

Job Hazard Analysis

JHA Name: Stationary Belt & Disc Sander



Assessment Date: 10-18-13

Revision Date: 05-19-17

Building or Location: Faribault & North Mankato Campus

Department or Program: Maintenance & Varied Technical Programs

Description of Individual Tasks or Assignments: Sanding Tasks (e.g., Sanding, and Polishing Objects; Correcting Surface Defects; Preparing Surfaces for Further Finishing; etc...)

Tools, Equipment, or Machinery Used when Performing Task: Stationary Belt & Disc Sander

| Hazard Type(s) Associated with Task or Assignment: | | Check for Exposure: | Specific Hazard Exposure: | Check if Exposure Recommends or Requires a Style of PPE? |
|--|---|---------------------|---|--|
| 1 | Impact <u>Example:</u> Person(s) can strike an object, or be struck by a moving or flying/falling object (e.g., fragments, chips, particles, sand, dirt/debris). | X | Potential exposure to flying fragments, particles and debris generated from sanding (e.g., injuries to eyes and face) | X |
| 2 | Penetration or Cut <u>Example:</u> Person(s) can strike an object, be struck by an object, or fall upon an object or tool that would cut or otherwise break the skin. | X | Potential exposure or accidental contact with abrasive sanding belt/disc (e.g., hand and finger injuries). | X |
| 3 | Crush or Pinch <u>Example:</u> An object(s) or equipment/machine may crush or pinch a body or body part | | | |
| 4 | Chemical or Harmful Dust <u>Example:</u> Exposure to chemicals (i.e., hazardous substances and harmful physical agents), infectious agents from spills, splashing, physical contact, and/ or exposure to dusts, vapors, fumes, or gases that could cause illness, irritation, burns, asphyxiation, breathing/vision difficulty, sensitization, infection, or other toxic health effects (i.e., acute or chronic). Note: "May also have or create ignition potential." | X | Potential exposure to nuisance dusts (e.g., respiratory irritation/discomfort) | X |
| 5 | Heat <u>Example:</u> Exposure to radiant heat sources, sparks, and splashes or spills of hot material | X | Potential exposure to friction burning of wood work pieces (e.g., fire hazards) | |
| 6 | Light (optical) Radiation <u>Example:</u> Exposure to strong light sources, glare, or intense light exposure which is a byproduct or a process. Note: "This category may also include hazards presented from lack of light (e.g., working in dark spaces/areas)." | | | |
| 7 | Electrical Contact <u>Example:</u> Exposure, contact, or proximity to live or potentially live electrical objects. | | | |
| 8 | Ergonomic/ Human Factors <u>Example:</u> Working in cramped spaces, repetitive movements, awkward postures, vibration, heavy lifting, etc... Note: "This category may also include unique hazards presented from tasks that require demanding or challenging degrees of mental and/or physical effort to be exerted by an individual. See <i>Physical Effort Definition/Examples</i> category for further explanation of physical effort." | | | |
| 9 | Environmental <u>Example:</u> Exposure to noisy environments, hot or cold work environments, poor weather conditions, working at a height, and any other conditions in the workplace that could cause danger, discomfort, and/or negative health effects. | X | Potential exposure to loud/prolonged noise (stationary belt & disc sander) | X |

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Personal Protective Equipment Requirements:

| | |
|-------------------------|---|
| Eyes & Face: | Safety Glasses with Side Shields or Goggles (Required when operating stationary belt & disc sander) |
| Head & Ears: | Hearing Protection Devices (Required when operating stationary belt & disc sander) |
| Whole Body: | |
| Feet: | |
| Hands: | |
| Respiratory: | N95 Particulate Masks (Optional/Available not required) |
| Other: | "Note: Keep Loose Clothing Away From Moving Belts/Discs" |

Other Control Measures or Requirements (Engineering & Administrative Controls):

#1) Impact Hazards: Ensure all guards are secured and correctly fitted. Adjust sanders to provide a minimum clearance (1/16” to 1/8”) between the belt/disc and work rest. Check the rotation of disc sander, and only sand on the side of the disc moving downward towards the table (this keeps wood driven into the work rest by machine rotation). Support the work piece against the work rest, and keep work pieces in motion when sanding to reduce wear on abrasive belts/discs. **#2) Penetration or Cut Hazards:** Keep hands away from the abrasive surface, hold small or thin work pieces in a jig or holding device. Do not attempt to sand pieces that are of a shape/size that could become wedged between the belt/disc and work rest. **#4) Chemical or Harmful Dust Hazards:** Particulate masks available upon request for personnel experiencing respiratory discomfort from dusts generated. Local Exhaust Ventilation (LEV) should be provided/maintained to remove sawdust from stationary belt & disc sanders. **#5) Heat Hazards:** Support the work piece against the work rest, and keep work pieces in motion to prevent friction burning (on wood stock). **#9) Environmental Hazards:** Personnel should receive Hearing Conservation training (e.g., regarding noise hazards), and be included in the Hearing Conservation Program when potentially exposed to a TWA of 85dB. **Miscellaneous Considerations:** Always disconnect power before making adjustments or changing abrasive materials. Personnel should make sure to only use the appropriate types and sizes of abrasive materials for the sander. Check that sanding belts & abrasive discs are installed correctly. When starting the sander, allow the machine to reach full RPM before sanding. Do not force the work piece against the abrasive surfaces by applying excessive pressure. Never use for more than one operation at any one time (i.e., belt sanding or disc sanding). Operators of tools, equipment, and machinery should read and follow all Manufactures' recommendations/requirements (e.g., inspections, servicing/maintenance, safe usage, etc...). Any tools, equipment, or machinery found damaged, defective, or otherwise unsafe should immediately be removed from service and not used until repaired or replaced. Personnel should always consult their Supervisors on the selection and use of PPE for the tasks being performed.

Physical Effort Definition/Examples

1.) Physical Mobility- Movement from place to place on the job, considering distance and speed **2.) Physical Agility-** Ability to maneuver body while in place or in static position **3.) Physical Strength (Light to Moderate)-** Ability to handle routine office materials and tools **4.) Physical Strength (Moderate to Heavy)-** Ability to handle 50lbs+ objects, considering frequency **5.) Dexterity-** Skill and ability in using hands, fingers, and feet **6.) Physical Balance-** Ability to maintain balance and physical control **7.) Coordination-** Harmonious functioning of body parts (e.g., eye/hand, hand/foot, etc...) **8.) Endurance-** Ability to sustain a prolonged stressful effort or activity with limited opportunity to rest.

Note: "This JHA provides only the minimum PPE/safety requirements necessary to safely complete the task or assignment, and the JHA only covers the hazards or exposures that are most likely to be encountered. Nothing within this JHA bars or restricts personnel from requesting higher degrees of PPE or control to mitigate workplace hazards. In addition, South Central College personnel (e.g., employees and students) are required to complete any applicable safety or on-the-job trainings required prior to performing their positions or participating in their programs of study. Finally, South Central College personnel should consult their supervisors/instructors, the college's written safety programs/policies, and/or the Security & Safety Director whenever they have questions or concerns."

Certification: This document certifies a hazard assessment was conducted meeting the provisions specified under 29 CFR 1910.132 (d) and South Central College's related safety programs and policies.

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Date: 05-19-17