of weeks, the system operation will suffer. Apparently, some of the older commercial flat bag type of collectors did exhibit that difficulty. Modifications in the design of such units have, however, been incorporated in more recent models and those difficulties may have been eliminated.

Two plants employ commercial collectors of the flat bag or envelope type. Another plant uses a cloth tube commercial collector and also one whose filtering element is of paper, which is replaced at intervals of several weeks. A study of operating details of these commercial collectors is indicated in this study, including considerations of original cost and operating cost.

Recirculation

Several plants return air from the dust collectors to the workroom to conserve heat in the cold weather. We are not prepared at this point either to condone or to condemn this practice except in cases where there is obviously leakage of dust through the filter and consequent recontamination of the air inside the plant. The practice is generally frowned upon where dusts that are hazardous to health are being handled. We believe there are certain circumstances where the practice might be permissible provided adequate safeguards are incorporated in operating procedures. The large volumes of air involved in dust control represent a tremendous problem as to heat loss and boiler capacity which cannot be passed over lightly.