



Rollover Protection Structures (ROPS): Filling the Commercial Gap

The previous generation of agricultural equipment was built to last, with the life span of older tractors having far surpassed current safety advancements. This presents a challenge to ensure the safety of the user, especially when it is observed that 25% of all work-related deaths are tractor rollover events. We are faced with a commercial gap for retrofitting ROPS that the equipment industry has not been able to successfully fill at a reasonable cost and with minimal effort.

In a new project supported by The Canadian AgriSafety Applied Research Program, researchers from across Canada took a look at the previous work and information regarding ROPS to move the development forward and fill that gap.

Tractor rollover incidents are frequently fatal, therefore, prevention efforts potentially have a very high payback value. What the previous literature revealed is shocking. Even though retrofitting older tractors with ROPS is proven to reduce fatalities and injuries, many people simply are not ensuring that their older tractors are equipped with ROPS. In a recent study, 43% of tractors in Saskatchewan were reported to not have ROPS, and approximately half of all tractors in Canada are still being operated without ROPS.

To date there have been numerous methods used to encourage the installation of ROPS such as rebates, trade-in programs, social marketing, retrofitting guides, and regulation. An encouraging Swedish study showed a significant drop in rollover fatalities over a 30 year period when ROPS are installed.

This project's intervention proposes to fill the commercial gap by developing user friendly, engineered ROPS fabrication design drawings for the majority of older tractors and provide them to farmers. The reliability of building them with typical farm shop equipment will be tested.

The *Low Cost Roll-Over Protective Structures Intervention Project* is one part of Agrivita Canada Inc.'s Canadian AgriSafety Applied Research Program, lead by a national team of researchers from the Prairie Agricultural Machinery Institute (PAMI), the Canadian Centre for Health and Safety in Agriculture (CCHSA), the University of Alberta, the Injury Prevention Centre (IPC, formerly ACICR), and the Canadian Agricultural Safety Association (CASA).

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