coat of rouge, tripoli, or other mild abrasive

The softness of the wheel built up of linen, canvas, felt, or leather is determined by the size of the flanges used—the larger the flange, the harder the surface When large flanges are used, it is often necessary to soften the working surface of the built-up wheels to conform to the contour of the object being polished A safe procedure for softening is to place the wheel on the floor or other flat surface and pound the edges of the wheel with a hammer or mallet The wheel should not be placed on the spindle with a file or other object held against it Such practice is almost certain to result in the object's catching in the wheel and being thrown with such force that the operator or nearby workers may be injured.

Polishing and buffing wheels should be mounted on rigidly constructed substantial stands, heavy enough for the wheels used Mounting procedures are the same as for grinding wheels Hood guards should be designed to prevent the operator's hands or clothing from catching on protruding nuts or the ends of spindles If working conditions require a hood which does not give such protection, then smooth nuts which cover the spindle ends and are installed with a spanner wrench should be used A prick punch and hammer should never be substituted for a spanner wrench

The range of peripheral speed in polishing and buffing is from 3000 to 7000 sfpm, with 4000 sfpm in general use for most purposes If the motors that drive the polishing and buffing wheels are equipped with adjustable speed controls, the controls should be installed in a locked case and the speed changed only by an authorized person

Exhaust hoods should be designed to catch particles thrown off by the wheels

Gloves should not be worn by polishers and buffers because a glove may catch and drag the operator's hand against the wheel Small pieces being polished or buffed can frequently be held in a simple jig or fixture Some operators use a piece of an old linen or canvas wheel for holding small pieces. The operator should not attempt to hold a small piece against the wheel with his bare hands

When rouge or tripoli is applied to a revolving wheel, the side of the cake should be held lightly against the periphery of the wheel If a stick is used, the side of the stick should be applied on the "off" side so that, if thrown, it will fly away from the wheel

Wire brush wheels

Brushing or, more commonly, scratch wheel operation, is used to remove burrs, scale, sand, and other materials.

Wheels are made of various kinds of protruding wires and with different thicknesses Scratch wheels should be rigidly held in place by flanges or nuts

The same machine setup and conditions that apply to polishing and buffing wheels apply to brushes. The speed recommended by the manufacturer should be followed The hood on scratch wheels should enclose the wheel as completely as the nature of the work allows and should be adjustable, so that the protection will not be lessened as the diameter of the wheel decreases The hood should cover the exposed arbor ends, or a smooth nut should be installed on them The work rest should be adjusted so that it is about ⅛ in from the brush wheel

Personal protective equipment is especially important in the operation of scratch wheels because of the tendency of the wires to break off The wearing of aprons of leather, heavy canvas, or other heavy material, leather gloves, face shields, and goggles should be mandatory