Fatal Grinder Accident at Quarry



Hand-held grinders are used frequently in the oil and gas industry in both maintenance shops and in the field. These tools contain significant potential energy and should be treated with respect. Operate them safely, use the guards and wear the proper PPE. If you don’t, your life may hang in the balance.

WHAT HAPPENED?

A welder, carrying out maintenance on a quarry excavator bucket, was killed while using an angle grinder to prepare surfaces for welding.

HOW DID IT HAPPEN?

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. The welder was rushed to hospital by rescue helicopter but died the same day.

WHAT WAS THE CAUSE?

Initial inspections show that the grinding machine and cutting disk were not compatible – and the grinder was not fitted with a guard.

WHAT COULD PREVENT THIS IN THE FUTURE?

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.
- Do not use 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.