

TOOLBOX TALK

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Ringing abrasive wheels

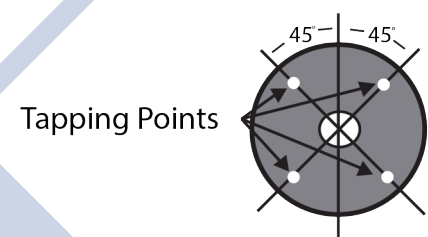
Bench grinders, pedestal grinders, and angle grinders are versatile tools that use various blades, brushes, or abrasive wheels to clean, buff, cut, or smooth material. Due to internal damage, abrasive wheels have been known to explode violently while in use. This internal damage can occur when a wheel is dropped, contact with falling material occurs, or during the manufacturing process. This is the reason that OSHA requires that a ring test be conducted on wheels before they are mounted onto grinding equipment.



The ring test is an effective method of detecting a defect in grinding wheels that are over 4 inches in diameter. The wheels can't be mounted during as that inhibits the ring. The grinding wheels should be free from dust or grease buildup, and they should be dry as water within the wheel's porous structure also deadens the sound.

How to do the test:

1. Suspend the wheel with a tool handle or your finger through the arbor hole in the wheel.
2. Tap the flat side of the wheel with a light non-metallic implement, such as a screw driver handle, at an area 45 degrees from the vertical center line on each side of the wheel and 1 – 2 inches from the edge of the wheel. (see illustration)
3. Rotate the wheel 45 degrees and repeat the test until the entire wheel has been tested.



The wheel passes the test if it gives a clear metallic tone (ring) when tapped at all four points. If the wheel sounds dead (dull thud) at any of the four points, it is cracked or damaged internally. Do not use it.