

FACT SHEET

MITRE SAWS

A mitre saw is a circular saw mounted on a frame, fixed to a rotating cutting table to make various cuts across the grain of timber. The saw may have a slide action, allowing cuts on much wider boards. Without a slide action, it is also known as a chop saw, or cut-off saw.

There are several types of power mitre saws:

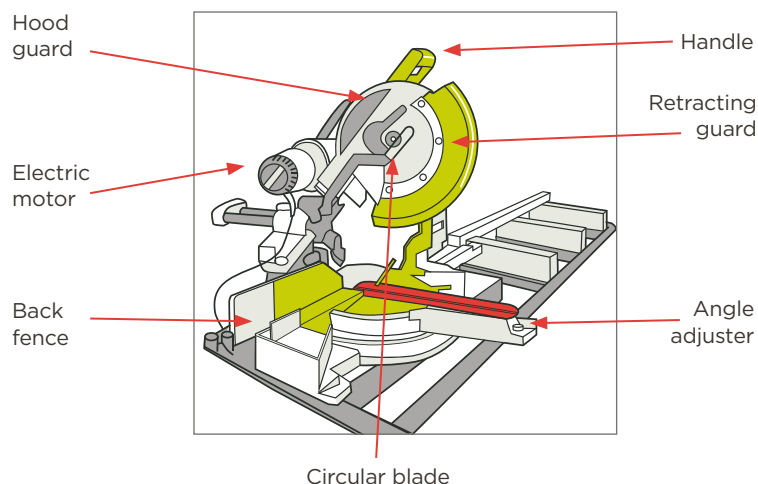
- > **Standard mitre saw:** has a fixed vertical pivot with rotating cutting table, allowing horizontally angled (or mitred) cuts while the blade remains vertical.
- > **Compound mitre saw:** has a rotating vertical pivot, allowing the cutter head and blade to tilt (or bevel) sideways in addition to the horizontally rotating table. This allows vertical and horizontal angled cuts, as well as cuts angled on both planes.

- > **Sliding compound mitre saw:** a compound mitre saw with horizontal sliding arms for the cutter head, allowing cuts on much wider boards.
- > **Dual compound mitre saw:** similar to a sliding compound mitre saw, but its blade and motor can tilt both left and right, providing more flexibility for cutting complicated angles, such as those required for crown moulding.

Mitre saws are often used for cutting long pieces of timber to length, and may be used to cut an angle on the end of a length of timber. When a mitre saw is used for cutting short lengths, the timber may be clamped on the saw's table, and the blade pushed through the timber.

Mitre saws do not allow the blade to turn parallel to the back fence, so they cannot perform rip cuts.

FIGURE 1: MITRE SAW



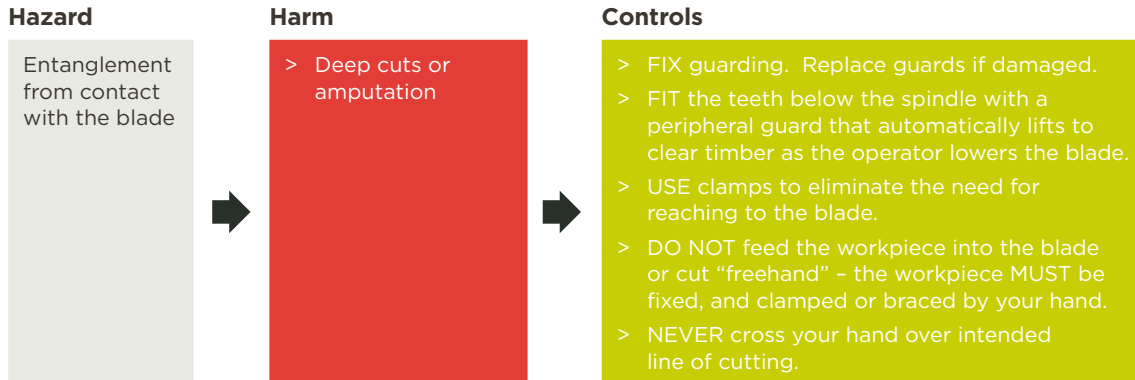
HAZARDS:

- > Entanglement from contact with the blade
- > Contact or impact from moving timber
- > Electrical
- > Noise
- > Dust
- > Slips, trips & falls
- > Contact, impact and entanglement from unexpected movement (during maintenance, cleaning & repairs)

PPE:



