

BENCH AND STAND GRINDERS DRESSING

- 1 Wear a face shield over your safety glasses for protection against heavy particles
- 2 Use a dressing tool approved for the job. Never use a lathe cutting tool
- 3 Inspect star dressers for loose shaft and worn disks
- 4 Round off the wheel edges with a hand stone before and after dressing to prevent the edges from chipping
- 5 Use the work rest to support and guide the tool. Use a tool holder if one is available
- 6 Apply moderate pressure slowly and evenly
- 7 Always apply diamond dressers at the center or slightly below the center, never above

FIG 31-25 —Major safety measures to be taken in a wheel dressing operation

cedures should be followed. Stones of unknown composition or manufacture should never be run more than 2500 sfpm and ordinarily not more than 2000 sfpm.

The size and weight of grindstones require a stand that is rigidly constructed, that is heavy enough to hold the stone securely, and that is mounted on a solid foundation to withstand vibration.

Since grindstones are run wet, all possible precautions should be taken to prevent slipping accidents near the stones. Rough concrete or other nonskid floor material is recommended.

Grindstones should be carefully inspected for cracks and other defects as soon as they are received from the manufacturer. Those not to be used at once should be stored in a dry, uniformly heated room. In storage they should be placed so that they will not be damaged.

Many grindstone failures result from faulty handling and from incorrect methods of mounting. Grindstones should not be left partially submerged in water. This practice causes an unbalanced stone that may break when rotated. Wooden wedges should not be used on power-driven stones. Often, such wedges are driven excessively tight or become

wet and swell. In either case, cracks start in the corners of a square center hole, radiate outward, and so weaken the stone that ruptures occur at normal speed.

After the stone has been centered, the central space about the arbor should be filled with lead or cement. Double thicknesses of leather or rubber gaskets, rather than wood washers, should be used wherever possible. If wood washers are used between the flanges and the stone, the washers should be $\frac{1}{2}$ - to 1-in. thick and the flanges should be clamped in place by heavy nuts.

Work rests should comply with the same conditions as those for grinding wheels.

For dressing or operating power-driven grindstones (either wet or dry), exhaust systems should be provided to remove dust and wet spray or mist.

Polishing and buffing wheels

Polishing wheels are either wood wheels faced with leather or wheels made of disks of canvas or similar material stitched together, with a coat of emery or other abrasive glued to the periphery of the wheels.

Buffing wheels are made of disks of felt, linen, or canvas, and the periphery is given a

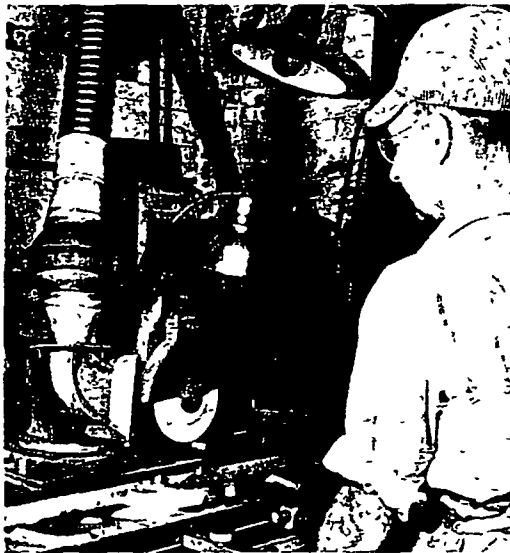


FIG 31-26 —Guarding and exhaust provisions for a surface grinding operation