USW HEALTH & SAFETY

HAZARD ALERT

Ejected Drift Pin From a Drop Forging Hammer Results in a Fatality

An employee and USW member was fatally injured when an unsecured drift pin was ejected from a drop forging hammer during the die key removal process. The die key is used to hold the dies in place during operation of a drop forging hammer. A die change crew of six employees was attempting to remove a bottom die key by using an overhead crane with a battering ram attachment. The crew manually handled the battering ram to repeatedly strike the drift pin forcing the die key out. While doing such, the unsecured drift pin ejected, and fatally struck the employee. The die change crew leader had three-years of service and the rest of the crew each had less than one-year of service.

Recommendations:

- Eliminate overhead crane ramming operations, destroy any ram(s) used with an overhead crane to install and remove die keys.
- Provide specialty hydraulic remote-controlled equipment with driven hammers for die changes to knock out die keys, and keep workers at a secure location.
- Secure drift pins for all die key removal processes in accordance with established procedures that involves employees and their representatives by verifying the drift pin is at sufficient depth into the key channel for the size of drift pin used, and use of drift pin hold downs, such as a post or come-along.
- Develop and implement a management permitting/sign-off system requiring inspection anytime there's use of a drift pin to assure safety posts are placed properly before proceeding.
- Develop/deliver training materials, photos, videos, etc., in a manner/language workers understand to aid in hazard identification and the hierarchy of controls.
- Training quality must be based on experience, not the number of hours and calendar days.
- Ensure trainers have the proper training and experience, are provided with the tools, skills and knowledge needed to train and educate other employees new to the job and tasks free of production pressures.
- Evaluate Management of Organizational Change processes to ensure downsizing, transfers, and staffing issues that impact the line-of-progression, training and manning cushions, don't result in negative consequences on safety. This applies to a whole organization, and it involves employees and their representatives. If the proposed changes are not safe, the change must not be made - making change is for safer future-fitting, not retrofitting changes that are not safe.
- Utilize a union-management health and safety committee, as well as a training committee to assess and focus on staffing issues that lead to 'green-on-green' hazards. Include seasoned, intermediate, and newer employees in addressing 'green-on-green' issues and understaffing.
- Increase staffing to ensure "qualified" employees are available to train and educate new employees to their jobs and tasks, and cover any employee absences.
- Provide all hourly and salary employees with a Right-To-Act process and annual retraining. All employees must have a written procedure and process to report hazards, stop unsafe/unhealthy jobs/tasks, and shut down any processes without the fear of retaliation.

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This hazard alert is based on an actual incident, and reflects our best understanding of the incident at the time it was written. However, many incidents have multiple causes; this alert may not cover all of them. The purpose of the alert is to illustrate workplace hazards; it is not intended to be a comprehensive report on the incident.