

## Safety Awareness Training KDW-11 Power Sanding Safety

### **Introduction.**

This safety Awareness procedure forms part of the Knox and District Woodworkers Inc. Safety Awareness Program, and details the safety requirements to be adopted in the operation of the equipment described below.

### **Sanding**

The sanding operation is the removal of excess material or it can also be utilized as a finishing operation by the use of a sanding machine.

### **Equipment.**

The sanding equipment at KDWC consists of a bobbin sander which is used to clean up contoured surfaces, one 4inch (100mm) horizontal belt sander and one 14 inch (350mm) dia. Disc sander (not shown) one combination disc and belt sander and one 500mm oscillating drum finishing sander.

#### **Bobbin Sander**



#### **Combination Disc & Belt Sander**



#### **Belt Sander**



#### **Oscillating Drum Sander**



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## Types of Sanders

**Bobbin Sander. (Fig1)** The bobbin sander has tubes of abrasive material which fits over differing sizes of bobbins; this allows the sanding of various radii and curves.

**Belt Sanders. (Fig2)** A sanding belt is normally a fiber-backed belt, coated with aluminium oxide or other abrasive materials. The belt is a continuous belt, which is joined either by adhesive tape or glue. The sanding belt must be the same width as the contact wheel to ensure safe operation of the process. Under no circumstances is a belt that is narrower than the contact wheel to be used. The sanding belt is mounted over both the contact (drive) wheel and the idler wheel.

**Disc Sander. (Not Shown)** The disc is normally a felt backed abrasive disc to suit the dia. of the drive disc. The abrasive disc is secured to the drive disc by the use of Velcro.

**Combination Sanding Machine. (Fig3)** Refer to belt and disc sander above.

**Oscillating Drum Finishing Sander. (Fig4)** When operating this machine always keep hands and fingers clear of the sanding head. Prior to turning the machine on adjust the sanding head so that it is lightly contacting the timber through the use of the adjusting wheel located on the top of the machine. **This is a finishing sander only and the sanding head should only be adjusted when there is no further contact with the timber.**

## Safety.

Prior to the operation of the Sanding Machines the following safety rules must be applied.

- Be aware of the emergency stop procedure.
- Member must ensure that the extraction fan is turned on at all times when operating this equipment.
- Ensure the member is aware of other personnel in the immediate area.
- Ensure work area is clear of obstructions that may cause tripping or falling.
- Ensure member is aware of dangers associated with the movement of the bobbin, disc or belts. **(Always wear a dust mask or other suitable dust protection).**
- The dangers of loose clothing or long hair being caught in machinery is well documented, therefore when using this machine, the member must wear the appropriate clothing. (Ref KDW-01).
- Member must ensure that the dust extraction outlet is turned off and that the feed belt is turned off at the power point when operations are complete.

## Operation

When operating the sanding equipment at KDWC ensure a suitable dust mask is worn to prevent the inhalation of any dust particles not captured by the extraction system. Care must be taken not to use frayed, damaged or badly worn sanding belts or discs, due to the possibility of the timber being scorched or the belt breaking. The member must take extreme care in the placement of his/her hands and fingers and must be aware at all times of the danger of contact with the abrasive surface.



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**Housekeeping.**

When operating any machinery or equipment ensure there are no obstacles, work or any other obstruction cluttering the work area. It is part of each member's responsibility to clean up the machine and surrounding area after use and ensure an adequate level of housekeeping is maintained throughout the workshop area ensuring the safety of themselves and all other members.

**Conclusion.**

The above safety requirement is intended to ensure the safety and well being of all club members, for detailed instruction on the operation of the above equipment refer to the appropriate club members. It is expected that each member will ensure that all work undertaken is carried out with consideration and due care for all.