MACHINES & TOOLS STANDARD OPERATING PROCEDURE - BELT SANDER

|  |  |  |  |
| --- | --- | --- | --- |
| **CONTACT INFORMATION** | | | |
| **Location** | Building: | | Room: |
| **Street Address:** |  | | |
| **Lab Safety Contact:** | Name: | | |
| Lab Phone: | Office Phone: | |
| **Emergency Contact** | Name: | Phone: | |
| **DESCRIBE PROCESS/EQUIPMENT** | | | |
| A belt sander or strip sander is a type of sander used to shape and finish wood and other materials. It consists of an electric motor which turns a pair of drums on which a continuous loop of sandpaper is mounted. Belt sanders may be handheld or fixed/mounted on a work bench (bench sanders). The belt sander is used to sand the edges of boards. It can be used to smooth the edge or to remove material to bring the edge of the workpiece to a reference line. Prior to using a belt sander students must receive training from their instructor in the operation of the belt sander including safety precautions. | | | |
| **HAZARD SUMMARY** | | | |
| Potential physical health hazards include injury due to abrasions or lacerations by the sander, being hit with unsecured stock thrown during operation, accidental start of the sander, belt slippage while rotating, and fire/electric shock. Hands, jewelry, and loose clothing can be caught in a belt sander and cause serious injury. Sanding dusts and debris can be inhaled or cause eye injury or irritation. | | | |
| **SPECIAL HANDLING AND STORAGE REQUIREMENTS** | | | |
| * Before using a belt sander, inspect it for visible defects. * If the belt sander shows defects or is malfunctioning, DO NOT USE IT. Tag it with “DO NOT USE” until repaired by a qualified individual, and alert the Professor/Instructor. * Check the tracking of the sanding belt. * Disconnect power tools when not in use, before servicing or adjustments, and before changing sanding belts. * Turn the belt sander off immediately between tasks * Do not operate the machine without dust bag intact * Regularly check and clean the dust bag, only after unplugging the unit. * Keep the cord well away from the belt * Store idle tools—When not in use, tools should be stored. * Never carry a tool by the cord or hose. * Never yank the cord to disconnect it from the receptacle. * Keep cord away from heat, oil, and sharp edges. * Keep all people not involved with the work at a safe distance from the work area. * Secure work with clamps or a vise when possible * Avoid accidental starting. Do not hold fingers on the switch button while carrying a tool. * Be sure to keep good footing and maintain good balance when operating a belt sander. * Do not remove or defeat safety guards. * Do not reach around, under, over or through guards into hazardous areas. * Do not reach into equipment to remove stuck or jammed material. * Do not bypass electrical safety procedures or equipment. * Never leave machines unattended with parts still moving * Do not attempt to oil, clean, adjust or repair any machine while it is running. Unplug it first. * Keep the floor and work area clear of sawdust and waste pieces. * Get help when handling long or heavy pieces of material. * Concentrate on the work and machine at all times. Do not talk unnecessarily while operating a machine. * Do not talk unnecessarily to others while they are operating a machine. * Stay alert. Never operate power tools when tired or under the influence of drugs, alcohol, or certain medications. | | | |
| **ENGINEERING AND VENTILATION CONTROLS** | | | |
| Operate belt sanders with dust bags attached or with dust collection system in operation. | | | |
| **PERSONAL PROTECTIVE EQUIPMENT** | | | |
| **PPE Requirements:**  Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that could get caught in moving parts. Tie back long hair. Do not wear long sleeves.  Shoes that cover the entire foot  Gloves; indicate type: Click here to enter text.  Inspect gloves before use. Use proper glove removal technique to avoid skin contact with outer surface of glove. Wash hands after removing gloves.  Safety goggles  Safety glasses  Face shield  Welding mask  Shop apron  Hearing protection  Other: Click here to enter text.  If the use of an N95, half mask, or full face respirator is requested, the individual and/or their supervisor must first contact Environmental Health & Safety for a consultation to determine if respirator use is necessary. If EH&S determines the use of a respirator is necessary, the individual must participate in the University’s respirator program. This includes a medical evaluation; respirator fit test, and training. | | | |
| **EMERGENCY PROCEDURES** | | | |
