



# HEALTH, SAFETY AND EMERGENCY MANAGEMENT

Promoting a safer place to work and study

## HSEM BULLETIN

### Angle Grinder – Noise Management

#### Who needs to read this?

All Curtin University Staff and Students

#### Background

Angle grinders are used extensively in the metal fabrication, stone work, construction work activities and can be used for wood work tasks when equipped with an "Arbortech" woodcarving disc. Other accessories such as polishing pads, sanding discs and wire wheels can be fitted to the tool making it extremely versatile.

Many makes of angle grinders exceed 85 dB (A) free running and therefore require the use of hearing protection.

#### Maintenance Information

- Ensure bearings and brushes are in good operational order.
- Ensure the blade guard is securely fitted and not rattling.
- Choose the correct disc for the task - a worn or out of round disc is not just unsafe, but produces more noise than one in good condition.

#### Recommendations

- Dampen the vibration of the material being ground or cut. For example: clamp as close as possible to work area.
- Where possible use the angle grinder outside - beware of noise annoyance to adjacent areas.
- Line grinding bay perimeter surfaces with acoustic absorption materials to reduce reflected sound. Use fiberglass insulation faced with perforated metal.
- Consider using mobile screens around the work area to reduce the sound transmission.

## Operator control Recommendations

- Replace old worn out angle grinders with 'quieter or newer units'. The noise level of 100 mm Angle Grinders when 'free running' for example can vary from 95 to 100 dB(A). This is dependent on factors such as bearing condition, gearbox wear and the age of the tool. Manufacturers can supply noise level data on the performance of the tool. Where possible use bench grinders.



## Who do we call with questions?

If you have any queries, please contact Health, Safety and Emergency Management on 9266 4900 or email [healthandsafety@curtin.edu.au](mailto:healthandsafety@curtin.edu.au).

## References

[Department of Commerce – WorkSafe WA Noise Management: Angle Grinder](#)

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