Abrasive Wheels

Abrasive Wheels - Handling and Storing of Bonded Abrasive Wheels

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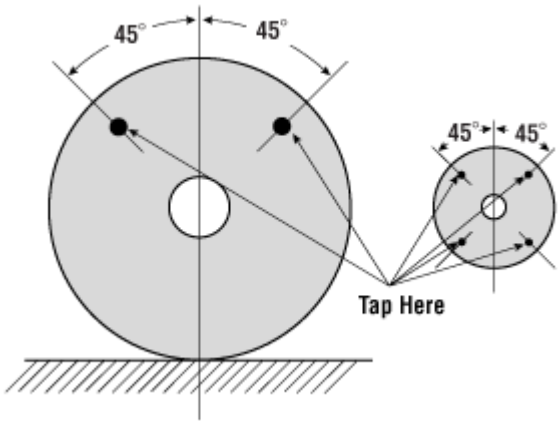
What safety precautions should be followed when using abrasive wheels?

- Select the right wheel for the job. A wheel is dangerous when used for work for which it was not designed. Booklets from wheel and machine manufacturers provide technical information on wheel selection and proper use.
- Use only wheels marked with the wheel type and maximum speed in revolutions per minute (rpm).
- Inspect the wheel when you purchase it, and again before using if it was stored. .
- Visually examine the wheel for any signs of damage such as chips and gouges.
- Use the "ring test" to check if the wheel is damaged. Ring tests do not apply to small wheels 10 cm (4 in.) diameter and smaller.
- Use abrasive wheels only on machines with safety guards. Exceptions may apply to some classes of wheels. Always check with the manufacturer’s instructions.

What is the "ring test?"

- The ring test is one way to check whether the wheel is cracked or damaged. Make sure the wheel is clean and dry. Tap wheels gently with a non-metallic tool such as a plastic screwdriver handle for light wheels and a wooden mallet for heavy wheels.
- Tap wheels about 45 degrees on each side of the vertical center line and about 3 to 5 cm (1 or 2 in) from the periphery. Repeat the test by rotating the wheel 45 degrees.



An undamaged wheel will make a metallic ring sound. Do not use any wheel that sounds dead or cracked and does not have a clear ring.

How should I handle and store the abrasive wheels?

All abrasive wheels are fragile. Do not use a wheel if it is damaged or suspected of being damaged.

- Handle the wheels carefully. Avoid dropping or bumping.
- Do not roll a wheel on its edge.
- Transport wheels in containers designed to provide support for the wheels if they are too heavy to carry by hand.
- Do not pile other items such as tools on top of wheels.
- Store wheels in racks or bins with dividers for different types of wheels and ensure easy access and less handling. Leave wheels that were shipped on a pallet stored as shipped until needed for use.
- Place straight or tapered wheels on their end in a cradle or chocked position to prevent rolling or damage.
- Never store wheels near excessive heat or cold, in contact with water, oil or moisture, nor in drawers with loose tools.
- Store wheels in a dry area. Prevent the area from freezing temperatures and any temperature or humidity that causes condensation on the wheels.
- When selecting the racks, bins, boxes or drawers for storage consider the size and type of wheels to be stored: for example, lay flat thin bonded wheels, and support larger wheels in racks. Always follow the manufacturer's instructions.
- Sort and store wheels so that older wheels can be selected first.
- Keep the information from the manufacturer in the storage area, and available to the machine operator.

- Follow the manufacturer's instructions for the length of time a wheel should be stored.

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