HAZARD ALERT

Department of Labour
TE TARI MAHI

Breech Rail Safety Switches on Rotary Milking Sheds

INCIDENT

A farm worker received crushing injuries to his chest while standing on the bridge of a rotary cow shed and reaching over to pick up a set of cups that were on the floor of the platform. This could have proved fatal if a fellow worker had not heard his cries for help and engaged the emergency stop cord and reversing mechanism.

CIRCUMSTANCES

The victim and a fellow worker were removing a stone from the foot of the sole cow on the platform. When this was completed, the other worker went away to attend to other duties, leaving the victim to prepare for wash down. The victim noticed that during the de-stoning process the cups had become dislodged from their holder and were lying on the floor of the platform. While approved practice was to replace the cups from the pit, he thought it would be quicker to go up onto the bridge. He stood on the bridge and bent over to reach across to pick up the cups. As he did so, his head and shoulders were below the activating bar of the breech rail safety switch, and the bail rail pushed him under the activating bar and pinned him against the solid frame beneath it.

INVESTIGATION

The rotary shed was a new installation on the farm in August 2006 and was a "60 Omega" model. It was manufactured by Delaval according to the specifications detailed in the 2004 "Guidelines for the Design of Safe External Rotary Milking Platforms". The safety features on this model included a breech rail safety switch that was designed with one activation bar at the top.

By February 2007, Delaval had developed a newer model the "Parallel Rotary" (PR) that replaced the "Omega". Due to a new design feature on the bottom of the bail called a "pull point", a second bar was required at the bottom of the breech rail safety switch. As a result of the second bar being added, a number of incidents involving injuries to cows were reported. These injuries occurred because the cows' heads went between the two bars and the safety switch was not activated.

To alleviate this problem, on the 29 September 2008 Delaval commissioned their installers to retrofit a third central bar to all Parallel Installations in NZ. The company has indicated that they are intending to continue this initiative worldwide.

The farmer in this case believed that he had the newest industry technology which was true at the time of installation he became aware of the subsequent modifications after the incident when he discussed the matter with the installer. Subsequently a 3 bar switch currently being used on the PR platforms was fitted, and this appears to be a satisfactory solution to prevent a reoccurrence of this accident. This would also be the case on other Omega platforms or platforms carrying switches of similar design.

GUIDANCE

Rotary cow shed owners should check the breech rail safety switch fitted to their platform, and ensure that it conforms to the three activation bar configuration pictured below.

DEPARTMENT OF LABOUR ADVICE

It is the Department's advice that breech rail safety switches on rotary milking sheds be checked to ensure that activating bars on these switches conform with the configuration pictured above.

WHICH INDUSTRIES/SECTORS OR MATTERS WILL THIS INFORMATION BE RELEVANT TO?

Agriculture, livestock transport

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