

# SFN

## Series



Filters with flat smooth pockets  
and pulse purge

# SFN Series Filters



## Description

SFN series filters represent versatile equipment used to perform various aspiration tasks in a wide range of processes. These are cost-effective, fully automatic self-cleaning modular continuous pocket filters with compressed-air pulse regeneration. Pockets are installed in one section horizontally, 12 pieces in a row, from 1 to 7 rows up. Filtration surface area of one module ranges from 18 to 126 m<sup>2</sup>. The filter is designed for continuous operation to clean air or gases from various types of dry loose, fibrous and slightly sticky dust, with an input concentration of up to 50 g/m<sup>3</sup>. The SFN filter is suitable for indoor and outdoor installations. Its modular design allows to achieve the required capacity by choosing the size and number of sections.

For dust discharge, the series uses containers for dust collection (drums of 60 and 100 l), equipped with manual cut-off valves to block the dust discharge point when the drum is removed from the running filter.

## Applications

- Aspiration of furnaces, cast houses
- Aspiration of silo and bunker loading/unloading
- Aspiration of process and associated equipment
- Aspiration of pouring sites, conveyor belts, conveyors, and elevators
- Aspiration of crushers, mills, screens, refrigerators, mixers, and dispensers
- Aspiration of thermal and mechanical metal cutting
- Aspiration of shot blasting and surface treatment
- Aspiration of welding processes

## Industries

- Chemical
- Metallurgical
- Metal working
- Mining
- Food
- Pharmaceutical
- Machine building
- Production of construction materials
- Cement production
- Other industries

## Restrictions in the use of SFN filters

(of series and piece production)

- Filters have no structural protection against explosion
- Not designed for the temperature of flow to be cleaned above 80 °C

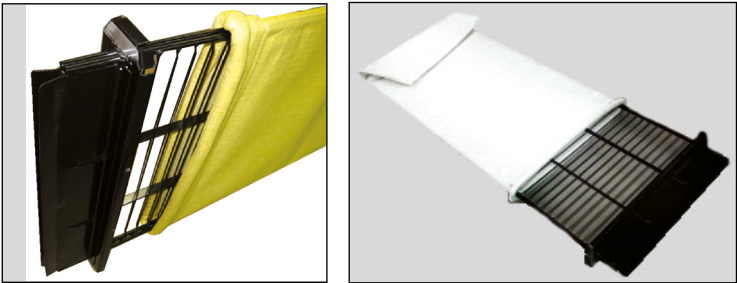


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Filter Elements

Filter element for a SFN filter is a smooth pocket made of non-woven needle-punched material (such as fiber or sheet felt) stretched on a metal lattice frame (see the photo). The frame is fitted with an inlet reducer.



Type of Filter Elements

Designation	Filtration surface, m²	Pocket material
PF-D-1.5-SFN	1.5	Polyester
PF-C-1.5-SFN		Antistatic polyester
PF-T-1.5-SFN		Teflon
PF-TC-1.5-SFN		Antistatic Teflon
PF-H-1.5-SFN		Water-repellent
PF-HC-1.5-SFN		Water-repellent antistatic
PF-A-1.5-SFN		Aramid (heat-resistant)
PF-AC-1.5-SFN		Antistatic aramid (heat-resistant)

Design Versions of SFN Series Filters

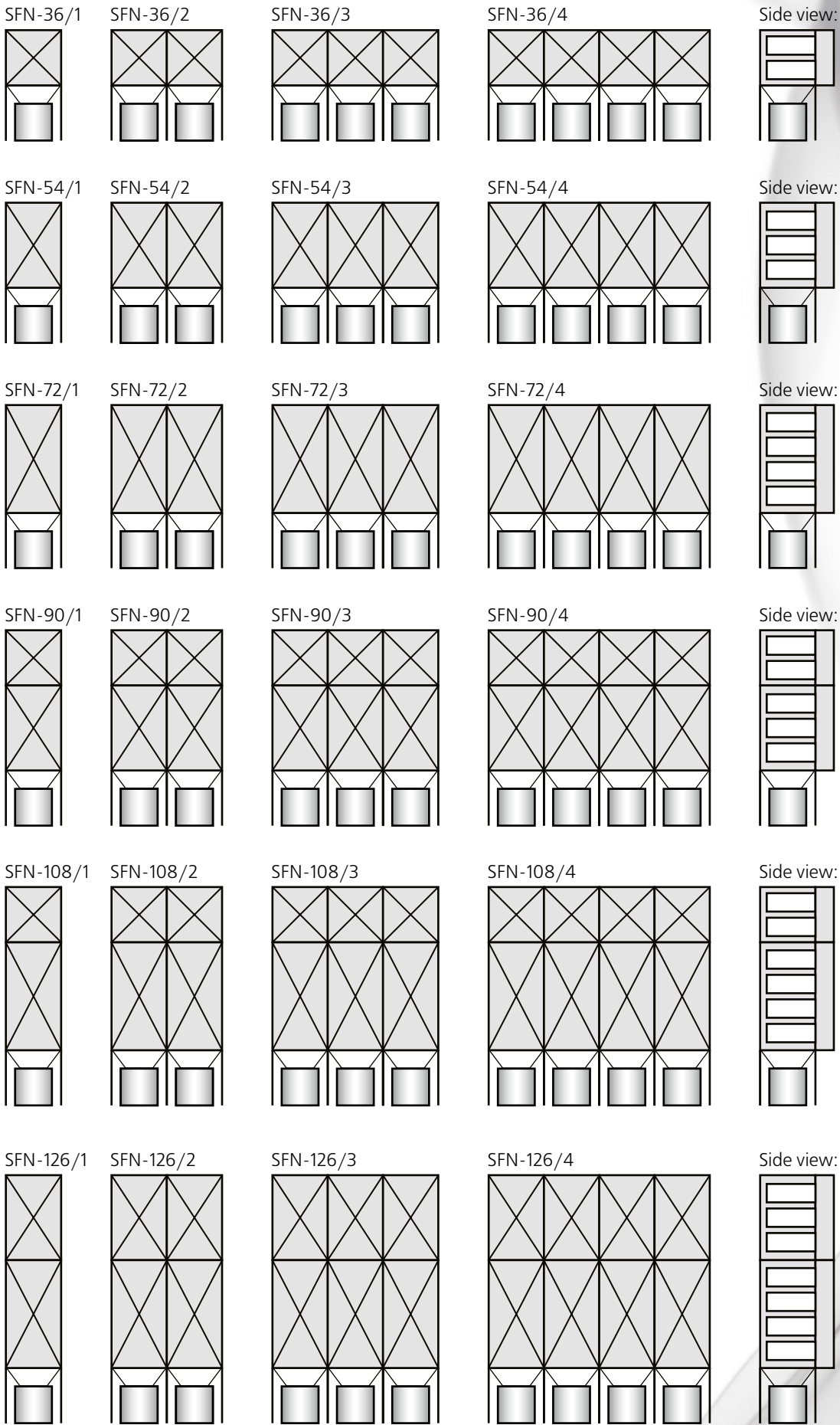
SFN filters consist of a body divided into “clean” and “dirty” areas, a pyramidal dust collector, supports and a dust collection container with a manual cut-off gate. The filters are equipped with a compressed-air pulse purge system. Following are possible filter configurations, relevant filtration areas, and rated capacities.

