Drill press

The drill press is a versatile machine that uses a multiple-cutting-edged drill bit secured in a rotating chuck to bore and drill holes, normally into wood stock. Either in floor or bench-top designs, drill presses are usually arranged vertically, requiring the operator to raise and lower an operating handle in order to control the drill bit. These machines also have variable speeds and some have multiple spindles for gang drilling. The most commonly used drill press is a single-spindle, floor-mounted, belt-driven machine for non-production drilling.



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Hazard

Serious lacerations and entanglement can occur if operators contact the rotating bit or chuck, or when operators try to hold the stock by hand when drilling. If not adequately secured, the stock can spin violently and contact the operator and others nearby. Also, injuries can occur from a projected chuck key if it is left in the chuck.

Solution

Use jigs or fixtures to fasten the stock to the bed and stabilize the work piece. This allows the stock to be secured for drilling and also allows the operator's free hand to be positioned away from the rotating chuck and drill bit. The drill bit is more likely to grab and twist an unstable work piece.



The stock can spin if not adequately secured to the table.

In many repetitive drilling applications, specially designed guards or shields are installed to protect the operator from the potential exposure to rotating drill chucks and drill bits. A fixed universal-type shield can be used on larger gang drills.

References

- General Industry
 Oregon OSHA Division 2/Subdivision O 29 CFR 1910.213(1)
- ANSI 01.1 Woodworking Machinery Safety Requirements