

## ACCIDENT/INCIDENT ALERT

October 2004

# Fatal Grinder Accident at Quarry

### Incident

A welder was carrying out maintenance on a quarry excavator bucket. He was using an angle grinder to prepare surfaces for welding when the disk disintegrated.

### Circumstances

The hand-held angle grinder was fitted with a 230 mm diameter cutting-off wheel and when it disintegrated, fragments penetrated the victim's chest and abdomen. He was rushed to hospital by rescue helicopter but died the same day.

### Investigation

This is continuing but initial inspections show that the grinding machine and cutting disk were not compatible - and the grinder was not fitted with a guard.

### Recommendation

Grinding machines and abrasive wheels should always be used in accordance with the manufacturer's instructions.

In particular:

- Always ensure the maximum speed (the no load rpm) marked on the abrasive wheel is greater than the rated speed of the grinder.
- Do not use grinding wheels that are larger than the maximum recommended size, or worn down wheels from other grinders.



*Angle grinder and disintegrated disk*

- Never use grinding wheel power tools without the wheel guard attached to the tool and positioned for maximum safety.
- Store and handle abrasive wheels with care and inspect them for chips or cracks before installing. Do not use any wheel that may be damaged.
- Refer to Australian Standard 1788 - *Abrasive Wheels* for more detail.