



MSHA's Accident Prevention Program Safety Idea

**SAFETY
IS A
VALUE!**

Pinch-point Protection for Mobile Bridge Conveyor Operators

Category : Section Face Equipment

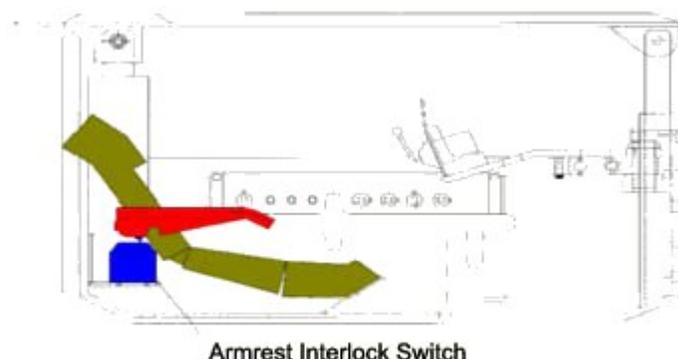
Mine Type: Underground Coal

In the past decade, 35 mobile bridge conveyor (MBC) operators have been crushed, pinched, or injured when operating an underground mobile bridge conveyor system. Most often, these accidents occurred when the miner was out of the protection of the equipment cab, and the continuous miner or at least one of the other conveyors was trammed, causing his conveyor section to move. These accidents can occur suddenly, because sections of the MBC and the continuous miner have the power to push or pull other sections of the system.

Although a panic bar provides safety to the operator, the best method, incorporated after a 1994 fatality, is the installation of a position occupied (dead man) switch. This switch de-energizes the tramping circuit of the entire system, not just a single section, when an operator is out of the cab. Common places to install dead man switches include the seat, arm rest, or cab door where the entire system's tramping circuit remains de-energized until the dead man switch is reactivated upon the return of the operator to the cab.

If a mechanical interlock is used, no modification is necessary to the machine approval. If an electrical interlock is chosen, the mine operator must obtain from MSHA a modification of the machine approval by way of the Field Modification Program by the mine operator or the conveyor manufacturer must seek a revision of the approval. For assistance in obtaining MSHA approval, please contact Ken Porter at (304) 547-2030.

Pictured is a sample Arm Rest Interlock Switch. When the operator leaves the chair, he must lift the armrest. This in turn de-energizes the conveyor. The conveyor remains de-energized until the operator resets the circuit by turning a reset button.



Proper training is important to minimize accidents. However, a fail-safe system, especially one already available, gives obvious safety advantages. For further information, contact your MBC manufacturer.

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Remember – Safety is a Value that you can LIVE with!