

Industrial Dusts

- 105 Dust Control in the Ceramic Industry. W.C.L. Hemson.
Am. Ceram. Soc. Bull. 28, 94-97 (Mar. 15, 1949).

The author first discusses dust control especially in relation to plant expansion and modernization. Then the separate operations--raw materials handling, overhead bins, etc., weighing and charging--are considered separately with their problems. The addition of a small amount of water to flint dust is recommended for box car shipments, and for weighing and charging as being better than exhaust ventilation, shipping in bags, or other methods that have been advocated. The dust may present a silicosis hazard or a nuisance value. The former must be eliminated with the least delay, but the time can be taken to eliminate nuisance dust. Measuring the silicosis hazard includes dust counting, free silica determination, and x-ray examination of employees. A table shows the relative toxicity, dustiness, and toxicity times dustiness, in the glass, silica brick, clay brick, and pottery industries. The economics of dust control is then discussed briefly, showing how the law of diminishing returns operates when unnecessary steps are taken to insure complete dust removal.

- 106 Respiratory Disease: An Industrial Hazard. A.T. Doig.
Glasgow Med. J. 30, p. 235 (July, 1949).

The author reviews the present status of knowledge of the respiratory disorders caused by industrial dusts, pointing out that dusts encountered in industry may produce a wide variety of reactions in the respiratory tract.

-- Condensed from Arch. Ind. Hyg. & Occ. Med.

- 107 Some Changes in the Blood in Silicosis. S.M. Geukin, I. Gelfon, N. Migina, A. Rashevskaya and A. Shilova. Klin Med. Mosk. 26, p. 49. (1948) Russian.

The authors found that certain blood changes may occur early in silicosis. The raised erythrocyte sedimentation rate found in a high percentage of cases of early silicosis is explained by the presence of secondary infection, bronchitis, pleurisy, and slight toxemia which are known to occur, even in the early stages. The viscosity of the blood was studied in 249 cases. It was over four in 45 per cent of controls, in 37 per cent of those exposed to dust, in 50 per cent of stage-1 cases, in 70 per cent of stage-2 cases and in 91 per cent of stage-3 cases. The same investigations with a group of patients free from tuberculosis, but with silicosis gave the same results. The quotient of Hesse, (hemoglobin percentage) was lower than 17.8 (normal) even in early cases viscosity of the blood of silicosis. The rise in the blood viscosity was thought to be due to a rise in the mean corpuscular volume of the erythrocytes of up to 92.2 cubic microns, found to occur in a group of 160 cases of silicosis. The possible causes of a rise in mean corpuscular volume are discussed. Experiments in vitro showed that the addition of silicon dioxide to whole