

Safety Alert

9-inch angle grinder kick-back lacerates worker's face and throat

The purpose of this Safety Alert is to highlight the risk of serious injury or death when using 9-inch (230mm) angle grinders.

Warning: Contains graphic image.

Background

A 71-year-old worker was seriously injured earlier this year, while using a 9-inch angle grinder during renovation work at an industrial shed in Winnellie. The worker was standing on a ladder and cutting steel wall frames above his head when the incident occurred.

The worker had been using a 5-inch angle grinder to make the initial cuts but switched to the larger grinder to finish the job quicker. The grinder kicked-back causing a laceration that ran from the worker's face, along his throat and into his chest.



Image: The scene in situ after the incident. (Insert) The extent of the laceration suffered by the injured worker.

Possible contributing factors

- The increased power, torque and size of 9-inch grinders makes them more difficult to control compared to smaller grinders or other cutting tools.
- The worker was not in a stable position to control the grinder as he was standing on a ladder with the grinder cutting above his head.
- The metal frame may have sagged due to the previous cuts made and pinched the cutting disk potentially contributing to the kick-back.

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- The extension lead the grinder was plugged into had been modified with a 15amp socket attached to a 10amp lead allowing the lead to be overloaded, and subsequently causing burning and a poor connection inside the 10 amp plug.
- Testing by NT WorkSafe showed the poor connection in the 10amp plug may have caused a fluctuation of the electrical current with the grinder unexpectedly stopping and starting, potentially causing a kick-back.

Action required

- Carry out a risk assessment to identify alternative tools or methods of cutting before you use a 9-inch (230 mm) angle grinder.
 - Some companies in the Northern Territory and across Australia have implemented voluntary bans of 9-inch angle grinders on their worksites due to the high number of serious injuries and deaths that have occurred.
- Ensure you have proper footing and balance when using a grinder, and you do not overreach. If you are cutting something at height, use an appropriate work platform that allows you to maintain your footing and balance.
- If you are cutting items that are upright or hanging, use props or clamps to prevent the item from sagging and pinching the cutting blade.
- Do not modify the electrical components of power tools or associated leads unless you are qualified. Ensure that the ampere capacity of any electrical leads matches the power requirements of the power tool.

Further information

For further information, please refer to the following:

Safety alert

- [Dangers associated with angle grinders](#)

Incident information release

- [Four workers injured in separate angle grinder incidents](#)

Code of Practice

- [Managing the risks of plant in the workplace](#)

Disclaimer

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