

CHARACTERISTICS OF
INDUSTRIAL HYGIENE INSTALLATIONS IN AMSCO

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Since there are a lot of kindred souls present who have been given the job of trying to satisfy the Medical Department's recommendations for cleaning up the plants, I would like to ask for a little sympathy on the number of people that usually have ideas that have to be considered on a dust control installation.

The job frequently starts as a result of a survey by the Industrial Hygienist, who makes a specific request for action. Then the Works Manager has to be considered because he won't like it if the installation interferes with operations and his hours per ton are increased. The department foreman thinks along the same lines, but may have entirely different ideas of how the job should be done. Frequently, the state safety or health inspector will put in his "oar" because his book says that it ought to be done this way. In many locations, building codes have to be met. At our Los Angeles plant, and I believe it will be coming elsewhere, we have an Air Pollution Board to contend with that is very fussy about the dust that gets out of the building. Then, of course, we all have a boss that is responsible for his division making a profit and of necessity has to be careful about the amount of money spent. By the time all of these requirements are taken care of, I sometimes wonder how we have accomplished even as much control of dust as has been done to date.

Some of you are dealing with high production work where the size of flasks used and other factors remain fairly constant over a reasonable period of time. That makes your dust jobs easier to solve. As you know, ours is primarily a jobbing business where flask and casting sizes vary greatly from one day to the next, which means we cannot design a closefitting hood for a specific operation because next month that same pouring line or that same grinder might be used for an entirely different purpose. Please bear this in mind in the discussion that follows.

Classes of Problems: There are three general classes of problems that the Medical Department asks us to correct, namely, toxic gases, illumination and dust.

Under the subject of gases, we do have a little trouble from carbon monoxide discharged from ladle heaters, but practically nothing else of any consequence.

Illumination is none too good in many of our working areas due to a great extent to higher standards having come into being since our lighting installations were made. I am not going to discuss those two problems to any extent, but will concentrate on the subject of dust and smoke, which is the one that gives most of our headaches.

Troublesome Operations - Melting: Although you are all familiar with foundry operations, I would like to go down the list of departments and point out the operations that cause trouble from a dust and smoke standpoint.

Starting in the Melting Department, we do our melting in arc furnaces which discharge a considerable quantity of smoke through the charging door and