

Operator Crushed in Processor Head

In the summer of 2018 in Oregon, a processor operator with ten years of experience died when the delimiting arms and feed rolls of the processor head he was repairing closed suddenly, crushing him.

As he was operating the processor that day, he noticed that the length-measuring wheel had broken off. He told the yarder engineer that he was going to retrieve it. He got out of the processor, leaving the engine running and the hydraulic switch in the “on” position.

The hydraulic safety lock lever on the processor was broken. When intact, the warning lever extended horizontally from the operator’s seat when the hydraulic system was energized, and it would have to be lowered into the “off” position before the operator exited the cab.

The processor operator and the chaser inspected the damage to the machine. The processor operator asked the chaser for some electrical tape. The chaser gave him the tape and then walked back around the processor to unbell the turn that was coming to the landing.

As the chaser was walking back to the turn, he heard the delimiting arms and feed rolls close on the processor head. He looked back, but did not see the operator in the cab. He went back to check on the operator and found him trapped inside the closed head.

The processor operator yelled for help. The chaser called for the yarder engineer, then climbed into the processor and opened the feed rolls. The operator fell out of the head, unconscious. The crew radioed the landowner’s office and emergency services were called. When responders arrived, they pronounced the processor operator dead at the scene.

An investigation found that the processor operator had been standing inside the open delimiting arms and feed rolls placing electrical tape on the wires where the measuring wheel had broken off. The engine was still running and the hydraulic system was engaged when he started repairs. Grounding one of the wires cut power to the switches that detect that the saws are retracted before allowing a log to be fed. This caused the arms and rolls to close suddenly.



Photo 1. Processor head that closed around operator. Photo shows feed wheels in open position. The arrow points to the location of the broken wires. The “X” shows the location where the operator was standing at the time of the incident.

Photo 2. Length measuring wheel that broke off of the processor head.

Photo 3. Exposed wires in the area where the length-measuring wheel broke off the processor head.



Photo 4. Broken hydraulic safety lock lever on processor.



Photo 5



Photo 6

Photo 5 & 6. Example of intact hydraulic safety lock lever raised in "on" and lowered in "off" positions on a different machine.

Recommendations

- Make sure workers always follow lockout/tagout procedures before any type of equipment servicing or repair. Do spot checks to make sure that equipment is consistently shut down and hazardous stored energy is controlled. Conduct retraining, if necessary.
- Check that all safety features on machines and equipment are in working order. Make sure employees are aware of the safety features and how they work.

Requirements

See WAC 296-54-517 – Lockout/tagout procedures:

- (1) Employers must establish and implement written procedures for lockout/tagout to prevent the accidental start up or release of stored energy of machinery that is shut down for repairs, maintenance, or adjustments.
- (3) Lockout/tagout procedure details must include:
 - (a) Employees performing maintenance, repairs, or adjustments have knowledge of the hazardous energy to be controlled and the means to control the energy.
 - (b) Machine shutdown.
 - (g) Engage hydraulic safety locks when applicable.
- (8) You must provide training to ensure that the purpose and function of the lockout/tagout program are understood by employees performing maintenance, repairs, or adjustments covered by this section. This program must be reviewed at least annually and training provided as needed. This training may be accomplished through safety meetings

See WAC 296-54-573 – Logging machines—General:

- (9) Each machine, including any machine provided by an employee, must be maintained in serviceable condition and the following:
 - (a) Each machine must be inspected before initial use during each workshift. Defects or damage must be repaired or the unserviceable machine is replaced before beginning work.
 - (b) Operating and maintenance instructions must be available on the machine or in the area where the machine is being operated. Each machine operator and maintenance employee must comply with the operating and maintenance instructions

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