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|  THOMPSON RIVERS UNIVERSITY Occupational Health & Safety | Number: OH&S 18.34.1 |
| | Revision Date: 05.06.2014 |
| | Sanders Safety Operations |

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1. **PURPOSE**






1.1. To educate workers and students of the proper safety procedures for working with belt and disk sanders.

2. **SCOPE**






2.1. This procedure applies to all employees and students while on TRU property

3. **PRECAUTIONS**

POTENTIAL HEALTH & SAFETY HAZARDS

| HAZARD | | TO PROTECT YOURSELF |
|---|---|--|
| PINCH POINTS There are gears and exposed moving parts on machinery. |  | Use LOCK-OUT procedures when performing maintenance or conducting any work within 12" of an exposed pinch point. NEVER put your hands or feet near an exposed pinch point or gears! |
| ELECTRICAL HAZARD |  | Do not attempt to service electrical wires. Consult TRU Facilities Department. |
| HIGH SOUND LEVELS Sound levels exceed 85 dB |  | HEARING PROTECTION is required when working in designated areas. |
| FOOT INJURY |  | Approved protective footwear is needed when there is the risk of foot injury due to slipping, uneven terrain, abrasion, crushing potential, temperature extremes, corrosive substances, puncture hazards, electrical shock and any other recognizable hazard |
| LASER HAZARD |  | Wear suitable eye protection |

4. PERSONAL PROTECTIVE EQUIPMENT

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|---|--|
|  | Safety glasses must be worn at all times in work area! |
|  | Respirator with HEPA filters must be worn when working with the sanders creates an excessive amount of dust. |
|  | Work Boots must be worn at all times when working in an area where there is risk of serious foot injury due materials falling onto the foot. |
|  | Work Gloves should be worn when there is a risk of hand injury during the course of work tasks. |
|  | Close fitting clothing or protective clothing must be worn. |

5. SAFETY PROCEDURES

As both belt and disk sanders can cause serious skin burns with incorrect use, Operators must be thoroughly trained in the safe handling of this piece of equipment.

5.1 Pre-Operation

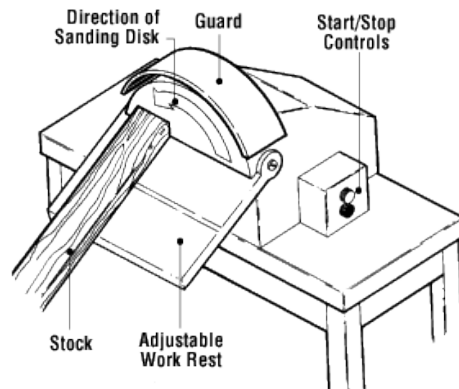
- 1) Wear safety glasses or goggles, or a face shield (with safety glasses or goggles) when operating a sander.
- 2) Wear hearing protection that is suitable for the level and frequency of the noise you are exposed to in the woodworking area.
- 3) Wear protective footwear
- 4) Wear a respiratory protection (e.g. dust mask) where required, during sanding operations and clean up.

- 5) Have the dust extracting system turned on and connected to the sander. Because of the dust created when sanding wood, the fire and explosion hazard is considerable.
- 6) Check that the sander does not have a torn belt or ripped sandpaper disk. The work could get caught and kick back work pieces.
- 7) Make sure that the sanding belt tracks properly.
- 8) Keep the work area free of debris (tripping and slipping hazards)
- 9) Keep hands away from abrasive surfaces.
- 10) Hold small or thin pieces of stock in a jig or holding device to prevent injuries to the fingers and hand.

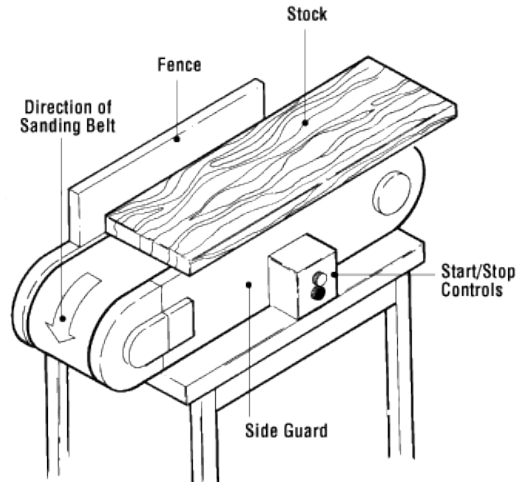
5.2 Safety Operation

- 1) Before plugging-in a portable sander be sure that the switch is in the "OFF" position to avoid injury.
- 2) Be aware of where the cord is relation to your work. Damaged cords can result in electrical shock. A sander should not be used in a damp or wet location.
- 3) When adjusting the tracking on a portable belt sander, be sure that the sander is supported and positioned to avoid contact with the operator.
- 4) The sander should be used away from the body.
- 5) Do not force a portable sander. The weight of the sander provides enough force for a job. Excessive pressure could result in the overheating of equipment and kickback of the material being sanded.
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- 8) As with all power equipment, do not leave the machine running. Ensure that the machine has come to a complete stop before leaving the machine.
- 9) Make sure that the sanding machine travels in the correct direction. Arrows on the back of the belt indicate the direction of travel that prevents your work from catching the belt's joint.

- 10) Sand on the downward side of a disc sander so that the wood is driven onto the table by the machine's rotation.
- 11) Enclose all drums, disk or belt sanding machines with an exhaust dust hood that covers all portions of the machine but the portion designed for the work feed.



- 12) Adjust work rests on all manually fed sanders to provide minimum clearance between the belt and the rest. The work rest should be secured properly.
- 13) Install abrasive belts that are the same width as the pulley drum.
- 14) Adjust abrasive belt tension to keep the belt running the same speed as pulley-drum when the wood is in contact with the belt.
- 15) Guard feed rollers to allow boards to pass, but keep operators' fingers and arms out
- 16) Install guards to prevent contacts at:
 - in-running nip points,
 - power transmission,
 - feed roll parts, and
 - the unused portion of the abrasion belt on the operator's side of the machine.



5.3 WHAT SHOULD BE AVOIDED WHEN USING SANDERS

- 1) Do not sand small or thin hand-held work pieces.
- 2) Do not wear loose clothing or jewelry while using revolving power tools. Tie back long hair or wear appropriate hair protection. These measures will prevent hair, clothing, or jewelry (like dangling neck chains) from being caught and pulled by sander belts and pulleys that are in motion.
- 3) Do not operate sanders without the exhaust system operating.
- 4) Do not operate sanders unless adequately guarded.
- 5) Do not operate sanders unless the work rest is properly adjusted.

6. RECORDS/VERIFICATION OF UNDERSTANDING

- 6.1. Records of safety training
- 6.2. Verification of Understanding

7. A training master log will be maintained by Chairperson or Supervisor

8. SUMMARY OF CHANGES

| Revision # | Date | Change (include section #) | Issued By |
|------------|------------|----------------------------|-------------|
| 1 | 05/06/2014 | NEW | OHS Officer |
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