

The relative degree of dustiness in the various departments of the four asbestos fabricating plants surveyed is indicated in Table VI. This summary of the average concentrations from the different plants has been prepared from the data contained in Table V.

TABLE VI. RELATIVE DUST CONCENTRATIONS IN DEPARTMENTS OF ASBESTOS PLANTS

Department	Number of Samples	Concentration—Millions of Particles per Cubic Foot of Air		
		Minimum	Maximum	Average
Preparation and Carding	36	0.6	123.3	44.36
Weaving and Mule Spinning	41	1.9	74.2	16.87
Twisting, Winding, Rope and Wick, Braiding, Gasket, etc.	29	0.3	20.6	4.64

It will be seen that the highest dust concentration occurs in the preparing room, where the asbestos receives its preliminary treatment. The lowest concentration is associated with the making of ring gaskets. The figures given in Table VI, while showing the relative dustiness, do not explain fully the conditions in each department. The concentration of the dust in the successive phases of the process varies, depending on the type of fiber used and the method of manufacture. In order to explain these variations, it is necessary to discuss separately, conditions encountered in the several operations. The figures given in the following paragraphs represent the concentration of dust in millions of particles per cubic foot of air.

Preparation—The dust in the preparing rooms is practically all due to pure asbestos, no cotton having yet been added. The degree of dustiness depends primarily on the type of fiber used. Thus, it was found in plant B that when mill fiber was fed into the Saco-Lowell opener, the average count was 119.4, as compared to a concentration of 33.2 when the longer-staple crude fiber was treated in exactly the same way.

In plant D one of the operations involved the screening of short-length mill fiber without first passing it through a Saco-Lowell opener. The employe engaged in feeding the material onto the screen was found to be exposed to a concentration of 65.7. A second workman, whose duty was to fill burlap bags with the screened fiber after it had been removed from the shaker by suction, was exposed to a concentration of 96.1.

In the mixing room, where the cotton and asbestos are blended, the degree of dustiness was again found to depend primarily on the type of fiber used. For example, the concentration of dust was 10.6 when a mixture of cotton and mill fiber was being fed into the mixing picker. The concentration dropped to 3.1 when the mixture