**Bench Grinding Wheel Do’s and Don’ts**

Bench grinders and bench grinding wheels have been in service for over 100 years and, when used correctly, they are a safe and effective tool. The causes of most accidents with these products have been related to misuse and abuse. An important way of avoiding wheel breakage and injury is to follow the attached Do’s and Don’ts for Bench Grinding Wheels.

**Do’s**

- Do always handle and store grinding wheels in a careful manner. Most bench grinding wheels are vitrified/glass bonded products and are very strong, but brittle.
- Do visually check all wheels for cracks or damage before use. In addition to the visual inspection, “Ring Test” all wheels before mounting on the bench grinder.
- Do check machine speed against established safe operating speed marked on the wheel.
- Do use mounting blotters as supplied by the wheel manufacturer.
- Do inspect mounting flanges for equal size, relief around the wheel’s hole, and the correct diameter. Flange diameter must be equal to or greater than one-third the wheel’s diameter (e.g. 6 inch wheel, 2 inch flange).
- Do use flanges that are clean, flat, and smooth.
- Do make sure the bench grinder has the proper wheel guard. Bench grinder guards should have side guards that cover the spindle, end nut, and flanges. It must cover 75% of the wheel’s diameter.
- Do make sure your bench grinder has an adjustable work rest that is kept adjusted to 1/8 inch or less from the wheel’s grinding face.
- Do make sure your bench grinder has an adjustable tongue guard/spark arrestor and set it to 1/4 inch or less from the wheel’s grinding face.
- Do allow newly mounted wheels to run at operating speed for one minute before grinding. Do not stand in front of or in line with the rotating grinding wheels during this test because, if damaged, the wheel most likely will break during this test.
- Do keep your work area clean and free of anything that could accidently strike or make contact with the grinding wheel.
- Do turn off coolant (when used) before stopping the grinding wheel to avoid creating an out of balance condition on the wheel.
- Do wear proper personal protection such as eye and face protection, apron, gloves, safety shoes, etc.
- Do maintain your tools as if your life depends on it.
- Do grind on the wheel’s face (outer diameter) only. Side grinding is NOT allowed.
- Do keep your grinding wheel face open and free of metal build-up. Dress wheel to remove foreign metals and to open the wheel face with new sharp abrasive grains.
- Do make sure your bench and pedestal grinder is permanently mounted. It should not move or fall over during use.
- Do review all applicable MSDS (Material Safety Data Sheets) before using this product. When required, control dust.
- Do comply with ANSI B7.1, OSHA and all safety materials provided with the wheels and the grinders.
- Do visit the abrasive manufacturer’s website for additional safety information.
- Do contact your abrasive manufacturer if you have any safety questions.
**BENCH GRINDING WHEEL DO'S AND DON'TS** continued

**Don'ts**

- Don't use wheels that have been dropped or otherwise damaged. If the wheel does not pass a “Ring Test”, do not use it.
- Don't force a wheel onto the machine or alter the size of the wheel's mounting hole. If the wheel won’t fit the machine, get one that will fit properly.
- Don't exceed the speed marked on the grinding wheel.
- Don't use mounting flanges on which the bearing surfaces are not clean, flat, and smooth.
- Don't tighten the mounting nut excessively. Tighten the nut just enough to prevent wheel slippage.
- Don't start the machine until the safety guard is properly and securely in place.
- Don't adjust the work rest or tongue guard/spark arrestor while the grinding wheel is rotating.
- Don't stand in front of or in line with a grinding wheel whenever a bench grinding machine is started.
- Don't grind on the side of the wheel.
- Don't jam the work into the wheel.
- Don't grind material for which the wheel is not designed. Do not grind/sand wood, plastic, or any other non-metallic materials.
- Don't use this wheel if you have not reviewed all of the safety materials and have not been properly trained in the use of the tool and wheel.

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 coated abrasive and machine manufacturer. You may contact the Saint-Gobain Product Safety Department at (508) 795-2317, Fax (508) 795-5120 or contact your Saint-Gobain Abrasives representative with any safety related questions.

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