Trade Safety Series:
Using Power Tools Safely -
Power drills

About the Video:
Master builder Todd Newman shares his 20+ years experience as a very safe builder, showing and explaining the best practice when it comes to the safe use of power tools. In this program we examine the best practice for using power drills.

Year of Production: 2014
Total length of video: 3.47

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Timeline

00.00 Introduction and Injuries
00.52 Importance of sharp drill bits; gentle force
01.26 Best practice; assess environment, choose right bit
01.44 Secure material
01.58 Hands, fingers safety and grip
02.20 Starting up process – wood v steel
02.40 Stopping practice
Learning Activities

For consideration prior to viewing:

These activities can be undertaken with participants working individually or in one or more small groups. They are designed so responses can be made in different ways, including brainstorming, discussion, written responses, role-plays etc.

1. Pair students up. Ask them to brainstorm and list all the dangers students can think of posed by a power drill in a construction site. Compile the list as a class. What did they identify? What did they not identify? Discuss.

2. Ask students to research all the possible injuries power drill. Discuss instances where these injuries are most likely to occur.

3. As a hypothetical exercise, ask students to imagine that they are in charge of safety at a construction site. Ask students to design a safety campaign to minimize injuries from power drills. Think visual (e.g. posters), verbal (e.g. toolbox meetings) and administrative (process regulation).
Questions about the video:

1. List the four main injuries that can occur when using a power drill.
   1. ________________________________________________________________
   2. ________________________________________________________________
   3. ________________________________________________________________
   4. ________________________________________________________________

2. What are the main types of drill bits?
   1. ________________________________________________________________
   2. ________________________________________________________________
   3. ________________________________________________________________

3. Always use a _______ _______ and _______ _______.

4. Always use _______ _______ to operate.

5. With wood start the drill up _________ drilling.
Questions about the video: Answer key.

1. List the four main injuries that can occur when using a power drill.
   A: 1) Lacerations 2) hand and wrist damage 3) Burns 4) Eye damage

2. What are the main types of drill bits?
   A: 1) Holesaws 2) Spade bits 3) Regular drill bits

3. Always use a ________ ________ and ________ ________.
   A. sharp bit, gentle pressure.

4. Always use ________ ________ to operate.
   A: both hands

5. With wood start the drill up ___________ drilling.
   A: before
Follow-up activities

These activities can be undertaken with participants working individually or in one or more small groups. They are designed so responses can be made in different ways, including brainstorming, discussion, written responses, role-plays etc.

1. Research the best first aid for an eye injury from a power drill

2. Research the best PPE options for use in a hot climate, and then a cold climate.

3. Research the different drill bits available, and when you should use them.
Suitable resources

Equipment and machinery resources (range of material available from this page)


Jackhammers:


Building and Construction Industry Guidelines for Electrical Practices:


Safety handbook for the building and construction industry:


Hierarchy of hazard controls: