

Hide ID marking system

Cattle hide identification applied on the slaughter floor for use through the supply chain to wet-blue grading

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2020-1070

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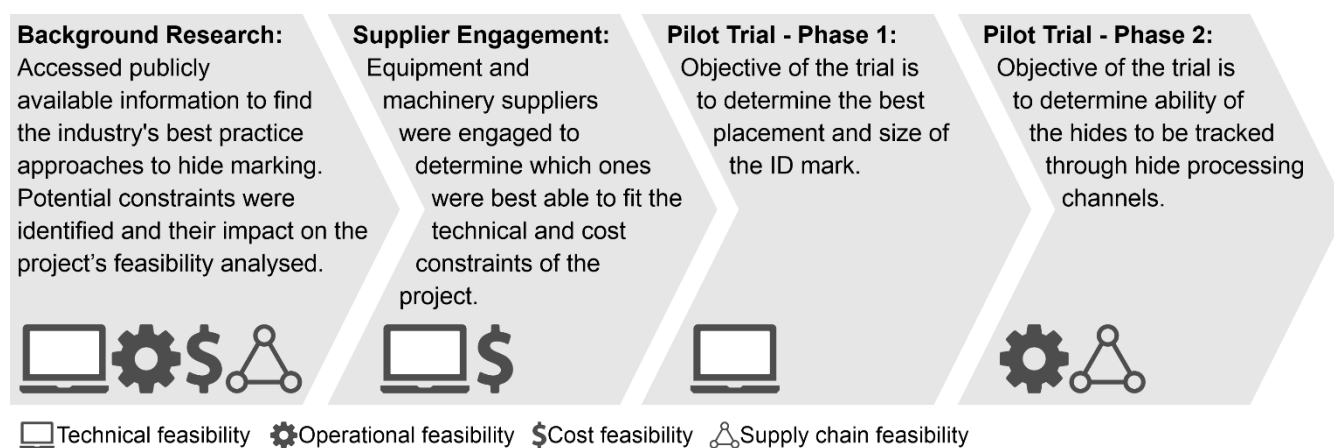
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Project Description

Linking hides back to cattle body number is an important traceability link. If a processor would like to improve the value of hides, there is only one other hide marking system in operation in Australia. This system, developed internally by the processor, is now over 20 years old and a mechanical punch operation, and not available for other processors to use. With the recent advancements of lasers, this project will evaluate the potential of laser application to this unit operation.

Project Content

The project was split into four phases, summarised in Figure 1.



Project Outcome

The project compared the benefits of mechanical punching systems against various laser marking systems. Taking into account the technical considerations learnt from a German-based Hide and Tanning company, the project engaged with a laser systems provider based in Brisbane to make a custom system to test on the Processors hides. Several trials composed of 5-10 hides each were performed, testing several font sizes and body positions.

Hides were then shipped to the tannery partner in China, where feedback on the readability of the hides was assessed based on photos taken of the tanned hides, post-wet blue grading.

Based on photos of the laser marked hides, post-wet blue grading, the Alfex laser system is able to clearly mark the outside of the hides, regardless of position.

A larger scale trial of 50 hides was processed in May 2021. The project is still awaiting results at time of publishing. From this set, a more confident analysis can be conducted.

Benefit for Industry

This project works as a proof of concept for a laser marking system in an Australian processor. As the laser system is still custom built and not integrated into the processing floor, a complete cost-benefit analysis cannot be conducted.

Useful resources

A+B Hides – German processor used to assess technical feasibility of a laser marking system (<https://www.apusb-hides.de/en/image-movie/>)