

scale effects. The data specifically support the earlier observation that contacting power derived from hydraulic spray nozzles is equivalent to that derived from gas pressure drop. There are no data available to test the hypothesis that contacting power from pneumatic spray nozzles is also equivalent. The available information is insufficient to demonstrate unequivocally that contacting power supplied mechanically is equivalent to that derived from gas pressure drop or hydraulic spray nozzles. However, it does strongly indicate that such may be the case.

-- Cond. from author's summary

- 186 Studies in High-Temperature Gas Cleaning. The Reduction of Fumes from Open-Hearth Furnaces. W. Strauss and M. W. Thring. J. Iron Steel Inst. 196, 62-65 (Sept. 1960).

Various methods for dealing with the orange or brown fume produced by oxygen lancing have been investigated. Electrostatic precipitators, bag filters, and multicyclones followed by venturi scrubbers have proved successful in individual cases. Economic considerations which govern the choice of a suitable method for each case are the quantities of dirty gas to be handled, the degree of cleaning required, the rate of gas production, an adequate water supply, and the space available for the erection of a gas cleaning plant. Experiments in filtering waste gases from open-hearth furnaces at temperatures of 375°C, using a coarse granular filter medium, colder than the gases to give thermal precipitation, gave efficiencies better than 90% under many operating conditions and pressure drops varying between 2 and 4 in. water gauge, for a 9-in. thick bed. Beds of 1, 3, and 10 1/2 in. were also investigated under a wide range of operating conditions. Ceramic filters and crushed refractory beds were also tested.

-- APCA Absts

- 187 Air Pollution from Alfalfa Dehydrating Mills. Anon. U. S. Public Health Service, Robert A. Taft Sanitary Engineering Center, Cincinnati, Ohio, Tech. Report A60-4, 25 pp. (1960).

This report discusses the quantity and size distribution of dust discharged to the atmosphere from alfalfa dehydrating mills, as determined by a study of a group of representative plants in Kansas and Ohio. It also discusses dust collection practices at typical plants and the relationship between these collection practices and the protein and carotene (pro-vitamin A) content of the meal produced. The appendix gives detailed layout and description of plants and particulate sampling points.

-- Public Health Eng. Absts.

COMMUNITY AIR HYGIENE

- 188 Air Pollution Review 1958 - 1959. W. L. Faith. Ind. Eng. Chem. 52, 967-971 (Nov. 1960).

This review includes articles in which a specific application to air pollution is made. Literature dealing with concentration and determination of specific pollutants has increased; greater emphasis has been given to automobile exhausts, with the State of California adopting standards for emissions of carbon monoxide and hydrocarbons; presence of radioactive materials in the atmosphere and in industrial wastes is covered. Training courses and manuals for pollution control and abatement personnel are discussed. An extensive bibliography is appended.

-- APCA Absts.

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