the future requirements of the facility. The task was to design an industrial refrigeration system that was not only capable of refrigerating 135,000 sq. ft. of existing facility, but one that would accommodate an additional 35,000 sq. ft. addition on the existing footprint, and then an additional 170,000 sq. ft. back-to-back facility to fill out the building site.

The first phase of the system had the full capacity liquid recirculator and receiver to accommodate the full expansion plans. Three full 335 HP, Frick RWF-134 compressors were installed to take care of the initial 135,000 sq. ft., and contemplated phase two 35,000 sq. ft. addition. The compressors were then matched with two Imeco IDC-960 evaporative condensers, sized for the same duty.

All piping and control valves were mounted on a roof support system, away from the refrigerated space to minimize the potential for leaks into the refrigerated space. The cooler air units were set on rack-supported platforms that had a catwalk around the unit for full accessibility. The dock units were installed in the open area of the dock, accessible from below, and where they would do the best job for cooling and minimizing infiltration into the facility.

The system was started up in early May, ahead of schedule, and the system was put in with no price additions in approximately half the normal time of installation for such a project this size.