HELPING AN AQUACULTURE FEED MANUFACTURER INCREASE THEIR PRODUCTION CAPACITY

"Once we accept our limits, we go beyond them" - *Albert Einstein*

Industry
Food

Sector
Aqua Feed

Segment
Production Control System

Project

- The client has 19 facilities around the globe, supplying over 2 million tonnes of feed to the aquaculture industry annually.
- To meet demand, the client's Tasmanian plant needed to double production from 70,000 to 140,000 tonnes within 12-months.
- The new production line needed to be built in parallel to the existing line to avoid significant production interruptions.
- Cromarty Automation were engaged by the client to work collaboratively with the client's international team to provide the control and automation solution, incorporating site SCADA and PLC then integration into the materials/stock handling system.

Solution

The project was split into two phases:

Phase 1 - *remove and install new intake and batching system*

- Ground up redesign of new CitectSCADA whilst maintaining legacy SCADA.
- Modify control system, maintain production, move and install equipment.
- PLC code simulation providing control system test environment, preventing waste of material waste and production time while speeding up commissioning without personnel risk.
- 4-week plant shutdown to install and commission the new control system.

Phase 2 - *install new extruder line*

- Ground up re-design for the new extruder control system.
- Installation of the new extruder line without stopping the existing extruder.
- The new program was installed and commissioned within a 1-week window.
- Removal the redundant code and de-commission the legacy system.

Outcome

Despite the project's size and complexity, the challenging development and commissioning timeframes, and the need to maintain production during the upgrade, the new facility started on schedule, remained within budget, and was almost immediately in production. The site now features a future-proofed control system, and Cromarty Automation successfully optimised the original equipment to enhance production stability. This not only met but exceeded the initial target of doubling production capacity.