

# CORNELL MACHINE SHOP SAFETY



## VERTICAL BAND SAW SAFETY AWARENESS GUIDE



### MINIMUM REQUIRED PPE

- Safety Glasses
- Closed-toe shoes
- Hearing Protection

### HAZARDS & CONTROLS

- The fast-moving blade creates a significant laceration or amputation hazard.
  - Keep as much of the blade guarded as possible.
  - Adjust the blade guard between 1/8 inch - 1/4 inch above the workpiece.
  - Ensure that the entire blade pulley system is fully enclosed.
  - When cutting a smaller piece of stock, utilize a push stick/block to push the workpiece through.
  - Before retrieving a cut workpiece, ensure that the blade has come to a complete stop.
- The moving blade also creates potential in-running nip point hazards. Avoid loose hair, clothing and jewelry while operating this machinery. Do not wear gloves while operating this machinery.
- Cuts and lacerations can come from the band saw blade breaking or moving off track.
  - Ensure that blades are not under too much stress.
  - Ensure the blade tension is always properly adjusted.
  - Always inspect the blade before using. Check for missing blade teeth or listen for clicking noises when it is running. Do not use blades under these conditions.
  - Make relief cuts on tighter curved cuts.
  - If the stock binds the blade, shut off power and wait for the blade to completely stop before attempting to back the stock out.
  - Never adjust the saw blade while it is running.
  - Keep table and point of operation clean and free of obstructions.
  - If blade breaks, immediately shut down power, notify appropriate personnel, lock and tag out the machine until it is back in working order.

## LIMITATIONS

- There are several different blade styles and setups for different types of materials and cutting operations. Be sure the blade you are using is appropriate for the type of material you are cutting.
- Spherical or cylindrical shaped objects should not be cut unless absolutely necessary. Cutting objects that do not lay flat on the cutting table can be grabbed by the blade and pull the operator into the blade. These types of objects shall only be cut by properly trained professional operators using the appropriate jigs and v-blocks.
- Thin sheets shall not be cut on a band saw. General rule of thumb is that at least 3 blade teeth should always be engaged in the workpiece when being cut.

## MACHINE GUARDING



Be sure to guard both pulley wheels that carry the band saw blade and ensure that access to them are controlled.

Adjustable blade guard to keep entire blade guarded except at the point of operation. This should always be adjusted to its lowest possible point.

## SHOP SPECIFIC PRECAUTIONS

-