

The CESCO EPC spot filter is a miniature jet filter, which can be employed for immediate suction and filtration of dust, in horizontal conveying systems.

The CESCO EPC spot filter is designed for direct installation on closed or semi-closed machines for instant dust extraction and filtering, and is designed and manufactured in accordance with the EC Directive 2006/42/EC.

GENERAL CHARACTERISTICS

- The large suction area cross-section keeps the air velocity low.
- Each filter hose can be cleaned separately.
- Easy change of filter bags through a large inspection door.
- Can be connected to a large central fan.
- As option, the fan can be supplied with a sound absorber for the exhaust air, if required.
- The filter bags are automatically cleaned by the electronic control system.
- The compressed air is supplied by standard compressed-air system, with the condition to be oil-free and dehumidified.
- The pressure is reduced through the reduction valve placed before the compressed-air inlet.
- All components including the ventilator are zinc coated.

Principle of operation



The spot filter removes a minor quantity of air from the working machine, creating a slight negative inner pressure, which prevents dust particles from escaping through leaks or openings.

The fan produces the differential pressure needed and sucks dusty air through the filter section mounted directly on the machine and discharges the cleaned air through a pipe exhaust.

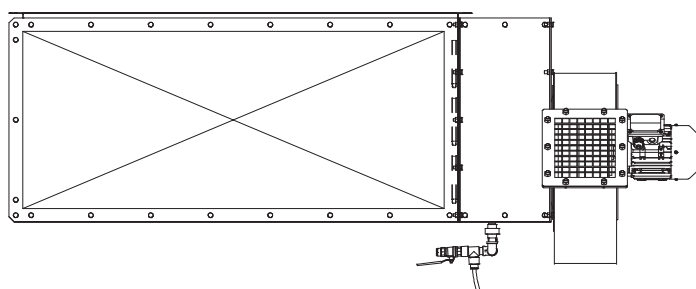
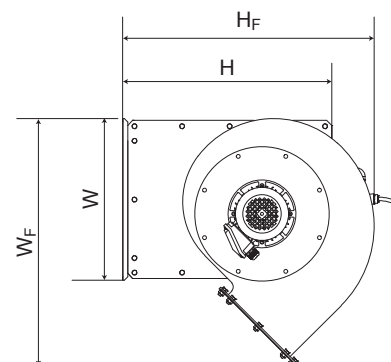
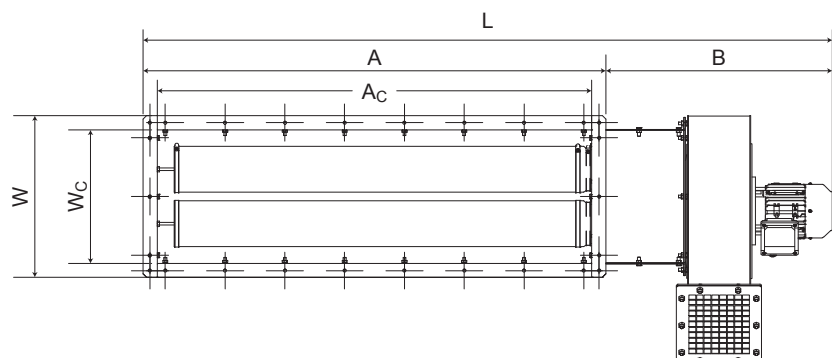
The filter bags are cleaned by means of an electronic control system with adjustable cleaning time.

The electronic control gives an impulse to one of the membrane valves at the compressed-air inlet.

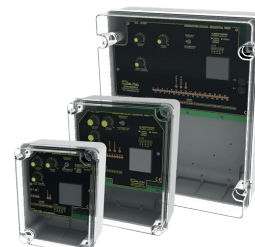
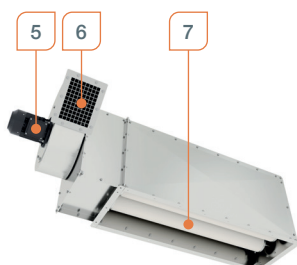
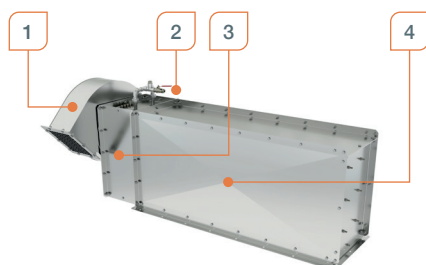
The valve will send a short, but powerful compressed-air blast into the filter bag, partly "beating" and partly blowing off the dust, so the dust is separated on the outside of the filter sleeves and then returned to the product flow.

Thus, some pulsations may occur during operation, depending on the pre-set pressure and volume of the machine.





- 1 Fan
- 2 Compressed air connection
- 3 Clean air chamber
- 4 Dust air chamber
- 5 Motor
- 6 Exhaust air outlet with grid
- 7 Filter hose and filter basket



The point filter consists of the following main components, the dust air chamber [4], the clean air chamber [3] and the fan [1]. The point filter is cleaned using compressed air supplied via the central compressed air connection [2] and controlled via the filter control unit.

Depending on the length of the filter hose [7], the motor of the fan [1] is available in 3 power levels: 0,75 kW, 1,1 kW and 1,5 kW. The exhaust air outlet of the fan [1] is fitted with a protective grid [6]. Optionally, an exhaust air silencer can also be installed on this flange.

The control unit features a robust solid state construction for excellent reliability and is designed for ease of installation and operation. The on and off times for the cleaning pulse can be simply adjusted through the use of rotary analogue dials, while the microprocessor ensures the accuracy of the settings.

Spot Filter	Unit	SFHN 6-12	SFHN 6-19	SFHN 6-24	SFHN 9-12	SFHN 9-19	SFHN 9-24	SFHN 12-12	SFHN 12-19	SFHN 12-24
Number of filter bags	-	2x3	2x3	2x3	3x3	3x3	3x3	3x4	3x4	3x4
Length of filter bags	mm	1200	1900	2400	1200	1900	2400	1200	1900	2400
Filter area	m ²	3,0	4,8	6,0	4,5	7,2	9,0	6,0	9,6	12,0
Inner length dust air chamber A _c	mm	1277	1977	2477	1277	1977	2477	1277	1977	2477
Length dust air chamber A	mm	1360	2060	2560	1360	2060	2560	1360	2060	2560
Fan and motor length B	mm	710	710	775	710	775	775	775	775	870
Total length L	mm	2070	2770	3335	2070	2835	3335	2135	2835	3430
Inner with dust air chamber W _c	mm	392	392	392	587	587	587	587	587	587
With dust air chamber W	mm	475	475	475	670	670	670	670	670	670
Total width including fan W _F	mm	730	730	820	730	820	820	820	820	910
Height dust air chamber H	mm	615	615	615	615	615	615	790	790	790
Total height including fan H _F	mm	740	740	780	740	780	780	780	780	830
Fan power	kW	0,75	1,1	1,5	1,1	1,5	2,2	1,5	2,2	3,0
Airflow rate	m ³ /h	1250	1900	2500	1900	3000	3750	2500	4000	5000
Compressed air consumption	NI/min	40	60	80	60	100	120	80	130	160
Weight	kg	ca.90	ca.120	ca.150	ca.120	ca.170	ca.200	ca.150	ca.210	ca.270

The data reported in this table are informative.

