AGL & AIRSIDE ELECTRICAL SERVICES

TODAY’S REQUIREMENTS TOWARDS AIRPORT SAFETY AND RELIABILITY ARE FOREVER IMPROVING AND REQUIRE WELL PLANNED AND RELIABLE AERODROME GROUND LIGHTING SYSTEMS (AGL) SUPPORTED BY A RESILIENT POWER SUPPLY AND ELECTRICAL INFRASTRUCTURE - ALL DESIGNED TO MEET FUTURE REQUIREMENTS.

Rambolls department of Airports, Electricity Supply & Security offers key competencies within all aspects of airport installations. We effectively cover all consulting services from planning, feasibility studies, conceptual design to detailed design and supervision of all AGL systems and airside electrical installations.

Our Experience
Extensive project experience and airport expertise makes us your most professional and reliable partner for your airport projects.

Our Services
Ramboll offers competent expert consulting within the broad spectrum of all AGL and airside installations summarized into five major areas:

- AGL. Aerodrome Ground Lighting Systems and Guidance Signs.
- CONTROL. Advanced Surface Movement Guidance and Control Systems and NAVAIDS.
- STANDS. Advanced Aircraft Stand & Docking Systems and intelligent Floodlighting Systems.
- POWER. Electricity Supply, secondary back-up systems and electrical installations.
- IT/COMS & SECURITY. Communication networks and security CCTV systems.
Training and Education
Continual professional development combined with ongoing design and field experience of our project employees ensures an up-to-date approach in how to meet today’s standards.

AGL
Aerodrome Ground Lighting offers crucial visual guidance for the pilot both on and off the ground and is a key element in every airport no matter the size.

A good AGL design improves safety and decreases risks while aircraft are maneuvering under low visibility conditions. AGL design demands thought through solutions and implements many internal and external factors which require a high level technical knowledge and experience of the designers.

Our services comprise all relevant lighting and guidance systems in use in a modern airport ranging from Approach and Runway Lighting to Guidance Signs and Obstacle Lighting.

We ensure that our designs meet the requirements of our clients and are in accordance with the relevant aviation standards.

Safety, Efficiency and Environment
New technologies and clever designs offer not only improved airport safety and optimized operational efficiency. The growing use of LED lights and advanced lighting control and monitoring systems presents new and exciting possibilities while greatly reducing airfield material and power consumption.

Control
We provide expert consulting in sophisticated navigational aid systems such as Advanced Surface Movement Guidance and Control Systems (A-SMGCS/ALCMS) and NAVAIDS systems. Our experience and continual professional development ensures consulting in the most optimal and up-to-date systems to optimize your airport efficiency and security.
The optimization of aircraft stands plays an important role in aircraft turn over times and air pollution from exhaust fumes. A good aircraft stand design will increase aircraft stand flexibility to different aircraft types while optimizing turn over times and minimizing air pollution. Our extensive aircraft stand expertise embraces the best and most efficient stand and floodlighting systems, including:

- Intelligent LED Floodlighting systems
- Ground Support Equipment and charging stations
- 400Hz/28V DC Aircraft power supply systems
- Aircraft ventilation and airconditioning systems (PCA)
- Docking Guidance Systems (DGS)
- Passenger Boarding Bridges (PBB)

As with fixed wing airfield installations, safety and control is also top priority in heliports design. In addition to our experience with airfield installations our services also include planning and design of AGL power infrastructure of Heliports.

Power
All airports must be supplied with a dependable primary power supply and backed-up with a reliable secondary supply system in case of emergency. We provide highly skilled consulting in power and electrical infrastructure systems:

- AGL Substation Power and Control Systems
- Generator and UPS Systems
- Medium and Low Voltage Distribution Systems
- Switchboard and Control Gear Installations
- Lightning Protection and Earthing Systems
- Charging Stations and Power Outlets

IT/Coms & Security
Reliable IT and communication systems are the backbone of a well-functioning airport. Our services include specialist consulting within all networking- and IT infrastructure systems and our certified security experts ensures the most optimal security, surveillance and access control systems to date.

Stands
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- Passenger Boarding Bridges (PBB)
Other Electrical Services
With over 200 highly skilled electrical engineers we are a strong partner and provide services within all types of electrical installations required in modern day airport terminals and facilities.

From high voltage power stations to award winning lighting design, intelligent Building Management Systems (BMS), access control systems and Automatic Fire Detection & Alarm Systems - our extensive skills portfolio and over 80 years in the field makes us the best choice for your airport.

Project References
Ramboll has significant experience from numerous airport projects internationally. Some of these include:
- Sydney Airport, Australia
- Dhaka Airport, Bangladesh
- Copenhagen Airport, Denmark
- Vagar Airport, Faroe Islands
- Greenlandic Airports, Greenland
- Vatnsmyri Airport, Iceland
- Dublin Airport, Ireland
- Mozambique Airports, Mozambique
- Bergen Airport, Norway
- Pulkovo Airport, Russia
- Suvarnabhumi Airport, Thailand
- Fujairah Airport, Emirate of Fujairah
- Abu Dhabi Airport, Emirate of Abu Dhabi
- Heathrow Airport, United Kingdom
- Gatwick Airport, United Kingdom
- Gibraltar Airport, Gibraltar
- RAF Akrotiri Military Airport, Cyprus
- Kabaale Cargo and Civil Airport, Uganda
- Brunei Airport, Brunei and many more ...
The ever progressing technology and product lines within AGL allows for new opportunities to improve your airport operations and cost savings. We would like to welcome you as our client and help you optimize your airport efficiency, reliability and safety.

For further information, please contact:

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