Crushed by Machine – No LOTO



A 46-year-old male employee was fatally injured when he was crushed by the upper ram of a rubber mixer. At the time of the incident the victim was working with a lab technician to ensure the proper ingredients were in place for a batch of a specific type of rubber.

Once the ingredients were placed on the feed conveyor; the conveyor was moved into position at the front of the mixer door. The conveyor fed the ingredients into the mixer and two rotors at the bottom of the mixer combined the ingredients. This batch was believed to be ruined due to overheating therefore the hopper had to be cleaned out by hand.

Once the hopper returned inside the mixer, the victim placed his head and both arms inside the front door of the mixer to clean out the bad batch. The ram began to move downward, and the downward motion of the ram pinned the victim inside the mixer door, crushing him.

The investigation revealed the victim did not lock-out the mixer before entering to clean it out; the pin used to keep the ram from falling was not inserted under the ram; and the ram switch at the main control panel was defective.

Investigators also found that energy control procedures were not developed, documented, or used when employees were engaged in activities such as cleaning and clearing out the machine. Which means there was not a procedure in place requiring employees to apply a lock in the end of the blocking pin so there was nothing to prevent the ram from coming down.

Lastly, the investigation revealed that authorized employees had not received training in the recognition of hazardous energy sources, the type and magnitude of the energy present, or the methods and means needed for energy isolation and control.