

BENCH AND STAND GRINDERS DRESSING

- 1 Wear a face shield over your goggles 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 26-24 — Major safety measures to be taken in a wheel dressing operation

wheel may overheat at the rim and crack. Operators, therefore, should be trained and supervised to make sure they clamp work tightly, always turn a magnetic chuck on before applying the wheel, and control the speed and depth of the work.

Baffle plates on each end of a surface grinder are generally standard equipment, but should include some provision for exhausting the grinding dust (Fig 26-25).

Internal grinders can be guarded with an automatic positioning hood that covers the grinding wheel when it is in the retracted or idling position.

Grindstones

Grindstones are made from natural sandstone, usually the Ohio and the Huron types. Huron grindstones are harder, have a finer grain, and can be operated at higher speeds than the Ohio. Ohio grindstones should never be run at a peripheral speed greater than 3000 sfpm, and for ordinary purposes not over 2500 sfpm. Huron stones may be safely run at 3000 sfpm, but should not exceed 3500 sfpm.

Stones of unknown composition 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 and heavy enough to hold the stone securely 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 used in 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 cen-

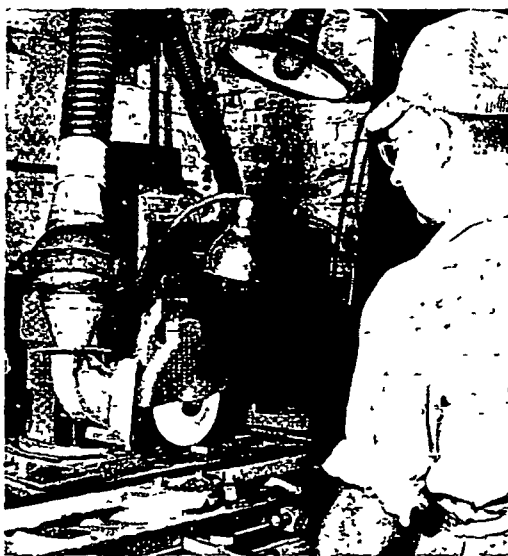


FIG 26-25 — Guarding and exhaust provisions for a surface grinding operation