



Safety Alert

From the International Association of Drilling Contractors

ALERT 01-06

HAND GRINDER INCIDENTS

WHAT HAPPENED:

Two separate reportable accidents occurred recently involving the use of hand held grinders. These both occurred due to grinder kickbacks and both employees were struck in the face by the body of the grinder and sustained serious facial injuries. The first occurred when the individual was completing grinding operations. The electric grinder became entangled with a loose tarpaulin tie rope from a shelter built around the work-station. The second occurred while the employee was cutting along the length of a section of pipe that was held in a vice, the cutting disc snagged in the pipe cut and kicked back striking the worker in the face.

WHAT CAUSED IT:

Investigation has found that the underlying cause on both occasions was a failure to appreciate the potential risks associated with:

- Change in the conditions at the work-site – the rope became free and introduced an additional hazard.
- The pipe was being held in a vice and when the cut was made in the pipe area gripped in the vice, the force of the vice jaws on the pipe caused the resultant 'gap' to close grabbing the cutting disk causing the grinder to kickback.
- Using a grinder to cut the pipe instead of a cut off machine (tool).

CORRECTIVE ACTIONS:

- Grinders are potentially dangerous if not inspected and used properly. Inspections should include examining the grinding disc/wheel for damage.
- Inspection should also include ensuring that all guards are in place. This will prevent most kick back injuries.
- Use appropriate personal protective equipment, such as a full-face shield and goggles.
- A Job Safety Analysis (JSA) should be completed for using a hand grinder. This JSA should be modified as needed for various hand grinder projects. (See the IADC Accident Prevention Guide Section 1 – 4 and 1 – 9 for guidance in preparing JSAs.)
- Remember a JSA is not a process that stops when the paperwork is written up and the safety meeting held.
- Use the proper tool for the job. In the second case, a cut off machine (tool) should have been used to cut the pipe.
- Employees must continually monitor the work-site to ensure that any changes that occur are evaluated and controlled so that the job can be completed safely.
- Employees using hand grinders need to receive training in their use so that they understand the hazard of pinched material.
- Be aware of the hazards associated with grinding / cutting operations.
- Temporary shelters need to be inspected to ensure that tie ropes are secure.
- Work area needs to be inspected to remove any loose objects that might strike the grinder disk causing the grinder to kickback.
- Refer to IADC Safety Alert 00-34.

The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.