

SAFETY INFORMATION

Deliver this insert to operator. Keep for reference.

3M™ Cut-Off Wheels



Read this insert before mounting or using product. Follow tool's instructions, employer's safety rules, ANSI B7.1 re: Cut-Off Wheels, and any other local standards. Operator must be properly trained.



WARNING Improper operation can cause serious injury or death to operators and bystanders. If a wheel breaks, fragments can fly off with deadly force. Sparks, heat, and dust generated while cutting can create fire, explosion, and respiratory hazards.

Planning and Preparation

Prepare a safe work area

Check workpiece materials

Use only on Carbon Steel, Stainless Steel, Cast Iron, or Alloys of: Titanium, Copper, Zinc, Chromium/Nickel, or Aluminum. Use on other materials may increase the risk of wheel breaking, fire, explosion, or health hazards.

Read the Safety Data Sheets (SDS) for the workpiece materials.

Respiratory hazard

Exposure to dust generated from workpiece and/or abrasive materials can result in serious, permanent lung damage or other injury. To reduce this risk:

- Use dust capture or local exhaust as appropriate.
- Wear all recommended protective equipment.

Fire and explosion hazard

Cutting produces sparks and heat. Keep away from anything that can ignite or explode. Do not allow dust to accumulate.

Do not allow bystanders

Keep bystanders out of the work area. Broken wheel fragments can be thrown a long distance, and bystanders may also be exposed to respiratory, fire, and explosion hazards. If other people must be nearby, ensure that they wear proper personal protective equipment (PPE).

Wear proper personal protective equipment

Always wear proper PPE as identified by your risk assessment to help protect against dust, grinding sparks and debris, noise, and some wheel fragments:



- full face shield



- impact resistant protective eyewear marked as ANSI Z87.1 conformant
- hearing protection
- NIOSH approved respirator



- gloves



- body and skin protection



- foot protection

Even with PPE, broken wheel fragments can cause serious injury or death. Follow safe operating procedures to reduce the risk of injury from wheel breakage.

Safe Operating Procedures

Broken wheel hazard

Follow these precautions to reduce the risk of injury or death from a wheel breaking.

Tool selection:

1. Use only on tools designed for cut-off wheels.
2. Check tool RPM rating. **Never use a tool that runs faster than the Max. RPM of the wheel.** Exceeding the wheel's Max. RPM can cause it to break apart.
3. Use only with proper guard. The guard helps direct fragments away from you if the wheel breaks.
4. Use only with flanges designed for cut-off wheels. Flanges must be clean, matching, and at least one-fourth the wheel diameter.

Mounting:

1. Inspect the wheel. Never use damaged wheels. Replace if damaged (e.g., cracks or chips).
2. Follow tool manufacturer's mounting instructions.
3. Never force wheel onto tool spindle or alter wheel center hole size. Do not alter wheel in any way.
4. Use correct attachment system. Tighten nut only enough to firmly hold wheel. Mount only one wheel on spindle.

Operation:

1. Direct wheel away from your body and bring it up to operating speed before cutting.
2. If vibration or wobbling occurs, stop immediately. Determine the cause and correct before continuing. Vibration or wobbling can be caused by:
 - Forcing a wheel onto a spindle that is too large.
 - Over-tightening the mounting nut.
 - Improperly mounted wheel.
 - A damaged center hole.
3. Follow good cutting practices:
 - Secure workpiece.
 - Keep all body parts and objects clear of cutting path.
 - Only cut with edge of wheel.
 - Begin cutting by gradually engaging work piece.
 - Never bump or force wheel so that tool motor slows or stalls.
 - Make only straight cuts. Never twist or bend wheel.
 - Direct sparks away from face and body.

Storage: Protect wheel when not in use. Never rest tool on wheel. Store wheels in dry environment above 32°F (0°C).

