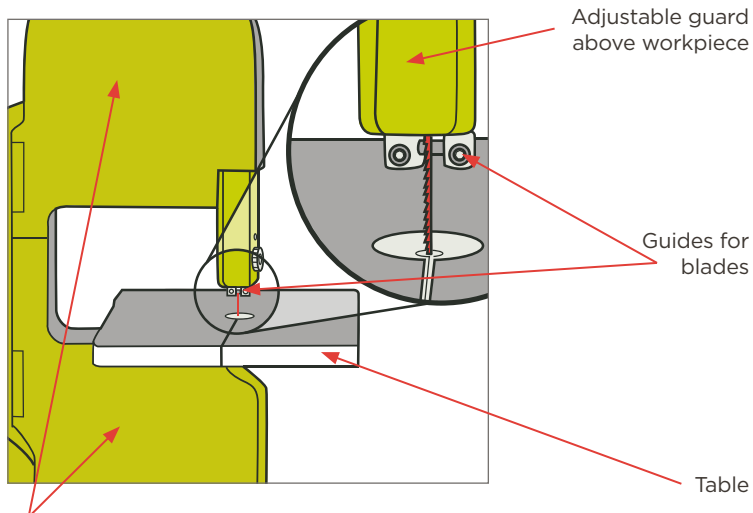


FACT SHEET

BAND SAWS

A band saw is a toothed steel blade passed over two band wheels. It cuts material held between the wheels. The material may be wood or plastic, metal or meat. Band saws are set up in different ways for different materials. Larger band saws used in sawmills are outside this factsheet's coverage.

FIGURE 1: WOODWORKING BAND SAW



Guards over top & bottom band wheels

HAZARDS:

- > Contact with blades
- > Dust

PPE:



NOT when working with tooth blades



TASK - FEED TIMBER THROUGH THE BANDSAW

Hazard	Harm	Controls
Contact with blades	> Deep cuts or amputation	<ul style="list-style-type: none"> > FIX guarding. > ADJUST the blade guide and guard within 6mm of the wood being cut to prevent fingers reaching above the workpiece. > USE a push stick, jig, or other aid to push small pieces of wood to the blade. > KEEP fingers off the line of the cut at all times. > ONLY cut one piece at a time. > DO NOT force a wide blade on a curve of small radius - make relief cuts on tight curves. > AVOID stacking timber pieces to ensure that the timber moves smoothly along the blade.

This can occur when pushing timber by hand into the blade of the saw. Timber MUST move smoothly against the blade as it is cut, to avoid twisting the blade, stalling, or going off the line of cut.

OTHER (NON-MECHANICAL) HAZARDS

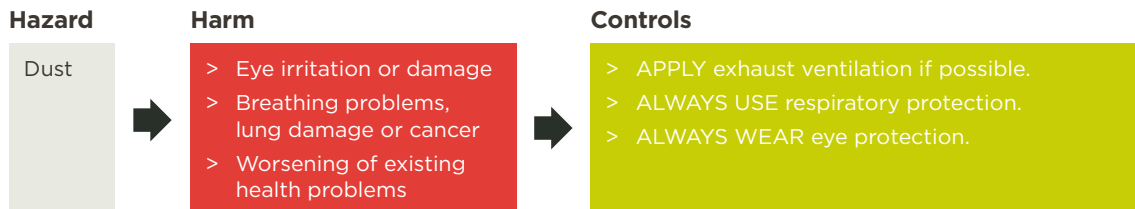
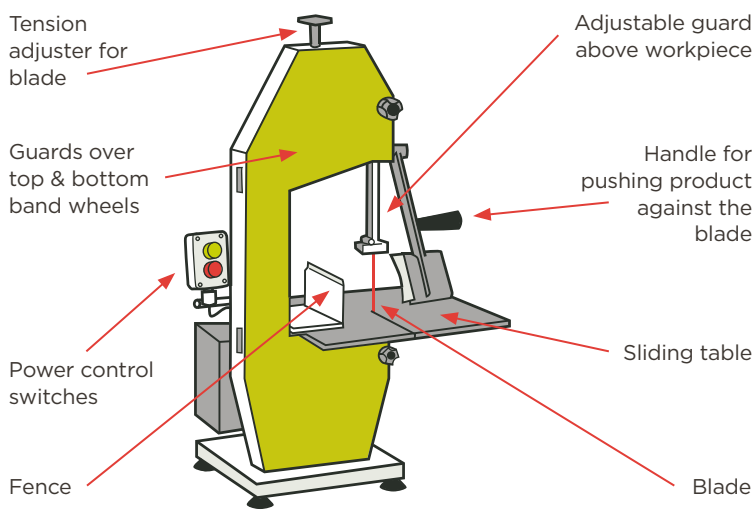