Summary Specifications of SFN Series Filters

Filter	Filtration area, m²	Capacity at a rated load, m³/h	Number of pockets in a filter, pcs.			Compressed-air flowrate, nm³/h	Weight, kg
			Horizontally	Vertically	General		
SFN-36/1	36	3,500	12	2	24	12	1,160
SFN-36/2	72	7,000	24	2	48	24	1,960
SFN-36/3	108	10,500	36	2	72	36	2,760
SFN-36/4	144	14,000	48	2	96	48	3,560
SFN-54/1	54	5,200	12	3	36	12	1,410
SFN-54/2	108	10,400	24	3	72	24	2,390
SFN-54/3	162	15,600	36	3	108	36	3,370
SFN-54/4	216	21,800	48	3	144	48	4,350
SFN-72/1	72	7,000	12	4	48	12	1,610
SFN-72/2	144	14,000	24	4	96	24	2,760
SFN-72/3	216	21,000	36	4	144	36	3,910
SFN-72/4	288	28,000	48	4	192	48	5,060
SFN-90/1	90	8,650	12	5	60	14	1,960
SFN-90/2	180	17,300	24	5	120	28	3,310
SFN-90/3	270	25,950	36	5	180	42	4,660
SFN-90/4	360	34,600	48	5	240	56	6,010
SFN-108/1	108	10,500	12	6	72	16	2,210
SFN-108/2	216	21,000	24	6	144	32	3,760
SFN-108/3	324	31,500	36	6	216	48	5,310
SFN-108/4	432	42,000	48	6	288	64	6,860
SFN-126/1	126	12,000	12	7	84	18	2,410
SFN-126/2	252	24,000	24	7	168	36	4,210
SFN-126/3	378	36,000	36	7	252	54	6,010
SFN-126/4	504	48,000	48	7	336	72	7,810

