

ABRASIVE WHEEL GRINDER SAFETY CHECKLIST

Before you start a grinder, check that:

- Wheel type and size are right for the job.
- Fixed grinder is securely mounted to bench.
- Portable grinder is steady.
- Grinding wheel is securely mounted on machine.
- Machine operating speed does not exceed what's marked on wheel, blotter, or container.
- Work rest is within $\frac{1}{8}$ inch of the wheel and slightly below its center.
- Power transmission motor is securely in place.
- Grinder is connected to working exhaust system (for dry grinding).
- Electrical power source is properly grounded, with cord and connections in good condition.
- The work area contains no water or other liquid that could create the potential for electric shock.
- There's no debris or material in the work area that could be ignited by sparks.
- Work area lighting is adequate, without glare or shadows.
- No hair, clothes, or jewelry dangle near the machine.
- Wheel has no notable nicks, scrapes, or cracks.
- Wheel has passed "ring test" before mounting:
 1. Obtain a nonmetallic tester (e.g., screwdriver handle or, for heavier wheel, wooden mallet).
 2. Tap gently about 45 degrees from the vertical centerline and 1 or 2 inches from wheel's edge.
 3. Listen for a clear metallic "ping"—a dull thud probably means a cracked wheel.

When you operate an abrasive wheel grinder:

- Put on PPE to protect hands, eyes, and ears.
- Be sure guard aligns with wheel and covers spindle end, nut, and flange projections.
- Lift wheels carefully; don't drop or bump them.
- Mount wheel or brush, replace guard, then stand to side and run machine for a minute with no load as a safety check.
- Allow grinder to come up to full speed each time before it contacts the workpiece.
- Maintain balance and firm control of tool while grinding.