

## Brush Safety Recommendations

**ATTENTION !!! ALL OPERATORS MUST READ THIS INFORMATION THOROUGHLY AND COMPLETELY BEFORE USING ANY FELTON BRUSH.**

### Operators and Work Area

**ALL POWER BRUSHES, LIKE OTHER ROTATING CUTTING TOOLS, DEMAND THAT CERTAIN OPERATING PRECAUTIONS BE OBSERVED TO ASSURE OPERATOR AND WORK AREA SAFETY.**

### Inspection, Storage & Handling

Brushes should be carefully inspected when removed from original packaging. Do not use if rusted or damaged. Store brushes in original boxes. Brushes should not be exposed to heat, high humidity, acids, fumes or liquids that can result in deterioration of the filaments, and subsequently, premature failure. Check for distortion of brush fill that can cause imbalance and excessive vibration when brush is operating. Do not allow foreign material to accumulate on brush face.

### Warning

In normal power brushing operations, the material being removed, such as burrs, scale, weld slag, or other residue, will fly off the brush with considerable force along with brush filaments which break off due to fatigue. The potential of serious injury exists for both the brush operator and others in the work area (possibly 50 or more feet from the brush). To protect against this hazard, before rotating the brush, during rotation, and until rotation stops, operators and others in the area must wear SAFETY GOGGLES, or FULL FACE SHIELDS WORN OVER SAFETY GLASSES WITH SIDE SHIELDS, and use PROTECTIVE CLOTHING and EQUIPMENT. You must follow all operator and safety instructions, as well as common safety practices which will reduce the likelihood or severity of physical injury.

### Machine Condition

Proper maintenance of machines and power tools is essential to keep them in safe operating condition. Special operating instructions furnished should be closely followed. Hoods and safety guards must be kept in place at all times. Use adequate spindle diameter for the brush — do not use brush larger than the machine was designed for and have sufficient power to maintain rated spindle speeds. Provide proper ventilation and/or exhaust systems on all brushing operations.

### Work Rest

Proper maintenance of machines and power tools is essential to keep them in safe operating condition. Special operating instructions furnished should be closely followed. Hoods and

safety guards must be kept in place at all times. Use adequate spindle diameter for the brush — do not use brush larger than the machine was designed for and have sufficient power to maintain rated spindle speeds. Provide proper ventilation and/or exhaust systems on all brushing operations.

## Mounting Brushes

Brushes should be inspected for rust, oxidation and other damage. Do not use the brush if not in good condition. Check spindle speed R.P.M. Do not mount and operate brush if spindle R.P.M. exceeds the listed RPM value that the brush is rated. Brush arbor hole and spindle diameter should be the same for free fit. Spindle length should be sufficient to permit a full nut mounting. Direction of spindle nut thread should be in such relation to the direction of rotation that the nut will tend to tighten as spindle revolves. When flanges are used, they should be identical in size and radial bearing surface to avoid cross-bending pressure on the brush. Inspect or jog machine or tool to assure the brush is mounted properly and securely, machine guards are in place, no vibration, etc. Run machine at operating speed at least one minute before applying work — DO NOT STAND IN FRONT OF OR IN LINE WITH BRUSH.

## Speeds

Observe all speed restrictions indicated on the brushes, containers, labels or printed in pertinent literature. "MSFS" or "MAX. SFS" means Maximum Safe Free Speed (R.P.M.) — spinning free with no work applied. For reasons of safety, the "MSFS/MAX. SFS" should not be exceeded under any circumstances. The application determines the recommended operating speed, which should never exceed the MSFS brush ratings marked on the brush and/or shown in this catalogue. Periodic speed checks are the responsibility of the operator and user. In all cases where MSFS is not indicated, and on special brushes, contact Felton Brushes for specific operating speed details.

## Protective Equipment

The potential of serious injury exists for both the brush operator and others in the work area. To protect against this hazard, before starting the brush, during rotation, and until rotation stops, operators and others in the area must wear SAFETY GOGGLES or FULL FACE SHIELDS WORN OVER SAFETY GLASSES and or appropriate protective clothing and equipment where a probability of injury exists that can be prevented by such equipment. Certain brushing operations, because of their nature and location, may require an enclosure to isolate the operation from other personnel.

## Brush Operating Pressures

Employ light working pressure. The "tips" of the wire or filament do the work. Every attempt should be made to avoid a wiping action, for example, working on the sides of the wire or filament.

The wiping action creates additional heat and wire fatigue, thus reducing brush life, with little increase in cleaning or deburring action.

Whenever possible the full face of the brush should contact the work piece. Applying work to the edge or side of the brush will develop a wiping action, thus shortening brush life.