FIGURE 2: MEAT CUTTING BAND SAW



HAZARDS:

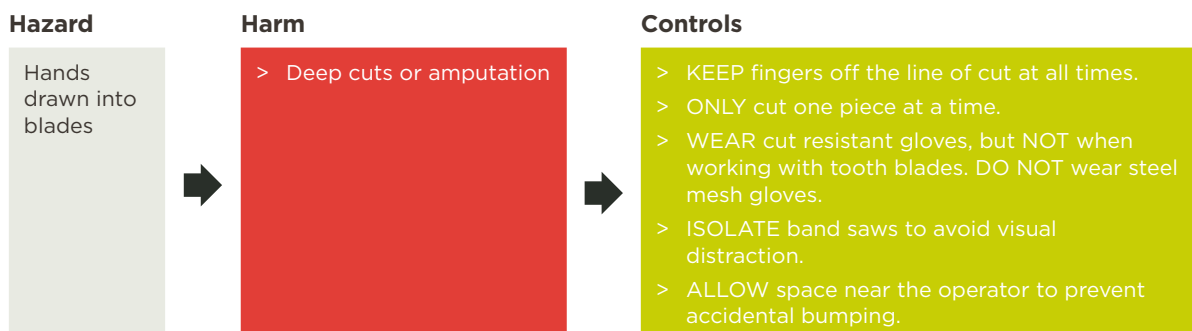
- > Hand drawn into blades
- > Forced product/ repetitive tasks

PPE:



NOT when working with tooth blades

TASK - FEED MEAT INTO THE BANDSAW & MAKE THE CUT



This can occur when pushing meat by hand into the blade. A meat cutting band saw uses a cutting table to present meat to the blade. Because meat cuts vary in thickness, it is not possible to close the blade guard to exclude fingers.

OTHER (NON-MECHANICAL) HAZARDS

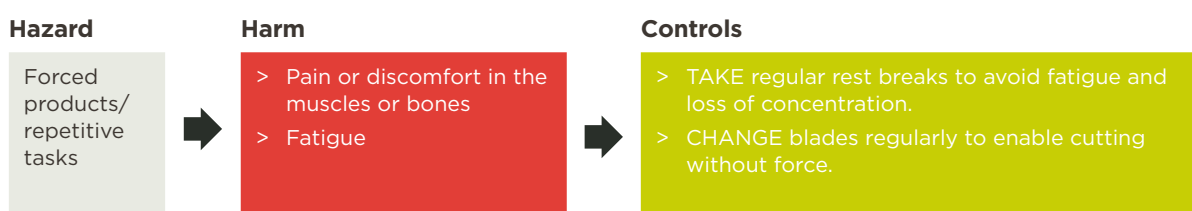
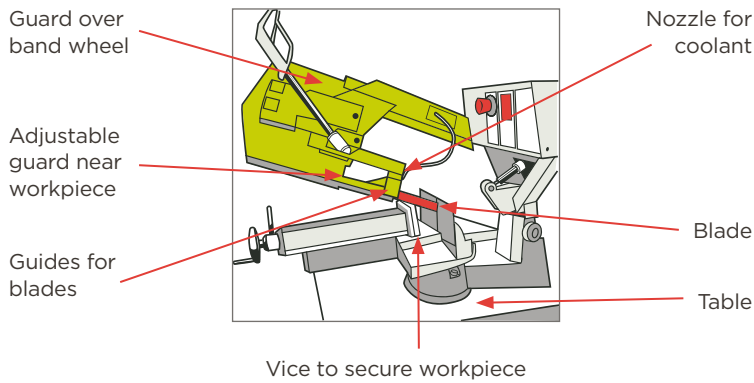


FIGURE 3: METAL CUTTING BAND SAW



HAZARDS:

- > Hands trapped by clamp
- > Heavy lifting
- > Contact with blades
- > Contact with soluble metal cutting oil

PPE:



NOT when working with tooth blades



TASK - LOAD AND SECURE THE METAL

Hazard	Harm	Controls
Hand trapped by clamp	> Crush injuries	<ul style="list-style-type: none"> > FIX guarding. > SECURE metal workpieces in the vice only when the blade is stopped.

A metal cutting band saw uses a clamp to secure the metal while the blade saws through it.

