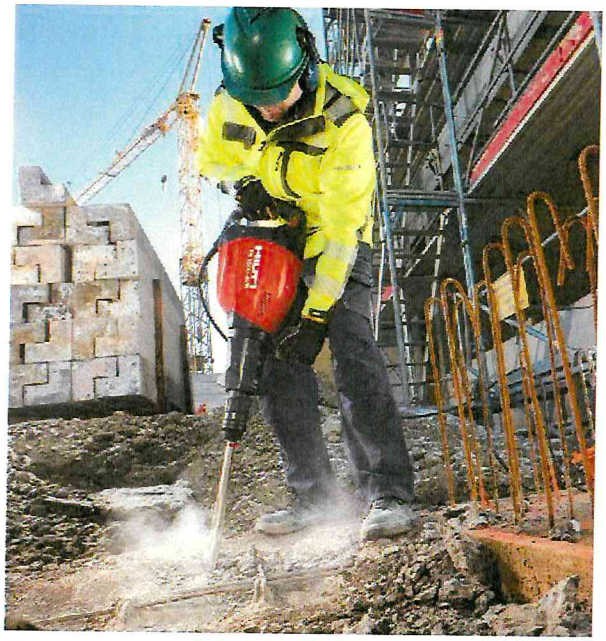
Portable, hand-held electrical tools

Reason	Electrical tools face harsh conditions on site and, when misused, they get damaged and become dangerous. Incorrectly used and poorly maintained tools can cause electric shock.
Outline	This talk covers pre-use checks, use of electrical tools and hazards.

Wear the correct personal protective equipment (PPE)



Electrical tools should be checked before and after use

Portable powered tools should be in good condition

Generally, only battery-powered or 110 volt tools are permitted on site

Face shield

Is generally required for the use of portable, hand-held electrical tools. Make sure you use the correct type and grade.

Look after your portable electrical tools and they will look after you.

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Pre-use checks

1. Make sure the casing isn't damaged. If it is, don't use it and report the damage to your supervisor.
2. Make sure that all cables, plugs or connectors are sound and not damaged.
3. Check that any guards fitted can be adjusted properly.
4. Use tools on the correct power supply. Generally only battery-powered or 110 volt tools are permitted on site.
5. Check to ensure the equipment has had a portable appliance test (PAT).

Safe use

1. Portable electrical tools should only be used for their intended purpose.
2. Ensure switches are working correctly before connecting to the power supply.
3. Wear suitable eye protection if there is any risk to your eyes.
4. Disconnect tools when not in use or when making adjustments.
5. Electrical power tools should be regularly inspected and maintained by a competent person.
6. If using the tool creates dust, you should wear respiratory protective equipment (RPE) to protect against dust inhalation.
7. You should be face-fit tested for the type of RPE you are using. This is in addition to primary dust control systems (for example on-tool extraction).

Hazards

1. If possible, keep power cables off the floor. They may get damaged, trail through water or cause someone to trip.
2. Electrical tools often present a noise and vibration hazard. Wear hearing protection, if necessary, and follow guidance on trigger times to avoid hand-arm vibration syndrome (HAVS).
3. Keep equipment clean and dry.
4. Portable electrical tools that have become wet should be allowed to dry and then be checked by a competent person for electrical safety before being used again.
5. Some hand-held tools can cause hand-arm vibration. Refer to your risk assessment and the manufacturer or hire company information sheets.

What should you check before using a portable electrical tool?
When drilling, when should you wear eye protection?
What are three potential hazards when using portable electrical tools?
What does on-tool extraction mean?
What voltage tools should be used on site?
Who should inspect and maintain portable electrical tools?
Where can you find information on the correct grade of eye protection for the tool you are using?