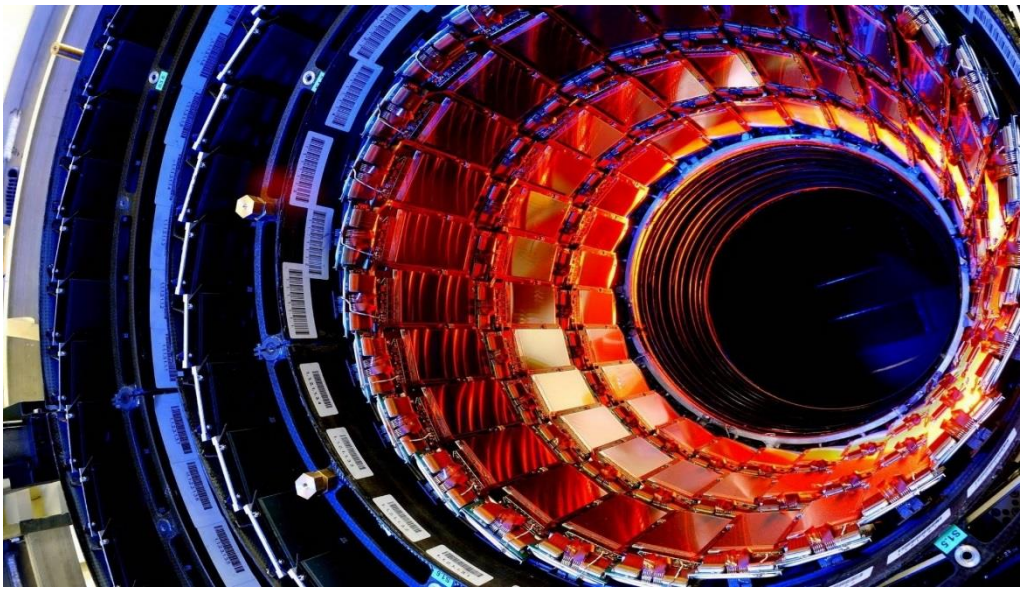
CASE STUDY I MARCH 2017



CERN HQ, SWITZERLAND

Daikin chiller technology works with world's largest lab to unlock the mysteries of the universe

Daikin is celebrating the renewal of its contract for the supply, commissioning and maintenance of chiller units to CERN, The European Organization for Nuclear Research. The largest physics laboratory in the world, CERN is recognized amongst other groundbreaking scientific research, as the birthplace of the World Wide Web and home of the Large Hadron Collider (LHC). To date Daikin has been the supplier of choice for 25 chiller units amounting to a total installed capacity exceeding 20,000 kW.

Founded in 1954, the CERN laboratory sits across the Franco-Swiss border near Geneva. CERN hosts nearly 13,000 visiting scientists and engineers representing 399 universities and research facilities per year, across 22 member states, and provides a hub for nearly 3,000 members

of the personnel. Together, scientists, engineers and technicians build and run accelerators, detectors and computing infrastructure, to probe the fundamental structure of the universe.

CERN is home to the Large Hadron Collider (LHC), the most powerful particle accelerator ever built. The accelerator sits in a tunnel 100 meters underground at CERN, the European Organization for Nuclear Research, on the Franco-Swiss border near Geneva, Switzerland. The 27 km long accelerator is used to boost beams of particles to high energies before they are made to collide with each other. The process gives the physicists clues about how the particles interact, and provides insights into the fundamental laws of nature.

The sheer size of the facility and its function requires cooling on an unusually high scale, plus absolute precision in terms of temperature control.

The Daikin chiller range has been the preferred chiller supplier choice by CERN, thanks to its wide range of application solutions : From small capacity scroll compressor units, low noise emission units to high efficiency inverter driven products.

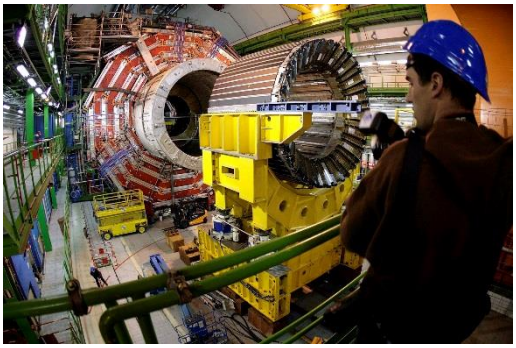
Daikin chillers provide cooling for various experiments currently being conducted at CERN laboratories.

As an example, six Daikin water cooled centrifugal chillers provide chilled water for the air conditioning system of the underground tunnel where the Large Hadron Collider (LHC) is installed.

"*Working with Daikin over the last five years has been a constructive experience for CERN. The Daikin chillers have proved to be reliable machines, satisfying the particular needs of CERN applications*." Says Mr. Anders Andersen from CERN's Cooling and Ventilation Group.

Daikin water cooled chillers such as the DWSC provide infinitely variable capacity control between 10-100%, using a single stage centrifugal compressor, to provide high efficiency performance.

Daikin has been the partner of choice for the CERN lab since 2012 for the supply, commissioning and maintenance of water chiller units. With the renewal of the contract for 2017, new installations are expected in the coming months.



No room for mistakes - Daikin chillers have proved to be reliable machines in a highly sensitive industrial setting.