

# **Drum Sander Safety Accreditation Notes**

Revised: December 2014

Note: Accreditation should be viewed as the start of a learning experience, not the end. Continue to learn as much as you can about setting up and using each item of equipment. By increasing your knowledge, you will reduce the chance of an accident and get better results. If you are unsure of any aspect of use, ask an experienced operator.

The drum sander is not an alternative to using the thicknesser.

The drum sander is only to be used for the initial sanding of timber that has been through the thicknesser. That is, to remove blemishes left by the thicknesser.

If you have any doubts about using the sander seek assistance/advice.

### Safety

- 1. No loose clothing, ties, scarves, gloves, etc. Ensure that long hair is constrained.
- 2. The feed belt can grab loose items of clothing e.g. a loose wind cheater.
- 3. Never ever use the sander without dust extraction.
- 4. Do not stick your fingers under the drum cover.
- 5. When sanding short lengths do not place them on the conveyor with your fingers on the underside. The rollers force the timber down and it can trap your fingers.
- 6. Except for cleaning the abrasive, the drum cover must not be opened when the drum is rotating.
- 7. Turn off the belt feed when cleaning the drum otherwise your clothes will catch on the feed belt.
- 8. Turn all motors off before trying to remove a jammed piece.
- 9. Never leave the sander running unattended.

### Belt sander components and basic operations

- 1. The main parts are: the feed belt, drum cover, drum, pressure-rollers, and height adjustment.
- 2. The controls: speed, oscillation on/off (do not touch), red light on speed controller.
- 3. Install and remove abrasive. Use of tool or your finger.
- 4. Clean abrasive.
- 5. Set drum to barely touch timber as the starting point.
- 6. Never use without dust extraction.
- 7. Imagine the drum lowering handle is a clock face and lower the drum an hour at a time (1/12<sup>th</sup> circle). The finer grade abrasives require even smaller increments, as can timber that burns easily such as Blackwood.
- 8. The Drum Sander's primary function is to remove minor imperfections left by planing or thicknessing and preparing the surface for hand sanding.
- 9. When edge sanding, if the bottom edge is not square to the timber face then the sanded face will also be off-square.
- 10. Vary where you run the timber through the sander to even-out wear on the abrasive.
- 11. Tat! Tat! Tat! Tat! This noise is caused by the abrasive at the end of the drum hitting the feed belt. Stop immediately and re-tension the abrasive. Alternatively, the timber piece may be less than 5mm thick and require a sled.



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12. Always clean the abrasive when you finish and before removing it from the drum.

#### General

- 1. Clean the abrasive regularly to prevent from it choking up. Some timber/abrasive combinations are prone to choking. Better to clean too often than not often enough.
- 2. Timber less than 5mm thick must be placed on a sled with a sacrificial backstop.
- 3. Very light sanding increments at high speed reduces the risk of burning timber, especially for timbers susceptible to burning. Slight skewing also helps in some cases. A light dusting of talcum powder on easily burnt timber before each pass is said to reduce the risk of burning.
- 4. Trying to remove too much in one pass is the main reason that abrasives burn or produce a resin streak which reduces their usefulness.
- 5. If using abrasive with a burn mark, place a small piece of masking tape on the machine case in line with the burn mark so that you can avoid it. Do not use pencil or a marker as these will still be in place when the abrasive is changed.
- 6. For glued-up panels that are too wide for the thicknesser, clean off exuded glue before sanding and skew the timber through the sander. A straight sanding pass over extruded glue will almost certainly ruin the abrasive. Coarse abrasives such as #80 work better than fine abrasives for cleaning remaining glue.
- 7. Support wide and long lengths of timber in and out of the drum sander.
- 8. The outer end of the sanding drum is set a fraction higher than the inside end so that a groove is not sanded into boards greater than 22" (560 mm) in width. Easier to hand sand out a slight ridge than a groove. Regularly swap the leading end of your timber through the sander to reduce the effect of the drum's slope.

Checkout a video presentation on the Guild's Jet 22-44 Oscillating Drum Sander: Video of Jet 22-44