SFN Series Filters

Configurations available



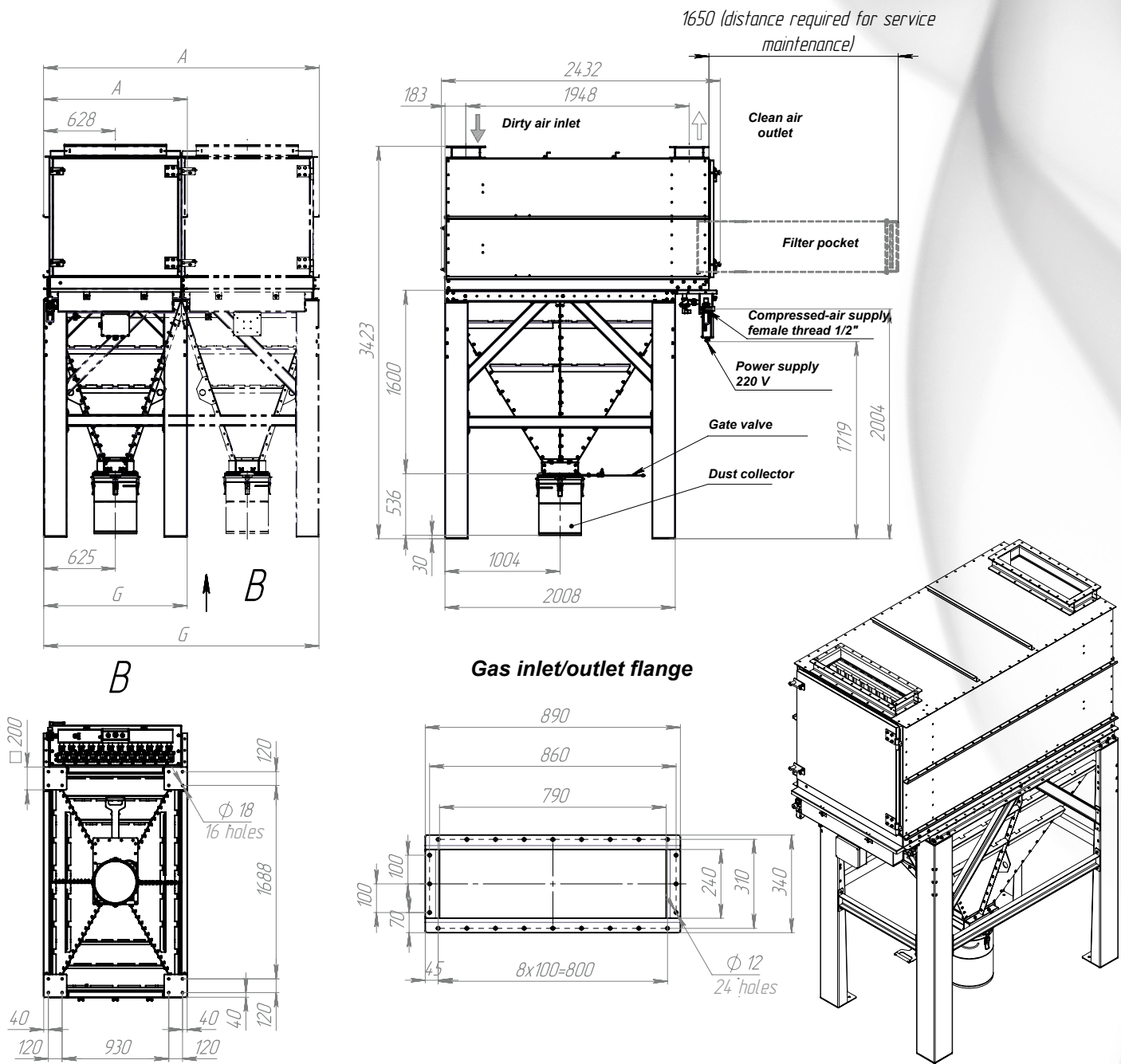


Series delivery set	
Filter body (dirty and clean areas)	
Gas inlet/outlet flanges on top (standard)	
Purge system included:	<ul style="list-style-type: none"> <li>– compressed-air receiver</li> <li>– purge pipes</li> <li>– pulse valves</li> <li>– KF-3 control unit (CONT-S)</li> <li>– differential pressure sensor</li> <li>– pre-separator with reducing gear</li> </ul>
Access doors	
Inspection hatch on the rear wall (by the number of sections)	
Filter pockets PF-D-1.5-SFN or PF-C-1.5-SFN	
Filter frames (painted)	
Pyramidal bunker (by the number of sections)	
Supports	
Manual cut-off gate valve (by the number of sections)	
Dust collector of 60 or 100 l (by the number of sections)	
Earthing line (for antistatic filters)	
Filter Painting	

Additional configuration	
Purge system heating included:	<ul style="list-style-type: none"> <li>– heat-insulated box (by the number of sections)</li> <li>– heating with thermostat (by the number of sections)</li> </ul>
Specific filter pockets	
Galvanized/stainless steel filter frames	
Body heat insulation	
Bunker heat insulation	
3-layer anti-corrosion treatment of body and dust collector	
Bunker heating	
Combined bunker	
Alternative dust discharge devices:	<ul style="list-style-type: none"> <li>– rotary valve (lock feeder)</li> <li>– double pendulous valve (flasher)</li> <li>– screw conveyor (for combined dust collector)</li> </ul>
Control sensors:	<ul style="list-style-type: none"> <li>– level sensor (in dust collector)</li> <li>– rotation sensor (for screw conveyor and rotary valve actuators)</li> <li>– compressed-air pressure control sensor</li> </ul>
Body-mounted fan	
Control and monitoring cabinet (under additional technical assignment)	



