SAFETY ALERT #382



Dated: Sunday, 29th NOVEMBER 2009

Title: FATAL GRINDER INCIDENT





Angle grinder and disintegrated disk

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:

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.
- 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.

Risk assessment must be completed for such tasks & then taught to the workers. Good suppliers (i.e. Dewalt, Hilti, Milwaukee) will conduct training on their tools including disc changes & safety inspection prior to use. All workers using tools must be given instruction, training, supervision & information on how to use the tools in a safe & controlled manner.