

INCIDENT ALERT

LOCATION: Construction/delivery site
ACTIVITY: Maintenance & Housekeeping
SUB ACTIVITY: N/A

ALERT STATUS: Normal
DATE ISSUED: 16/02/10
INCIDENT No: 00253

TITLE

Abrasive Grinder Wheel Incidents

ACCIDENT / INCIDENT DETAILS

Safety Alert received from Build Safe United Arab Emirates:

A number of Abrasive Grinder Wheel Incidents, including a fatality have been summarised by BSUAE.

The fatality was caused when an abrasive wheel broke and severed an artery in the worker's thigh.

The accident investigation found that the wheel that broke was rated for a maximum of 6110 rpm but the grinder was rated for a maximum of 10000 rpm. Furthermore, the abrasive wheel was larger than 5 inches in diameter which prevented the installation of the guard provided with the grinder.

(see additional pdf document for further details)

ACCIDENT / INCIDENT IMAGES

LEARNING POINTS / ACTIONS TAKEN

The recommendations can be summarised as follows;

- Follow manufacturers guidance and national guidelines.
- Ensure guard is installed.
- Never use above chest height.
- Do not remove the guard.
- Ensure that workers are trained and aware of rpm limitations.
- Use only wheels that match the diameter and speed (rpm) rating of the grinder.
- Replace the disc when wear becomes obvious or the disc is chipped.
- Stop using if vibration becomes very apparent
- Stand perpendicular to the plane of the cutting wheel
- Wear appropriate PPE
- Keep a log of all equipment used on site
- Grinders that cannot have their RPM speed clarified should be taken out of use immediately.
- Supervisors must check equipment prior to and during use every day.
- Close management is critical.

EDITORS NOTE: IN THE UK, THE FOLLOWING RECOMMENDATIONS COULD BE ADDED (to ensure a safe working system)

People using grinding equipment must be appointed, trained and considered competent by their employer.

Grinding machines and wheels should only be used for the purpose for which they were intended and for which they are suitable.

Ensure that clamping devices and work rests are secure and properly adjusted so that the workpiece is stable before grinding or cutting.

Work with sufficient lighting

Never mount a wheel that cannot be fully identified (and never use a wheel that is date expired).

Do not leave the grinder until the wheel has stopped rotating.

Ensure equipment complies with relevant standard.

LEARNING POINTS / ACTIONS IMAGES