General technical drawing of pocket filter SFN-36/..-GV/DB



Dimensions and specifications of SFN-36/.. series filters

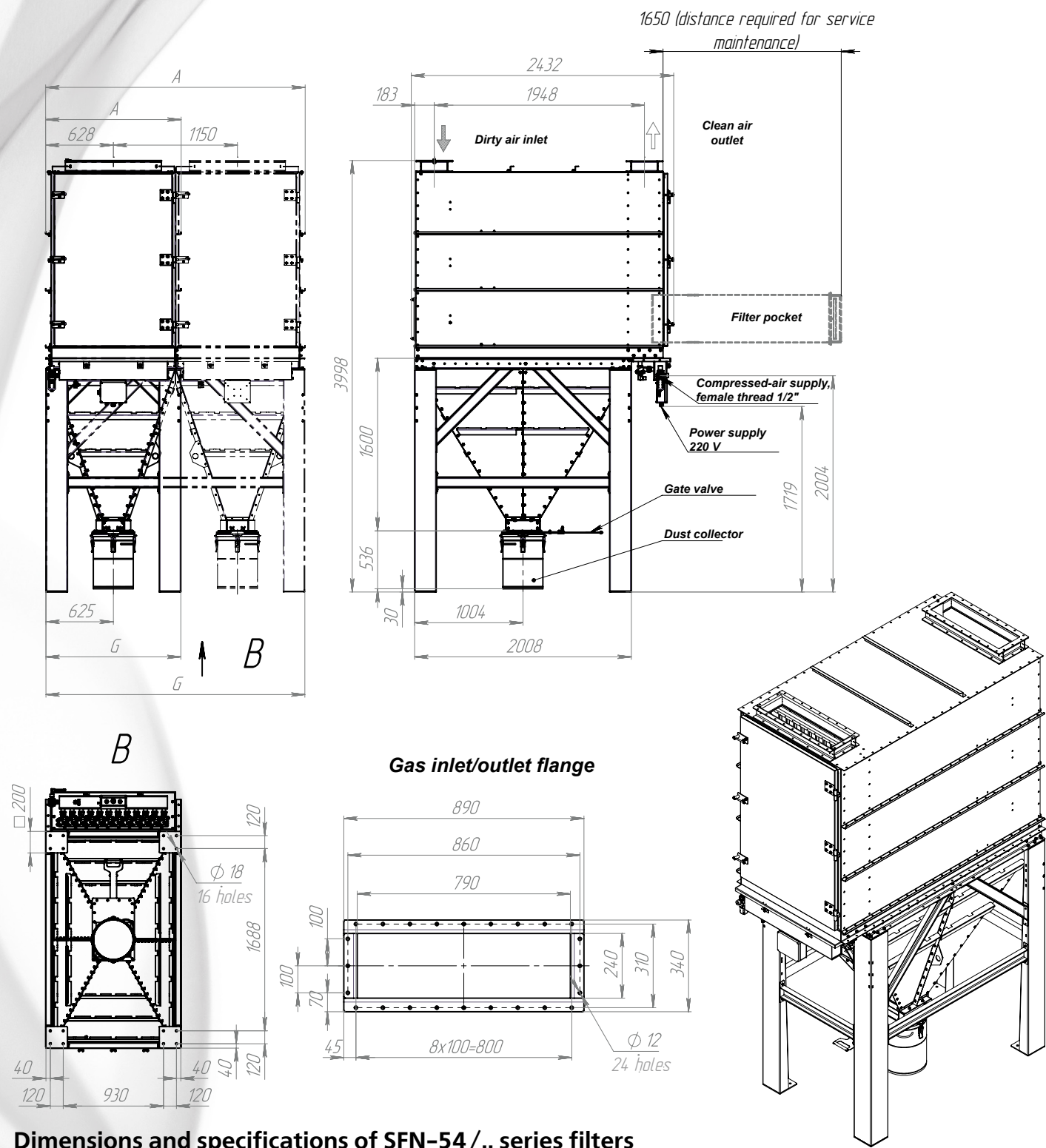
Filter type	Capacity, m³/h	Filtration surface area, m²	Compressed-air flowrate, nm³/h	Number of pockets, pcs.	Weight, kg	A, mm	G, mm
SFN-36/1	3,500	36	12	24	1,160	1,255	1,250
SFN-36/2	7,000	72	24	48	1,960	2,405	2,400
SFN-36/3	10,500	108	36	72	2,760	3,555	3,350
SFN-36/4	14,000	144	48	96	3,560	4,705	4,700

A standard filter is equipped with a manual cut-off gate valve and a drum.

