

Hot carcass grading:

Driving Quality Assurance and Processing Efficiency

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Project Description

Initiated in response to the industry's need for more objective and reliable meat quality assessments, the project's primary goal was to develop a technology capable of real-time, accurate, objective grading tool for beef and lamb carcasses. The MEQ Probe, the centrepiece of this project, was developed through collaborative efforts involving industry experts, machine learning engineers, and meat processing professionals.

Project Content

Throughout the project, extensive collaboration with leading meat processors facilitated the development and validation of the MEQ Probe. More than 20,000 lamb IMF samples were collected and over 100,000 beef marbling measurements were used for model training and analysis.

Project Outcome

The AMPC-funded meat grading project, culminating in the development and validation of the MEQ Probe, marks a transformative milestone in the meat processing industry. The project's overarching objective to introduce a technology capable of real-time, accurate, and objective grading for pre-chiller beef and lamb carcasses has not only been achieved but exceeded expectations.

The technology demonstrated exceptional accuracy, surpassing industry standards for intramuscular fat (IMF) measurements in lamb and marbling measurements in beef.

Benefit for Industry

This technology not only addresses the longstanding demand for objective grading but also contributes to enhanced transparency, consistency, and trust along the entire meat supply chain.

Looking ahead, the successful commercialisation and adoption of the MEQ Probe have the potential to transform meat grading processes globally. This innovative tool not only provides meat processors with a reliable, efficient, and objective means of ensuring product quality but also opens avenues for many other benefits such as early cut planning, optimising chiller usage and sortation, and consistent product delivery.