Introducing Infrastructure
Zurich Airport is Switzerland’s gateway to the world, as well as a high-quality airport in the heart of Europe. To fulfill this promise, we always strive for a professional infrastructure, which enables the airport to operate at the highest standards while having a professionally structured organisation. As the operator of Zurich Airport, Flughafen Zürich AG has fulfilled this role. The Infrastructure department is responsible for energy supply, operation and maintenance of all buildings along with their building services and airport-specific facilities.
TECHNICAL FACILITY MANAGEMENT

Technical installations are commonly the basis of a well-functioning building – our job is to make sure they are maintained and optimized. Particularly for strategic airport facilities such as power supply, the building management system or the baggage sorting equipment and outages can have devastating consequences. Qualified specialists, engineers and technicians from all areas work on a daily basis to ensure the highest of standards.

One department – many facets
Facility management encompasses a diverse range of tasks, ranging maintaining the existing fabric of a buildings, (by way of ensuring maximum availability of all systems), to services such as engineering, maintenance, renovations and cleaning. Further tasks include the production of electricity, district heating and cooling.

Long-term results
The various specialist services also work daily to preserve the value of the 75 or so buildings and their numerous facilities. The proactive maintenance measures taken by Flughafen Zürich AG cover all services necessary to ensure the long-term functional and operational safety of the building services. Quality, efficiency, occupational safety and the environment are key and essential factors.
**INFRASTRUCTURE TECHNICAL FACILITY MANAGEMENT**

**Extensive expertise**
Our specialist knowledge enables us to cover all areas of technical facility management, starting with planning extensive projects, right through to operations. Our own workshops, an internal architecture firm and an experienced project management team enable us to efficiently implement newbuilds and conversions as well as refurbishments.

**Round-the-clock monitoring**
Service interruptions cannot be afforded as they can have an impact on flight operations. Permanent monitoring, control and a reliably functioning fault management service with 24-hour stand-by service safeguard operations are required. Our Service24 building services management centre handles this responsibility. It is the reporting office for all internal and external matters. In emergencies, employees take initial action before involving the appropriate stand-by service.

**Underground connections**
The entire airport site is connected by kilometres of underground utility ducts. This efficient system enables power, heat, cooling, telephone and electrical connections to be easily added to new buildings and renovations.

**HVACS**
Our expertise in building services ranges from planning through operating and maintaining to optimising and renovating heating, ventilation, air conditioning, refrigeration and plumbing systems and fire protection equipment.

**LOCKING TECHNOLOGY**
Locking Technology is responsible for issuing all keys at Zurich Airport. It also plans and manages all locking systems for tenants and partners, from conventional to state-of-the-art locking systems.

**LOGISTICS SYSTEMS**
In addition to the building services systems, we also use our extensive expertise to operate the baggage handling system (BHS), all security screening and X-ray equipment.

**MAINTENANCE & INSPECTION**
We ensure that everything is brought smoothly into operation and assume responsibility for maintaining and inspecting all building services systems at Zurich Airport in accordance with statutory requirements and standards.

**SERVICE24**
The building services management centre Service24 monitors and controls the technical installations around the clock and receives reports of faults and damage. When an incident occurs, Service24 coordinates the necessary measures.
INFRASTRUCTURAL FACILITY MANAGEMENT

In and around the building, there is a lot happening that goes almost unnoticed. From the clean restrooms and the fully-stocked brochure racks to the signage and functioning parking ticket machines: “The right expert in the right place at the right time” is our motto. Day in, day out, we work behind the scenes, ensuring that services are provided to a high standard of quality throughout the airport grounds.

Services from A to Z
First impressions are crucial. A well-kept appearance makes real estate attractive to tenants, customers and visitors alike and serves as an advertisement. The Infrastructure department is more diverse than virtually any other, and yet so inconspicuous. We make sure that the overall impression, from the time of arrival to leaving the building, is the right one.

Cleanliness – our hallmark
Flughafen Zürich AG has its own cleaning team. Over 340 employees ensure the cleanliness of Zurich Airport on a daily basis. Their friendliness and professionalism contribute to the airport’s positive image.

CONTRACT MANAGEMENT
As a contractor and working closely with our specialist services, we offer tailored end-to-end solutions for customers, under facilities, maintenance or energy supply contracts. We are keen to share our specialist knowledge and many years of experience.

BUILDING CLEANING
Zurich Airport is considered to be one of the cleanest airports in Europe. This is the result of consistent cleaning maintenance, periodic cleaning duties which are professionally carried out in accordance with need.

FIRE PROTECTION EQUIPMENT
We carry out regular inspections and expert maintenance to ensure that the fire protection equipment at Zurich Airport is always in good working order. Our specialists have a wealth of experience and specialist knowledge.
Safety is paramount
The real estate belonging to Flughafen Zürich AG is under round-the-clock surveillance. Control of the main service doors for access to the non-public area and the entire car park is ensured 24 hours a day.

External surveillance companies also carry out night surveillance on our behalf in and around the buildings. The main purpose of these tours is to inspect and report open doors, faulty installations and fire fighting and fire protection equipment.

Personal and always near at hand
We also provide all our technical and infrastructural building management services to third parties. We are on site and have extensive knowledge of the airport.

Various service offices are available at the airport to personally provide information for employees and customers with concerns. Damage reports (including cleaning) can be made to our Service24 building services management centre daily around the clock. The appropriate measures are taken in direct discussion with the customers.

TRANSPORT AND RELOCATIONS
Relocations can become a real nuisance, often swallowing up a great deal of time. Why not entrust them to trained specialists? We can prepare, coordinate and undertake your relocation.

