PSIcontrol

Optimal management of energy networks for secure airport operations

PSI 🌰

The optimal software solution

For secure airport operations

Secure and reliable airport operations begin on the ground. The processes of modern airports pose logistical and energy-technical challenges which remain hidden to most passengers. For these processes, airport operators and airlines can rely on the PSI products.

Large airports are also energy network operators. The addition of renewable energy generation such as photovoltaic systems on rooftops and open areas as well as the ongoing electrification of the airport vehicle fleets are only two of the many changes which demand action from the operators.

PSIcontrol supports airport operators' management of their energy networks

The network control system PSIcontrol supports airport operators' management of their energy networks on all electrical voltage levels as well as the management of pipe networks for heating, cooling, process energy, gas, and water.
The combination with PSIcommand further increases the airport's reliability by integrating intelligent repair and maintenance strategies.

In addition, PSIcontrol supports all fault clearance processes in order to enable fast and correct responses in error situations.
Using machine learning, a high degree of automation, and seamless processes from the control center all the way to tablets are only some of the many benefits of the software PSIcontrol and PSIcommand which are optimal for airports.

Combining the benefits of the various components results in a powerful solution adapted to your individual processes and systems.

Transparency across sectors and stable energy supply for the airport:

+ Network transparency and stability on all voltage levels of the electrical network
+ Integration of energy generation such as generators, cogeneration, and photovoltaic systems
+ Integration of all pipe systems (gas, water, heating, cooling, process energy)
+ Integration of building automation including fire protection systems
+ Integration of airport lighting system

Comprehensive services:

+ Update & upgrade service
+ Concept, realization, installation, training, commissioning, maintenance, and 24/7 service

Intelligent charging management for:

+ The increasingly electrified service vehicle fleet of the airport
+ The parking area on the airport grounds

Support for decarbonization:

+ Integration of renewable energy source such as rooftop photovoltaic systems
+ Minimization of energy consumption and costs
+ Energy management

Anomaly detection:

+ Comprehensive system hardening, redundancy concept, and penetration testing
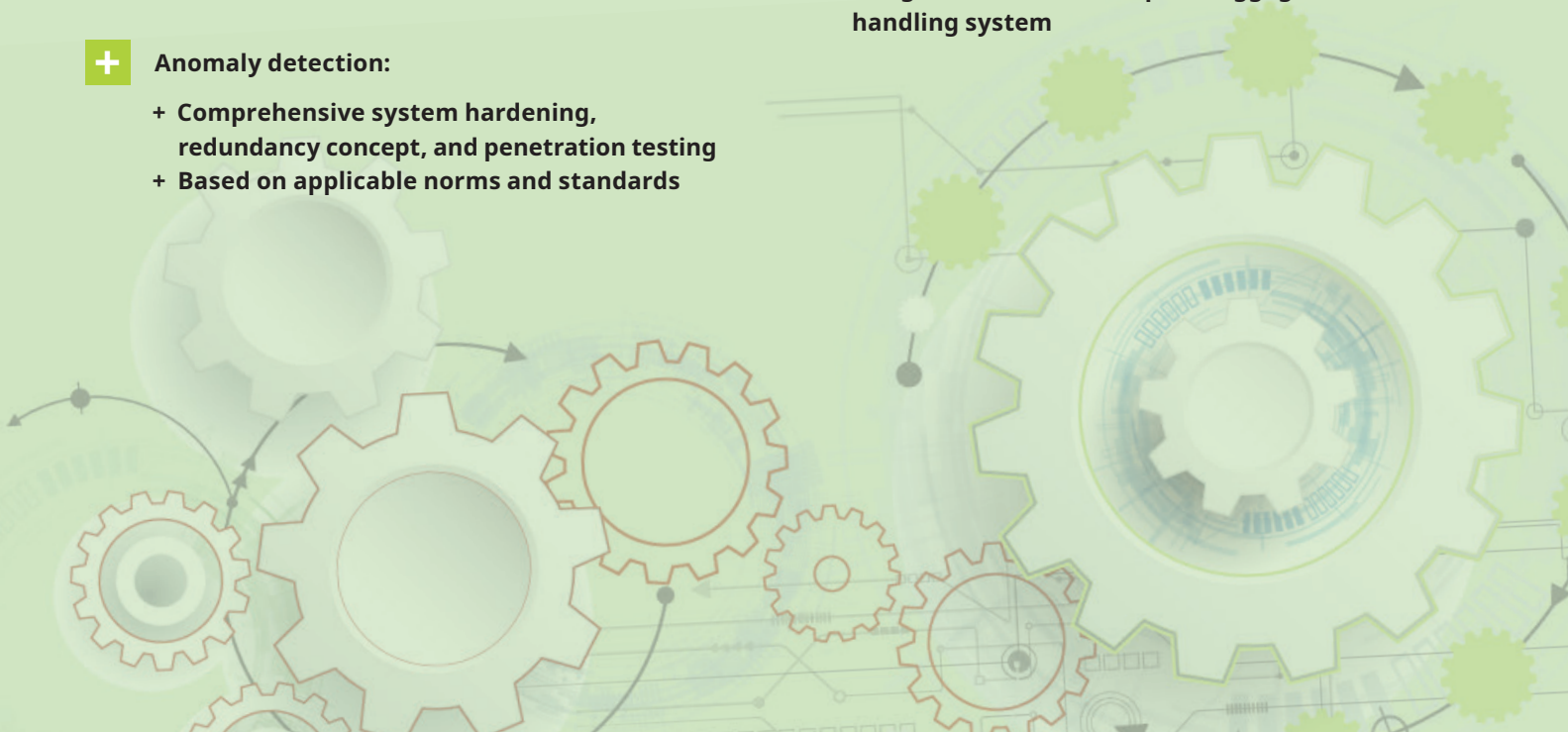+ Based on applicable norms and standards

Maintenance and fault management:

+ Reducing faults by proactive maintenance strategies
+ Identification, resolution, and documentation of faults
+ Multi-criteria optimization (for example using outage time or costs) by artificial intelligence
+ Emergency and crisis management
+ Switching management
+ Support for smart phones and tablets for mobile service staff

Automated and reliable management of your networks:

+ Management of all currents of the network and emergency power infeeds as well as busbar sections
+ Automated switching operations in fault situations
+ Alarm generation and manual remote control for all networks
+ Logging of all operations in manual and automatic mode
+ Integration of redispatch measures
+ Visualization of all operating and switching states

Logistics processes:

+ Baggage handling management by integration of the PSIairport baggage handling system

PSI Software AG

Boschweg 6
63741 Aschaffenburg
Germany

Phone: +49 6021 366-0
energie-ee@psi.de
www.psi.de | www.psienergy.de

PSI