

TOOLTALK

Bench Grinder Safety Guide

Potential Hazards

- Cuts and amputations
- Inhalations of toxic materials, dust
- Eye injuries
- Struck by fragments from exploding wheels
- **Death from flying fragments**

Common Accident Cost*

- Stitches **\$2,000**
- Average hand injury claim **\$6,000**
- Average worker's comp claim **\$7,000**
- Average severed tendon injury **\$70,000**

* Bureau of Labor Statistics

Key Examples

- Employee's pinky finger was amputated and index finger degloved when his hand became caught between the wheel and work rest. *OSHA penalties totaled \$12,675*
- Employee was using the side of a grinding wheel to make an edge on round metal stock, the part snagged, and the grinder pulled on the part along with the employee's finger, which was amputated. *OSHA penalties totaled \$18,000*

Bench Grinder Safety Tips

- Use a Safety Scale to ensure the gaps between the grinding wheel, tool rest and tongue meet OSHA and ANSI standards.
Part No 0962323 (shown right)
- Make sure the machine's operating speed doesn't exceed the speed marked on the wheel.
- Visually inspect all wheels prior to use and perform the "ring test" on all wheels before mounting. To perform a ring test, gently tap the wheel to check for cracks. If it is undamaged, it will sound clear.
- To prevent an injury due to a new wheel exploding, stand off to the side and run new wheels at operating speeds for one minute before grinding.
- Wait until the grinding wheel comes to a complete stop before leaving the workstation. Never use a foreign object to stop the wheel.



Bench Grinder Checklist

- Is cleanliness maintained around the grinder?
- Is the tool rest kept adjusted to within 1/8" (0.3175cm) of the wheel?
- Is the adjustable guard on the top side of the grinder used and kept within 1/4" (0.6350cm) of the wheel?
- Are bench and pedestal grinders permanently mounted?
- Is eye protection worn, or are the safety shields in place during use?
- Do side guards cover the spindle, nut and flange, and 75% of the wheel diameter?
- Are dust collectors and powered exhausts provided on grinders used in operations that produce large amounts of dust?
- Does each grinder have an individual on-and-off control switch?

Source: OSHA