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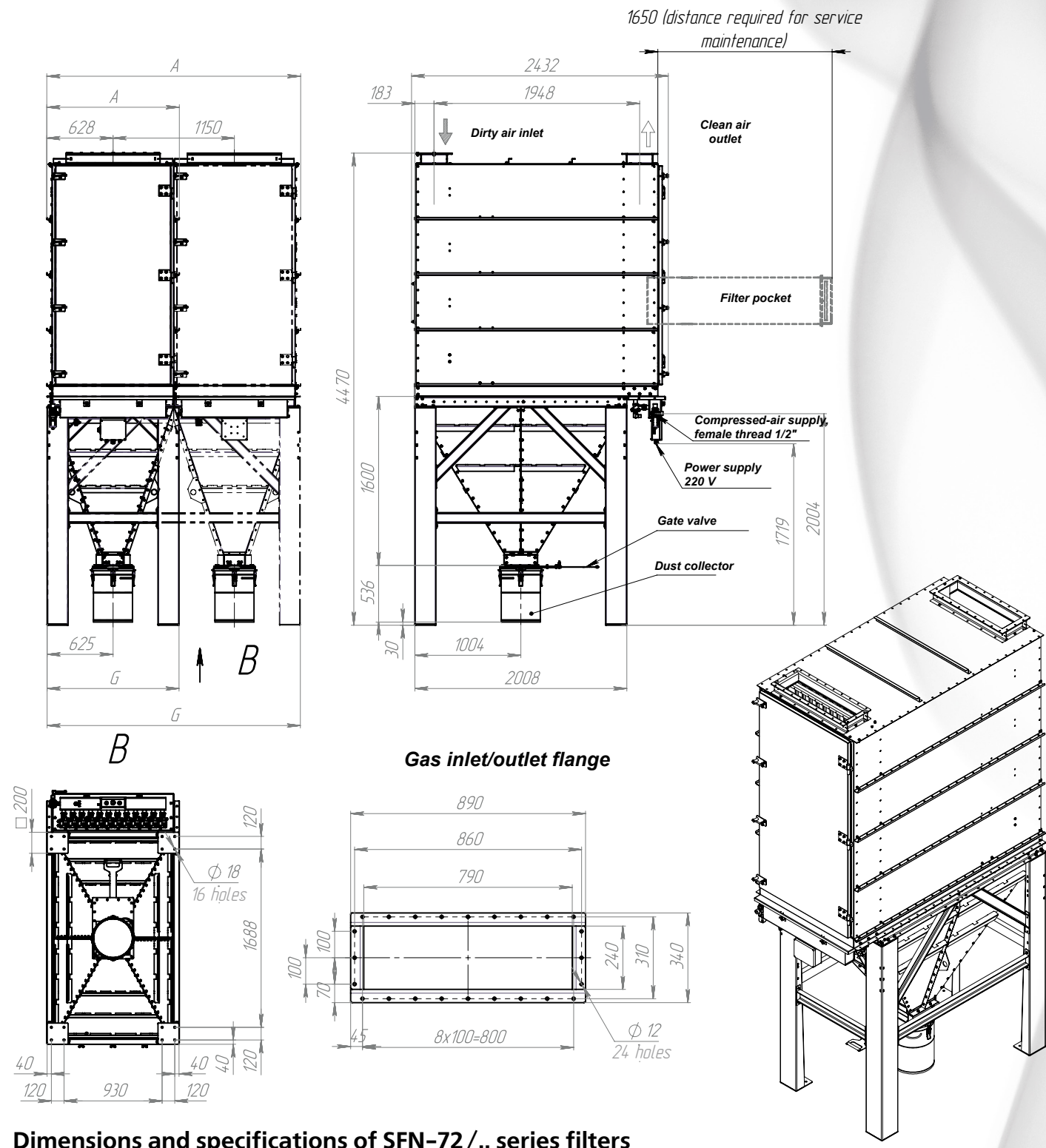
General technical drawing of pocket filter SFN-54/..-GV/DB



Dimensions and specifications of SFN-54/.. series filters

Filter type	Capacity, m <sup>3</sup> /h	Filtration surface area, m <sup>2</sup>	Compressed-air flowrate, nm <sup>3</sup> /h	Number of pockets, pcs.	Weight, kg	A, mm	G, mm
SFN-54/1	5,200	54	12	36	1,410	1,255	1,250
SFN-54/2	10,400	108	24	72	2,390	2,405	2,400
SFN-54/3	15,600	162	36	108	3,370	3,555	3,350
SFN-54/4	21,800	216	48	144	4,350	4,705	4,700

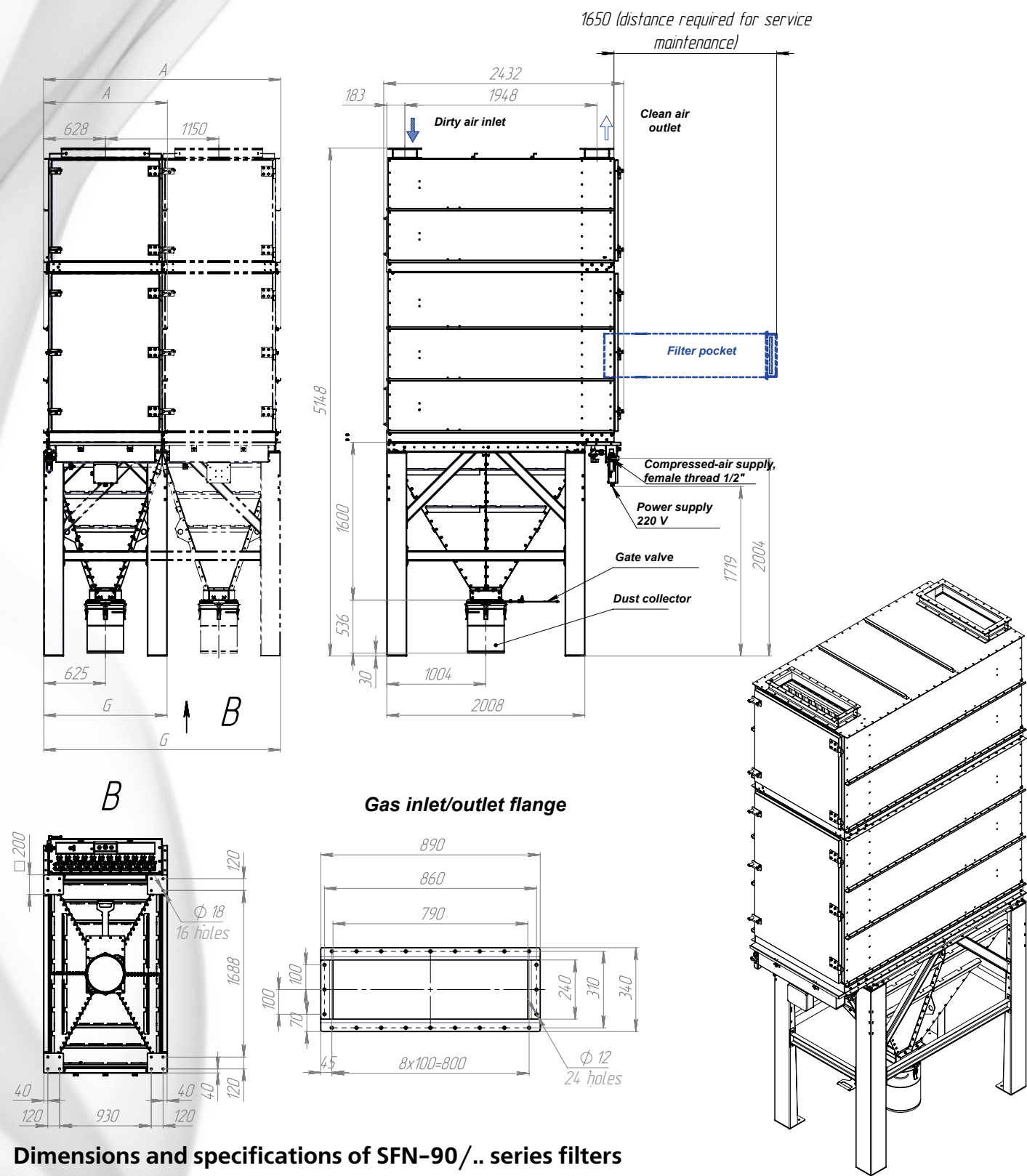
General technical drawing of pocket filter SFN-72/..-GV/DB



