



Deutsches Zentrum
für Luft- und Raumfahrt
German Aerospace Center

CONTEXT

Customer : DLR (Galileo)

Sector of activity :
Space research

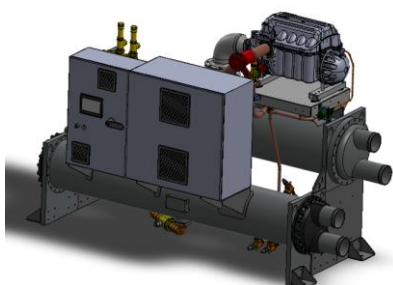
Location : Germany
Year : 2023

Equipment installed :
4x ZEUS R1234ze 310KW

Description of the equipment :

- *Water-to-water chiller
- *Centrifugal compressors with magnetic bearings
- *Spray evaporator.

Total capacity :
1,5MW



THE CUSTOMER

The DLR (Deutsches Zentrum für Luft- und Raumfahrt), Germany's national center for aeronautics, space, energy, and transport research, plays a key role in managing and monitoring the European Galileo satellite system from its facilities in Munich (Oberpfaffenhofen).

As part of this strategic mission, CTA was selected to provide the cooling solution for the buildings housing the Galileo satellite control system. Given that service continuity and thermal stability are vital for these infrastructures, the solution had to combine reliability, energy efficiency, and compliance with environmental standards.

CTA supplied four chillers, each rated at 310 kW, operating with R1234ze refrigerant, a very low GWP fluid. Each unit is equipped with a magnetic bearing Turbocor compressor, ensuring high energy efficiency, reduced maintenance, and stable operation even under partial load, thanks to oil-free design and magnetic technology.

Through this supply, CTA directly contributes to the safety and reliability of Galileo operations, providing continuous and sustainable cooling for the DLR's critical infrastructure.

