Cutting and Grinding Safety

PRECAUTIONS:

- Loose clothes, gloves, jewelry or long hair can be caught in moving parts. Keep them away.
- Avoid accidental starting. Be sure switch is off before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch on invites accidents.
- Always wear safety glasses, face shield, protective gloves, suitable protective clothing, hard hat, steel toe boots and hearing protection and dust mask if necessary. Keep other employees away while operating power tools.
- Always use proper guard with grinding wheel, it protects operator from broken wheel fragments. Turn the wheel guard so that the closed area is towards the operator.
- First switch on and only present the tool to the work piece once it is running.
• Wheels and other accessories running over rated speed can fly apart and cause injury. Use at least “max. 80m/s”.

• Always use with the side handle installed and keep both hands on the tool at all times during use.

• Ensure that sparks produced during work do not constitute a risk to the user or other personnel and are not able to ignite inflammable substances. Endangered areas must be protected with flame-resistant covers. Make sure that fire-risk areas are always provided with suitable fire extinguishers.

• Never use cutting discs for grinding purposes. Cutting discs must not be subjected to any lateral pressure.

• Use clamps or other practical way to secure and support the work piece to a stable platform. Holing the work by hand or against your body is unstable and may lead to loss of control.

• Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed. Abrasive wheels shall be stored and handled with care in accordance with manufacturer’s instructions

• Disconnect the plug form the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

• Use only accessories that are recommended by the manufacturer for your model.

• Inspect the tool before each use to ensure cutting edges are sharp, the on and off switch works, the clamp nut is in place and secure and ventilation openings are clear.

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**Do’s:**

• Handle and store wheels in a careful manner.
• Observe the 3 basic rules of “no rolling, no dropping, and no contact with other objects”.
• Store wheels on a shelf or storage rack in a dry place.
• If the grinding wheel is marked with a service limit, be sure to use it only within the service limit period.
• Before mounting a wheel onto a machine, perform a visual inspection and ring test (hammering test) to check for cracks, chips, and other problems.
• Check that the maximum operating speed, dimensions, and other specifications of the grinding wheel are correct for the machine where it will be used.
• Check that the outer diameters and contact widths of the mounting flanges are equal and correct on the left and right sides.
• Use the blotters that are supplied with the wheels.
• The blotters should be larger than the flange diameter and must not be stained or torn.
• Balance the wheel with balancing weights.
• Be sure that the work rest is properly adjusted. The wheel should be no more than 3 mm away from the work rest and 3 – 10 mm away from the adjustment piece.
• The standard length of the wheel spindle after mounting should be 13 mm.
• Use a grinding wheel cover which covers at least one half of the grinding wheel at all times.
• Perform test operation for at least 1 minute before the first grinding of the day, and for at least 3 minutes before using a newly mounted wheel.
• Wear safety goggles, dust-proof mask, and other necessary protective gear during operation.
• In order to avoid disrupting the balance, completely shut off the coolant before stopping the wheel rotation.
• Use shield plates or other means to protect operators from sparks.
• In order to prevent respiratory illnesses, be sure to ensure dust control and sufficient ventilation.
Don’ts

- Do not use a grinding wheel that was dropped or subjected to other impact or a grinding wheel where any abnormality was found during inspection.
- If the hole diameter of the grinding wheel does not match the machine, do not force the wheel onto the machine or alter its hole diameter.
- Do not exceed the maximum operating speed that is marked on the wheel.
- Do not use mounting flanges if the surfaces which contact the grinding wheel are deformed, scratched, dirty, or corroded.
- Do not use flanges that do not have roll-offs. If the wheel is attached by nuts, do not use flanges (base plates) that have roll-offs.
- When mounting onto the flanges, do not over-tighten the nuts.
- Do not use the side of the wheel unless the wheel is specifically designed for that purpose.
- Do not start the machine before the grinding wheel cover is installed.
- Do not use excessive force to press the work piece against the grinding wheel, or the grinding wheel against the work piece.
- Do not directly touch a rotating grinding wheel with any part of your body.
- During test operation, do not stand in front of the grinding wheel direction of rotation.
- When working with a portable grinder, do not place the grinder onto a table, floor, work piece, or other surface before the grinding wheel has fully stopped.
- Do not perform grinding in a location where there is the risk of ignition or explosion.
- Do not enter the area where sparks are produced.