

UV Lights

Australian Meat Group

UV wet conveyor product belt sterilisation

Project Code
2020-1050

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Project Description

The purpose of this project is to see if UV light can be introduced to the product conveyor belts and assist in the reduction of water used to clean the belts during production periods, as well as, reducing the microbial counts on the product and therefore giving AMG the ability to increase shelf life.

Project Content

The project has included the following:

- UV light selection and fitting in the boning room,
- Cleaning cycle variations in water usage while maintaining acceptable microbial counts,
- Plant water savings as a result of UV light application,
- Product shelf life extension as a result of UV lights being used.

Project Outcome

The results from this project were that the use of UV lights on the Product conveyor belts has significantly reduced the overall microbial counts, and the E.coli counts on the products. This reduction in counts initially has led to the reduction in cleaning cycles by AMG. The initial water saving from reducing the cleaning the cycles was 7000 litres per day but now after months of trials to determine the right number of cycles required and the water requirement per cycle, AMG have reduced the cleaning water by 22000 litres per day.

The second outcome after months of product testing, is that the product shelf life has been extended from 120 days to 130 days due to reduced microbial counts as a result of the use of UV light on the product conveyor belt.

Benefit for Industry

The benefits for the industry for those that adopt UV lights are envisaged to be a reduction in water usage which is both expensive and seen as unsustainable, and, potential to extend the product shelf life giving more options to processors with shipping and meeting customers minimum shelf life requirements.