SHIFT BRIEFING

BENCH GRINDER - WHEEL DRESSING BEST PRACTICES

Dressing is the process of restoring the sharpness of the grinding wheel by breaking away the dulled abrasive crystals or by removing the glazed or loaded surface of the wheel, thus presenting new sharp-cutting edges of the abrasive grains. This breaking away is caused by the pressure of the dresser crushing the bond and releasing the dull abrasive. This process should not be confused with treeing, which refers to the shaping of any part of the wheel to run true or to alter it to some desired shape.

The tools used for dressing are made in a variety of types and are called dressers. The more commonly used off-hand dressers are the star type and the diamond stick (below).



To dress the wheel, support the dresser on the tool rest so that the point of contact is slightly above the center, and with the handle tilted upward at an angle as shown below.



Slowly press the dresser against the face of the revolving wheel until it "bites." Then move it back and forth to obtain a straight surface, and at the same time, hold the dresser rigidly enough on the tool rest to maintain trueness while dressing.



Loaded Wheel

Wheel Loading is caused by:

- 1) Metal too soft
- 2) Wheel bond too strong

When self-sharpening the wheel, the pressure of grinding will either fracture the grain or pull it out of the bond when it becomes dull. This action exposes new, sharp-cutting edges.