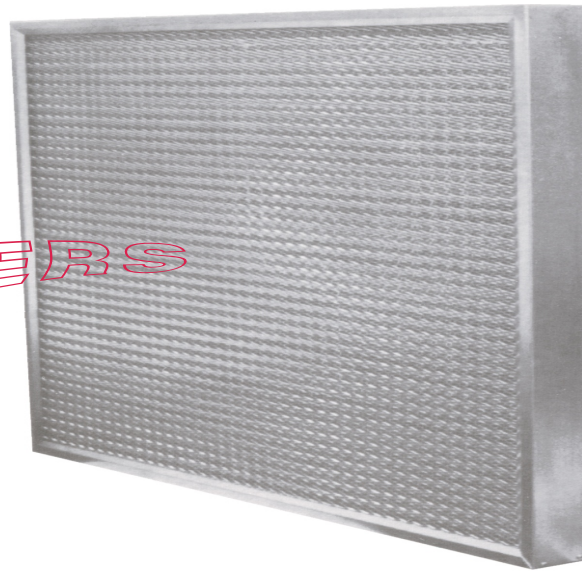


# Aluminium Filter

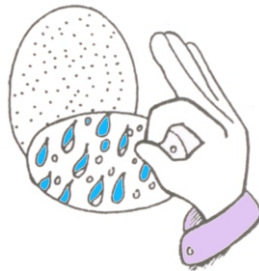
AIR FILTERS



## 5 Major Features

### 1. Suitable for Dry and Wet gases

Both dry dust and wet mist can be collected using the same design. Water does not influence the life nor Cause screen clogging problems.



### 2. Low pressure loss results in low Operating cost

Thanks to the use of inertia dedusting and impact separation principles, the pressure loss is extremely small. Not only the initial cost but also the operating cost of the mesh screen dust collecting system are much lower compared with the conventional dust collectors of the same capacity.



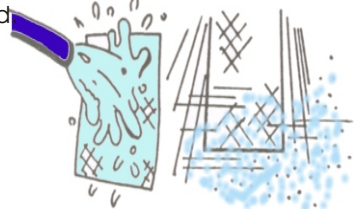
### 3. Suitable for high temperature flue gas and corrosive gas

Aluminium alloys or stainless steel superior in Heat resistance and corrosion resistance is used to ensure long life under high Temperature or corrosive atmosphere.



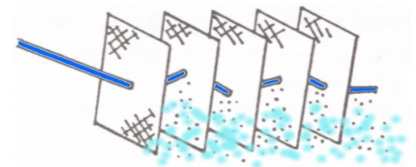
### 4. Simple maintenance

Removal of dust from the mesh screen is done using vibrators or water scrubbing. For this reason, no change of mesh screens are required.

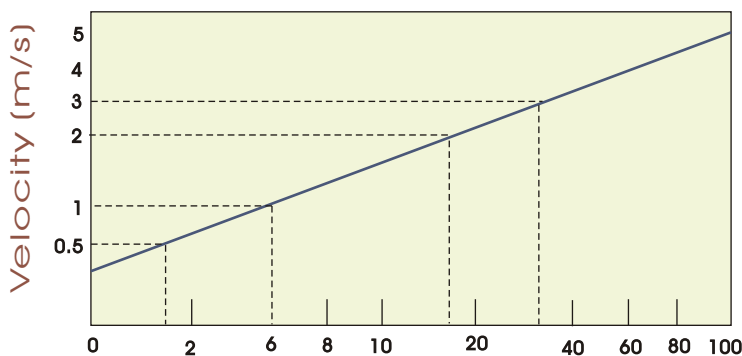


### 5. High dust collection efficiency

The patent protected 45° angle honeycomb design enables high collection efficiency in spite of relatively large hole size. By selecting the best gas velocity through the mesh screen, very fine dust and mist can be collected with the mesh screen with the same hole size.



