

# METAL CUTTING BAND SAW SOP

## ACRONYMS

LOTO - Lockout/Tagout.  
 PPE - Personal Protective Equipment.  
 SOP - Safe Operating Procedure.

## HAZARDS

What can cause harm?

- ▲ Moving saw blade
- ▲ Electricity
- ▲ Hot parts
- ▲ Ejected objects
- ▲ Manual Handling
- ▲ Poor housekeeping

## PRECAUTIONS

- All operators are trained and competent to operate Metal Cutting Band Saw safely. Operator training should include:
  - Workplace induction
  - Safe operating procedures
  - Manufacturer's instructions
  - Nature of hazards
  - Fitting of PPE
  - Manual handling
  - Housekeeping
  - First Aid



## MAINTENANCE

- Follow LOTO procedures. Record service/repairs information in Maintenance Log
- Maintenance is conducted as per manufacturers' instructions and by qualified persons only
- When the machine is taken out of service for maintenance:
  - Shut off and isolate the power supply
  - The power supply is clearly labelled/tagged "do not use."



## PRE-OPERATIONAL INSPECTION

- Follow the pre-operational checklist in the manufacturer's operational manual:
  - Tested and tagged
  - Interlocked/fixed guards functional
  - Blade guide adjusted to suit workpiece
  - Blade tension correct, sharp and attached secured
  - Nuts, bolts etc. in place, no missing screws
  - Guards undamaged
  - E-stops accessible and functional
  - Controls labelled, legible and functional
  - Moving parts lubricated
  - Coolant levels sufficient
  - Cutting table secured in required work position
  - Cutting table cleared of off-cuts, debris, metal shards
  - Saw clean, clear of dirt, grease, oil or flammable solvents.

## WORK AREA



No trip or slip hazards



Adequate lighting

## PPE



## METAL CUTTING BAND SAW SOP

### OPERATION

1. Operate in accordance with manufacturers' instructions
2. Wear prescribed PPE
3. Raise the saw head to a vertical position
4. Adjust the stop limit so the motor stops just after the workpiece is cut off
5. Adjust the stock stop to the required length position
6. Open vice to accept the workpiece to be cut. If the piece is long, support the end with an approved support
7. Rotate the vice hand wheel to tighten the workpiece
8. Turn the motor switch on, adjust blade speed to correct setting for the material of the workpiece
9. Allow the saw head down slowly to enter the workpiece to minimize blade tooth damage due to excessive entry speed. Ensure:
  - Correct blade for thickness and type of material
  - Select correct speeds for thickness and type of material.
  - Adequate ventilation based on materials being cut
  - Secure work using clamps
  - Ensure correct direction of feed (into blade/cutter against the rotation of the blade)
  - Stand with feet shoulder-width apart, maintain a firm stance
  - Watch workpiece
  - Keep body parts clear of the blade
  - Only cut one workpiece at a time and hold it firmly against the table when passing through the blade
  - Clear away off-cuts, swarf, and debris regularly
  - Turn off the machine; follow LOTO procedures to ensure the machine cannot be accidentally activated. Wear cut-resistant gloves when clearing away debris and disposed of in appropriate containers
  - Stop work if the machine begins to vibrate unexpectedly, or the blade appears to be weakened.

× ***Do not leave unattended when running.***

✂ ***Entanglement/Lacerations from moving parts/blades. Keep fingers (and other body parts), hair, clothing, jewelry, and tools away from moving parts.***

✓ ***CLEAN*** the band saw. Oil and grease marks should be cleaned off using mild household surface cleaner and a soft rag.

× ***DO NOT*** use abrasive cleaners or strong solvents that can damage the machine.



✓ ***Wear gloves*** when handling blades during replacement (cut-resistant gloves).

✚ ***If blade jams***

- ✓ Stop machine.
- ✓ Ensure blade comes to a complete stop before clearing blockage.