

WAMAIR® FP / FPX Polygonal Dust Collectors



HIGH PERFORMANCE
VERSATILE DESIGN



CERTIFIED
ATEX version
available

available with
zero
nanofiber
filter elements

INTELLIGENT SOLUTIONS TO ALL KINDS OF DUST ISSUES

WAMAIR® is a Polygonal Dust Collector range that comes in a steel housing equipped with high performance POLYPLEAT™ or pocket-type filter elements.

WAMAIR® Dust Collectors are supplied in a stand-alone version with their own hopper range, as bin vents or fully insertable to be easily integrated into several applications such as silo venting, mechanical conveying, mixing and blending, as well as discharging through loading bellows.

The range has been designed in compliance with regulations for the manufacture of equipment for dry powder processing in several industries such as building and construction, glass, chemicals, animal feed and food processing.

WAMAIR® Dust Collectors are provided with **zero** filter media to achieve optimal performance in all kinds of dedusting applications.

Filter Elements and Filter Media

POLYPLEAT™

Pleated Elements



GLAZED FACE SIDE



Available dimensions:

L = 520 mm

L = 770 mm

L = 920 mm

zero filter media



NANOFIBRE

High Efficiency Filtration
with nanofibre deposit



OIL-REPELLENT



ANTISTATIC



MICROPOROUS
ePTFE MEMBRANE



WATER-REPELLENT

Pockets

Flat Needle-Felt Elements



HEAT SET



Available dimensions:

L = 500 mm

L = 750 mm

L = 1,000 mm

L = 1,500 mm



OIL-REPELLENT



ANTISTATIC



POLYURETHANE
COATING



WATER-REPELLENT



MICROPOROUS
ePTFE MEMBRANE

Features

DIMENSIONAL

- Air volume: 250 ~ 9,000m³/h (147 ~ 5,300 cfm)
- Filtering surface: 3 ~ 70m² (32 ~ 755 sq ft)
- Temperature range: -20°C ~ 80°C (-4°F ~ 176°F)
- Horizontal or vertical installation
- Stainless steel casing or insertable version

APPLICATIONS

- Suitable for both positive (up to 500mm H₂O) and negative (up to -350mm H₂O) pressure applications
- Wide range of filter elements and media, including high efficiency **zero** technology
- ATEX-versions available

MAINTENANCE

- Inspection door with captive fastening knobs for easy and safe access for filter element replacement

CLEANING SYSTEM

- High efficiency programmable compressed air cleaning system
- “Full Immersion” solenoid valves, integrated into air tank to minimise flow resistance

Options and Accessories

ATEX Certification

Available for:

- Zone 22 (Category 3D)
- Zone 21 (Category 2D)

ATEX Versions Suitable for Internal Zone 20 application

Filter Media

Available with:

EC 1935/2004 (food-grade materials)

- EU 10/2011 (food-grade plastic materials);
- EC 2023/2006 (GMP-regulation).



Presetting

for differential pressure gauge

Polygonal Hopper

Prearranged for bin, butterfly valve, rotary valve, various types of flow aids



Integrated Suction Fan

Available with:

- Choke valve
- Silencer



Electronic Control Panel

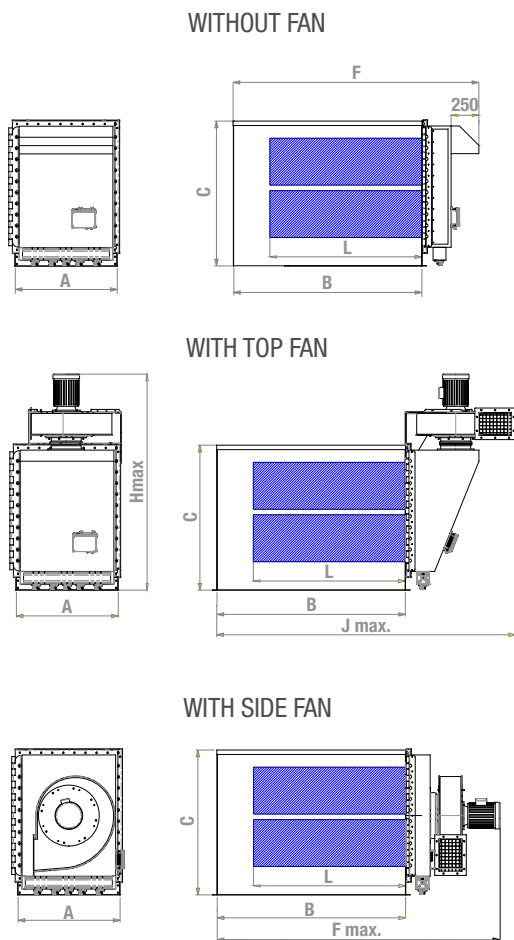
Available with:

- Differential pressure meter
- Connectivity with Modbus RS485
- WiFi or GPRS module

Heating System

For cold environments from 0 to -20 °C (not available for ATEX version)