POSTAL SERVICES
Our postal services are very diverse. Letters or parcels (A/B post, Registered, Express) can be handed over at the staffed counter. Our pricing is always in line with current market prices.

SMALL TASKS
We undertake periodic inspections and maintenance of portable fire extinguishers, defibrillators, fire extinguisher points and emergency and safety lighting. We offer a service of the highest quality and first-level support.
ENERGY SUPPLY

Zurich Airport is an international and regional transport hub, an industrial site and the workplace of some 20,000 people, making it a large consumer of energy. Each year, Flughafen Zürich AG buys around 115 gigawatt hours of electricity and 140 gigawatt hours of fuel. This equates to primary energy use of around 460 gigawatt hours. As a progressive and responsible company entrusted with a mandate, Flughafen Zürich AG makes a clear pledge in its Energy Strategy 2030 to use primary energy economically and ensure a high level of security of supply.

Our own heating plant with district heating network
We realised early on at Zurich Airport that it is wasteful to burn valuable fuel with the potential to generate 2000 degrees purely to generate a room temperature of 22 degrees. Since the first steam turbine was put into operation in 1969, Zurich Airport has been considered a pioneer in combined heat and power generation (CHP) and regularly generates electricity during the winter months. Today, as well as four steam boilers with a total output of 120 megawatts, there are also two steam turbines and a gas turbine with a total electrical output of ten megawatts. With overall efficiency of around 90%, this exemplifies the concept of combined heat and power generation.

The power produced is channelled entirely to our own site network and covers around 20% of our requirements. The heat is distributed to consumers via our own district heating network. It is used for heating purposes, to produce process hot water and as process heat.

The fuels used are natural gas (CH4, 90%) and environmentally friendly heating oil (10%). This dual fuel concept has a positive impact on fuel costs and security of supply.
INFRASTRUCTURE  ENERGY SUPPLY

**ELECTRICITY**

Electricity is the most vital energy source for the running of Zurich Airport. Without electricity, the entire technical infrastructure would instantly grind to a halt. A secure supply at competitive market costs is the overriding priority. Zurich Airport’s electricity requirements are constantly rising, albeit a gradual upward trend.

**DISTRIBUTION HEATING**

Central heat generation enables optimum use of fossil fuels while also ensuring that we are always using the latest environmentally-friendly technologies. It guarantees a high level of security of supply and comfort for the building users and operators. Thanks to modern building envelopes and building services systems, consumption is dropping steadily.

**COOLING**

As well as providing comfort on hot days, cooling is essential to the operation of technical systems. It is generated from electricity, using cooling machines. Modern concepts optimise the potential for high performance figures, with the aid of modern machines, free cooling and the use of waste heat. Demand is rising.

**ELECTRICITY**

Photovoltaic energy
The roof space at Zurich Airport is the ideal location for photovoltaic arrays. We currently generate around 1000 megawatt hours of solar power per year, which equates to roughly 0.8% of our requirements. More arrays are either under construction or at the planning stage.

Continuous optimisation of energy and operations
Zurich Airport has been firmly committed to energy optimisation since the 1970s. Although the infrastructure at Zurich Airport has grown by 50% in the last twenty years and traffic flow by 60%, energy requirements have stabilised at the 1994 level.

New building envelopes, heat recovery systems and state-of-the-art generating plants have significantly reduced primary energy requirements for heating purposes. The only fly in the ointment is the slight but steady growth in electricity requirements.

An in-house operations optimisation team checks energy consumption systematically. It adjusts the running times of air-conditioning and ventilation systems or optimises the operating times and temperatures of heating and cooling systems, depending on current requirements. When investments are made in replacements, older controls, pumps and lighting are replaced with new, energy-saving products.

**AIRCRAFT POWER SUPPLY**

We provide aircraft on the ground with electrical power and cooled or heated air, via stationary ground power (400 Hz) and air-conditioning units. In this way, the aircraft saves on fuel, which in turn benefits the environment.
OUR STRENGTH

QUALITY
Our top priority is to ensure your satisfaction, and that means our work must be of the highest possible standard. We demonstrate daily that quality is paramount for us, as proven by the numerous awards we garner each year as well as the positive feedback from our customers. Starting with clean terminals and toilet facilities, right through to the installation of complex systems, we attach great importance to constant quality improvements and customer satisfaction. Should a problem nonetheless arise, the services of Service24 are available around the clock, 365 days a year to rectify all faults affecting building services and structures (including cleaning).

EFFICIENCY
Our energy efficiency is continually enhanced through monthly reports and analyses, enabling us to counteract increased consumption. The operating hours of the systems are also regularly reviewed and adapted to user requirements, enhancing the comfort of our users and reducing energy consumption. Buildings and systems undergo energy inspections to implement energy optimisation potential in restructuring and renovation projects and help fulfil Flughafen Zürich AG's Energy Strategy 2030. Our principle is to derive maximum use from the available resources.

OCCUPATIONAL SAFETY
Flughafen Zürich AG accords high priority to occupational safety and has set itself the objective of reducing absences due to accidents and illness. It operates an occupational health and safety concept which is continuously implemented in the Infrastructure department. Employees are informed about risks and safety measures at the workplace. We believe it is particularly important to offer training and further education to improve occupational safety and create an environment conducive to an evolving and positive safety culture.

ENVIRONMENT
We preserve drinking water resources by using rainwater and groundwater for our WC flushing and for the water treatment systems for technical facilities. In accordance with the legal standards, wherever possible only natural refrigerants are used for cooling and air-conditioning systems. For the benefit of users and the environment, we undertake regular hygiene inspections and water sampling and draw on our in-depth knowledge of the systems to identify potential for further optimisation.
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