Technical Brochure

ProJet smart®

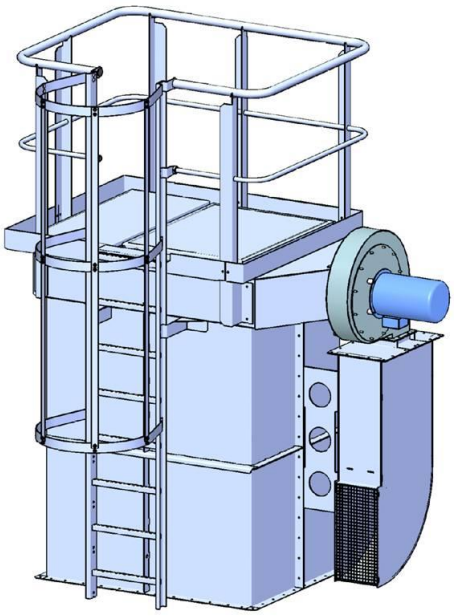
The economical solution

Mighty solutions for tiny particles.

ProJet smart®

Functional and construction features

1 Introduction



Compact filters type ProJet smart® are particularly compact bag filters with integrated fan, silencer and a cleaning control system. They are the inexpensive and easily available dust removal solution for many application areas.

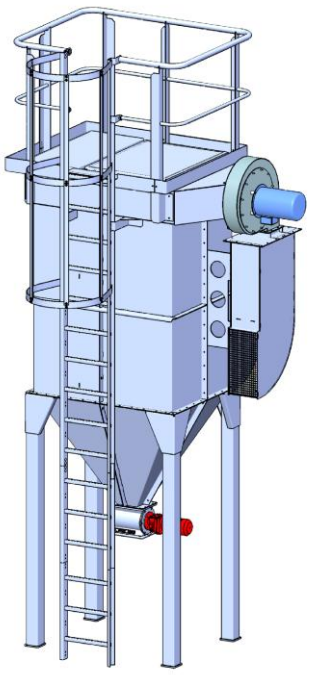
The function of the filters is based on the jet pulse principle. The filters are cleaned by means of the highly efficient Intensive-Filter injector system with "ideal nozzle". The Intensiv-Filter JetBus Controller® is part of the scope of delivery and guarantees fully automatic cleaning.

ProJet smart® compact filters are characterised by their sturdiness and proven quality. The filters achieve high precipitation efficiency. Low maintenance requirement with high reliability is a decisive factor in reducing running costs.

For new systems, enhancements and conversions, we develop precise recommendations to meet your specifications. The ProJet smart® bag filters are produced in series. The delivery times are correspondingly short.

As an experienced specialist, we offer high quality, professional consultation, and optimised process sequences.

2 Specification



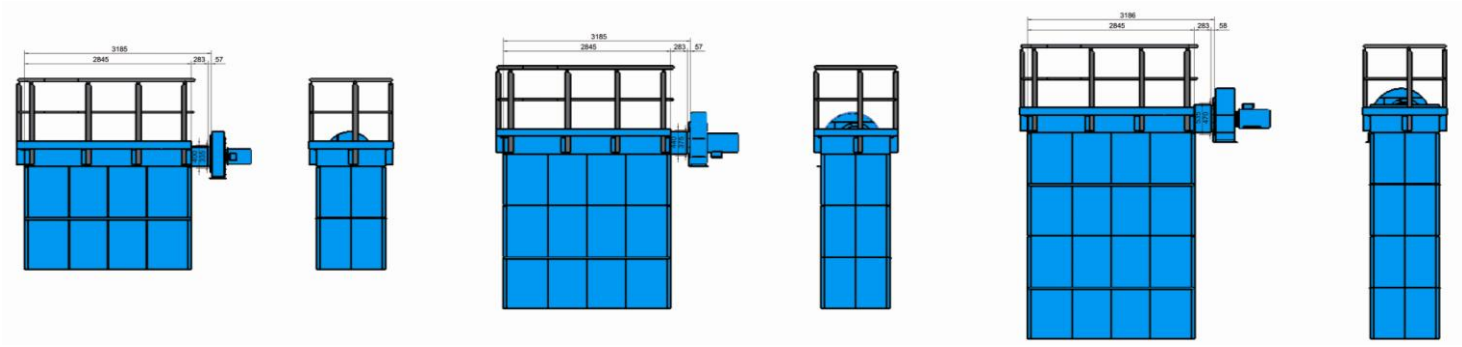
- Compact filter with dust collection chamber or bunker filter with optional bypass flap
- Filter support with base plates for the compact filter
- Ladder and railings for access to the filter head
- Roof door enables access to the clean gas area
- Dust extractor over rotary valve or double pendulum flap for the compact filter
- Built-in fan and silencer
- Cleaning control system with the JetBus Controller®
- Compressed air tank with integrated diaphragm valves
- Intensiv-Filter injector system with "ideal nozzle" on the injector tube and inlet nozzle at the bag opening
- Bag fixing optional with snapring or wire ring bag with tension bar
- Compressed air filter/regulator with manometer, filter and pressure regulator
- Supporting cages, galvanised
- ProTex energy saving filter media (nominal diameter 130 mm)