Overall Dimensions - Horizontal Polygonal Dust Collectors



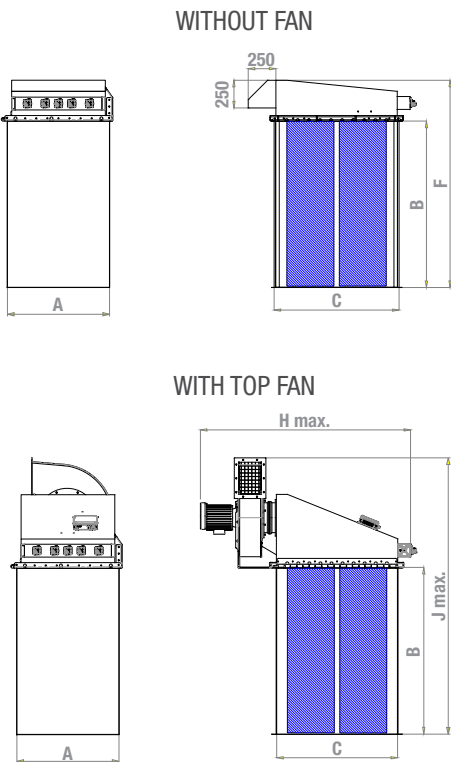
VOLUME INDEX	Filter Media Surface			Collector Body Dimensions				Without fan	With top fan	With side fan	Fan Power (kW)
	POLYPLEAT™ (m²)	POCKET (m²)	L (mm)	A (mm)	B (mm)	C (mm)	H (mm)	F (mm)	J max. (mm)	F max. (mm)	
1	6 - 10*	3	500	570	700	825	1,415	1,220	1,590	1,515	0.75 ~ 3.00
2	14	5	750		950			1,470	1,590	1,765	
3	18	6	1,000		1,200			1,720	2,090	2,015	
4		8	1,250		1,450			1,970	2,340	2,265	
5		9	1,500		1,700			2,220	2,590	2,515	
6		5	500	845	700	825	1,510	1,220	1,645	1,610	0.75 ~ 5.50
7		7	750		950			1,470	1,895	1,860	
8	28	9	1,000		1,200			1,720	2,145	2,110	
9		12	1,250		1,450			1,970	2,395	2,360	
A		14	1,500		1,700			2,220	2,645	2,610	
B		6	500	570	700	1,320	2,005	1,220	1,645	1,610	0.75 ~ 5.50
C		9	750		950			1,470	1,895	1,860	
D	34	12	1,000		1,200			1,720	2,145	2,110	
E		15	1,250		1,450			1,970	2,395	2,360	
F		18	1,500		1,700			2,220	2,645	2,610	
G		9	500	845	700	1,320	2,030	1,220	1,815	1,640	1.10 ~ 7.50
H		14	750		950			1,470	2,065	1,890	
L	42-56*	18	1,000		1,200			1,720	2,315	2,140	
M		22	1,250		1,450			1,970	2,565	2,390	
N		28	1,500		1,700			2,220	2,815	2,640	
P		12	500	1,065	700	1,320	2,130	1,220	1,815	1,740	1.10 ~ 11.00
Q		18	750		950			1,470	2,065	1,990	
R	48-70*	24	1,000		1,200			1,720	2,315	2,240	
S		30	1,250		1,450			1,970	2,565	2,490	
T		36	1,500		1,700			2,220	2,815	2,740	
Y		45	1,250	1,065	1,450	1,815	2,815	2,000	2,565	2,495	3.00 ~ 11.00
U		54	1,500		1,700			2,250	2,815	2,745	

* Filtering surface area varies according to the number of filter elements



ATEX version available
Provided also for POLYPLEAT™ with 42-56 and 48-70 m² but related to M and S volume index

Overall Dimensions - Vertical Polygonal Dust Collectors



VOLUME INDEX	Filter Media Surface			Collector Body Dimensions				Without fan	With top fan	Fan Power (kW)
	POLYPLEAT™ (m²)	POCKET (m²)	L (mm)	A (mm)	B (mm)	C (mm)	H (mm)	F (mm)	J max. (mm)	
1	6 - 10*	3	500	570	500	670	1,405	865	1,390	0.75 ~ 3.00
2	14	5	750		750			1,115	1,640	
3	18	6	1,000		1,000			1,365	1,890	
4		8	1,250		1,250			1,615	2,140	
5		9	1,500		1,500			1,865	2,390	
6		5	500	845	500	670	1,500	865	1,450	0.75 ~ 5.50
7		7	750		750			1,115	1,700	
8	28	9	1,000		1,000			1,365	1,950	
9		12	1,250		1,250			1,615	2,200	
A		14	1,500		1,500			1,865	2,450	
B		6	500	570	500	1,170	1,995	865	1,450	0.75 ~ 5.50
C		9	750		750			1,115	1,700	
D	34	12	1,000		1,000			1,365	1,950	
E		15	1,250		1,250			1,615	2,200	
F		18	1,500		1,500			1,865	2,450	
G		9	500	845	500	1,170	2,025	865	1,615	1.10 ~ 7.50
H		14	750		750			1,115	1,865	
L	42-56*	18	1,000		1,000			1,365	2,115	
M		22	1,250		1,250			1,615	2,365	
N		28	1,500		1,500			1,865	2,615	
P		12	500	1,065	500	1,170	2,120	865	1,615	1.10 ~ 11.00
Q		18	750		750			1,115	1,865	
R	48-70*	24	1,000		1,000			1,365	2,115	
S		30	1,250		1,250			1,615	2,365	
T		36	1,500		1,500			1,865	2,615	

