Safe work procedure

1. Completed by: Andrew McVicar
Staff number: 1121632

2. Safe work procedure title and basic description of activity
Title: Belt-Disc Sander

Description of activity:- Using a belt-disc sander for sanding or finishing metal, wood, plastics.

3. List Hazards and risk controls as per risk assessment

<table>
<thead>
<tr>
<th>Associated risk assessment number and location:</th>
<th>Potential hazards</th>
<th>Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is no separate Risk Assessment, or HIRAC performed for this SWP. All hazards have been identified, with control mechanisms listed. Provided the controls are used, the likelihood of injury is low.</td>
<td>Abrasions. Burns to skin. Eye injuries. Excessive dust. Unsecured material being flung around.</td>
<td>Ensure appropriate guards are in place, and work cautiously to minimize risk of having material caught. Advisable to wear gloves for metals. Wear safety glasses. Wear dust mask, mainly for timber products. Take additional precautions if timber is treated. Beware of location of material being sanded such that in conjunction with direction of belt and disc rotation, this will not happen.</td>
</tr>
</tbody>
</table>

4. List resources required including personal protective clothing, chemicals and equipment needed

**PERSONAL PROTECTIVE EQUIPMENT**
- Safety glasses must be worn at all times in work areas.
- Sturdy footwear must be worn at all times in work areas.
- Long and loose hair must be contained.
- Close fitting/protective clothing must be worn.
- Gloves must not be worn.
- Respiratory equipment may be required.

5. List step by step instructions or order for undertaking the task

**PRE-OPERATIONAL SAFETY CHECKS**
- Ensure material to be sanded poses no hazard. Consult the manufacturers' Material Safety Data Sheets (MSDS) for specific technical data and precautionary measures for any unusual materials or coatings on materials sanded with this equipment.
- Locate and ensure you are familiar with all machine operations and controls.
- Ensure NO flammable or combustible materials are present nearby.
- Ensure there is adequate lighting and ventilation in the area of operation.
- Check workspaces and walkways to ensure no slip/rip hazards are present.
- Ensure all guards are fitted, secure and functional. Do not operate if guards are missing or faulty.
- Ensure the table is set not more than 2mm from disc.
- Check belts and discs are in a serviceable condition.
✓ Check that the abrasive disc/belt is the appropriate type for the material to be sanded.
✓ Check that the abrasive belt is suitably tensioned and tracking straight. Adjust if necessary.
✓ Stand out of the direct line of the abrasive belt at all times.
✓ Start the dust extraction unit before using the machine.

OPERATIONAL SAFETY CHECKS

✓ Allow machine to reach maximum revolutions before operating to avoid overloading or disc/belt damage.
✓ Always place material on the table on the downward side of the disc travel to hold it down on the table surface.
✓ Hold material firmly against stops or table before applying pressure on abrasive.
✓ Use light pressure only against the belt or disc.
✓ If the material gets hot stop sanding while you can still hold it and cool it down before continuing.
✓ Keep fingers clear of disc or belt while sanding.
✓ Before making adjustments (except for belt tracking) switch off and bring the machine to a complete standstill.

ENDING OPERATIONS AND CLEANING UP

✓ Switch off the machine when work completed.
✓ Leave the machine in a safe, clean and tidy state.

DON’T

✗ Do not use faulty equipment. Immediately report suspect machinery.
✗ Do not sand very small items.
✗ DO NOT sand items of a size that may become caught between the disc and the table.
✗ Do not slow down the disc/belt with the workpiece. Grinding at less than the proper (full) speed will tear grit out of it reducing its life.
✗ Never leave the machine running attended.
  Do not use compressed air to clean the machine

6. List emergency shutdown procedures
   Hit Emergency Stop button.

7. List Emergency procedures for how to deal with fires, spills or exposure to hazardous substances
   Fires or spills are highly unlikely. Exposure to hazardous substances would most likely be when working with treated timber: if exposed, shut down equipment and move to an area with fresh air. If there are breathing difficulties, report, and seek medical advice.

8. List Clean up and waste disposal requirements
   Vacuum or carefully sweep dust generated. Dispose of in general waste.

9. List legislation used in the development of this SWP
   AS/NZS 3760:2010; In-service safety inspection and testing of electrical equipment.

10a. List competency required – qualifications, certificates, licensing, training - e.g. course or instruction:
   Metal Trades Craftsmen’s Certificate, or equivalent.

10b. List competency of Assessor
   David Beech – Senior Technical Officer (Physica) – BSc (Eng)

11. Supervisory approval, And review
   Supervisor: Gemma Thompson
   Signature: 
   Responsibility for SWP review: Gemma Thompson
   Date of review: 9th August 2013

12. SWP Sign off sheet
In signing this section the assessor/authorisor agrees that the following persons are competent in following this SWP.

<table>
<thead>
<tr>
<th>Name</th>
<th>Signature</th>
<th>Date Competent</th>
<th>Name of Assessor/Authoriser</th>
<th>Assessor/Authoriser signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew McVicar</td>
<td></td>
<td>9th August 2013</td>
<td>David Beech</td>
<td></td>
</tr>
<tr>
<td>Marcel Kaegi</td>
<td></td>
<td>9th August 2013</td>
<td>David Beech</td>
<td></td>
</tr>
<tr>
<td>Rattan Bhandari</td>
<td></td>
<td>9th August 2013</td>
<td>David Beech</td>
<td></td>
</tr>
<tr>
<td>Cos Delapaz</td>
<td></td>
<td>9th August 2013</td>
<td>David Beech</td>
<td></td>
</tr>
<tr>
<td>Michael Paterson</td>
<td>See Physics file</td>
<td>6th October 2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terry Pfeiffer</td>
<td>See Physics file</td>
<td>6th October 2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PETER KERR</td>
<td></td>
<td>25 Sept 13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>