

APSZ cartridge type dust filters and dust separators



Tigép Ltd. Tiszakécske - Blasting hall, 2 x 60.000 m³/h aspiration system

The way, how APSZ works :

During normal operation the dusty air arrives into the filter through its inlet opening and passes through the filter cartridges. The dust particles will be captured on the surface of the filtering media, the clean air passes through the media into the clean air space of the filter, than leaves it through the outlet strut.

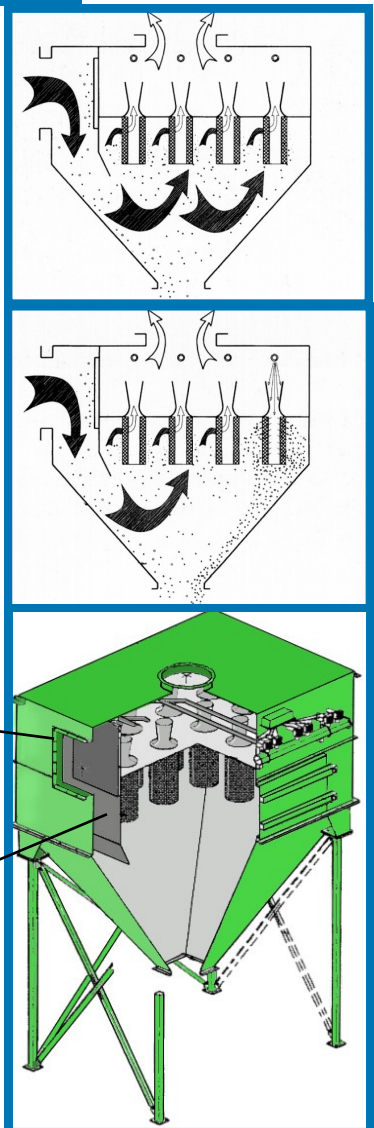
An electronic control system automatically cleans the cartridges in pairs, one after the other. A solenoid opens a large diameter diaphragm valve for 0,1 sec time in pre-adjusted intervals, to introduce high pressure compressed air straight into the middle of the filter cartridges. This way the dust settled on surface shall fall back into the lower hopper of the filter.

Integrated pre-separator

In case of high dust concentration this cost saving solution replaces an independently arranged pre-separator (no need for air-ducts) .
Further advantage: Only one lower hopper, one dust discharge device.

Designed to treat metallic and non-metallic dusts

The buffer plate of the pre-separator reinforced with manganese steel will reduce the flying particles actual energy, this has a stressed importance in case of highly abrasive dusts.

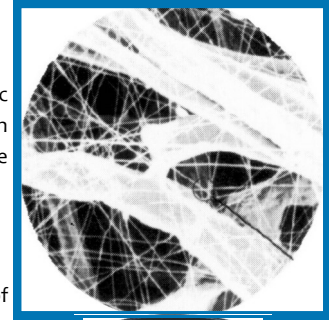


What is „ULTRA-WEB” filter?

Donaldson has developed a special filtering media, in which a sub-microscopic size extra-fine cloth layer is connected to a conventional one. This resulted in an outstanding filtering capacity. The superfine mesh net uniformly holds the sub-microscopic particles.

Separation efficiency: 99,97%; at 0,3 µm

The trespassing dust amount can be reduced with its two-third by means of using ULTRA-WEB filtering media. ULTRA-WEB meets the TA-air and other European dust emission requirements.



Low pressure loss

Since operational costs are directly influenced by pressure loss and air volume, using ULTRA-WEB filter cartridges 25%, or more energy can be saved.

Low costs per m³/h

In case of identical pressure loss, the use of ULTRA-WEB filters will result in 30 – 50% higher air volume, than with conventional media.

Substantial energy savings

Proper separation of dust and hazardous material, in most of the cases, allows recycling of the clean air into the workshop space. This result in substantial savings both in heating and in air conditioning costs.

Simple maintenance

No tools will be needed to do maintenance jobs with your filter.

Maintenance-free cartridge lock system facilitates fast and safe filter cartridge exchange.

APSZ filters technical data

| Type | 2 | 4 | 6 | 8 | 12 | 16 | 24 | 48 |
|---|------|------|------|------|------|------|------|------|
| Filtering area (m ²) | 42 | 84 | 126 | 168 | 252 | 336 | 504 | 1008 |
| Number of cartridges: size: Ø324 x 660 | 2 | 4 | 6 | 8 | 12 | 16 | 24 | 48 |
| Air demand m ³ / h Cleaning air pressure: 4,5-7 bar | 4 | 4 | 7 | 9 | 13 | 17 | 25 | 50 |
| Weight: (kg) | 350 | 900 | 1300 | 1500 | 1550 | 1700 | 2000 | 3100 |
| Height: (mm) | 2176 | 3775 | 3775 | 3804 | 3804 | 4642 | 4642 | 4642 |
| Width: (mm) | 660 | 1267 | 1320 | 1891 | 1960 | 2382 | 3168 | 6168 |
| Depth: (mm) | 905 | 1327 | 1475 | 1327 | 1960 | 1944 | 1944 | 2218 |

APSZ: the right solution for all dust aspiration and separation tasks.

Standard outfit

- Maintenance hatch in clean air space;
- Automatic cleaning system;
- Cartridge pressure loss display;
- Pre-assembled filter elements;
- Heavy duty structure.

All moving parts are arranged external, their maintenance can be carried out either by running machine.

- Mobil and fixed filters -
- Aspiration volume 1.000–300.000 m³ / h -

Optional

- Separated dust removal devices
- Platforms and ladders
- Fans
- Cleaning control based on pressure difference.

Delivery scope

- Air-ducts
- Turn-key projects
- Stainless steel filters
- Customer specifications (support legs, inlet-, outlet transition pieces)