* Filtering surface area varies according to the number of filter elements

Benefits



EASY MAINTENANCE

Minimised plant downtime due to quick and easy maintenance



LOW EMISSION

Due to advanced technology **zero** filter media



COMPACT & EASY FITTING DESIGN

Different body configurations available for the same filtering surface area



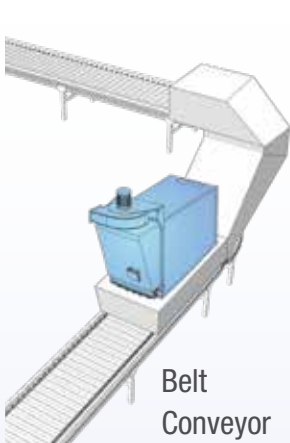
WORLDWIDE SUPPORT

Technical support and spare parts available worldwide thanks to **WAMGROUP®** subsidiary network

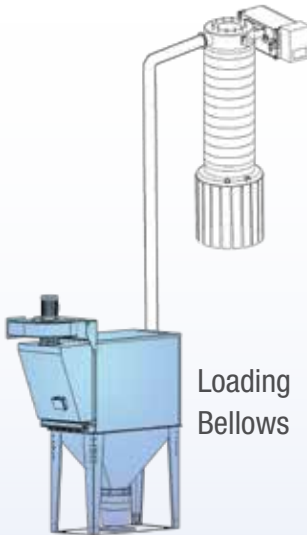


VERSATILE

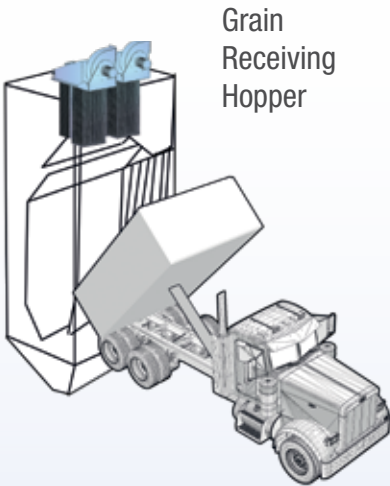
Perfectly suitable for many different technical applications:



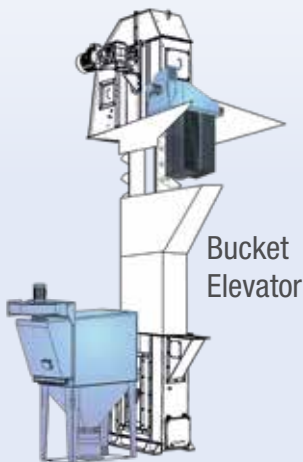
Belt Conveyor



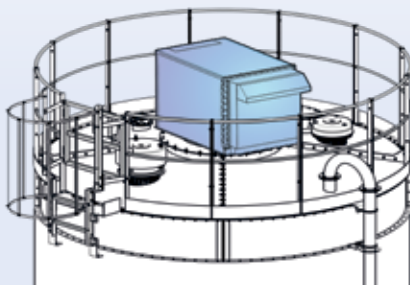
Loading Bellows



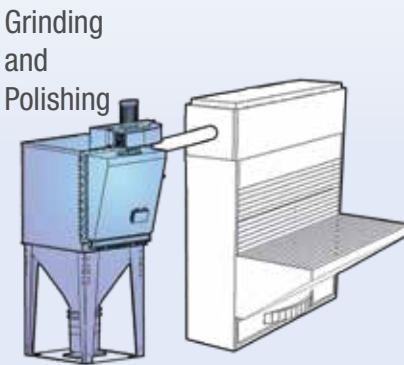
Grain Receiving Hopper



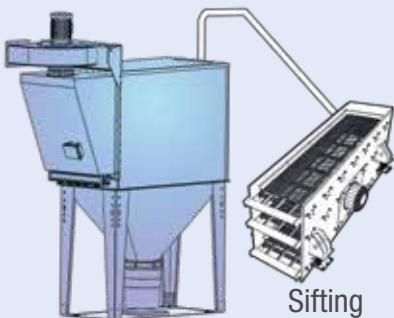
Bucket Elevator



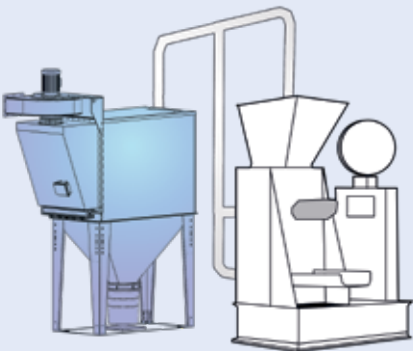
Silo Venting



Grinding and Polishing



Sifting



Bagging

Application