TASK - PRESENT TIMBER TO THE SAW

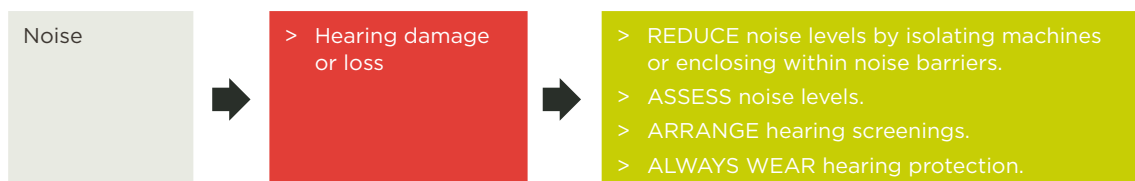
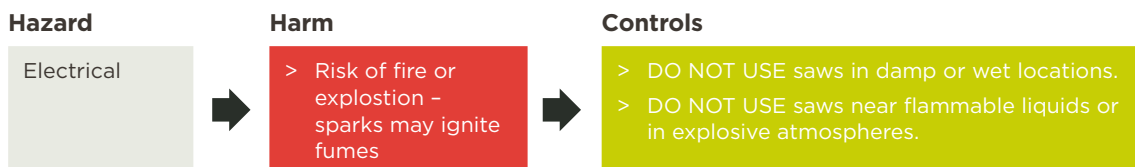


It is very dangerous to support the workpiece "cross-handed", that is, holding the left side of the workpiece with your right hand.

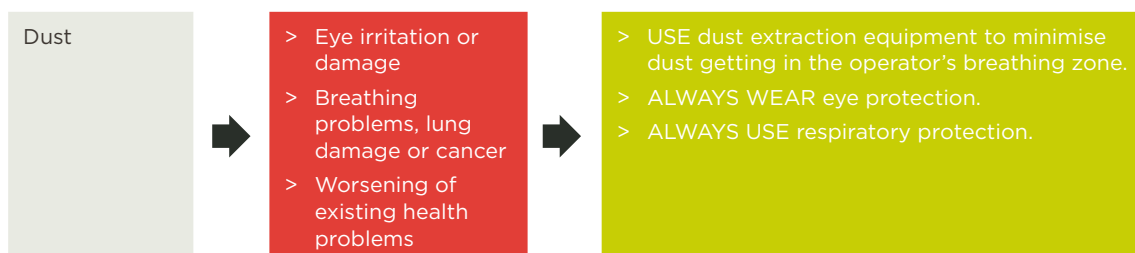


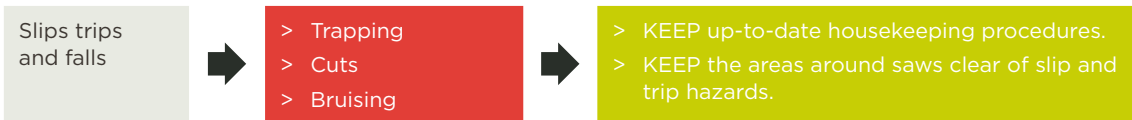
Multiple workpieces cannot be sufficiently clamped or braced, and may attach to the blade or shift during cutting.

OTHER (NON-MECHANICAL) HAZARDS

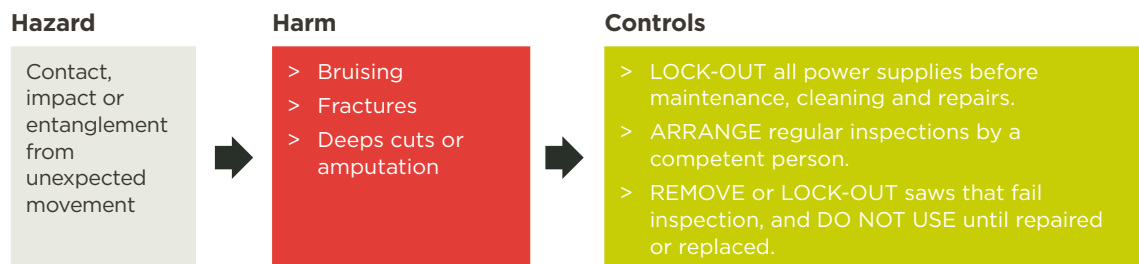


A safe noise level over an eight hour day is 85dB(A). A mitre saw may exceed this noise intensity.





TASK - MAINTENANCE, CLEANING & REPAIRS



References, current standards and further information can be found on the Safe Use of Machinery project page at: www.worksafe.govt.nz

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