

CIMCO Supports Leading Pharmaceutical Manufacturer in "Going Green"



Hoffmann-La Roche is a worldwide leader in providing pharmaceutical and diagnostic solutions that make a profound difference in people's lives. The company has been in business in Canada for more than 75 years, employing over 500 people across the country. Roche Canada operations are centered in Mississauga, Ontario (pharmaceuticals) and Laval, Quebec (diagnostics).

As a company that operates in 150 countries, Roche understands the impact that they have around the world, and so has committed to a policy of strong environmental responsibility. They recognize that only environmentally responsible companies can achieve sustainable financial success. For Roche, environmental improvement and sustainable development represents a long-term commitment to the needs of current and future generations.

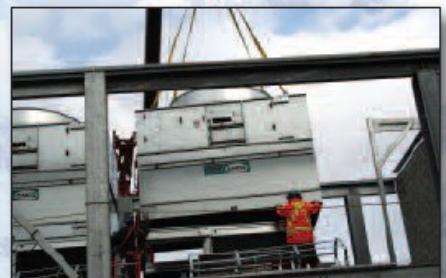
The Roche facility in Mississauga has 42 air conditioning units and 5 cooler units that use either HCFC refrigerants or HFC refrigerants. Their combined cooling load is over 450 tons. So as part of their commitment to reduce greenhouse gas emissions, the company approached CIMCO for solutions regarding the phase-out of HCFC/HFC air conditioning systems. CIMCO's Hal Cooper and Dave Malinauskas undertook an initial study and report that outlined the benefits of converting from "Freon" to "Ammonia" air conditioning systems. The Ammonia-Glycol air

conditioning system has an Ozone Depleting Potential (ODP) of 0 and a Global Warming Potential (GWP) of 0. The system is environmentally-friendly and is comprised of Industrial Refrigeration components that have proven to be very safe and very reliable.

Though the project did not proceed immediately, Phase 1 finally began in the fall of 2009 after the system design and engineering was

completed by CIMCO Central engineers, headed by Camille Zabbal. Bresser Construction and CIMCO have joined forces to complete this large project by late next spring.

The system consists of a central ammonia refrigeration plant that produces cold non-toxic propylene glycol that is pumped to cooling coils in the 47 air handlers and cooling units.



The equipment in the design includes:

- 406 TR (550 hp) Cimco ammonia compressor skid with (3) Frick screw compressors for the air conditioning system
- 34 TR (80 hp) Cimco ammonia compressor skid with dual 17 TR systems for complete back-up of critical storage areas
- Liquid Cooled Vyper VFD drives on all compressors
- 2 Glycol stratification tanks
- 2-cell Cooling Tower with fan motor VFD's
- Cimco Cooling Tower pump skid with Stainless Steel Tank and 7 pumps
- Cimco Stratification Tank skid with 72" x 14 ft tank and 4 pumps
- Cimco pump skids with 7 pumps to circulate glycol / water including 8 VFD's
- 42 Heat/Cool Outdoor air handlers to replace all existing Rooftop units
- 4 cleanable stainless steel industrial air units for the Cold Room
- 1 Liebert critical process Data Room cooling unit with glycol coils
- Cimco 500 amp Motor Control Centre

Congratulations to Roche Canada for their ongoing commitment to environmental sustainability, and to the CIMCO Central team for helping them to achieve their "Going Green" objectives.