

Cambridge Airport - Runway Cabling upgrade

Case Study

Company name - Dewhurst Airfield Services Ltd

Client - Cambridge Airport / Marshall Aerospace

Project value - £85,000

Duration - 3 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

Works were delivered over a three-month programme, with a strategic night-working approach enabling cabling replacement to be completed section by section—ensuring zero disruption to live airfield operations.

Dewhurst Airfield Services managed the project as principal contractor, coordinating civil works and maintaining a controlled, safety-led delivery throughout.

Outcome

The upgraded system delivers:

- Improved reliability and resilience of AGL infrastructure
- Enhanced maintainability through upgraded components
- Continued operational continuity with no service interruption