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HEALTH SAFETY ENVIRONMENTAL

SAFETY ALERT

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Avoiding Handheld Grinder Kickback

A handheld grinder can **kick back** due to several reasons, all related to how the tool interacts with the material being cut, ground, or polished. Kickback is a sudden and often violent reaction where the grinder jerks back toward the operator. This can be dangerous and is often caused by the following:

1. Wheel Binding or Pinching

- **Cause**: The grinding or cutting wheel gets stuck or pinched in the material.
- **Result**: The motor's torque causes the tool to jerk or kick back when the rotation of the wheel is abruptly stopped.

2. Incorrect Wheel Type or Size

- **Cause**: Using a wheel that isn't appropriate for the material or task (e.g., a cutting wheel for grinding).
- **Result**: Poor performance and increased chance of the wheel catching or binding.

3. Improper Cutting Angle

- **Cause**: Holding the grinder at too steep or too shallow of an angle.
- **Result**: The wheel can snag the workpiece, leading to kickback.

4. Damaged or Worn Wheel

- **Cause**: A cracked or worn wheel is more likely to fail or catch.
- **Result**: Increased risk of both wheel explosion and kickback.

5. Loose or Improperly Secured Workpiece

- **Cause**: If the material moves during operation, the wheel can catch unexpectedly.
- **Result**: The grinder may kick back due to the sudden resistance or misalignment.

6. Excessive Force or Pressure

- **Cause**: Pushing the grinder too hard into the material.
- **Result**: Increases the chance of binding or losing control.

7. Loss of Control or One-Handed Operation

- **Cause**: Not using both hands, or losing grip due to tool torque or vibration.
- **Result**: Any sudden movement can result in kickback that's hard to manage.

Safety Tips to Prevent Kickback:

- Use the correct disc for the job and material.
- Always secure the workpiece.
- Let the grinder reach full speed before making contact.
- Hold the tool firmly with both hands.
- Don't force the tool—let the wheel do the work.
- Avoid cutting with the side of the wheel unless it's designed for that.
- Be aware of where the wheel might catch or bind.

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