

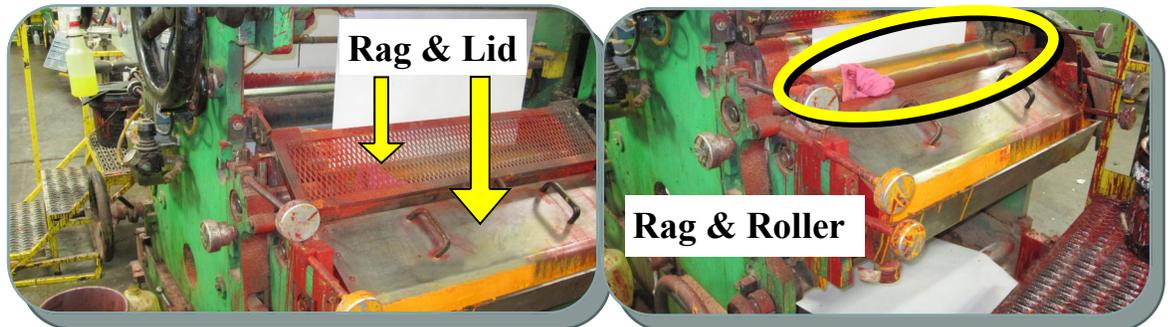


# HAZARD ALERT

## Lack of Machine Safeguarding Leads to Hand and Finger Injuries

A paper worker suffered a serious hand injury while wiping ink off the face of the print station lid of a bag-making machine. A hinged metal mesh barrier guard was in the closed position during cleaning activities when the edge of the cotton rag went under the guard and wrapped around a rotating roller. The worker's rag, his hand and fingers were pulled underneath the guard causing the guard to raise upward. Unfortunately, the barrier guard did not have a safeguarding device such as an electrical safety interlock switch that would have shut off or disengaged the control power after the guard was forced out of position.

This same injured worker was also on one-handed "light-duty" work at the time of the incident because of an injury to his opposite hand that occurred 24-days prior on the same machine (different section). A barrier guard was installed after the first injury on that section of the machine, but a hazard analysis/reduction for the entire machine was not done (or properly completed) to eliminate and/or control other machine hazards. After the second injury, the employer's accident investigation focused on fault-finding of the employee's behavior rather than fact-finding, identifying all hazards, contributing factors involved, and his employment was terminated.



### Recommendations to Prevent Recurrence:

- Guards and protective devices must protect against danger including moving parts. Guards must be properly designed/constructed, fitted, securely held in place, not easily defeated, located at an adequate distance from the danger zone and cause minimum obstruction to view the production process/hazard.
- Contact machine manufacturers and retrofit, if applicable, guards that will prevent workers contact with the machine's hazardous areas.
- Conduct a hazard analysis with worker participation that focuses on the relationship between the workers, the task, the tools and the environment. Consider the entire machine operation production process, the machine modes of operation, individual activities associated with the operation, servicing and maintenance activities. The results from the analysis may then be used as a basis to design machine safeguarding and overall hazardous energy control program/procedures (Lockout/Tagout/Verify).
- Establish an effective hazardous energy control program/procedures (Lockout/Tagout/Verify) to complement machine safeguarding methods.



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The information provided in this alert is based on preliminary data only and does not represent final determinations pertaining to the nature of the incident or conclusions regarding the cause of this event.