Metalworking Machines – Metal Saws (Hot) – Fact Sheet



WHAT SHOULD YOU DO BEFORE USING A METAL SAW?

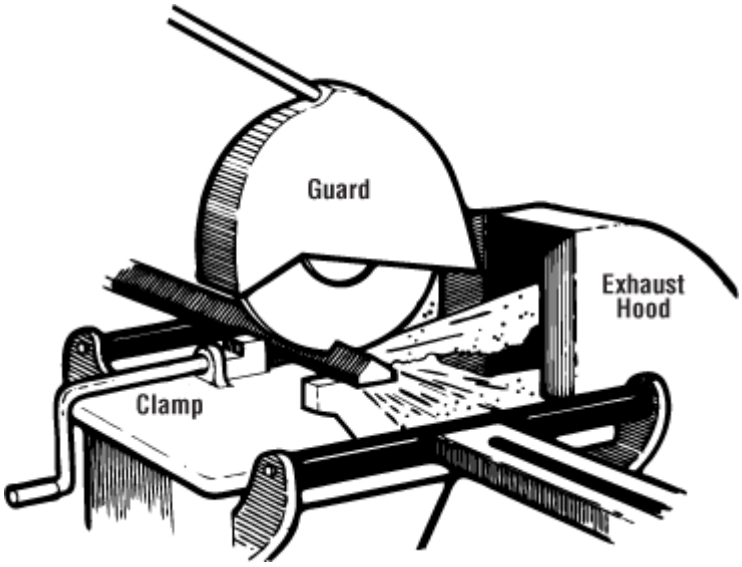
Hot metal saws can be dangerous if not used properly.

- Read the owner’s manual carefully.
- Make sure you understand instructions and are properly trained before operating a hot metal saw.

Hot metal saws, often referred to as cut-off saws or chop saws, use an abrasive cut-off wheel. The machine may operate dry or wet, at low or high speed, and in either manual or automatic mode.

What are some basic safety principles to follow?

- Wear appropriate CSA-certified personal protective equipment, including safety glasses, hearing protection and footwear as necessary.
- Wear approved respiratory protection when necessary.
- Handle and store wheels as directed by the manufacturer.
- Inspect all wheels for possible damage before mounting.
- Use the proper blade for the material being cut.
- Check machine speed against the maximum safe operating speed marked on the wheel.
- Make sure that mounting flanges are equal and the correct diameter (at least 1/4 of the wheel diameter).
- Use mounting blotters when they are supplied with wheels.
- Clamp work firmly in place when using non-reinforced cut-off wheels.



- Use a properly designed safety guard covering at least one half of the grinding wheel.
- Allow mounted wheels to run at operating speed, with guards in place, for one minute before cutting.
- Bring wheel into contact with the work without bumping on impact.
- Turn off coolant before stopping the wheel to avoid an out-of-balance condition.
- Keep working surface clean of scraps, tools and materials.
- Keep floor around saw clean and free of oil and grease.
- Make sure that the saw has a start/stop or emergency button within easy reach of the operator.

What should you avoid doing?

- Do not use a cracked wheel or one that has been dropped or damaged.
- Do not force a wheel onto the machine or alter the size of the mounting hole. If the wheel does not fit the machine properly, get one that will.
- Do not exceed the maximum operating speed marked on the wheel.
- Do not use mounting flanges whose bearing surfaces are not equal, clean, flat and free of burrs.
- Do not tighten the mounting nut excessively.
- Do not grind on the side of the wheel.
- Do not start machine until the wheel guard is in place.
- Do not stand directly in front of the cut-off wheel when starting a machine.
- Do not jam, bend or pinch the wheel.
- Do not force cutting such that the motor slows.
- Do not cut without proper ventilation.

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