



FIREWOOD PROCESSOR

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SAFETY ALERT • MARCH 2021

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BACKGROUND

On a summer day in the Northeast, an employee of a small logging / firewood company was operating a firewood processor. The unit was at a permanent location owned by the company. As the unit was fully mechanized, the employee was working alone to process a load of firewood while the business owner fed logs onto the infeed conveyor with a tractor. A customer was also on the site picking up an order. The unit was a few years old but had no known deficiencies.

PERSONAL CHARACTERISTICS

The employee was in his mid-40s, newly hired, and on his second day of work for this employer. He had no previous experience with logging or a firewood processor. He received no machine-specific training prior to being left alone to operate this machine. The employee wore no PPE, but a lack of PPE is not considered a contributing factor in this injury. The employee had no known history of workplace injuries or unsafe work practices.

UNSAFE ACTS AND CONDITIONS

As stems are bucked to length by the circular saw, the blocks drop into the splitting trough. It is not uncommon at this step for any firewood processor to get a block crossways to the orientation of the splitting wedge. When a block was noticed in this orientation, the employee reached out from the workstation to re-align the block. Several functions on a processor like this one have functions with an automated cycle. It is not certain if this was the reason for the wedge movement, but as the operator reached out into the splitter trough, the ram was moving toward the block of wood and the wedge.

ACCIDENT

As the operator reached into the trough to move the block in line with the splitting wedge, the wedge cycled toward his arm and pinched his arm between a block of wood and the wedge.

INJURY

The operator's hand was amputated at the wrist by the wedge. The visiting customer applied direct pressure to the wrist to control the

severe bleeding. The company owner attempted to call for help but lacked cell service. The customer got the injured employee in his truck and headed for the hospital, making another call to EMS down the road. The ambulance met the injured employee several miles from the accident scene and took over care of the victim. In the panic of the injury, the severed hand was not brought with the victim. The ambulance crew proceeded to take the injured employee to the hospital, and a second crew returned to the accident scene to retrieve the severed hand.

When the injured employee and his hand arrived at the local hospital, Lifeflight transported them to a Boston trauma unit. At this time, recovery is still in progress, and the long-term success of surgery is still pending.

RECOMMENDATIONS FOR CORRECTION

Employee Training – In addition to new employee orientation, operator-specific training should be provided (and comprehension confirmed) for any machines or equipment and their unique issues and controls. For most firewood processors, managing wood in the splitter trough is an ongoing issue and should have a specific protocol.

Machine Specific

Shutdown Procedures – An employee should not reach into a point-of-operation while the system is live. In this case, an effective shutdown process or method to remotely manage wood in the trough should be developed for this common hazard.

Accessing EMS – First aid supplies, first aid training, and an effective procedure to contact EMS should be developed for each worksite.



This Safety Alert analyzes an injury in accordance with the chain of events represented by the five dominoes above. Pioneer industry safety experts H.W. Heinrich and Alfred Lateiner developed this accident analysis system to provide a graphic sense of how injuries can be avoided. Their methodology has been accepted by safety professionals worldwide.

Safety Meeting Report

Topic(s) Discussed:

Comments / Recommendations:

Date:

Company:

Names of Employees Attending:

Meeting Conducted by:

Please follow equipment manufacturers' recommendations for safe operation and maintenance procedures.

signature