

Automated Beef Splitting

Automated Beef Slaughter Splitting Translation Project -
Cleaning Validation Trials

Project Code
2022-1033

Prepared by
Paul Vanderlinde

Date Submitted
11/04/2022

Disclaimer The information contained within this publication has been prepared by a third party commissioned by Australian Meat Processor Corporation Ltd (AMPC). It does not necessarily reflect the opinion or position of AMPC. Care is taken to ensure the accuracy of the information contained in this publication. However, AMPC cannot accept responsibility for the accuracy or completeness of the information or opinions contained in this publication, nor does it endorse or adopt the information contained in this report.

No part of this work may be reproduced, copied, published, communicated or adapted in any form or by any means (electronic or otherwise) without the express written permission of Australian Meat Processor Corporation Ltd. All rights are expressly reserved. Requests for further authorisation should be directed to the Executive Chairman, AMPC, Suite 2, Level 6, 99 Walker Street North Sydney NSW.

Project Description

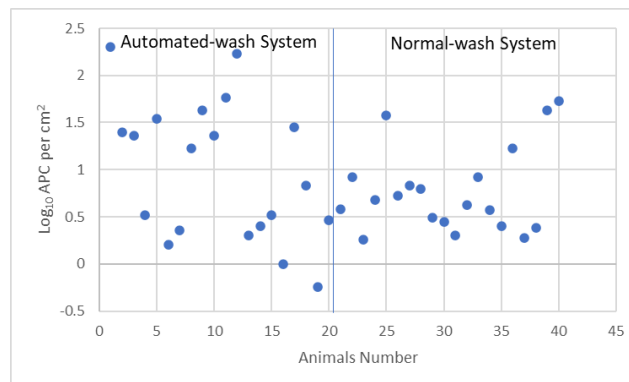
Before installing a robotic splitting saw in an Australian beef plant, a trial was undertaken to evaluate the impact on carcass hygiene of the automated cleaning system utilised in the Jarvis robotic splitter.

Project Content

A review of current regulatory requirements in Australia and in major markets was undertaken to identify possible impediments to the adoption of automated wash systems in Australian establishments. To examine any effect on carcass hygiene a manual beef carcass splitting saw was retrofitted with an automated cleaning system and installed at an Australian export beef establishment. Carcass swabs were collected immediately after splitting with and without the automated wash system. Swabs were analysed at an independent laboratory for aerobic plate count, *E. coli* and coliforms using Petrifilm™. Results were statistically analysed to determine if there was a measurable effect of automated washing on carcass hygiene.

Project Outcome

Australia and the EU regulations require equipment to be sanitised between carcasses when contact occurs before final disposition. This requirement is based on a perceived risk of cross-contamination. While in the US, equipment need only be sanitized when necessary. An analysis of carcass hygiene following splitting with and without automated washing found no significant difference in the microbiological load on carcasses (see figure).



Benefit for Industry

This data can be used to support an application by industry to trial robotic splitting saws in Australian establishments.