Dimensions and specifications of SFN-72/.. series filters

Filter type	Capacity, m <sup>3</sup> /h	Filtration surface area, m <sup>2</sup>	Compressed-air flowrate, nm <sup>3</sup> /h	Number of pockets, pcs.	Weight, kg	A, mm	G, mm
SFN-72/1	7,000	72	12	48	1,610	1,255	1,250
SFN-72/2	14,000	144	24	96	2,760	2,405	2,400
SFN-72/3	21,000	216	36	144	3,910	3,555	3,350
SFN-72/4	28,000	288	48	192	5,060	4,705	4,700

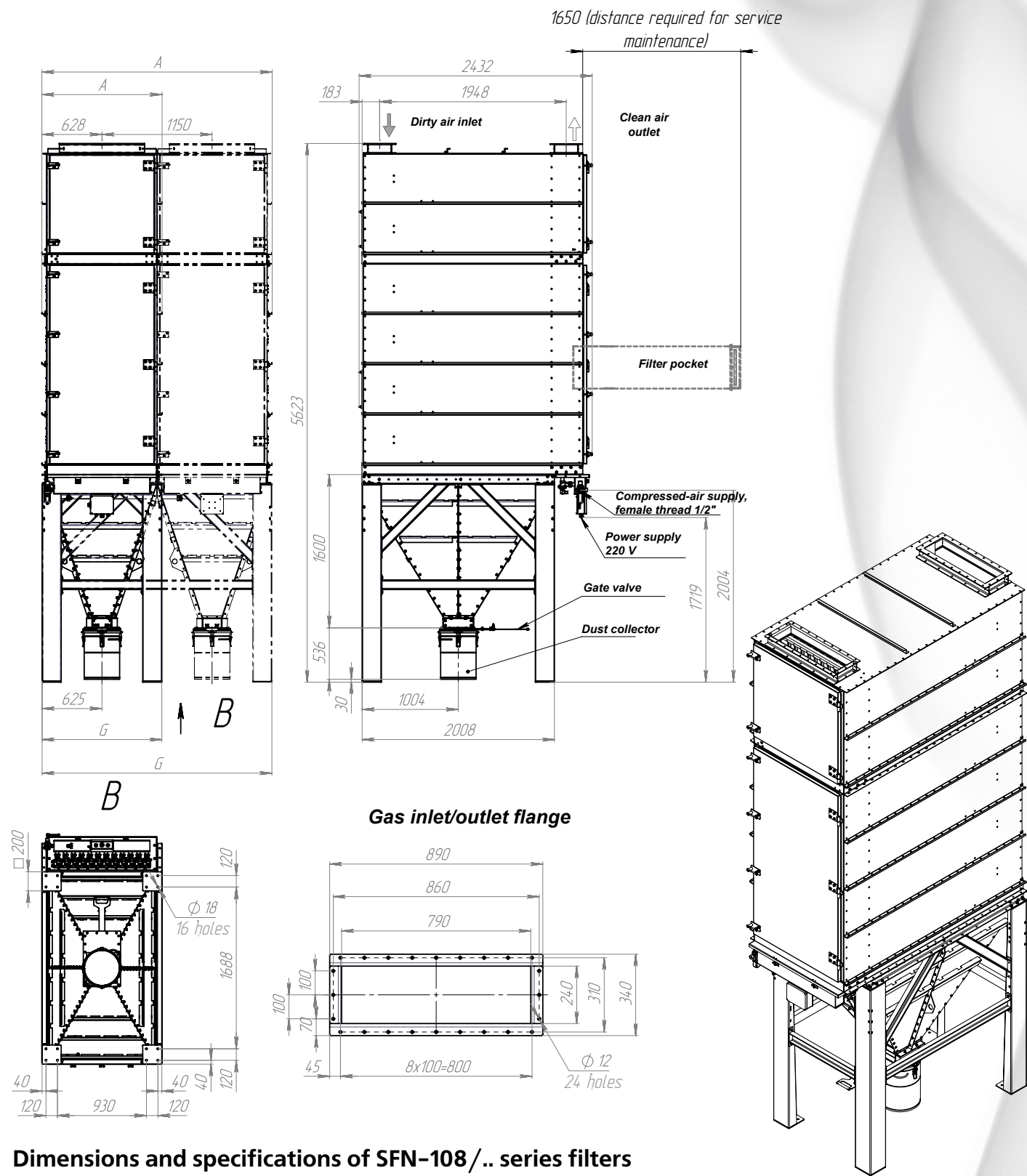
General technical drawing of pocket filter SFN-90/..-GV/DB



