

Hand injury from portable hand-held angle grinder

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What happened?

A worker was injured whilst cleaning equipment using a portable handheld angle grinder fitted with a wire brush. The rotating brush caught an edge and kicked into the worker's gloved left hand. The glove was pulled into the rotating wire brush resulting in a deep abrasion to the hand.



Glove and wire brush



Hand position - RECONSTRUCTION

IOGP Life Saving Rules:



Line of fire



Bypassing safety controls

What were the causes? What went wrong?

Our Member's investigation determined:

- The task risk assessment was incomplete.
- The grinder was being used without the side grip handle fitted.
- No consideration was given to where to place the hand relative to the rotating brush.
- Given the operator's position, the grinder could not be used safely.
 - The operator should have moved to the other side of the component to complete the task, and deployed the grinder in a horizontal position.
- There was no formal power tool / abrasive wheel training in place.
- There was inadequate supervision of the task.

Lessons learned

- Equipment should be safe and without risks to the operator (that is, complete, with safeguards fitted and free from defects). [*This is a*

regulatory requirement in many places].

- Appropriate supervision is essential.
- Reliance was placed on experience and 'on the job' training rather than on formal training and competence evaluation.

Actions

- Task risk assessment amended to include all hazards and control measures.
- Angle grinder side grip handle obtained and fitted and its use made mandatory as company policy.
- Review of power tool/abrasive wheels training and competency evaluation requirements.
- Supervisors' responsibilities discussed and reaffirmed.

See also:

- Are YOU prepared to work safely videos:
 - IMCA short video – [Watch your hands](#)
 - IMCA short video – [Grinding wheel safety](#)

Incidents reported to IMCA involving grinders, can be investigated from the [Safety Flash](#) archive.

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