

Hôpital Louis-H-LaFontaine

Effectiveness and Flexibility

Situation

Hôpital Louis-H. Lafontaine, located in Montreal, did not have an existing cooling system in the building. The hospital was involved in the first phase of reorganizing and renovating existing space in order to convert it into office space. During the first phase of the project, only 20% of the total available space (four out of eighteen blocks) was being renovated, which amounted to approximately 18,000 square feet of office space. The current cooling load is 30 tons. As the project progressed into additional phases, more office space would become available, and a greater cooling load would be required.

The mechanical consultant initially specified a new 170 ton water-cooled screw York chiller as a solution for the hospital's cooling requirements. Direct Energy's sales representatives met with the hospital's Technical Management team to discuss the benefits of installing a Smardt chiller.

Solution

Upon evaluation of the information and technical data, the hospital's Technical Management team requested the installation of a 170 ton Smardt chiller, which included two 85 ton compressors. This solution ensured that there would be sufficient capacity for future needs. It also takes full advantage of energy savings, as the Smardt chiller is more energy efficient than other types of chillers. Additional benefits include lower maintenance costs, ability to operate at low load, low noise levels, and oil-free operation.

Since installation and start-up in July 2007, the hospital's Technical Management team and staff have been extremely satisfied with the performance of the Smardt chiller. The primary benefit at this stage has been the chiller's ability to operate at a very low load (20% of its capacity, or 17 tons). Since the project is partially completed, the chiller has been operating at temporary low load, and has even had multiple starts and stops without issue. This has made it possible to operate the chiller effectively throughout the summer.

The customer is pleased with their choice of the Smardt chiller. They are also very satisfied with the effort put in by Direct Energy to ensure that the equipment and service met all of their expectations.

