

BAG DUST COLLECTOR ATEX GI-M

DESCRIPTION

The ATEX sleeve filter GI-M is a machine with very high filtration efficiency, and has been designed to work in environments where a high protection against explosions is needed, in accordance with the legislation ATEX 94/9 / EC. It has a high structural strength that allows it to withstand very high pressures, designed using the finite element method (FEM ANALYSIS), complying with the UNI welding process standards

EN 288-4 and directive 97/23 / CE (PED). This allows the use of the filter with highly explosive dust and is suitable for use in classified areas ATEX 21 and 22. The filter is equipped with anti-explosion breaking membranes certified, of a size appropriate to the explosive class of the powder to be treated. An explosion suppression or compartment system is installed in combination with the filter. The subdivision is necessary in order to avoid the propagation of the explosion in other parts of the plant or in the environment; it must always be associated with a suppression or relief system. The compartment system can be mechanical (guillotine valve) or chemical (dust suppressor).

Principle of operation

The dusty air is introduced into the lower part of the filter (4) through the tangential hole. The coarsest dust contained in the air already sucked up, they undergo a first felling and fall into the collection hopper.

Passing the quiet chamber the dust passes through the filtering sleeves passing. During work, the filter is always kept in perfect working order through a counter-current cyclic cleaning system. A jet of compressed air, accumulated in a special tank (3), is quickly injected inside the sleeves, creating a violent shaking wave in counter flow able to detach and precipitate the particles deposited on the outside of the sleeves. The rotary valve (7) will discharge the dust.

Construction Details

The dust collector is made entirely of very thick steel, opportunely worked and treated to make it long lasting. The filter has a filtering sleeves pneumatic cleaning system and a cyclical program to wash the filtering sleeves. Furthermore, it also has complete inspection portals, fireproof portals and a dust container.

OPTIONALS

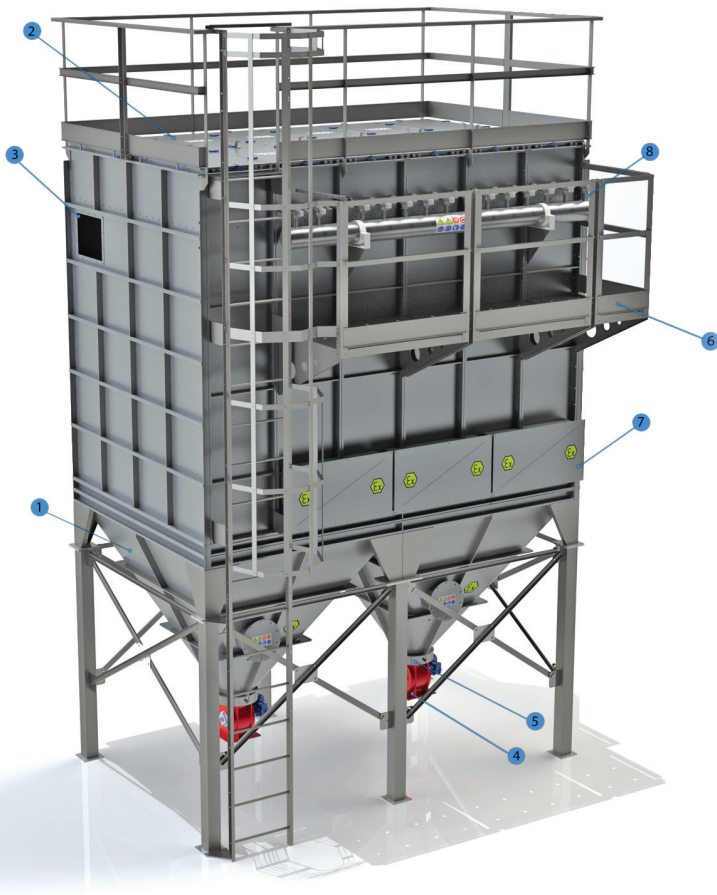
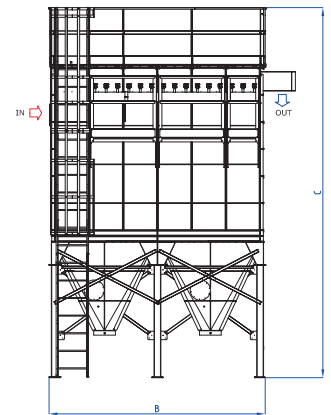
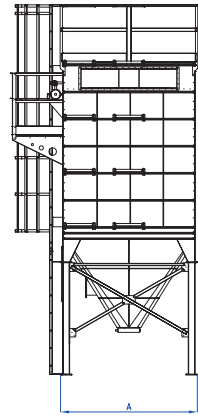
Discharge valve with rotocell, discharge system with exclusion valve, explosion suppression system, compartmentation valve, antiacid internal paint, manufactured with special steel, antiflooding filter.

APPLICATION FIELDS

Ideal for highly explosive particles and for workplaces where extremely effective protection against explosions is needed.



MOD. GI-M		UNITS	GI-M66	GI-M99	GI-M132	GI-M165	GI-M198	GI-M231	GI-M264
Filtering surface	m ²		63.3	63.3	126.72	158.4	190.08	221.76	253.44
Quantità filtering sleeves	n°		66	66	132	165	198	231	264
Max fume temperature	°C					60			
Explosive class of dusts to filter	/				ST3 - 300 bar m/sec - 11 bar g				
Sleeve material	/				PES, 520 gr/m ²				
Sleeve dimensions	mm				Ø 123 x H 2500				
Venturi tube cages	Material				Steel galvanized				
Electrovalves	n°/Ø		6/1"	9/1"	12/1"	15/1"	18/1"	21/1"	24/1"
Air tank capacity	n°/l		1/25	1/35	1/45	1/80	2/45	2/60	2/70
Air tank pressure	Bar				6				
Compressed air consumption per pulse	NLt				240 @ 5 bar (200ms)				
Discharge hoppers	n°		1	1	1	2	2	3	3
Drop loss max	mmH ₂ O				160				
Structure	Material				Steel S235JR				
Thickness	mm				40/10				
Weight	kg		3213	4120	4800	5302	5740	6548	7445
A	mm				2400				
B	mm		1990	2590	3190	3790	4390	4990	5590
C	mm		6500	6500	6500	6500	7200	7200	7200



CONDUCTIVE FILTER GROUPS



- 1 Hopper inclined to 60°
- 2 Inspection door handle
- 3 Air filter inlet
- 4 Discharge rotovalve
- 5 Manual shutter
- 6 Quiet chamber
- 7 Explosion outlet panels
- 8 Compressed air tank for sleeve cleaning