



SAFE WORK PROCEDURE DRUM SANDER MACHINE

SPECIFIC DANGERS OF A DRUM SANDER

- ✓ A Drum Sander has an automatic feed for the timber and the action is sanding, not cutting. It is therefore a relatively safe machine to use. However, care must still be taken to avoid personal injury or damage to the machine.
- ✓ A Drum Sander has a length of abrasive paper wound in a spiral round the drum. It must be checked for tightness and excessive wear.
- ✓ Hands could be pulled or fed into the machine if allowed to become too close causing severe injury.
- ✓ The depth of cut must be appropriate for the width and hardness of the timber. Excessively deep cuts will burn the abrasive and stall the machine. Cuts are usually only 0.1mm or 0.2mm deep.
- ✓ Painted timber or wet timber will clog the abrasive. Paint should be removed with a hand plane before machining.
- ✓ The automatic feed on a drum sander must be checked to ensure it is tracking properly. Adjust if necessary.

GENERAL SAFETY ASPECTS

- ✓ Do not use this machine unless you have been instructed in its safe use and operation.
- ✓ **Covered footwear, eye protection (Minimum safety glasses or goggles) must be worn at ALL times by the operator** and any other person in the near vicinity of the drum sander.
- ✓ Long or loose hair must be contained, and clothing must be close fitting.
- ✓ Ensure the work area is free of any trip hazards or obstructions before commencing operations. Keep the work area clear of such hazards while working.
- ✓ The drum sander must always be operated by only one person. This includes turning the machine on/off and feeding the timber into the sander. Please note that a second person may be needed to support longer pieces of timber as it is machined. It is also common practice for two persons to use the machine – one feeding the timber in and the other holding the timber as it exits the machine.

PRE-OPERATIONAL ASPECTS

- ✓ Do not use faulty equipment. Immediately report faults to the convenor or persons responsible and, if appropriate, tag out the planer.
- ✓ Initially, the depth of cut of each length of timber is determined by measuring the maximum thickness along the plank. As this frequently involves some estimation, adjust the machine so it will accommodate timber slightly larger than the thickness of the timber. For example, if the timber measures say 23mm thick, then set the machine to 24 or 25mm for the first cut. Pass the timber through the machine and adjust the depth of cut as necessary.
- ✓ Check the operation of the switch (start/stop).
- ✓ The abrasive paper should be changed only by authorised persons.
- ✓ Always start the machine before feeding in timber.
- ✓ Always use dust extraction.



Melville Group of The Woodturners Association of Western Australia (Inc.)

OPERATIONAL ASPECTS

- ✓ Always feed material evenly and smoothly **according to the grain**. Slight forward pressure or downward pressure is sometimes needed. If excessive forward pressure is needed to push the timber through, then the depth of cut is possibly excessive. An uneven surface finish will result if the timber stops advancing.
- ✓ Keep your hands clear of the machine, never allowing them to be fed in with the timber.
- ✓ Engage the assistance of another person to support the end of the timber when it is very long.
- ✓ The depth of cut is determined by the width and hardness of the timber. A drum sander will only sand away small amounts of timber about 0.1mm or 0.2mm. The machine should never be set so that the motor is labouring. It should sound like it is running freely.
- ✓ Never leave the machine running unattended.
- ✓ Stop the machine immediately if it develops a problem.

POST-OPERATIONAL ASPECTS

- ✓ When finished, unplug the power cord.
- ✓ Clean work area and planer of sawdust.

REMEMBER: THE ONUS IS ON YOU TO WORK SAFELY