Dimensions and specifications of SFN-90/.. series filters

Filter type	Capacity, m³/h	Filtration surface area, m²	Compressed-air flowrate, nm³/h	Number of pockets, pcs.	Weight, kg	A, mm	G, mm
SFN-90/1	8,650	90	14	60	1,960	1,255	1,250
SFN-90/2	17,300	180	28	120	3,310	2,405	2,400
SFN-90/3	25,950	270	42	180	4,660	3,555	3,350
SFN-90/4	34,600	360	56	240	6,010	4,705	4,700

General technical drawing of pocket filter SFN-108/..-GV/DB

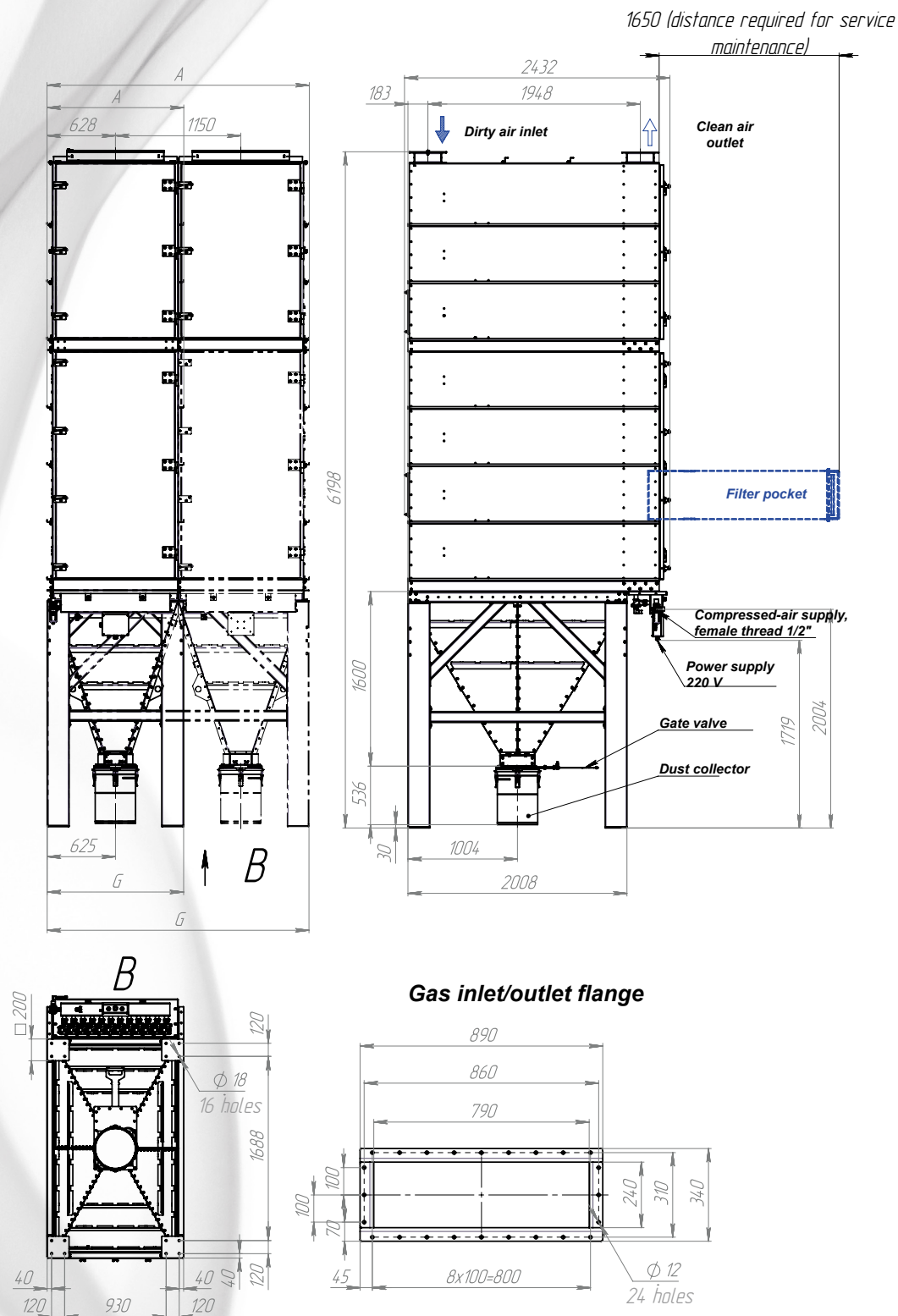


Dimensions and specifications of SFN-108/.. series filters

Filter type	Capacity, m³/h	Filtration surface area, m²	Compressed-air flowrate, nm³/h	Number of pockets, pcs.	Weight, kg	A, mm	G, mm
SFN-108/1	10,500	108	16	72	2,210	1,255	1,250
SFN-108/2	21,000	216	32	144	3,760	2,405	2,400
SFN-108/3	31,500	324	48	216	5,310	3,555	3,350
SFN-108/4	42,000	432	64	288	6,860	4,705	4,700



