CASE STUDY

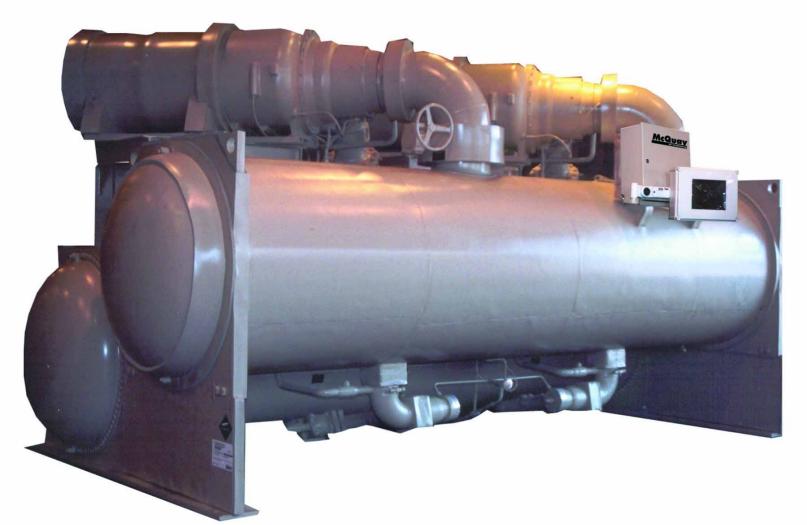
IBM Canada Saves Energy and The Ozone Layer With McQuay Chillers

Getting rid of CFCs paid off in a big way for IBM Canada. As a concerned corporate citizen, IBM Canada was one of the first to respond to the Montreal Protocol's request to reduce CFC usage. To that end, they began to replace the old chillers in their semiconductor packaging plant in Bromont, Quebec, with more environmentally friendly chillers.

The Bromont plant is a high technology facility specializing in electronic component assembly and functional testing. It provides the top quality microchips and other components used in most IBM products and many OEM customer products. One of the busiest facilities in the IBM family, the factory provides a controlled environment—with precise air temperature and humidity control—to protect the integrity of their products.

In keeping with their corporate pledge to reduce and eventually eliminate all ozone depleting chemicals in their plants, the IBM Bromont facility began working with representatives from McQuay to develop a strategy and identify options for replacing their existing equipment with more environmentally friendly equipment from McQuay.

The IBM plant had seven 1000-ton chillers and a 350-ton chiller. All



these chillers operated using either R-12 or R-11 refrigerants.

One by one, IBM began replacing the chillers with McQuay centrifugal chillers. Soon after the first McQuay chillers began operating, the IBM plant noticed they weren't using as much energy as they usually did. In fact, the activity inside the plant had increased, but the temperature--which is precisely set to provide the optimum manufacturing environment--had not.

As more McQuay equipment was added to the facility, the energy costs continued to decrease. Replacing their old chillers with McQuay ozone-friendly chillers was really paying off for IBM. Next, McQuay representatives proposed replacing two of the existing 1,000-ton chillers with one McQuay dual compressor centrifugal chiller. The McQuay dual machine would provide enough cooling capacity at a lower first cost and lower operating cost than the two existing chillers.

When they added the McQuay dual centrifugal chiller, the lower kW/per ton became a major factor in helping the plant meet its goals for reducing energy consumption. So far, IBM has purchased three 1000-ton McQuay single compressor centrifugal chillers and one 2500-ton dual centrifugal chiller. All McQuay centrifugal chillers use ozone safe HFC-134a refrigerant, and IBM has been extremely pleased with how the equipment has been working.

For more information,contact your local McQuay Representative or call (800)432-1342.
Visit our website at www.mcquay.com.