

**Case 351. 47-year-old factory maintenance worker died when he was entangled in the plastic drive gear of a food conveyor.**

A 47-year-old male factory maintenance worker died when he was entangled in the plastic drive gear of a 6 ½-foot long by 17-inch wide by 32-inch high food conveyor. The conveyor was powered by a ½-HP, 480-volt motor located at the end of the unit. The conveyor had a 240 volt drop cord with a twist plug for power to the conveyor unit. The conveyor's disconnect box was located in the middle of the unit on the back side, requiring employees to reach over the unit to stop or shut it off. The disconnect box had a lockable red e-stop push button and a black start button. The conveyor was on casters and could be rolled into place for use with various pieces of equipment and operations. The drive shaft from the motor had three plastic gears which were driven by the motor and shaft. The conveyor was plugged in and was running when the decedent became entangled. It is unknown how the decedent became entangled or the activity the decedent was performing at the time of entanglement. His coworker, who was working in another area of the room, had removed and cleaned the plastic conveyor belt and the conveyor equipment. The decedent had been assigned to clean the floor of the room. The floor was wet and covered with sanitizer/soap solution. He was observed by his coworker with his gloved right hand/arm caught in the plastic drive gear. The decedent had been pulled up tight against the shaft. His coworker ran for help and emergency response was summoned. The decedent was working overtime and the cleaning activity was not his regular job.

MIOSHA General Industry Safety and Health Division issued the following alleged Serious citations at the conclusion of its investigation.

SERIOUS: GUARDS FOR POWER TRANSMISSION, PART 7, RULE 722(1):

Shafting exposed to contact 7 feet or less above a floor or platform level was not guarded:

Two (2) conveyors in the XYZ\* Area have inadequate guards for the revolving powered shaft; having set screws protruding, as well as keyway shaft grooves.

SERIOUS: CONVEYORS, PART 14, RULE 1412(3):

Repairs or clean up, where unexpected motion would cause injury, shall be done when power is off and locked out.

An employee did not utilize energy isolation procedure while cleaning the Conveyor in the XYZ\* Area.

\*Area name changed for confidentiality purposes