



Fatal Accident with an Unguarded Pneumatic Hand Grinder

A USW member was working alone performing grinding duties on a cast carbon steel part in a work station at a foundry. While operating an unguarded pneumatic horizontal hand grinder with a 6-inch type 1 snagging wheel, the rotating wheel exploded. The flying wheel fragments struck the operator in the face and neck area causing fatal injuries, even though he was wearing eye and face protection. The equipment involved was a Top Cat 56H Series Horizontal Grinder with a 6-inch DACO 1539SW wheel attached.



Recommendations:

- Audit all grinders for compliance per the manufacturer's guidelines and the American National Standards Institute B7.1 Safety Requirements for the Use, Care and Protection of Abrasive Wheels.
- Safety guards of proper design and construction must be maintained or the grinder needs removed from service using a Stop Work Authority process as outlined in the [USW's Bargaining for Stop Work Authority to Prevent Injuries and Save Lives](#).
- Audit all grinders to ensure that spindle does not exceed maximum RPM of grinding wheels.
- Audit handling practices for all grinding wheels to ensure care is exercised to prevent damage.
- Handle and store grinding wheels in safe location not subject to water, solvents, condensation, high humidity or freezing temperature, and related shelf life.
- Establish inspection process for new and existing grinding wheels.
- Train all operators on use, care, mounting, inspection and operation of abrasive grinding wheels and maintaining grinders.
- Negotiate 'working alone' provisions with employers in a collective bargaining agreement or memorandum so that no employee is performing work alone in areas where hazardous conditions exist that would endanger their safety where they cannot communicate with others, cannot be heard, or cannot be seen, per a union-management risk assessment.
- Conduct and document a hazard assessment of the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment.



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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.