# 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.







<u>↑</u>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 (SDSs) 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

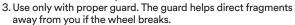
# Broken wheel hazard

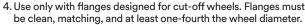
Follow these precautions to reduce the risk of injury or death from a wheel breaking.



#### **Tool selection:**

- 1. Use only on tools designed for cut-off wheels.
- 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.







#### Mounting

- 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:

- Direct wheel away from your body and bring it up to operating speed before cutting.
- 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).