Table of Contents

Abrasives

Note: Tungsten Carbide Burrs are listed in Cutting Tools

Abrasive Product Use Instructions

THE IMPORTANCE OF GRINDING and CUT-OFF WHEEL SAFETY

The safe use of grinding and cut-off wheels is extremely important to everyone concerned with the manufacture and use of bonded abrasive products.

For some time, grinding wheel manufacturers have been involved in compliance with, and publishing information about, the safe use of these products. One of these basic documents is the American National Standards Institute ANSI B-7.1 1988 and Addendum entitled "Safety Requirements for the Use, Care and Protection of Abrasive Wheels".

The safe use of abrasive wheels relies upon common sense, and recognition of these two factors:

Grinding wheels can be broken.
Rotating wheels develop stresses, which can cause the wheel to break.

Since wheels can be broken, they must be handled, stored and used with care. Because rotating wheels develop stresses, their safe operating speed must never be exceeded. Ultimately, the user assumes responsibility for carefully selecting, properly handling, and safely using any abrasive grinding or cutting wheel.

This is not intended to be a complete guide to the use, care and protection of abrasive wheels. All users should read and familiarize themselves with “American National Standards Institute” (ANSIB-7.1) for complete safety and use requirements.

NEVER . . .

Never use a wheel that has been dropped. The impact may have caused cracks that will result in breakage.

Never force a wheel onto the machine or alter the size of the arbor hole. Don’t use a wheel that fits the arbor too loosely.

Never exceed maximum operating speed of the wheel.

Never use dirty, nicked, warped or sprung mounting flanges. Don’t tighten mounting nut excessively.

Never grind on the side of the wheel, unless the wheel is specifically designed for that purpose.

Never start machine without safety guard in place.

Never jam work into the wheel. Don’t cut or grind material for which the wheel was not designed.

Never stand directly in wheel’s plane of rotation when machine is started.

Never forget that cutting and grinding wheels are dangerous when misused or improperly handled.

ALWAYS . . .

Always select the right wheel for the job.

Always use the right equipment and machines. They should be maintained and checked regularly, and any sub-standard conditions should be corrected before use for safety and efficiency.

Always inspect, handle and store wheels in a careful manner. Wheels should be stored horizontally on flat surfaces. Do not lean wheels against equipment, or roll wheels on the floor.

Always use wheel guards or protective hoods. Certain small sizes, cones and plugs (Type 16, 17 and 18) are exceptions. Refer to ANSI B-7.1 for details.

Always use proper mounting procedures for wheels, particularly for cones and plugs.

Always wear safety glasses or other suitable eye protection equipment.

Always check maximum wheel operating speed against rate speed of equipment. Do not over-speed wheels.

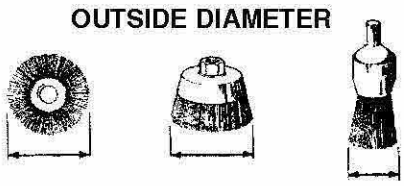
Always determine that mounting flanges are at least the minimum diameter specified in ANSI B-7.1 (section 5).

Always run machine at operating speed for at least one minute (with guard in place) before cutting or grinding.

Wire Brush Wheels

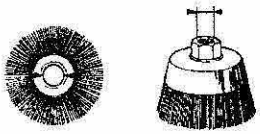
BRUSH TERMINOLOGY

OUTSIDE DIAMETER

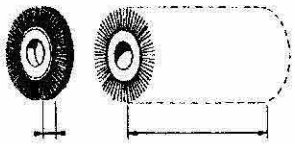


TRIM LENGTH

ARBOR HOLE



FACE WIDTH



BRUSH LENGTH

BRUSH CORRECTION GUIDE

Desired Changes	Suggested Brush Change
Slower Action	• Smaller diameter brush • Run brush slower • Brush with thinner wire • Brush with longer trim length • Narrower brush face
Faster Action	• Larger diameter brush • Run brush faster • Brush with heavier wire • Brush with shorter trim length • Wider brush face
Finer Finish Desired	• Run brush faster • Brush with longer filaments • Brush with thinner wire • Wider brush face
Coarser Finish Desired	• Run brush slower • Brush with shorter filaments • Brush with thinner wire • Narrower brush face
Remove Burr Instead of Rolling or Peening It	• Brush with shorter trim length • Wider brush face • Brush with heavier wire • Run brush faster
Filaments Break Off	• Reduce pressure • Brush with thinner wire
Short Brush Life	• Brush with thinner wire • Reduce pressure • Wider brush face

GARD Hand-held "Quick-Clean" Wire Brush

- **Ideal for Aluminum Weld Prep**
- **.006 Stainless Steel**
- **3 x 7 Rows**
- **Wooden Handle – (Not plastic) will not melt when used on hot welds**
- **Ideal for light duty cleaning in hard-to-reach areas with a long handle for use with welding gloves**

Part No. 5437-SBSS
Available in boxes of 6 pieces