

Safety Alert

Dangers associated with angle grinders

The purpose of this Safety Alert is to highlight the risks associated with the use of angle grinders.

Background

A Darwin worker sustained a serious laceration to his arm, including damage to his artery while using a 5inch angle grinder to cut bolts on a vessel.

The grinder, which had its handle removed, kicked back while the worker was cutting a bolt causing the blade to strike the worker's forearm. Co-workers provided immediate first aid to the worker, before he subsequently underwent emergency surgery.

A risk assessment undertaken after the incident, determined the remaining bolts could be removed using spanners.

This is the eighth serious laceration involving grinders reported to NT WorkSafe in 2020. A review of the incidents identified the following common contributing factors:

- This was the second incident where the handle had been removed from the grinder.
- This was the second incident where it was identified that the grinder selected was not the appropriate tool for the job.
- In the majority of incidents the disc has caught, and kicked back.
- Injured parties have largely been experienced workers, suggesting that workers can become complacent when undertaking routine tasks. Inadequate supervision of workers may have been a contributing factor.
- One incident involved a school student, possibly indicating that the student received inadequate training and supervision.



Image 1: Manufacturers instruction manuals advise that handles must be installed securely before operation.

Possible contributing factors

- The grinder's handle had been removed, against manufacturer recommendations. If the handle had been in place and used by the worker, the worker would have likely had better control when it kicked back;
- The grinder was not the right tool for the work being undertaken;
- The discs being used to cut the bolts were not appropriate for the job; and
- The worker was inadequately supervised.

Action required

- Conduct a risk assessment, which will assist in selecting the right tool for the job.
- Grinders, like any items of plant, must be used in accordance with manufacturer recommendations. Guards and handles are an important safety feature and must not be removed.
- Hold the grinder with both hands ensuring the side handle is inserted on the side of the unit that provides the best grip for the work activity.
- Ensure the discs used are appropriate for the activity.
- Wear appropriate gloves which extend to the forearm, hearing protection and safety glasses or a face shield when grinding. Flame-resistant clothing should be worn for hot work.
- Ensure workers receive information, instruction and supervision and are adequately trained in the safe use of grinders.
- Ensure your work group have an adequate number of first aid trained workers, and that first aid kits are readily available and suitable to the work being undertaken.

Further information

For further information, please refer to the following:

Codes of Practice

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

Manuals

- Refer to your operating manual for the manufactures safety information.

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