

BENCH GRINDER SAFETY

A Quick Reference for Injury Prevention & Compliance

RISK ASSESSMENT

A risk assessment for a pedestal or bench grinder always includes a core set of recognized hazards and requirements. The discussion below describes each hazard and makes suggestions for remediation. You can find detailed information on each hazard and the related OSHA requirements on our website.

While the discussion below addresses the most common hazards, a machinery risk assessment should also include an investigation of application-specific hazards. (learn more on our website)

RECOGNIZED BENCH GRINDER HAZARDS (and their resulting injuries)

Wheel Explosions
(shrapnel can lead to fatalities)

Caught-In or Caught-By Moving Parts
(lacerations and amputations)

Flying Debris & Coolant
(irritation, burns, and eye injuries)

Contact with Grinding Disc
(lacerations and amputations)

Inability to Quickly Abate Emergencies
(increases severity of injuries)

Unintentional Restarting
(increases occurrence-rate of injuries)

Coasting & Freewheeling
(increases occurrence-rate of injuries)

MITIGATE ALL OF THESE HAZARDS WITH
A SINGLE ENGINEERING CONTROL

The MAKESafe Power Tool Brake

- ✓ Stops hazardous tool coasting
- ✓ Prevents accidental restarts
- ✓ Adds compliant e-stop
- ✓ Restricts unauthorized access
- ✓ Avoids injuries & fines
- ✓ Installs in 2 minutes



BENCH GRINDER HAZARD MITIGATIONS

An interactive version of this document is available on our website: www.makesafetools.com

ENGINEERING CONTROLS

- Install an interlocked motor brake to stop the wheel quickly after each operation.
- Install **accidental** restart prevention. [FED/OSHA: 1910.213(b)(3), CAL/OSHA: §2530.43]
- Install an emergency stop button or momentary foot switch. [CAL/OSHA §4001, NFPA 79]
- Ensure side guards cover the spindle, nut and flange and 75% of the wheel diameter. [FED/OSHA 1910215(a)(2), CAL/OSHA §4237, §3577]
- Ensure tool rest and tongue guard are in place and able to meet spacing requirements. [FED/OSHA 1910.215, CAL/OSHA §3577]
- Securely anchor the bench grinder. In the case of pedestal grinders, this includes anchoring the pedestal to the ground. [FED/OSHA 1910.212(b), CAL/OSHA §3576]
- Provide interlocked dust collectors or powered exhausts. [FED/OSHA 1910.94(b)(2), CAL/OSHA §5152]

ADMINISTRATIVE CONTROLS

- Ensure tool rest and tongue guard meet spacing requirements before starting an operation. [FED/OSHA 1910.215, CAL/OSHA §3577]
- Ring test and visually inspect all grinding wheels before they are mounted. [FED/OSHA 1910.215, CAL/OSHA §3580]
- Verify that the maximum RPM rating of each abrasive wheel meets or exceeds the grinder RPM. [FED/OSHA 1910.215(d)(1), CAL/OSHA §3583]
- Use approved lockout/tagout means and procedures for all maintenance activities [OSHA 1910.147, CAL/OSHA §3314]

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Wear eye protection (goggles or face shield). [FED/OSHA 110.133(a)(1), CAL/OSHA §3380]
- Wear any other PPE appropriate for the task.



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TOOLS DON'T BREAK YOU**



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