3 Technical data ProJet smart® bunker filter

Filtertype PJS	Air flow rate [m3/h] (*1)	Number of bags	Bag length [mm]	Compressed air consumption [Nm^3/h] (*2)	Filter surface area [m^2]	Power of fan motor [kW]	Weight [kg]
IF-PJS-SB-030-01-01750	2.573	30	1.750	5,4	21,4	5,5	1.067
IF-PJS-SB-030-01-02625	3.859	30	2.625	5,4	32,2	5,5	1.271
IF-PJS-SB-030-01-03500	5.146	30	3.500	5,4	42,8	11,0	1.535
IF-PJS-SB-054-01-01750	4.631	54	1.750	6,0	38,6	7,5	1.338
IF-PJS-SB-054-01-02625	6.947	54	2.624	6,0	57,9	11,0	1.598
IF-PJS-SB-054-01-03500	9.263	54	3.500	6,0	77,2	15,0	1.938
IF-PJS-SB-066-01-01750	5.660	66	1.750	6,1	47,2	11,0	1.488
IF-PJS-SB-066-01-02625	8.491	66	2.625	6,1	70,8	15,0	1.854
IF-PJS-SB-066-01-03500	11.321	66	3.500	6,1	94,3	18,5	2.202
IF-PJS-SB-078-01-01750	6.690	78	1.750	6,3	55,8	11,0	1.626
IF-PJS-SB-078-01-02625	10.035	78	2.625	6,3	83,6	15,0	2.021
IF-PJS-SB-078-01-03500	13.380	78	3.500	6,3	111,5	18,5	2.399

