

Safety Facts: Bench Grinder*

A bench grinder is a high-speed, two-sided benchtop type of grinding machine used to drive abrasive, fast-rotating wheels of various sizes.

Depending on the bond and grade of the grinding wheel, you can use it to sharpen a variety of cutting tools such as tool bits, drill bits, chisels, and gouges. Bench grinders also roughly shape metal before welding or fitting. Bench grinders have several basic adjustments and machine guarding components for safe machine use.

Why is it important?

Typical accidents involving grinders have included fingers caught in the machine's components and eye and face injuries due to wheel disintegration, missing guards, or misadjusted parts. Using bench grinders correctly can prevent these serious injuries and fires.

Key characteristics of bench grinders

A bench grinder is a practical piece of equipment because of its versatility – they are available in a broad range of sizes, models, and makes.



Bench grinders do not create accurate, smooth, and precise work. In most cases, the fabricated piece must get to finer grinding in another machine for the finished product.

Associated risks/hazards

- Cuts
- Abrasions
- Electric shock
- Fires and Sparks
- Burns and Heat
- Flying Debris
- Entanglement
- Hot Components
- Crushing or pinch point hazards

Preventive next steps

Overall machine condition

- Securely mounted on a bench or pedestal
- Powered by a protected circuit
- Grinder runs without excessive vibration
- Tool rests intact and properly adjusted

Guard considerations

- Guards installed and adjusted properly
- Side plates installed and adjusted properly
- Transparent components are crack-free and free of fogging or haze

Working area issues

- The working area around the grinder free of oils and flammable materials

Grinding wheels

- Correct wheel available for the job
- Test the wheel before use

Personal safety

- Demonstrate safe grinder practices with operators
- Use appropriate PPE
- Perform testing of grinding wheels
- Inspect grinding wheels at every change, whether new or old



For additional resources visit:

[Use of Bench and Pedestal Grinders](#) – Canadian Centre for Occupational Health and Safety

[Abrasive Equipment](#) – Occupational Health and Safety Regulation Part 12: Tools, Machinery and Equipment

Bench Grinder Toolbox Talk

Name of Facilitator: _____ Date: _____

Supervisor Signature: _____ Date: _____

Employee feedback/questions/recommendations

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Workers who attended

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Key Talking Points (Facilitator Notes)
