

# CANADIAN RINK EMPLOYS 'SMART' PRODUCTS IN LOW-CHARGE SYSTEM

Outdoor ice rink cuts refrigerant charge by more than 90% with system supplied through Smart Rink Connect

— By Charlotte McLaughlin and Michael Garry



"Smart" low-charge ammonia/glycol system at Covent Garden Market Rotary Rink, London, Ontario

The Covent Garden Market Rotary Rink, an outdoor ice rink in London, Ontario, leveraged a website representing a consortium of refrigeration equipment manufacturers in purchasing a low-charge ammonia/glycol system that reduced its refrigerant charge more than 90%.

The website, Smart Rink Connect (<https://www.smartrinkconnect.ca>), features 200 products from CIMCO Refrigeration, Mayekawa, Evapco, Alfa Laval, Rink Seal Pro and Dry Solutions. Most of the products are enhanced by IoT (internet of things) "smart screen" technology that provides technicians with real-time, actionable performance data on components and the overall system. The site stresses "efficiency, reliability and safety."

"We've partnered with Alfa Laval, Mycom [Mayekawa], Evapco, Ring Seal Pro and Dry Solutions, and we've created a suite of products called Smart Rink Connect," said Dave Fauser, director of sales, CIMCO Refrigeration at the IIR Natural Refrigeration Conference & Expo in Phoenix, Ariz., March 4-6. He described the partnership as an "association" of like-minded companies. The site could expand to serve the cold-storage sector, he said.

According to Fauser, the website, launched two years ago, sold 200 units last year and has supplied about 100 ice rinks.

CIMCO's product on the site, "Smart Hub," is a controller for the entire refrigeration system that analyzes data to "keep the plant at maximum efficiency and reliability," said Fauser.

The website allows end users to retrofit systems piecemeal with the technology on the site, noted Benoit Rodier, director of business development, CIMCO, at the IIR conference.

## REPLACING R22

Covent Garden's low-charge (65-lb) ammonia/glycol system, which is owned and managed by the City of London, Ontario, was installed in November 2017, as a replacement for an 18-year-old system with 700 lbs of R22 refrigerant.

The system includes four "smart" products from the website: two Mycom 50-HP compressors, one Alfa Laval chiller and one Alfa Laval plate-and-frame condenser. According to the *London Free Press*, the system cost \$450,000.

By providing technicians with performance data on screens, the system is designed to help "employees who are not as confident with refrigeration systems," said Brad Wilkins, CIMCO's team lead for Ontario recreation.

Mike Knowler, technologist for the City of London (Ontario) facilities design and construction group, said in a YouTube video about the Mycom compressors that the smart technology enables his staff to "see problems and anticipate problems coming." He said he has realized simplicity of operation and operational savings including "energy savings we started seeing from day one."

The system will allow the City of London longer intervals between maintenance events, said Wilkins.

Wilkins observed that, after not advancing during his first decade in the business, he "can't believe how much the industry has been evolving over the past two or three years with smart components connecting people with equipment at different levels than before."

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