*1: Filter surface load 2 $m^3/m^2/min$

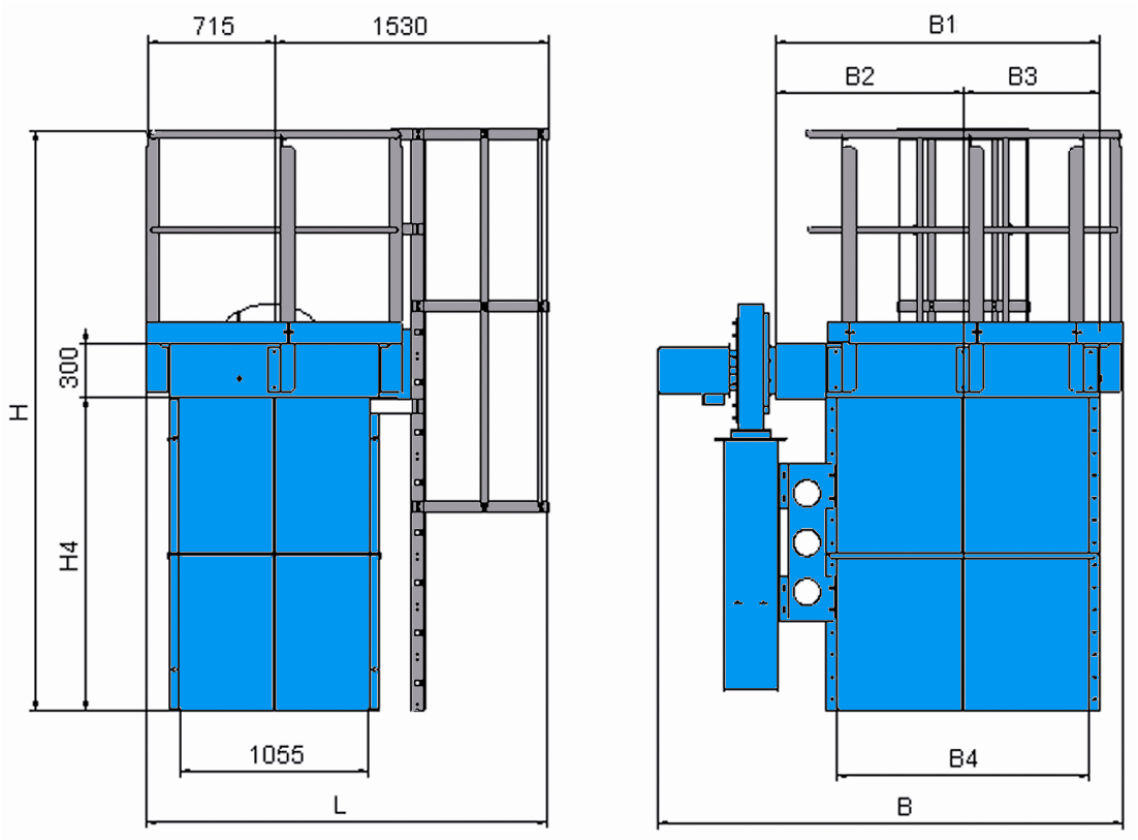
*2: Cleaning pressure 0.4 MPa, cleaning cycle 240 sec.



4 Main dimensions ProJet smart® bunker filter

Filtertype PJS	Clean gas plenum			Housing (inside)		Total dimensions (Required space)		
	Width			Width	Length	Length	Width	Height
	B 1	B 2	B3	B4	H4	L	B	H
IF-PJS-SB-030-01-01750	1.808	1.045,5	762,5	1.405	1.750	2.245	2.593	3.242
IF-PJS-SB-030-01-02625	1.808	1.045,5	762,5	1.405	2.625	2.245	2.625	4.117
IF-PJS-SB-030-01-03500	1.808	1.045,5	762,5	1.405	3.500	2.245	2.774	4.992
IF-PJS-SB-054-01-01750	2.468	1.375,5	1.092,5	2.065	1.750	2.245	3.312	3.242
IF-PJS-SB-054-01-02625	2.468	1.375,5	1.092,5	2.065	2.625	2.245	3.317	4.117
IF-PJS-SB-054-01-03500	2.468	1.375,5	1.092,5	2.065	3.500	2.245	3.417	4.992
IF-PJS-SB-066-01-01750	2.798	1.540,5	1.257,5	2.395	1.750	2.245	3.647	3.242
IF-PJS-SB-066-01-02625	2.798	1.540,5	1.257,5	2.395	2.625	2.245	3.747	4.117
IF-PJS-SB-066-01-03500	2.798	1.540,5	1.257,5	2.395	3.500	2.245	3.837	4.992
IF-PJS-SB-078-01-01750	3.128	1.705,5	1.422,5	2.725	1.750	2.245	3.977	3.242
IF-PJS-SB-078-01-02625	3.128	1.705,5	1.422,5	2725	2.625	2.245	4.077	4.117
IF-PJS-SB-078-01-03500	3.128	1.705,5	1.422,5	2.725	3.500	2.245	4.167	4.992

