AMERICAN AIR FILTER COMPANY INC.

1st Street and Central Avenue, **Louisville, Ky.**

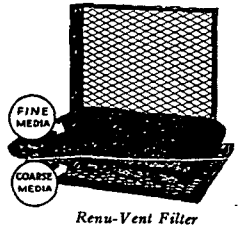
Representatives in Principal Cities

Dust Engineering—Dust Engineering is that branch of applied science which deals with the origin, nature and characteristics of the small solid air-borne particles called "dust," and the development of methods, processes and apparatus for its control or elimination.

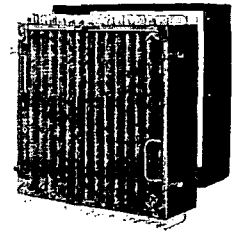
The American Air Filter Company, Inc., has had an important part in advancing the science of Dust Engineering. The efforts of its Research and Engineering Staff for the past twelve years have been devoted exclusively to the study of dust problems and the development of a complete line of air cleaning equipment for modern air conditioning, building ventilation and the control of process dust in industry.

American Air Filter products, therefore, not only embody the knowledge accumulated from years of constant research and the experience gained from designing, building and applying thousands of air filters, but are backed by ample technical and financial resources to insure their outstanding position in the Dust Engineering field.

Products—American Air Filters are available for every condition, with operating characteristics and efficiencies to suit specific problems. In general, there are two distinct types based upon the "viscous film" and "dry mat" principles. Each type is made in several styles which differ in method of operation, servicing, space required and initial cost to meet the various conditions encountered in air cleaning problems. A discussion of various filter types will be found in the Technical Data Section under "Air Cleaners."



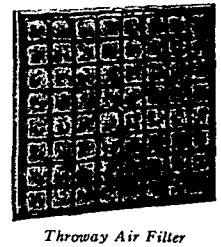
Renu-Vent Filter



Airmat Type PL-24 Filter



M/W 2 Filter



Throway Air Filter

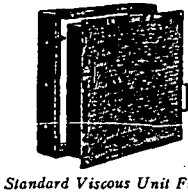
Air filters are generally used for the removal of dust, dirt, bacteria and other foreign matter from the air and are applied to general ventilation, modern air conditioning, process dust control; for air compressors and Diesel Engines; mill motors, turbo-generators and other electrical applications; and for air or gas under pressure to remove entrained oil, moisture and dirt.

Air Filters In Air Conditioning—Filtered air is today recognized as essential in modern air conditioning. There are other important factors which contribute to our comfort such as temperature, air movement and humidity, but science today emphasizes the prime necessity of pure air for health and efficiency.

Air cleaners have, of course, always been considered an integral part of large central systems. These are usually of the fully automatic type such as the Multi-Panel filter, illustrated in the accompanying photograph.

There are now available to manufacturers of unit air conditioners moderate priced unit filters such as the Renu filter, the Throway filter, and other types of filters illustrated on this page.

The Renu filter is an entirely new departure in air filter construction. It consists of a permanent metal frame provided with a removable cover and renewable filter pad. The cover



Standard Viscous Unit Filter

is easily removed without the use of tools, and filter pad can be lifted out and replaced with a new one at very small expense.

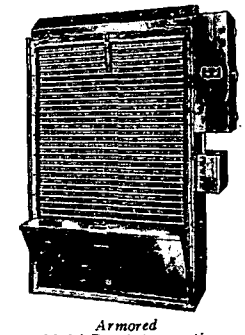
The Throway filter, as the name implies, is designed to be discarded after it has served its maximum period of usefulness and replaced with a new filter unit. The Filter pad is enclosed in a perforated cardboard container which makes it possible to readily dispose of the dirty filter by burning it.

There is probably no single item which costs as little and may mean as much in the design of an air conditioner as air filtration. These units are furnished in any dimensions or shapes desired—usually in units handling 400 cfm and from 2 in. to 4 in. thick. They are usually made in the following sizes—20 x 20 in., 16 x 25 in. and 16 x 20 in. High cleaning efficiencies can be secured, with a resistance to air flow ranging from 1/16 in. to 3/8 in. water gauge.

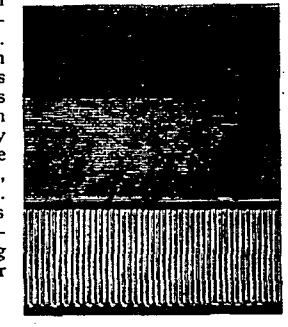
Automatic Self-Cleaning Air Filters—The American line of automatic air filters is among the most complete ever offered. Proved in principle and performance by years of actual service.

Armored Multi-Panel Filter—Introduces an entirely new and unique panel construction to further improve the already outstanding performance of the famous Multi-panel air filter. The new "armored" panel with its three stages of air cleaning maintains the present high efficiency and normal operating and resistance of the Multi-panel filter and offers the added advantage of handling excessive line concentrations or heavy dust loads without clogging.

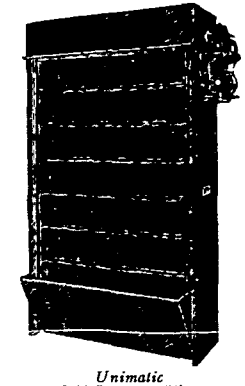
Unimatic Self-Cleaning Filter—Developed especially for small air volumes where hand operation or push button control is practical. Fills the need for an intermediate filter between manually maintained units and the fully automatic Multi-panel. The Unimatic offers numerous advantages, one of which is the single pass curtain which makes possible the use of progressively packed media with its low resistance and great dust holding capacity.



Armored Multi-Panel Automatic



Section of Multi-Panel filter curtain showing unique construction of new Armored Panel. Dark portion of screen is bakelite-fibre coated. The bright uncoated screen lies immediately behind the Armored section of the preceeding panel and provides the second or intermediate stage of air cleaning. The Armored section is at the bottom of the panel.



Unimatic Self-Cleaning Filter

Standard Viscous Unit—The American Unit Air Filter incorporates the time tested unit principle of construction. Each unit consists of a standard steel frame and interchangeable cell equipped with automatic latches to facilitate removal for cleaning and recharging.

Airmat Filter Dry Type—The filtering media in this type is the Airmat sheet, a dry filter mat composed of thin sheets of gauzy, cellulose tissue. The Airmat sheets are supported in screen pockets mounted in a unit frame of box-like construction. These unit frames can be set up to meet any capacity requirement or space condition. Airmat sheets are renewable—their life depending on the dust condition and hours of service.

Airmat filters are used both for comfort and industrial air conditioning. In the latter field they are particularly well adapted for the recovery of valuable dusts and for abating the dust nuisance prevalent in so many industrial plants. They are available in two types, the PL-24 as illustrated and the Well Pocket type unit.

Our standard data books and catalogues are in most engineering files or libraries. We will be glad to furnish complete data to engineers or manufacturers.