Blotters... What Good Are They?

Plenty Good! The proper use of blotters can aid in preventing wheel breakages. Let's take a moment to look at blotters, what they are and why they exist.

Blotters by definition are compressible washers that must be placed between an abrasive wheel and a mounting flange. These blotters are more than just cardboard or paper, but are designed to strict standards for material type, thickness, coefficient of friction, and compressibility. Do not attempt to create your own by cutting blotters from old paper cartons, sheets of rubber, or leather, etc. Use only blotters that are supplied or recommended by the abrasive wheel manufacturer.

Use one clean new blotter for each mounting flange used; blotters can help to ensure uniform distribution of flange pressure. They tend to cushion the pressure of flanges against high points or uneven surfaces. They also prevent damage to the surfaces of the flanges from the coarser abrasive surfaces of the wheel. Additionally, blotters provide a better coefficient of friction than would be obtained between the flanges and the wheel without blotters, thereby providing better transmission of the driving power to the wheel. Lastly, many blotters provide important safety information such as maximum abrasive wheel operating speeds and important warning(s) information.

If blotters could talk, they probably would give us a real earful. Anytime a wheel is dismounted or changed, a set of flanges are removed, we need to closely look at the impression remaining on each blotter from the flange. Often, the blotters speak for themselves and will tell a real story. They can clearly show telltale signs of uneven pressure which may be caused by situations such as worn distorted flanges, excessive clamping pressure, foreign material under the flanges, creased or folded over blotters, etc. Remember, stresses in a bonded abrasive wheel are cumulative and any of these conditions will contribute to a wheel breakage. The blotter impressions can assist greatly in identifying the true cause(s) of wheel cracking or breaking problems while in use.

Blotters are not required for the following types of abrasive wheels:

1. Mounted wheels (mounted points).
2. Abrasive disc and Type 2 wheels, which are mounted by means of inserted nuts, inserted washers, or projecting studs.
3. Plate mounted wheels.
4. Wheels that are mounted in chucks such as cylinders and segmental wheels.
5. Types 27, 28 and 29 wheels.
6. Cutting-off, Type 1 and Type 27A wheels.
7. Internal wheels less than 2" in diameter.
8. Diamond and cubic boron nitride wheels with metal or carbon fiber cores.
9. Modified Type 6 and 11 wheels (Terrazzo), blotters applied flat side of wheel only.

Wheel blotters really are "Do-Gooders," performing a very important function in the safe mounting and use of grinding wheels. Let's pay attention to them, and to what they are telling us.

For additional information on this topic or if you need any other abrasive safety information, please review ANSI, OSHA and all literature provided by the abrasive wheel and machine manufacturer. You may also contact the Saint-Gobain Product Safety Department at Tel. (508) 795-2317 or Fax. (508) 795-5120 or contact your Saint-Gobain Abrasives, Inc. representative with any safety related questions.

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PLAY IT SAFE AT THE WHEEL

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