All dimensions in mm

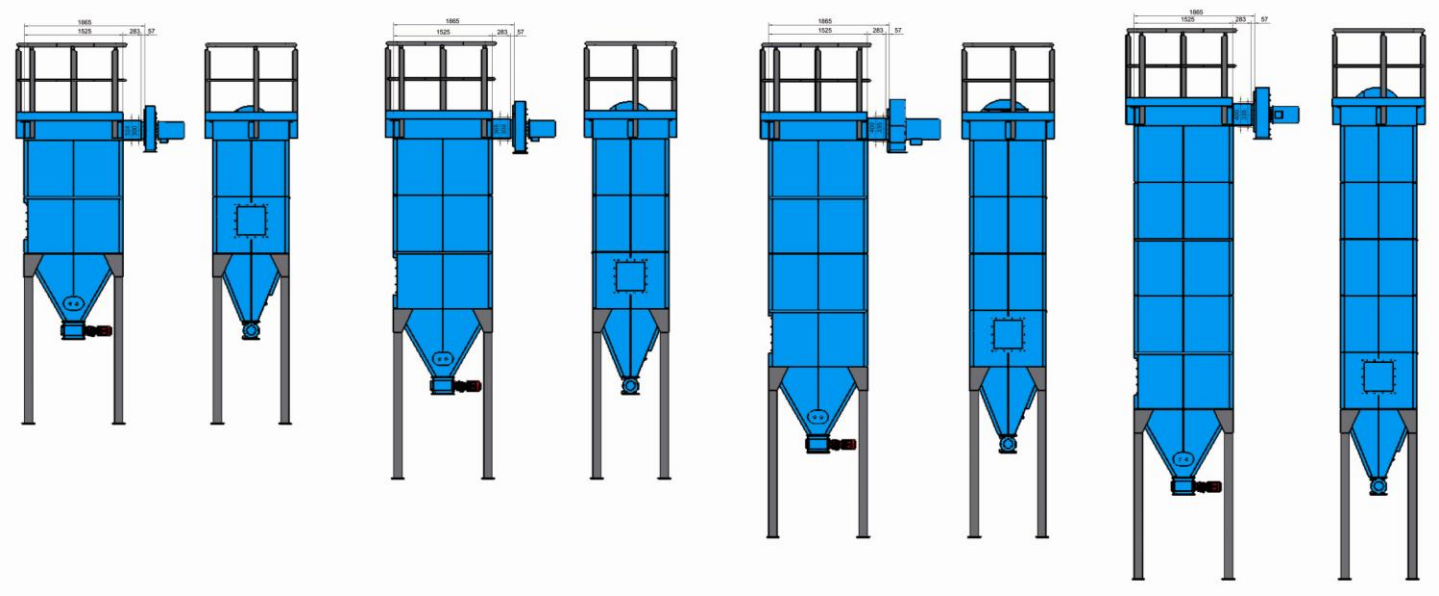


5 Technical data ProJet smart® compact filter

Filtertype PJS # = Rotary valve (R) Double pendulum flap (D)	Air flow rate [m3/h] (*1)	Number of bags	Bag length [mm]	Compressed air consumption [Nm^3/h] (*2)	Filter surface area [m^2]	Power of fan motor [kW]	Weight [kg]	
							R	D
IF-PJS-S#-030-01-01750	2.573	30	1.750	5,4	21,4	5,5	1.370	1.315
IF-PJS-S#-030-01-02625	3.859	30	2.625	5,4	32,2	5,5	1.565	1.510
IF-PJS-S#-030-01-03500	5.146	30	3.500	5,4	42,9	11,0	1.855	1.800
IF-PJS-S#-030-01-04375	6.432	30	4.375	5,4	53,6	11,0	1.970	1.915
IF-PJS-S#-054-01-01750	4.631	54	1.750	6,0	38,6	7,5	1.735	1.678
IF-PJS-S#-054-01-02625	6.947	54	2.624	6,0	57,9	11,0	1.995	1.938
IF-PJS-S#-054-01-03500	9.263	54	3.500	6,0	77,2	15,0	2.358	2.300
IF-PJS-S#-054-01-04375	11.578	54	4.375	6,0	96,5	18,5	2.648	2.590
IF-PJS-S#-066-01-01750	5.660	66	1.750	6,1	47,2	11,0	1.940	1.884
IF-PJS-S#-066-01-02625	8.491	66	2.625	6,1	70,8	15,0	2.345	2.287
IF-PJS-S#-066-01-03500	11.321	66	3.500	6,1	94,3	18,5	2.678	2.620
IF-PJS-S#-066-01-04375	14.151	66	4.375	6,1	117,9	18,5	2.935	2.877
IF-PJS-S#-078-01-01750	6.690	78	1.750	6,3	55,8	11,0	2.175	2.118
IF-PJS-S#-078-01-02625	10.035	78	2.625	6,3	83,6	15,0	2.570	2.515
IF-PJS-S#-078-01-03500	13.380	78	3.500	6,3	111,5	18,5	2.930	2.872
IF-PJS-S#-078-01-04375	16.724	78	4.375	6,3	139,4	30,0	3.437	3.380

