**Drill Press**

 **Standard Operating Procedure (SOP)**

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| **All students must have a signed and dated Standard Operating Procedure form before they use any machine in the welding shop**. |

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| Safety glasses must be worn at all times in work areas. | Hair Protection circleLong and loose hair must be contained. |
| Foot Protection circleSturdy footwear must be worn at all times in work areas. | ApronClose fitting/protective clothing must be worn. |
| **Prohibition circleProhibition circle**Rings and jewelry must not be worn. | Hearing protection may be required for some operations.Hearing Protection circle |

### **INITIAL SAFETY CHECKS**

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|  | Ensure that all slip/trip hazards have been cleared from the work area. |
|  | Ensure that all that all guides and guards are correctly positioned. |
|  | Check that the drill press appears to be in good condition. |
|  | Ensure that the operation of the ON/OFF starter and Emergency Stop buttons are functioning properly |
|  | Do not use damaged equipment. |
|  | Immediately report damaged machinery. |

**OPERATIONAL PROCEDURE**

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|  | Know the location of start and stop switches/buttons |
|  | Keep the drill press table free of tools and other materials. |
|  | Use only properly sharpened drill bits, and drill bit chucks that are in good condition. Remove dull drill bits, battered tangs, or sockets from service |
|  | Remove metal or wood scrap from the table or stock, by hand, use brushes or other tools to properly remove debris. |
|  | Do not attempt to perform maintenance on the machine, while the drill press is in motion. |
|  | Do not insert a chuck key into the chuck until the power is shut off and the machine has come to a complete stop. |
|  | All belts and pulleys must be guarded; if frayed belts or pulleys are observed, the drill press must be taken out of service and the belts or pulleys must be replaced. |
|  | All stock must be properly secured with a vise or clamps prior to a machining process. |
|  | If the stock slips in the vise or clamp, the operator must not attempt to hold the work with his/her hand or try to tighten the vise/clamp while the machine is in motion. Before re-tightening the loose stock turn off the power to the machine. |
|  | Use the correct speed and drill for the type of stock being machined |
|  | Use the appropriate bit for the stock being machined. Bits with feed screw or extremely long bits should not be used. |
|  | The drill bit should be mounted the full depth and in the center of the chuck. |
|  | Position the table and adjust the feed stroke eliminating the possibility of the bit striking the table. |
|  | Feed the bit smoothly into the work. If the hole being drilled is deep, withdraw the bit frequently to remove shaving on the bit. |
|  | Never attempt to remove a broken drill with a center punch or hammer. |
|  | When an operator has finished working on the drill press, and before leaving the drill press for any reason, the power must be shut off and the machine must come to a complete stop. |
|  | When an operator observes an unsafe condition on the drill press, they must report it immediately to the Supervisor and the press will be taken out of service until the problem has been corrected. |
|  | Leave the machine in a safe, clean and tidy state. |

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| NEVER attempt to force the drill press to cut faster by using a snipeNEVER leaver a running machine unattended |



**This Standard Operating Procedure does not necessarily cover all possible hazards associated with the machine. The operator of any machinery should be committed to operating this and all machinery in a safe manner. In addition this SOP has been designed to be used as part of an education program which was designed to teaching Safety Procedures and to act as a reminder to users prior to machine use.**

**Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Instructor’s Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Student Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**