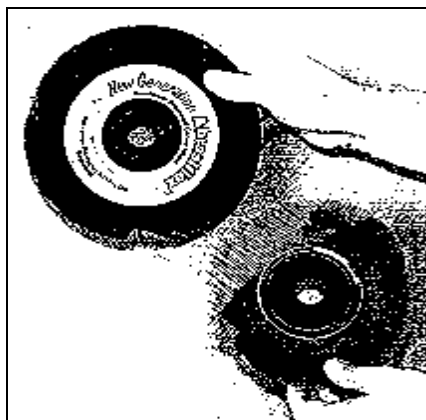


PMC 4 CUTTING WHEEL SAFETY



OBJECTIVE

To provide guidelines on the safe use of cutting and grinding wheels (also known as discs).

STATUTORY REQUIREMENTS

Section 19 of the *Occupational Health Safety and Welfare Act 1986* requires employers to ensure the work environment is safe, plant is maintained in a safe condition and workers receive adequate training and supervision.

RISK CONTROL MEASURES

The following guidelines will assist you to minimise the risks associated with cutting and grinding wheels:

- never use cutting wheels for grinding work, as they are not designed to withstand side pressure. Similarly, grinding wheels can fracture at the edge when used for cutting;
- never use the incorrect cutting or grinding wheel for masonry work. Masonry wheels designed to be used with water may overheat and fracture if used dry;
- never use a wheel that has become wet (if it is not designed to be used with water);
- ensure the machine is appropriate for the job before attempting to use the cutting or grinding wheel. It should have the correct drive flanges (guards or covers over the spinning wheel), which are flat, clean and free from defects;
- ensure the machine is fitted with a metal safety guard that operates correctly;
- avoid using lock-on switches when cutting or grinding, particularly on large machines;
- never use a wheel that has been dropped as it may be weakened or cracked;
- store and handle wheels carefully to avoid damage;
- inspect wheels for possible damage before they are mounted onto a machine. If there are any signs of damage, a replacement should be used and the damaged wheel destroyed;
- use the correct wheel on the machine. Check that the wheel has the right hole size when mounting abrasive cutting or grinding wheels. The hole should not be so loose that it requires centering before operation. If it is too tight, it should never be reamed to fit;
- use the correct tools when fitting wheels;
- allow newly-mounted wheels to run freely at normal operating speed, with the guard in place, for at least one minute prior to cutting or grinding;
- ensure the maximum operating speed of the machine never exceeds the specification of the wheel;
- always allow the wheel to stop by itself, rather than through applied pressure to its edge or face;

- wear appropriate clothing and personal protective equipment when using cutting and grinding wheels, such as eye or face protection, masks, gloves etc. Wearing long pants will prevent molten metal and sparks from entering shoes;
- ensure that workers have adequate training to operate the equipment, especially machines with motors exceeding 500 watts. Such machines have the capability to seriously injure the user should the machine jam, sometimes throwing the operator or causing the wheel to self-destruct;
- ensure workers do not operate unsafe or inappropriate machinery to perform their work;
- provide earth leakage protection and ensure the machine has been maintained and tested by a competent person.

FURTHER INFORMATION

Workplace Services

GPO Box 465
ADELAIDE SA 5001

Ph: 1300 365 255 *(If calling from a mobile phone or from interstate ph: (08) 8303 0400)*

www.eric.sa.gov.au

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