Filter surface load 2 $m^3/m^2/min$

*2: Cleaning pressure 0.4 MPa, cleaning cycle 240 sec.

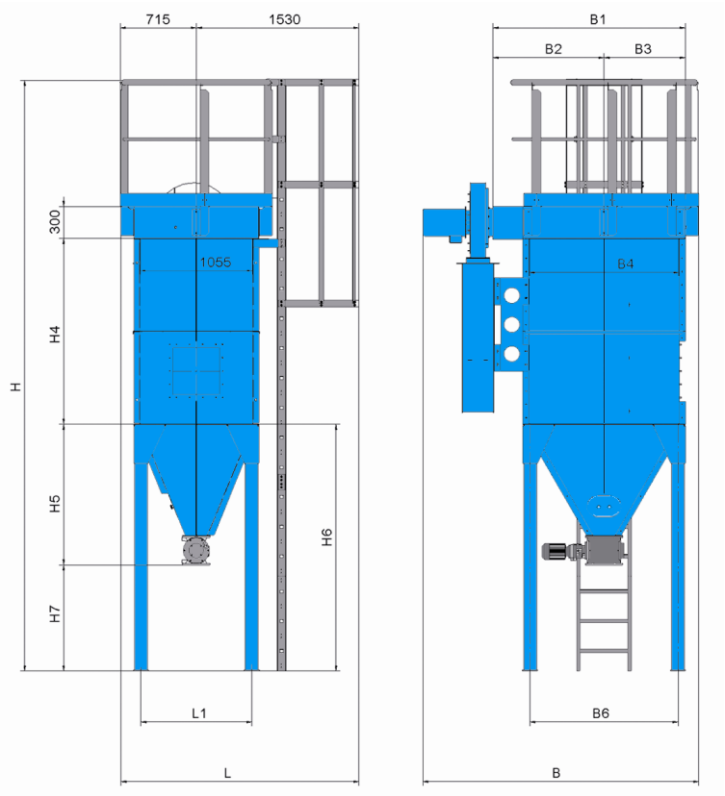


6 Main dimensions ProJet smart® compact filter

Filtertype PJS # = Rotary valve (R) Double pendulum flap (D)	Clean gas plenum Width			Housing (inside)		Hopper		Supporting structure			Expansion space *	
				Width	Length	R Height	D Height	Width	Length	R + D Height	R Height	D Height
	B 1	B 2	B 3	B 4	H 4	H 5	H 5	B 6	L1	H 6	H 7*	H 7*
IF-PJS-S#-030-01-01750	1.808	1.045,5	762,5	1.405	1.750	1.323	1.713	1.393	1.043	2.625	1.305	975
IF-PJS-S#-030-01-02625	1.808	1.045,5	762,5	1.405	2.625	1.323	1.713	1.393	1.043	2.625	1.305	975
IF-PJS-S#-030-01-03500	1.808	1.045,5	762,5	1.405	3.500	1.323	1.713	1.393	1.043	2.625	1.305	975
IF-PJS-S#-030-01-04375	1.808	1.045,5	762,5	1.405	4.375	1.323	1.713	1.393	1.043	2.625	1.305	975
IF-PJS-S#-054-01-01750	2.468	1.375,5	1.092,5	2.065	1.750	1.894	2.284	2.053	1.043	3.000	1.109	779
IF-PJS-S#-054-01-02625	2.468	1.375,5	1.092,5	2.065	2.625	1.894	2.284	2.053	1.043	3.000	1.109	779
IF-PJS-S#-054-01-03500	2.468	1.375,5	1.092,5	2.065	3.500	1.894	2.284	2.053	1.043	3.000	1.109	779
IF-PJS-S#-054-01-04375	2.468	1.375,5	1.092,5	2.065	4.375	1.894	2.284	2.053	1.043	3.000	1.109	779
IF-PJS-S#-066-01-01750	2.798	1.540,5	1.257,5	2.395	1.750	2.180	2.570	2.343	1.003	3.375	1.198	868
IF-PJS-S#-066-01-02625	2.798	1.540,5	1.257,5	2.395	2.625	2.180	2.570	2.343	1.003	3.375	1.198	868
IF-PJS-S#-066-01-03500	2.798	1.540,5	1.257,5	2.395	3.500	2.180	2.570	2.343	1.003	3.375	1.198	868
IF-PJS-S#-066-01-04375	2.798	1.540,5	1.257,5	2.395	4.375	2.180	2.570	2.343	1.003	3.375	1.198	868
IF-PJS-S#-078-01-01750	3.128	1.705,5	1.422,5	2.725	1.750	2.466	2.856	2.673	1.003	3.750	1.287	957
IF-PJS-S#-078-01-02625	3.128	1.705,5	1.422,5	2.725	2.625	2.466	2.856	2.673	1.003	3.750	1.287	957
IF-PJS-S#-078-01-03500	3.128	1.705,5	1.422,5	2.725	3.500	2.466	2.856	2.673	1.003	3.750	1.287	957
