

Renewal Cooling Plants UZA II

Client:

Universität Wien

Country:

Austria

Duration:

From June 2019 to June 2021

Services:

Project management, site supervision for the trades building services, electrical engineering and structural engineering

Project objectives

The realization concept favored by the University of Vienna provides for a comprehensive renovation and renewal of the existing cooling system in order to ensure a long-term and energy-efficient cooling supply for the building in the future.

Project description

The University Center Althanstraße (UZA) is a building complex built between 1978 and 1995 in the 9th district of Vienna and mainly constructed as a covering for the Franz-Josefs-Bahn (or freight station) north of the Franz-Josefs-Bahn station. The UZA II houses numerous departments and institutes of various faculties of the University of Vienna, primarily Pharmacy & Nutritional Sciences and Earth Sciences & Meteorology.

Project data

Five highly efficient chillers with a total cooling capacity of approx. 3.2 MW with hybrid coolers on the roof will be installed, reserves for future expansion will be additionally created. As this is a very sensitive laboratory and research site, special attention was paid to a very high functional and failure safety during the implementation of the concept. Therefore, an interconnection line between the refrigeration plants will be built to ensure a corresponding redundancy.

Project specifics

Due to the complexity of the reconstruction, the trades building services, structural engineering, electrical engineering and measurement and control technology are affected. In addition, due to the continuous minimum cooling load of the building (laboratory and research areas), a continuous cooling operation must be maintained during the entire reconstruction measures.

Services

Provisional solution: Construction of a provisional solution to cover the requirements in the meantime (partial maintenance of operation during renewal) Plant construction / refrigeration technology: Renewal of the chillers and hybrid coolers as well as associated installations in the refrigeration plants, installation of a interconnecting line between the plants as an increased failure reserve MSR: Renewal of the associated MSR and integration into the building control system Electrical engineering: Related electrical engineering services (supply of the new aggregates). Structural engineering: Required structural services (breakthroughs, substructures, etc.) and fire protection



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