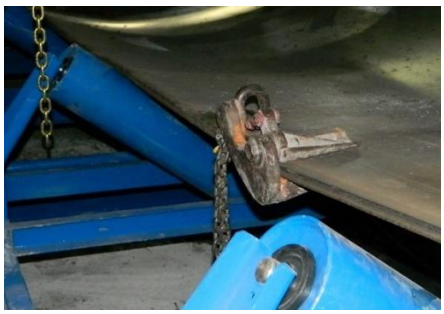
Safety Alert

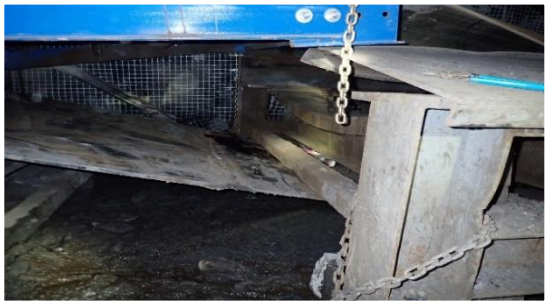
Working in Proximity to Belt Conveyors

Lock-Out, Tag-Out, Try-Out, and Block Against Motion Before Working.

There have been eight fatalities involving belt conveyors in the mining industry since January 26, 2017. Six involved miners working near moving conveyors, while two involved maintenance of an idle conveyor. All of these fatalities could have been prevented with proper lock-out/tag-out and blocking against motion before working. The most recent fatality, involving a miner coming in contact with a moving conveyor, is under investigation.

On December 23, 2019, a miner on a belt move crew was fatally injured while removing a splice pin from a 72-inch mainline conveyor. A belt gripper and a ratchet-style come-along failed, releasing stored energy in a tightly stretched portion of the belt, causing the belting to suddenly become taut and shift upward, pinning the miner between the belt and frame of the belt tailpiece.





Best Practices During Belt Conveyor Maintenance

Block From Motion

- **Identify, isolate, and control stored mechanical, electrical, hydraulic, and gravitational energy.**
- **Effectively block the belt conveyor to prevent movement** in either direction.
- **Relieve belt tension** by releasing the energy at the take-up/belt storage system. Be aware that some tensile energy may remain.
- **Anchor belt clamping system to substantial belt structures. Use properly rated engineered belt clamps and come-alongs. Do not use belt grippers** to restrain tensioned belts.
- **Position the clamp 90 degrees to the belt's direction of travel**, and tie off in line with the belt's direction of travel.
- **Position belt splice where it can be safely accessed** to avoid pinch points.
- **Be aware of the consequences** if blocking equipment fails. Stand in safe locations.

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Best Practices During Belt Conveyor Maintenance (continued)

Lock and Tag

- **De-energize electrical power, and lock and tag** the main disconnect before beginning maintenance. Only the person who installed a lock and tag can remove them, and only after completing the work.
- **Never lock out using the start and stop controls** (belt switches). These do not disconnect power conductors.
- Once power has been disconnected and properly locked and tagged out, **test the system** to assure there is no power to the belt conveyor.

Training and Communication

- **Ensure miners are trained on safe work procedures.** Develop step-by-step procedures and review them with all miners before they perform non-routine maintenance tasks such as adding or removing conveyor belt.
- **Communicate effectively.** After maintenance has been completed and before removing your lock and tag, ensure everyone is clear of the belt conveyor and communicate to others that you will be restarting the belt.