IF-PJS-S#-078-01-04375	3.128	1.705,5	1.422,5	2.725	4.375	2.466	2.856	2.673	1.003	3.750	1.287	957

* further supporting levels on request

Filtertype PJS # = Rotary valve (R) Double pendulum flap (D)	Total dimensions (required space)		
	Length L	Width B	Height H
IF-PJS-S#-030-01-01750	2.245	2.593	5.867
IF-PJS-S#-030-01-02625	2.245	2.625	6.742
IF-PJS-S#-030-01-03500	2.245	2.774	7.617
IF-PJS-S#-030-01-04375	2.245	2.657	8.492
IF-PJS-S#-054-01-01750	2.245	3.312	6.242
IF-PJS-S#-054-01-02625	2.245	3.317	7.117
IF-PJS-S#-054-01-03500	2.245	3.417	7.992
IF-PJS-S#-054-01-04375	2.245	3.507	8.867
IF-PJS-S#-066-01-01750	2.245	3.647	6.617
IF-PJS-S#-066-01-02625	2.245	3.747	7.492
IF-PJS-S#-066-01-03500	2.245	3.837	8.367
IF-PJS-S#-066-01-04375	2.245	3.837	9.242
IF-PJS-S#-078-01-01750	2.245	3.977	6.992
IF-PJS-S#-078-01-02625	2.245	4.077	7.867
IF-PJS-S#-078-01-03500	2.245	4.167	8.742
IF-PJS-S#-078-01-04375	2.245	4.362	9.617



All dimensions in mm

7 Standards

- Operating conditions:
  - Filter medium can be used up to max. 145°C (max. PES dry)
  - Residual dust content < 10 mg/m³
  - Subpressure available upstream of the filter at nominal volumetric flow at least 1500 Pa
  - Acoustic pressure level at nominal volumetric flow at a distance of 1 m max. 80 dB(A), measured according to DIN 45635, part 1
  - Further noise protection measures and thermal insulation upon request

- Coating:
  - Pretreatment St 2 according to DIN 55928
  - Inside: zinc phosphate primer 40 µm, grey green
  - Outside: zinc phosphate primer and synthetic resin top coating - blue grey (RAL 7031), 40 µm each

- Delivery:
  - Fan and silencer 22 kW motor power and up, separate
  - Supporting cages and filter bags, separate
  - Steel structure in individual parts

- 3 sets of documents in German or English
- Delivery of drawings for housing and steel structure upon request

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