



Quarry Crusher Fatality



INCIDENT

A quarry crusher operator was killed when the primary plant stacker conveyor belt that he was standing on suddenly ran backwards due to a component failure in the head drum.

CIRCUMSTANCES

The operator stopped the 30-metre long inclined stacker conveyor and locked it out – apparently because of slippage in the head drum.

The plant maintenance fitter was unavailable and the operator attempted to tighten the screws on the two cone clamp devices that fasten the head drum to the drive shaft. With two helpers he then proceeded to remove the build-up of rock from around the chute where a conveyor from the primary crusher feeds onto the stacker conveyor.

The operator stood on the belt about two metres in front of the loading chute and used a high-pressure hose to move rock away down through the chute towards the tail drum. With this material out of the way the belt suddenly moved backwards under the load of several tonnes of rock that it contained. He fell over and was forced into the narrow gap between the conveyor belt and the chute where he died of his injuries.

INVESTIGATION

The cone clamp devices that fasten the head drum to the drive shaft were found to have completely failed.

GUIDANCE

Specific rules and procedures must be developed and followed for conveyor maintenance work. For example, belts should be securely clamped to prevent movement, as if may not be enough to just lock out the drive motor.

Always ask yourself the general “stay safe” questions:

- What am I doing?
- What could go wrong?
- What could I do to make it safer?

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

Quarrying, Extractive Industries.

Note: This material has been prepared using the best information available to the Department of Labour at the time of publication. Information may change over time and it may be necessary for you to obtain an update. This material is also only intended to provide general advice and does not constitute legal advice. You should make your own judgement about action you may need to take to ensure you have complied with your workplace health and safety obligations under the law.

