

Airbus Hawarden Airport Case Study

Company name - Dewhurst Airfield Services Ltd

Client - Airbus Hawarden Airport

Project value - £1.8 million

Duration - 6 months

Project Overview

Dewhurst Airfield Services was appointed to deliver a major upgrade to the Aeronautical Ground Lighting (AGL) infrastructure at Airbus Hawarden Airport, supporting increased operational demand and enhancing runway performance in low-visibility conditions.

The project formed a key part of the airport's readiness for increased Airbus "Beluga" flight movements, requiring a significant upgrade to the existing CAT I lighting system through the installation of LED runway centreline and touchdown zone lighting, alongside the construction of a new AGL substation.

Scope of works

Delivered as a fully integrated design and build solution, the project included:

- Installation of LED runway centreline and abbreviated touchdown zone (TDZ) lighting
- Full upgrade of AGL circuits, including isolating transformers and primary/secondary cabling
- Construction of a new pit and duct system to house AGL infrastructure
- Design and build of a purpose-built brick AGL substation
- Integration of new constant current regulators (CCRs)
- Installation of 275kVA standby generator, UPS, and mains power systems

Replacement of the AGL control and monitoring system, including new touchscreen interface in the ATC tower

Delivery and execution

Appointed as system designer and principal contractor, Dewhurst Airfield Services managed the full lifecycle of the project—from initial survey and design through to installation, coordination, and commissioning.

Works commenced with a comprehensive survey and marking out of runway infrastructure, followed by the parallel installation of new pit and duct systems and in-runway lighting. Civil works, including substation construction, were delivered in coordination with specialist partners, ensuring program efficiency and seamless integration.

A dedicated airside compound was established to support operations, with all works carried out in strict compliance with CAA and HSE requirements.

Outcome

The completed upgrade delivers:

- Enhanced runway visibility and pilot guidance in low-visibility conditions
- Increased operational capacity to support Airbus flight schedules

- A fully modernised, future-ready AGL system with resilient power infrastructure
- Successful photometric testing and flight validation, ensuring full compliance

The project was delivered on time and within budget, achieving full client satisfaction and immediate operational readiness.