Snapshot Report

Safety harnesses

Development of rise ad fall platform recirculating harness attachment

Project Code
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Project Description

The project undertaken aimed to provide a safety solution to reduce the risk of injury from falling of a rise and fall platform (R&FP) using harnesses.

Project Content

To reduce the risk of injury from falling off a Rise and Fall Platform (R&FP), harnesses are required to be worn. This is now conventional in the meat industry.

Covid has seriously impacted labour availability, requiring high levels of first-time training. This leads to a mix of experienced and in-experienced boners on R&FP at one time and sometimes a supervisor as well. Boners follow left to right carcase movement on the platform to complete their task. Upon completion of a carcase, Boners re-circulate behind other working boners. Inexperienced Boners take longer, limiting throughput rate, as they use the full R&FP length to complete their tasks. Experienced Boners complete their tasks earlier and ‘cut-out’ early in recirculation, thus boning more carcase than learners.

The purpose of this project is to reduce the risk of injury from falling of a rise and fall platform (R&FP) using harnesses. In addressing this objective, we aim to:

1. Satisfies fall restraint requirements

2. Allows Boners Recirculate behind without any need to detach and re-attach

3. Does not encumber, but improves ergonomic performance and postural support where possible

4. Allows for quick, single handed attachment and detachment

5. Allows for early cut out

6. Is reliable, durable, corrosion resistant, and acceptably non-shedding of particulate material

7. Preferably not complicated nor high maintenance

8. Can be mounted on and within the size constraints of the R&FP

9. Does not inhibit throwing of bones onto the bones belt

10. Does not add excessively to the platform weight

11. Does not create other safety problems

The research project is driven by the need to provide a mechanism that allows a harness tether attachment, with minimal ergonomic encumbrance, for the recirculating boner path and early ‘cut-out’, is quite novel and challenging and thus requires research and development towards a solution.

Project Outcome

The project was successful at designing, developing, and implementing a method that reduces the risk of injury from falling off a R&FP. An initial 3D concept model and drawings was developed. A protype was then trialled in the workshop and modifications occurred based on the initial assessments. A protype was installed into production and trialled with employees. Feedback and improvements were identified and actioned. The remainder of the R&FP were installed. All boners without a bar on the R&FP now wear a harness as part of their safety.

Benefit for Industry

A working mechanism and solution has been developed that allows a harness tether attachment, with minimal ergonomic encumbrance, for the recirculating boner path and early ‘cut-out’. This allows the industry to have both experienced and in-experienced boners on R&FP at one time. Furthermore, it allows boners to re-circulate behind other working boners and allows for inexperienced boners to take the time required to learn. This project has provided a solution that reduces the safety risk for the company and industry.