| In case of fire or large and/or extremely hazardous chemical releases pull the fire alarm and evacuate the area  If someone is seriously injured or unconscious  **CALL 911 or CAMPUS POLICE AT 813-974-2628**  From a safe place, provide as much information as possible to the emergency responders including chemical name, volume, hazards, injuries, and location.  **Evacuation Procedure**   * Immediately evacuate the building via the nearest exit when the fire alarm is activated. * If unable to evacuate due to a disability, shelter in the area of rescue / refuge, typically a stairwell landing, and wait for assistance from drill volunteers or emergency responders. * Instruct visitors and students to evacuate and assist them in locating the nearest exit. * Do not use elevators to exit the building during an evacuation as they may become inoperable. * Carry only those personal belongings that are within the immediate vicinity. * Close doors to limit the potential spread of smoke and fire. * Terminate all hazardous operations and power off equipment. * Close all hazardous materials containers. * Remain outside of the building until the building is released for reentry. * Do not restrict or impede the evacuation. * Convene in the designated grassy gathering area and await instruction from emergency responders or drill volunteers. Avoid parking lots. * Report fire alarm deficiencies, (e.g., trouble hearing the alarm) to facilities personnel for repair. * Notify evacuation drill volunteers or emergency responders of persons sheltering in the areas of rescue/ refuge. * **Never assume that an alarm is a “false alarm”. Treat all fire alarm activations as emergencies. Get out of the building!**   **Incident and Near Miss Reporting**: Report any incident that occurs in any University of South Florida affiliated teaching or research laboratory/studio or field research project. An incident means any unplanned event within the scope of a procedure that causes, or has the potential to cause, an injury or illness and/or damage to equipment, buildings, or the natural environment. Due to medical privacy concerns, no personal identifying information of the person involved in the incident shall be entered or submitted with the form.  <http://www.usf.edu/administrative-services/environmental-health-safety/reporting/index.aspx>  **Workers’ Compensation Procedure:** Call AmeriSys at 800-455-2079 to report a work-related injury or illness. Complete the Supervisor’s Accident Investigation Report available at the link above and send it to EH&S within 24 hours. | | | |
| **WASTE DISPOSAL** | | | |
| Hazardous waste, such as solvents, acids machine oil, and contaminated rags must be disposed of as hazardous waste in accordance with the USF Hazardous Waste Management Procedure, the U.S. EPA, and the FDEP. The USF Hazardous Waste Management Procedure can be found using the following link, <https://www.usf.edu/administrative-services/environmental-health-safety/documents/hazwaste-managementprocedure.pdf>  Universal waste, such as aerosol cans, nickel cadmium, lithium ion, nickel metal hydride, lead acid, mercury or silver hydride batteries must be segregated and collected into a closed container labeled with its contents. Contact Facilities Management-Services at (813) 974-2500 for removal. | | | |
| **TRAINING REQUIREMENTS** | | | |
| Complete training with an experienced user before using any machine or tool.  Check training requirements for this activity below:  Shop Specific Training from the PI/Supervisor or their designee  EH&S Hazard Communication  EH&S Respirator Fit Test  EH&S Fire Prevention Safety  EH&S Slips, Trips, and Falls  Other:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
| **PRIOR APPROVALS** | | | |
| This activity requires prior approval from the Professor/Instructor/or their Designee.  If this box is checked, working alone is not allowed. | | | |

By signing and dating here the Principal Investigator or a designee certifies that the Standard Operating Procedure (SOP) for ***Belt-Sanders*** is accurate and effectively provides safe standard operating procedures for employees and students in this lab who will use this potentially hazardous tool or machine.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature Printed Name Date

I affirm that I have read and understand the Standard Operating Procedure for ***Belt-Sanders***and have undergone training with an experienced user regarding this SOP.

|  |  |  |
| --- | --- | --- |
| Printed Name | Signature | Date |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |