

# THE SAINT-GOBAIN ABRASIVES SAFETY GUIDE

## Read it, Follow it!

Saint-Gobain Abrasives supplies at least one safety guide with each package of grinding wheels. This process is very expensive but, worth it because end user safety is our highest priority. Our customers must deliver these guides to end users for reading, posting at or near their work station and following these important safety rules. These guides educate and reinforce basic abrasive safety rules and when followed, they make most abrasive accidents disappear. They provide the end user with Mounting and Use Instructions along with known hazarded warnings.

The two basic safety guides provided to grinding wheel users are titled, "Safety Guide for Portable Grinding Wheels" and "Safety Guide for Grinding Wheel Users." They are written in three languages (English, French and Spanish) and are often referred to as the "do's and don'ts" of grinding wheel safety. English versions shown.

These brief general rules cannot cover many questions on special grinding applications. ADDITIONAL and more detailed information is contained in the booklets listed below, all of which are available by writing to: Grinding Wheel Institute 30200 Detroit Road Cleveland, Ohio 44145-1967

**SAFETY BOOKLETS**

- Mounting Techniques for Wheel Sleeves on Cylindrical Grinding Machines
- High-Speed Heavy-Duty Grinding Machines-Swing Frames and Floor Stands
- Portable Grinding Machines, Safe and Efficient Operation
- Handling, Storage and Inspection of Grinding Wheels
- Special Speeds for Grinding Wheels
- Cutting-Off Wheels
- Mounted Wheels and Points, Safe Speeds
- ANSI B7.1 Code for the Use, Care and Protection of Abrasive Wheels
- Safety Recommendations for Grinding Wheel Operation

**WARNING**

Improper use may cause grinding wheel breakage and serious injury. Comply with ANSI B7.1, OSHA and Safety Guide furnished with package. Don't overspeed, abuse or drop wheel. Always use a guard, personal protective equipment and proper mounting procedures.

Grinding generates dust. Most of the dusts generated are from the material being ground. Excessive dust inhalation will adversely affect the breathing function. To avoid breathing impairment always use dust controls and protective measures appropriate to the material being ground. SEE FEDERAL HAZARD COMMUNICATION STANDARD 29CFR. 1910. 1200.

**IMPORTANT**

Deliver this folder with grinding wheel to operator. Read before mounting the wheel.

Form 49877 (REV. 1/96) Printed in the U.S.A.

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**IMPORTANCE OF PROPER MACHINE MAINTENANCE**

Grinding is a safe operation if the few basic rules listed below are followed. These rules are based on material contained in the ANSI B7.1 Safety Code for "Use, Care and Protection of Abrasive Wheels". For your safety, we suggest you benefit from the experience of others and carefully follow these rules.

**WARNING**

IMPROPER USE MAY CAUSE BREAKAGE AND SERIOUS INJURY

DO and DON'T

1. DO ALWAYS HANDLE AND STORE WHEELS IN A CAREFUL manner.
2. DO VISUALLY INSPECT all wheels before mounting for possible damage and ring test vitrified wheels.
3. DO CHECK MACHINE SPEED against the established maximum safe operating speed marked on the wheel.
4. DO CHECK MOUNTING FLANGES for equal and correct diameter.
5. DO USE MOUNTING BLOTTERS when supplied with wheels.
6. DO BE SURE WORK REST is properly adjusted. (Center of wheel or above, no more than 1/8" away from wheel.)
7. DO ALWAYS USE A SAFETY GUARD covering at least one-half of the grinding wheel.
8. DO ALLOW NEWLY MOUNTED WHEELS to run at operating speed, with guard in place, for at least one minute before grinding.
9. DO ALWAYS WEAR PROTECTIVE SAFETY GLASSES and additional eye & face protection if required.
10. DO TURN OFF COOLANT before stopping wheel to avoid creating an out-of-balance condition.

1. DON'T USE A CRACKED WHEEL OR ONE THAT HAS BEEN DROPPED or become damaged.
2. DON'T FORCE A WHEEL ONTO THE MACHINE OR ALTER the size of the mounting hole - if wheel won't fit the machine, get one that will.
3. DON'T EVER EXCEED MAXIMUM OPERATING SPEED established for the wheel.
4. DON'T USE MOUNTING FLANGES ON WHICH THE BEARING SURFACES ARE NOT CLEAN, FLAT AND FREE OF BURNS.
5. DON'T TIGHTEN THE MOUNTING NUT EXCESSIVELY.
6. DON'T GRIND ON THE SIDE OF THE WHEEL. (See ANSI Code B7.1 for exceptions.)
7. DON'T START THE MACHINE UNTIL THE WHEELGUARD IS IN PLACE.
8. DON'T JAM work into the wheel.
9. DON'T STAND DIRECTLY IN FRONT of a grinding wheel whenever a grinder is started.
10. DON'T FORCE GRINDING so that the motor slows noticeably or work gets hot.

POST THIS GUIDE NEAR YOUR GRINDING MACHINE

**IMPORTANCE OF PROPER MACHINE MAINTENANCE**

Since the more common of wheel breakage have been traced to improper mounting, improper speeds, abrasive operation and/or careless handling of the grinder proper and regular maintenance service and inspection procedures obviously are of great importance in preventing wheel's breakage. Regular inspection and maintenance procedures must be of necessity be the responsibility of the user. All portable type grinders should be inspected at regular intervals to ensure that the mounting flanges are in good condition, of the proper size and shape, that the speed governing device is functioning properly, and that no damage has occurred to the grinder or wheel as a result of abusive use or careless handling. Comply with OSHA and ANSI B7.1 Safety Regulations.

The following Do's and Don'ts should be used as a guide to safer portable grinding.

**WARNING**

IMPROPER USE MAY CAUSE BREAKAGE AND SERIOUS INJURY

DO and DON'T

1. DO CHECK ALL WHEELS FOR CRACKS OR OTHER DAMAGE before mounting.
2. DO CHECK MACHINE SPEED against the established maximum safe operating speed marked on wheel.
3. DO USE MOUNTING BLOTTERS when supplied with wheels.
4. DO BE SURE WHEEL HOLE, THREADED OR UNTHREADED, FITS MACHINE ARBOR PROPERLY and that flanges are clean, flat and of the proper type for the wheel you are mounting.
5. DO ALWAYS RUN WHEEL IN A PROTECTED AREA at least one minute before grinding.
6. DO USE WHEEL GUARD furnished with machine.
7. DO ALWAYS WEAR PROTECTIVE SAFETY GLASSES and additional eye & face protection if required.
8. DO EMPLOY DUST CONTROLS AND/OR PROTECTIVE MEASURES appropriate to the material being ground.

1. DON'T USE WHEELS WHICH HAVE BEEN DROPPED or otherwise damaged.
2. DON'T USE A GRINDING WHEEL THAT HAS RATED SPEED LESS than the speed of the grinder.
3. DON'T USE EXCESSIVE PRESSURE WHEN MOUNTING wheel between flanges. Tighten nut only enough to hold wheel firmly.
4. DON'T USE HEAVY SIDE GRINDING PRESSURE on any Type 1 straight wheel or thin Type 27 wheel.
5. DON'T HANDLE MACHINE CARELESSLY. Stop wheel on work and use racks or hooks to support machine when not in use.
6. DON'T USE RELIEVED OR RECESSED FLANGES WITH THREADED HOLE CUP WHEELS, cones or plugs.
7. DON'T MOUNT MORE THAN ONE WHEEL ON A SINGLE ARBOR.

POST THIS NEAR YOUR MACHINE

# PLAY IT SAFE AT THE WHEEL

Joe Safety says, "Following these important safety guides can help to keep you and bystanders safe!"

For additional information on this topic or if you need any other abrasive safety information, please review ANSI, OSHA and all literature provided by the abrasive wheel and machine manufacturer. You may also contact the Saint-Gobain Product Safety Department at (508) 795-2317 or Fax (508) 795-5120 or contact your Saint-Gobain Abrasives, Inc. representative with any safety related questions.

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Saint-Gobain Abrasives, Inc.

