



Plant Engineering Office
Manufacturing Staff

Maintenance Bulletin

Subject

EXPOSURE TO ASBESTOS FIBER INHALATION DURING
BRAKE AND CLUTCH INSPECTION AND REBUILDING

Number

137

Asbestos is a constituent of most commonly used friction materials used for brakes and clutches. Overexposure to asbestos fibers in the air can occur during inspection and repair operations on brakes, brake drums, clutches, and associated components of these units when compressed air is used to blow off asbestos laden dust.

In order to preclude overexposure by inhalation of asbestos fiber during inspection and repair operations on vehicles, presses, and cranes the following procedures recommended by the Industrial Hygiene Section of the Personnel and Organization Staff:

- o Brakes, brake drums, clutches, and other associated components shall be cleaned using an industrial type vacuum cleaner with a filter system efficient capable of capturing a three (3) micron particle size. The Industrial Hygiene Section has evaluated and found acceptable from the asbestos fiber emission standpoint the Sears Roebuck and Company Catalog #9H1451N forty five (45) gallon industrial vacuum cleaner for wet or dry pickup. Accessory set catalog #9G16973, consisting of crevice tool and brush must be used to afford proper pickup. Current (1973) cost of this unit complete with accessory set is approximately \$105.00.
- o Disposal of asbestos laden waste from the vacuum cleaner shall be done by wet methods of dust suppression or by an employee performing such removal using a respirator specified by the U.S. Bureau of Mines for pneumoconiosis producing dusts under Approval 24C and Schedule 21. The Minnesota Mining and Manufacturing Company respirator Model 8710 meets these requirements.
- o Disposal of asbestos laden waste from the vacuum cleaner shall be in sealed containers labeled as per subparagraphs (g) and (h), Federal Register 1970-93(a) pages 22143 and 22144 (OSHA). The filters on the discharge ports should also be disposed of when they become loaded rather than attempting to clean them. These filters should be disposed of in properly labeled sealed containers.
- o Under no circumstances shall compressed air blowoff be used to clean brakes, brake drums, clutches and associated components.

August, 1973

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