|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Department:** | **P/W Mechanic Shop** | **Area** | **Shop** |  |
| **Subject:** | **Drill Press SWP** | | |

**Drill Press**

**Warning:**

The use of this tool may be hazardous. The Drill Press is a high-speed, fast-cutting power tool so special safety precautions must be observed to reduce the risk of personal injury. It is important to fully understand and observe the safety precautions and procedures below. If not familiar with the use of this equipment, obtain practical instruction from a competent operator or Supervisor. Do not operate without thorough training or unless under the direct supervision of an instructor. Do not operate if safety devices are not in place.

**Purpose:**

The Drill Press is an electrical powered high speed rotating tool meant for drilling holes into different types of material. The holes cut into the material depend on the size of the bit used. The Drill Press is capable of cutting through metals of many thicknesses and sizes. Bits are made of different for the product that is being drilled.

**Hazards:**

|  |  |  |
| --- | --- | --- |
| * Cuts | * Flying debris | * Burns and heat |

**PPE Required:**

|  |  |
| --- | --- |
| * CSA approved face shield or glasses | * Safety footwear |
| * Approved hearing protection | * Leather gloves |

**Pre Set-Up:**

* Ensure lighting is adequate.
* Do not wear loose clothing.
* Make sure there are no flammables around Drill Press.
* Clamp working piece to drill press table tightly.
* Keep cutting fluid (metcool) close to you as it will be needed.
* Use a saw horse roller if work piece is too long for saw to clamp.
* Ensure you’re wearing appropriate PPE.
* Ensure all locking adjustment handles are tight.

To replace the drill bit:

* Turn off the Drill Press.
* Make sure rotation has stopped and use chuck key to loosen chuck.
* Remove drill bit from Drill Press.
* Fit the proper size and type of drill bit for the Work piece you are going to drill.
* Tighten the chuck with the chuck key.
* Replace chuck key on hook so it is not forgotten on chuck.

**Procedure**

* Adjust Drill Press table to the depth you want to drill and tighten table clamp.
* Tighten work piece to Drill Press table with a “C” clamp or vice to avoid spinning causing injury.
* Place Drill Press gear in a proper speed for size of hole drilled( slow for large holes, high for small holes).
* Start Drill Press by turning on switch.
* Avoid awkward operations and hand positions where a sudden slip could cause a hand to move toward the drill bit while it’s spinning.
* Keep one hand on the work piece to stabilize it, with your other hand pull down on the handle till the bit touches the work piece.
* Let the drill bit make a mark, lift the handle and look at the work piece to confirm hole location.
* Pull down on the handle and start to drill.
* Use cutting fluid (metcool) to keep the drill bit sharp and drill clean holes.
* Once drilled through, lift handle till bit is completely out of work piece.
* Turn of switch to shut down Drill Press.
* With gloves on hands, loosen “C” clamp or vice and remove steel.

**Post Procedure/take Down:**

* Keep the work area clean for other people to use it.
* Put scraps in metal bin.

**Summary:**

* Always wear appropriate PPE.
* Remove chuck after drill bit change.
* Ensure Drill Press is in good working order before you use it.
* Always make sure the rotation has stopped before changing the drill bit.
* Consult the supervisor if unsure of how to use.

|  |  |
| --- | --- |
| Created: 2011-Jan-21  Revised: N/A | Author: Kevin Lamb  Approved by: Bruce Labelle |