



Bench Grinder

SAFETY Training

Bench Grinder Usage Requires CAUTION

Hundreds of bench grinder related injuries are reported each year - injuries that could have been prevented.

Why do Accidents Happen

- 1 - Fatigue
- 2 - Rushing to finish a job
- 3 - Lack of awareness of the potential risks
- 4 - Use of the wrong tool or wrong accessories
- 5 - Removal or bypassing the tool's safety features
- 6 - Failure to certify or "ring test" a wheel before mounting



Accidents Happen... FAST!

An 8" grinding wheel has a no-load speed of 3,600 RPM, which equals

90 MPH!

CAUTION SAFETY ZONE

metabo[®]
PROFESSIONAL POWER TOOL SOLUTIONS

STEP 1: PROPER USE OF PPE

Be sure to check with your safety officer for specific PPE requirements for your company.

- Safety Glasses
- Face Shields
- Work Gloves
- Flame retardant clothing
- Protective foot wear
- Protective head gear



STEP 2: PROPERLY PREPARED WORK ENVIRONMENT

If you see something or someone that looks unsafe... **TELL A SUPERVISOR IMMEDIATELY**

Grinders Throw Sparks

- Remove all combustible materials including paper, cardboard and rags
- Never work near combustible liquids, gases or dust

Never operate power tools in wet environments

Power tools require your full attention

- Clear your mind and avoid distractions
- Secure loose hair, clothing and jewelry away from moving parts
- Never work under the influence of substances

STEP 3: SELECTION OF THE PROPER TOOL

Check with your safety officer regarding company specific requirements for working at heights/drop protection

The Right Tool for the Job

- Match rated RPMs and power to the work being performed.
- Use specific tools for unique applications

Never Alter a Tool

- Do not bypass the on/off switch
- Never use "non-grinder accessories"
- Use manufacturer supplied or OSHA recommended guards for the application
- Always use the prescribed bench grinder guards

STEP 4: PROPER USE OF ACCESSORIES & START-UP

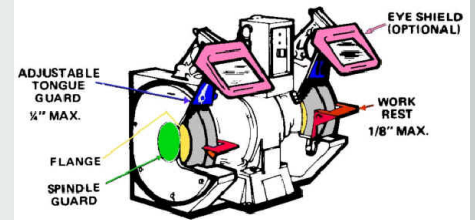
Always match the diameter of the wheel with the rating on the bench grinder.

Refer to the spec plate or *owner's manual* for details.

- Never use a wheel with a rated speed lower than the rated speed of the bench grinder
- Never use an unapproved accessory
- Always stand to the side of the wheel when starting the bench grinder

STEP 5: PROPER GUARDING

- Always make sure all guards are in place
- The exposure of the periphery shall not exceed 90 degrees
The side guard shall cover the spindle and flange
- Adjust upper, or "tongue" guard to never exceed a distance of 1/4" from the wheel
- Adjust tool rest to never exceed a distance of 1/8" from the wheel



STEP 6: WHEEL SAFETY

- Always visually inspect vitrified grinding wheels before installation
- If chips or hairline cracks are found - DO NOT USE!
- Always ring test a vitrified wheel before installation
- If the wheel returns a dull sound or "thud" - DO NOT USE!
- Always comply with ANSI B 7.1 Safety Requirements for the use, care, and protection of abrasive wheels
- Excessive vibration is dangerous. If excessive vibration is felt, immediately shut off the grinder and determine the cause of vibration
- Only use wheels or accessories specifically recommended by the tool manufacturer

STEP 7: TOOL SAFETY

- Always make sure the grinder is securely mounted to a bench or pedestal
- Only grind on the face of the wheel
- Never grind on the side of the wheel
- Never grind aluminum, brass, bronze or other "white metals" as they can clog the wheel
- Never grind small stock - use clamping pliers for items that cannot be easily held by hand
- Always bring work to the wheel slowly
- Never bypass the on/off switch
- Always maintain the bench grinder to manufacturers original condition

STEP 8: WHEEL CARE

- Move object being ground evenly across the face of the wheel to promote even wheel wear
- Wheels should be trued and dressed when worn out of round
- Wheels should be trued and dressed if the face becomes clogged or worn smooth
- Wheels should be trued and dressed only on the face, never on the side

Bench Grinder

USAGE CHECKLIST

Before any grinder is issued a job, ask the following questions:

- Is the bench grinder the correct choice of tool for the required work?
If the answer is no, **STOP!** Decide a better way to do the job.
- Is the operator trained in the use of bench grinders and trained to recognize the possible hazards associated with the use of a bench grinder?
If the answer is no, **STOP!** Get the needed training/assign only trained operators.
- Does the operator have the required PPE?
If the answer is no, **STOP!** Issue the proper, required PPE before issuing the bench grinder.

Tool Maintenance

PRE-USAGE CHECKLIST

Check overall condition of bench grinder and ensure there are no outward signs of damage

- Are all combustibles away from the work area?
- Is the bench grinder securely mounted?
- Are the side covers in place?
- Is the upper guard "tongue" properly adjusted?
- Is the lower guard "tool rest" properly adjusted?
- Is this the correct tool for the job?
- Has the operator been trained on the usage?

For additional information, please contact your local Metabo Representative
or visit our website at www.metabousa.com