

Craft brewer uses quiet refrigeration system for walk-in beer coolers

Application

Refrigeration system for walk-in beer coolers

Customer

Sun King Brewery, a craft brewery located in Indianapolis, Ind.

Challenge

Sun King Brewery, like many other craft brewers, is located in a downtown area. There isn't much space for a condensing unit, and complicating the situation further was the fact that the arrangement of the building didn't allow for the unit to be at the back of the building. It needed to be right in front, next to the walk-in space, and within close proximity of the main parking and front entrance. A discreet solution was critical.

Another important feature for Sun King's refrigeration system was the reliability. Hundreds of barrels of beer are stored in this walk-in cooler. For a small enterprise, protecting that investment is a business critical issue.

Solution

U.S. Cooler, a manufacturer of walk-in coolers and freezers, met with Sun King Brewing about their walk-in cooler needs. Once they understood the demanding requirements of the applications in terms of efficiency, reliability, sound, and discreet look, they immediately recommended the Copeland™ outdoor refrigeration unit, X-Line Series.

Shortly after installation, the refrigeration system was not working. A quick check of the X-Line onboard compressor electronics technology indicated that there were no compressor or unit issues.

The servicing contractor was able to quickly pinpoint the problem at the evaporator and get the system back up and running. Since start-up, the system has been running flawlessly with no interruption to refrigerating the product.

The chart below shows the sound level of the X-Line unit compared to a typical outdoor condensing unit.



“ The X-Line refrigeration units exceeded my expectations. The solution makes sense for small business owners who need peace of mind that their equipment will work. ”



– Omar Robinson
President
Sun Kin Brewing



Results

- Two six-horsepower outdoor refrigeration units (X-Line) were installed 50 feet from the front door by the main parking stalls, a noise and sight-sensitive area.
- Built-in Copeland compressor electronics technology has helped protect the investment since September 2010 with no system downtime.
- Sun King Brewing is planning an expansion requiring more walk-in cooler space. One more X-Line unit has been sped out for the job.

Resources

Learn more about the Copeland outdoor refrigeration unit at: Emerson.com/CopelandOutdoorUnit



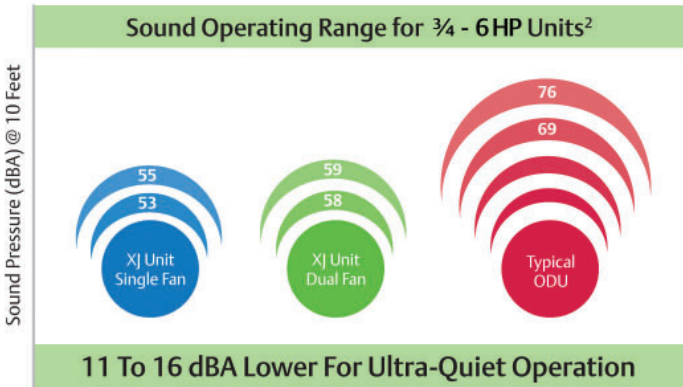
Advanced walk-in refrigeration technology

The Copeland outdoor refrigeration unit, X-Line Series, ranges in size from ¾ - 6 HP, and offers energy savings of up to 40% compared to standard industry condensing units, making it perfectly suited for many walk-in cooler and freezer applications. The X-Line unit incorporates multiple advances in refrigeration as standard features into a single unit solution, including:

- The latest generation Copeland refrigeration compressors which have been optimized for the highest annual energy efficiency
- Ultra-quiet and efficient variable-speed PSC fan motors
- Large condenser coils for more efficient heat transfer
- High efficiency fan blade design
- Proprietary electronic algorithms to optimize energy performance
- Exclusive Enhanced Vapor Injection (EVI) circuit on low temperature units for added capacity and system efficiency
- Exclusive Copeland compressor electronics technology to enable faster, more accurate service, along with compressor protection benefits to lower total lifecycle costs

The X-Line unit's slim profile, light weight, wall mount capability, and sound reduction features may also offer customers added benefits from:

- Crane rental savings
- Flexible location options previously not available
- Ease of installation and service savings
- Compliance with noise ordinances
- A more attractive and quieter atmosphere for neighbors and customers



2 Sound values shown represent the XJ unit's lowest and highest operating dBA measurements, or typical industry outdoor unit published data, for both MT and LT products. Sound pressure values are 10 feet from the unit at 25°F evap for MT and -10°F evap for LT at 90°F ambient. A sound reduction of up to 3 dBA will occur in ambient temperatures below 70°F. This data is typical of "free field" conditions for horizontal air cooled condensing units and may vary depending on the condensing unit installation. There are many factors that affect the sound reading of a condensing unit such as unit mounting, reflecting walls, background noise and operating condition.

“The X-Line unit is perfect for our customers that are looking for a quiet, reliable, energy efficient condensing unit. We have had several customers who have purchased this unit and are very satisfied with the overall performance.”



– Josh Craig
V.P. Operations
U.S. Cooler