

New air chill delivered in record time for Red Lea Chickens



CLIENT

Red Lea Chickens produce poultry products that are sold through wholesalers, supermarkets, butcher shops, restaurants, hotels and clubs as well as their own retail outlets. All products have been processed at their Blacktown facility since operations began in 1957.

OBJECTIVES

Wiley was approached to design and build an air chill to improve chilling capacity and product quality. Wiley was recommended to Red Lea by Linco, a leading poultry equipment supplier of air chill process systems.

CHALLENGES

- The location and timing of the project presented a multitude of design and construction challenges
- Air chilling of poultry is provided in mid-process, in the 'heart' of the operation.
- Finding space for the air chill room where there is none available at ground level where the main process areas are located
- Constructing an air chill above production areas was the only option for Red Lea. An area that was used for staff amenities and carton storage was the only viable location
- The height of the air chill meant the room had to penetrate the roof structure.

SOLUTIONS

Advice

Wiley studied the feasibility of building the air chill through the existing roof in the recommended location.

Investigations included:

- Lifecycle costing and cost planning to reduce running costs
- Process flows and people access
- Fire safety
- Existing structural adequacy to accommodate the addition structure
- Capital cost estimates and time schedule.

Design

Once the project was considered feasible, Wiley moved quickly to submit a development application (DA) with Blacktown City Council.

While the DA was processed, Wiley developed designs for tendering and construction activities.

Engineering

- Coordinated process and utilities requirements for the Linco mechanical scope as well as the specialised refrigeration air chill system.

New air chill delivered in record time for Red Lea Chickens



Construction

The project was complex due to being constructed through the roof and needed to be fast tracked. On this basis, the project under an open-book Target Sum style agreement. The end cost was below the original Target Sum.

Wiley took single point of responsibility for:

- Relocation of staff facilities to facilitate construction of the air chill
- Safe access for Red Lea's process staff during construction
- Tendering and negotiation of sub-contract trade packages
- Site supervision of all construction works including safety
- Coordination with Red Lea operations staff
- Coordination with Linco equipment installation
- Financial management and contracting of sub-contractors.

RESULTS

The new air chill provides Red Lea with improved chilling capacity and improvements to stringent product quality specifications.

The project was delivered fast tracked in seven months from feasibility stage through development approval and design, construction and commissioning.

