

# **BAND SAW SAFETY**

## **The Band Saw**

- The band saw is a powerful machine. Extra caution and care must be taken while using it.
- The band saw is intended for cutting both straight and curved lines in both thin and thick materials.
- The basic operating principle is that of a continuous blade turning around two guide wheels. One wheel is above the table and the other is below the table.
- The blade therefore cuts continually downwards resulting in a smoother cutting action than the scroll saw.
- Blades of various widths and teeth sizes are available.
- Narrow blades are used for cutting small diameter curves.
- Wider blades are used to cut very thick material or when using the saw to rip material.
- There are also blades specially designed to be used for cutting metal.
- The size of the band saw is determined by the diameter of the wheels.
- The rip fence is used when making straight and long cuts which are parallel to an edge.
- The band saw table can also be tilted to make angle cuts.

## **How to Use the Band Saw**

- Always use layout or guide lines to mark your material to be cut. Include lines for relief cuts if necessary
- Adjust the upper guide to allow for 2-3 mm of clearance above the material.
- Feed the material into the blade and ensure that the cut is being made on the waste side of the guide line.
- Make relief cuts first. This will allow the blade to cut freely and help to prevent the blade from binding when cutting small diameter curves.
- When cutting relief cuts, always back the blade out slowly to avoid pulling the blade off of the guide wheels.
- Be sure to keep hands away from the front of the blade.

## **Band Saw Safety Rules**

- 1 Always get permission from the instructor before using the band saw.

# **BAND SAW SAFETY**

- 2 Visually inspect the bandsaw...be sure that:
  - all guards are in place and properly adjusted;
  - band wheels are enclosed;
  - you are aware of on/off switch and emergency STOP button locations.
- 3 Wear personal Protective Equipment (PPE). Safety Goggles or a Face Shield must be worn while using the band saw. Check with the instructor to see if ear protection is required as well.
- 4 No loose clothing or jewelry when operating a bandsaw.
- 5 Do not make any adjustments without teacher permission. If adjustments permission granted, be sure that power is off.
- 6 Use both hands and keep fingers at least 4" from the blade at all times.
- 7 Keep upper guide within 5mm (1/4") from the material being cut.
- 8 Plan your cuts carefully. Saw curves gradually. Sudden twists will cause the blade to bind or break. Use relief cuts if necessary.
- 9 If the blade breaks, turn the power off immediately and step back. Inform the instructor immediately.
- 10 Always make a short cut first. Avoid backing out of cuts with the power on. Backing out of a cut may cause the blade to come off of the drive wheel.
- 11 Do not cut cylindrical stock without the use of a V block clamp.
- 12 Remove scrap pieces from the table only after the blade has stopped.
- 13 Always operate the saw from the front never from the side.
- 14 Do not leave the band saw until the blade has stopped.
- 15 Ensure that the blade is running at full speed before starting a cut.
- 16 Cut on the waste side of your line, leaving the pattern line on the work.
- 17 Keep your hands beside or behind the blade. Never in front.
- 18 Use a push stick on small pieces.
- 19 If you are in doubt about the operation of the band saw, ask your instructor for help

## **BAND SAW SAFETY**

### **BAND SAW DATA SHEET**

#### **General Requirements**

Students must be trained on the safe and proper use of the **Band Saw** before they may begin using it. The student must demonstrate safe and proficient procedures.

#### **Personal Protective Equipment**

Safety Glasses or Face Shield

#### **Possible Risk Factor**

Entanglement [hands and hair]

Small projectiles [chips]

Hand injuries

Cuts and Abrasions

Eye injuries

# **BAND SAW SAFETY**

## **BAND SAW QUIZ**

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

- 1 When using the band saw, \_\_\_\_\_ are required when making curved cuts.
- 2 You should adjust the \_\_\_\_\_ above the work before beginning to cut.
- 3 Narrow blades are best suited for cutting \_\_\_\_\_.
- 4 When cutting with the band saw, the blade should cut on the \_\_\_\_\_ side of the work piece.
- 5 When using the band saw, plan your cuts carefully. Saw curves gradually. Sudden twists will cause the blade to \_\_\_\_\_ or \_\_\_\_\_.
- 6 When using the band saw, keep your hands \_\_\_\_\_ or \_\_\_\_\_ the blade. Never in front.
- 7 Inspect all \_\_\_\_\_ before using any saw.
- 8 Always support \_\_\_\_\_ pieces.
- 9 Use \_\_\_\_\_ sticks on small pieces.
- 10 Use the \_\_\_\_\_ when changing blades.

### **WORD BANK:**

relief cuts, waste, bind, break, beside, small curves, guards, round, push, lock-out, behind, upper guide