

Machining and Bevelling

Whenever possible, pre-ground, installation-ready brake linings and clutch facings should be used. If friction materials must be arced, this should be done by lathe-turning at low speed, rather than by grinding. Linings should not be ground to fit brake systems for which they were not designed. Where friction materials must be machined, bevelled, or lathe-turned, adequate local exhaust ventilation equipment connected to a HEPA vacuum collector should be used to prevent mechanic exposure and shop contamination. Such equipment should be designed and set up by a professional ventilation engineer, using specifications such as those found in the American Conference of Governmental Industrial Hygienists' ventilation manual (36) as a minimum design standard. There must be a comprehensive asbestos control and monitoring program where machining, bevelling, or lathe-turning is done (30).

Special Areas for Brake Work

Eating, drinking, and smoking should not be done in an area where brake work is done. Mechanics should wash their hands and face before eating and wash all exposed skin and change clothes before going home. If possible, work clothes should be laundered at special facilities equipped to wash clothing contaminated with asbestos. Smokers should be urged to quit and, if necessary, be provided assistance in entering a smoking cessation program. Accidental spillage of brake dust should be promptly vacuumed with a HEPA vacuum.

VI. RESPIRATORS

The National Institute for Occupational Safety and Health (NIOSH) recommends the use of engineering controls and good work practices as the primary means of reducing exposures (9,13). Proper use of a respirator specially recommended for asbestos (37) when using the brake cleaning methods described in Part IV of this guidance can only protect a mechanic while the respirator is being worn. Since any of the brake cleaning methods described in Part IV could contaminate a garage with brake dust, mechanics and other employees would have to wear such a respirator all day to be protected. In addition, effective respirator use requires a complete respiratory protection program, including worker training, medical evaluations, proper respirator selection and maintenance, fit testing, and periodic inspections. Furthermore, NIOSH and EPA recommend only certain air-supplied respirators for asbestos exposure (37). These respirators could be very cumbersome in a garage setting.