

 DALHOUSIE UNIVERSITY <i>Inspiring Minds</i> Safe Work Instructions for Powered Hand Drills	<i>Policy Sponsor:</i> Assistant Vice President Facilities Management	<i>Approval Date:</i> December 2015
	<i>Responsible Unit:</i> Trade Services	<i>Revisions:</i> January 2018

Hazards Identified:

Electrical shock, dust, noise, getting entangled in moving parts, flying material, Breaking drill bits

Personal Protective Equipment Required:

Safety boots, safety glasses or goggles, dust mask (If Required)

Training Required:

Before using this equipment employees must be trained by a competent person in its proper use and care and in the proper use and maintenance of all required PPE.

These safe work practices must be followed at all times and are to be reviewed annually to ensure they are adequate and accurate.

General Precautions

1. Only properly trained and experienced employees are to operate this equipment.
2. Always follow the manufacturer's instructions when selecting and using a bit or attachment especially if you are unfamiliar with the work or drill.
3. Read and review the owner's manual regularly to refresh your understanding of the manufacturer's recommendations for proper use of this equipment.
4. Do Not exceed the manufacturer's recommended maximum drilling capacities.

5. Required PPE must be used at all times during the operation of this equipment.
6. Make sure that the drill and bit are correct for the job.
7. Ensure that drill bits are sharp and free of any debris before use.
8. Do Not use a damaged or bent drill bit.
9. Do Not use a hole saw cutter without the pilot drill.
10. Do Not use high speed steel bits without cooling or lubrication.
11. Ensure that drill bit is properly installed / seated and tightened in the chuck.
12. Always check the drill for defects that, during use, could cause the drill to malfunction.
13. DO check the power cord and plug to ensure there are no frays, cuts, broken plug or ground prongs, etc.
14. Do check the trigger switch before use to ensure it is working properly.
15. Do not use a drill that has not been properly maintained or is malfunctioning.
16. Keep drill air vents clear to ensure adequate ventilation and avoid over heating.
17. Always “test run” a new drill or one that you are not familiar with in order to get a feel for how it operates.
18. Make sure that the power outlet you will be using is the proper rating for the drill.
19. If you must use an extension cord make sure that it is free from defect, properly grounded and is the correct rating for the drill being used.
20. Ensure that the extension cord does not create a tripping hazard for you or other people.
21. Avoid using drills with extension cords in wet or damp areas.
22. Keep power cords and extension cords clear of the bit while drilling.

23. Tag a malfunctioning drill with a "DO NOT USE" tag and ensure that it is either repaired or removed from service.
24. Always remove the "key" from the chuck before starting the drill.
25. Always check the material to be drilled for objects or flaws that may cause the drill to "buck" or jam.
26. Ensure that the material to be drilled is firmly secured either by virtue of the way it is constructed or by using vise grips, "C" clamps or something of a similar nature.
27. **Never** use your hand to prevent material from turning.
28. To start drilling make sure the drill is off before placing the bit in the pilot hole.
29. Ensure the drill is held firmly with one or both hands and is correctly aligned with the spot to be drilled.
30. Make sure that you can apply adequate pressure for the material being drilled.
31. Use the auxiliary handle on larger drills to maintain continuous and even pressure.
32. Do Not reach under or around stock that is being drilled.
33. Do Not over reach, reposition yourself.
34. Reduce the rate of feed just before breaking through the surface of the material being drilled.
35. Maintain solid footing and balance.
36. Do Not attempt to free a jammed bit by starting and stopping the drill. Unplug the drill and then remove the bit from the work piece. Remove the drill from the bit if necessary.
37. When performing minor repairs, replacing or cleaning bits make sure the drill is disconnected from its power source.
38. Remove any flammable materials if there is a chance of excessive heat being generated by the drilling or if sparks are an issue.

39. Never wear loose fitting clothing, dangling neck chains or anything that can get caught in moving parts.
40. If gloves must be worn, due to cold, etc., keep them away from moving parts of drill.
41. Keep long hair tucked under proper head wear.
42. Never use any type of drill for anything other than its intended purpose.
43. Never use a drill if your ability to concentrate on the job is compromised in any way.
44. Do Not raise or lower the drill by its power cord.