Heavy lifting	> Strain injuries	<ul style="list-style-type: none"> > Support the workpiece on extension tables or roller trestles when necessary. > GET HELP to lift large workpieces.
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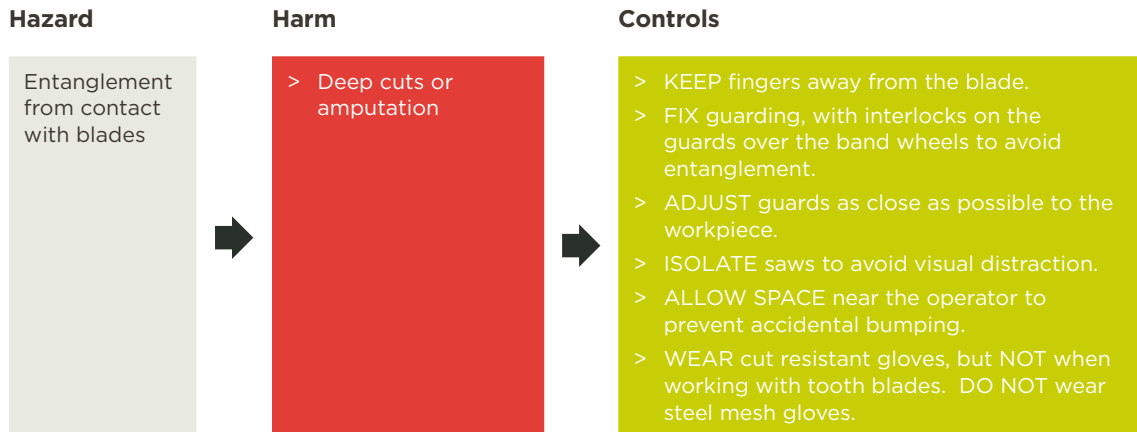
TASK - MAKE THE CUT

Hazard	Harm	Controls
Contact with blades	> Deep cuts or amputation	<ul style="list-style-type: none"> > FIX guarding. > ADJUST the blade guide and guard as close to possible to the product being cut. > ISOLATE band saw from traffic/ walkways to avoid distraction.

OTHER (NON-MECHANICAL) HAZARDS

Hazard	Harm	Controls
Contact with soluble metal cutting oil	<ul style="list-style-type: none"> > Dermatitis > Breathing problems > Can cause illness, or worsen existing health problems 	<ul style="list-style-type: none"> > CLEAN or FILTER fluids and ensure timely replacement. > USE respiratory protection, gloves, and eye protection when handling cutting fluid.

HAZARDS CONCERNING ALL BANDSAWS



Operators can be distracted by people moving around, which may lead to fingers contacting the blade.

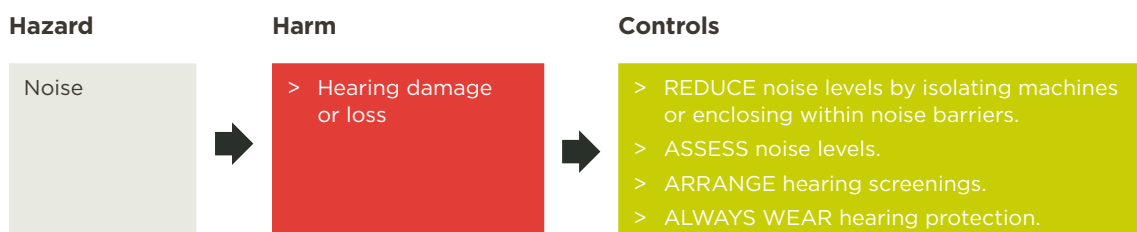
Changing or fitting the band saw blade can result in contact with sharp teeth.

Band saws may develop a regular “click” if the blade cracks and is likely to break. If a click is heard, saws should be turned off and not used until inspected and repaired.

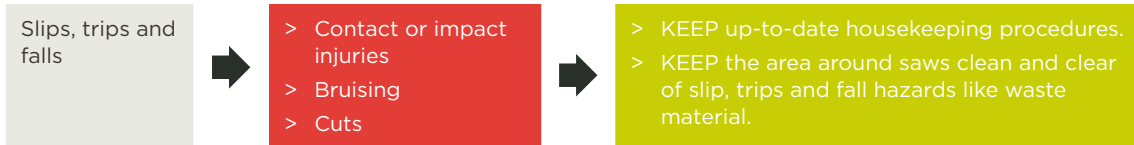


People can mistakenly believe the blade has stopped. Stopping time after power is turned off should be no more than 10 seconds.

OTHER (NON-MECHANICAL) HAZARDS



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



Waste material underfoot can cause slips and falls.

TASK - MAINTENANCE, CLEANING & ADJUSTMENTS

Hazard	Harm	Controls
Exposed blades	> Cuts	> LOCK-OFF all power supplies before maintenance and cleaning, or adjusting blades and guard. > WEAR cut resistant gloves, but NOT when working with tooth blades. DO NOT wear steel mesh gloves.
Moving parts	> Entanglement or trapping injuries	

Steel mesh gloves can get caught and draw hands into the machine.

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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