Mesh Screen Pressure Loss



Pressure Loss  $\Delta P$  (mm Aq)  
Gas : Air

# Aluminium Filter

**CONSTRUCTION:** Aluminium filters are manufactured of 100% aluminium stock and sheet. The filtering element is processed from 0.3 thickness sheet and is expanded in pattern of varying densities. The layers are pleated and corrugated to offer maximum filter surface area. The filtering element is enclosed in 0.6 aluminium formed channel. There are no protrusions on the outside of the frame and medium is entirely enclosed on sheared ends.

**SIZES:** Aluminium filters are manufactured in the following standard sizes. All other sizes are made to order.

**PERFORMANCE DATA:** Aluminium filters are designed to operate in multiple velocity applications. Aluminium filters may be used in system with airflow ranges from 100 FPM to 900 FPM. Performance characteristics are as follows.

**CLEANING:** To clean aluminium filter, just flush with warm water.

## Performance Data

| Model Number | Nominal size | Actual size             | Rated capacity ( CFM ) | Initial Pressure Drop |
|--------------|--------------|-------------------------|------------------------|-----------------------|
| A1- 12 -24   | 12 x 24x 1   | 11 1/2 x 23 1/2 x 7/8   | 575                    | 0.05                  |
| A1- 16 -20   | 16 x 20x 1   | 15 1/2 x 19 1/2 x 7/8   | 640                    | 0.05                  |
| A1- 16 -25   | 16 x 25x 1   | 15 1/2 x 24 1/2 x 7/8   | 800                    | 0.05                  |
| A1- 20 -20   | 20 x 20x 1   | 19 1/2 x 19 1/2 x 7/8   | 800                    | 0.05                  |
| A1- 20 -25   | 20 x 25x 1   | 19 1/2 x 24 1/2 x 7/8   | 1000                   | 0.05                  |
| A1- 24 -24   | 24 x 24x 1   | 23 1/2 x 23 1/2 x 7/8   | 1200                   | 0.05                  |
| A2- 12 -24   | 12 x 24x 2   | 11 1/2 x 23 1/2 x 1 7/8 | 575                    | 0.10                  |
| A2- 16 -20   | 16 x 20x 2   | 15 1/2 x 19 1/2 x 1 7/8 | 640                    | 0.10                  |
| A2- 16 -25   | 16 x 25x 2   | 15 1/2 x 24 1/2 x 1 7/8 | 800                    | 0.10                  |
| A2- 20 -20   | 20 x 20x 2   | 19 1/2 x 19 1/2 x 1 7/8 | 800                    | 0.10                  |
| A2- 20 -25   | 20 x 25x 2   | 19 1/2 x 24 1/2 x 1 7/8 | 1000                   | 0.10                  |
| A2- 24 -24   | 24 x 24x 2   | 23 1/2 x 23 1/2 x 1 7/8 | 1200                   | 0.10                  |
| A4- 12 -24   | 12 x 24x 4   | 11 1/2 x 23 1/2 x 3 7/8 | 575                    | 0.18                  |
| A4- 16 -20   | 16 x 20x 4   | 15 1/2 x 19 1/2 x 3 7/8 | 640                    | 0.18                  |
| A4- 16 -25   | 16 x 25x 4   | 15 1/2 x 24 1/2 x 3 7/8 | 800                    | 0.18                  |
| A4- 20 -20   | 20 x 20x 4   | 19 1/2 x 19 1/2 x 3 7/8 | 800                    | 0.18                  |
| A4- 20 -25   | 20 x 25x 4   | 19 1/2 x 24 1/2 x 3 7/8 | 1000                   | 0.18                  |
| A4- 24 -24   | 24 x 24x 4   | 23 1/2 x 23 1/2 x 3 7/8 | 1200                   | 0.18                  |

**Note :** Above capacities are standard ratings for this size. In high velocity situations, the aluminium filter will operate at double these ratings, with corresponding increase in initial pressure drop.

|   | 1inch | 2inch  | 4inch  |
|---|-------|--------|--------|
| Average Arrestance %                    | 70.8% | 76.4%  | 79.3%  |
| Dust Holding capacity / Ft <sup>2</sup> | 70gms | 120gms | 175gms |

Data in accordance with ASHRAE Standard 52-76