### General technical drawing of pocket filter SFN-126/..-GV/DB



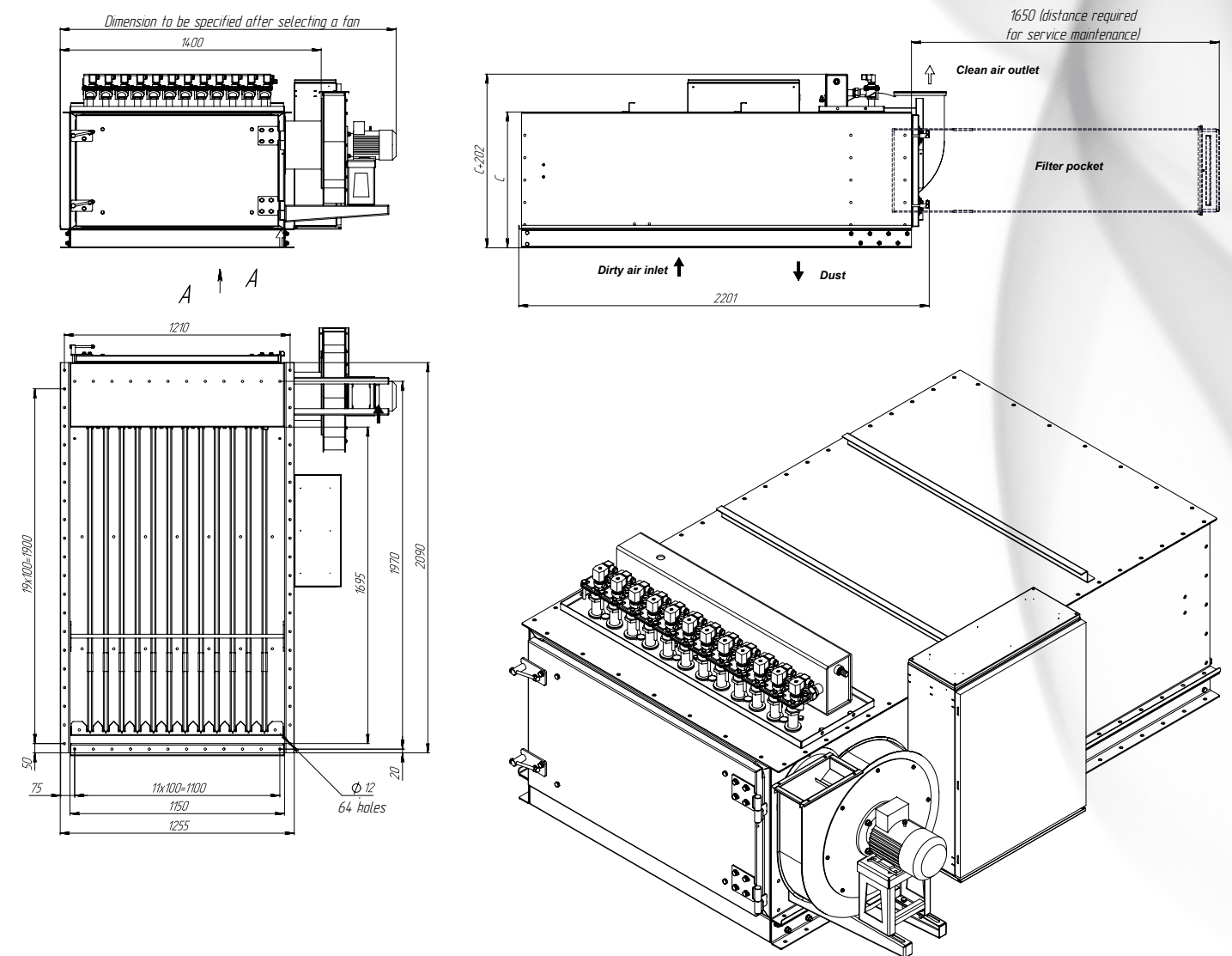
### Dimensions and specifications of SFN-126/.. series filters

Filter type	Capacity, m³/h	Filtration surface area, m²	Compressed-air flowrate, nm³/h	Number of pockets, pcs.	Weight, kg	A, mm	G, mm
SFN-126/1	12,000	126	18	84	2,410	1,255	1,250
SFN-126/2	24,000	252	36	168	4,210	2,405	2,400
SFN-126/3	36,000	378	54	252	6,010	3,555	3,350
SFN-126/4	48,000	504	72	336	7,810	4,705	4,700

A standard filter is equipped with a manual cut-off gate valve and a drum.

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### General technical drawing of SFN-FH spot (conveyor, bunker, silo) pocket filter



## SFN-FH Filters

SFN spot filters are manufactured both in a pressure version (without a fan) to ventilate pressurized silos, bunkers, etc. and in a negative-pressure version (with a fan) to be installed at pouring sites and silos, which require negative pressure.

### Dimensions and specifications of SFN-...-FH series bunker filters

Filter type	Capacity, m³/h	Filtration surface area, m²	Compressed-air flowrate, nm³/h	Number of pockets, pcs.	Weight, kg	C, mm
SFN-18-FH	1,800	18	18	12	450	728
SFN-36-FH	3,600	36	18	24	670	1,253
SFN-54-FH	5,400	54	18	36	890	1,778
SFN-72-FH	7,200	72	18	48	1,110	2,303

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