



### Long service life due to effective filter cleaning



New filter cartridge



Filter cartridge in operation



Filter cartridge after dedusting

The FP 150 is equipped with a dedustable antistatic filter cartridge, which enables the filter to be freed from dust by compressed air blasts. Its PES (polyester) microfibre surface comes with a conductive coating and provides a robust and well protected solution against mechanical damage for a wide range of customer applications. The cartridge is thus well suitable for

applications in which large quantities of dry dust are extracted and achieves enormously long service lives compared to systems with saturation filters. In combination with precoating (application of a separating layer on the filter cartridge), it is also possible to reliably separate sticky and moist dusts.



### Simple dust removal



The dust generated during the process is disposed of via the removable dust container. If required, a dust

bag can be inserted for low-contamination dust removal.



### Assurance in occupational and health safety

W 3	ISO 15012-1 $\eta \geq 99\%$	W 3
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Welding fumes and dusts from related processes are easily handled by this system. The Institute for Occupational Safety and Health (IFA) has specifically tested them in accordance with DIN ISO 15012-1 (2013). It fulfils the protection level for safe extraction and filtering required by the TRGS 528 Directive. Smoke, vapours or dusts with particles in the micrometer range are safely filtered out of the air. Awarded W3, the system offers triple protection for humans, environment and machinery.



### Modular and flexible



The FP 150 is equipped with a dedustable filter cartridge of dust class M. A particle filter (H13) can optionally be connected downstream to increase the separation efficiency, for example in the case of carcinogenic substances. A molecular filter (activated

carbon/BAC) is also available for removal of odours from the process air. Depending on the selected additional filter, a machine base must also be ordered to increase the stability of the system.



## Filter cartridge dedusting



Filter cartridge new

Filter cartridge, saturated

The FP 150 is equipped with a special dedusting control system, which enables the filter cartridge to be automatically freed from dust and thus increase the filter service life enormously.

Depending on the application, different options can be parameterized by the customer:

Differential-pressure controlled dedusting (factory setting)

- The system continuously measures the current filter saturation and automatically starts the dedusting cycle when a set value is reached (factory setting: 75% filter saturation).

- Interval dedusting (parameterizable via interface)

The system automatically starts the dedusting cycle at adjustable intervals (minutes/hours).

- After-run cleaning (parameterizable via interface)

The after-run cleaning can also be activated in addition to another mode. When the system is switched to standby, a dedusting cycle starts automatically. This allows the system to clean the filters at the end of a working shift without interrupting a work process.

- Start dedusting via interface

Depending on the application, the customer can easily activate the cleaning process via the interface. This function is recommended when the customer's work process may not be unexpectedly disturbed.

### Additional functions:

Control of shut-off valve, system shut-down during dedusting, cycle times, etc.



## Draws off every harmful particle Pollutants do not stand a chance



- Low-contamination dust disposal
- Molecular sieve against gaseous pollutants
- Piping / Flexible hose / Extraction arm
- Air-recirculation or exhaust-air pipe



## Double adsorption power



Active carbon



BAC granulate



Active carbon/BAC

The adsorption of the gaseous substances takes place with activated carbon (physical adsorption) and BAC granulate (chemical adsorption).

In addition, they take up a very broad spectrum of gases and odours.

-> Neutralization through chemical bonding with the reaction substance applied to the substrate material.

## Further information on the series

Scan QR code:

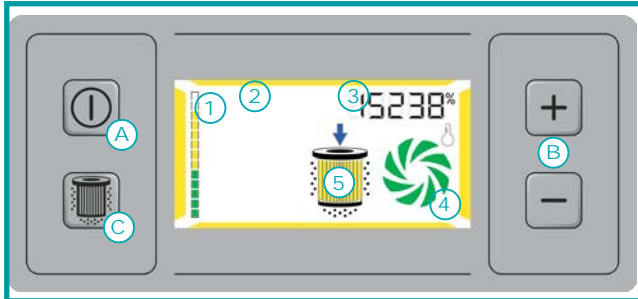




## Inspiring checking



### Always full control over the system



- . A - Start / Stop button
- . B - Manual power control
- . C - Manual start of filter-cartridge dedusting
- . 1 - Saturated filter notification
- . 2 - System status indication
- . 3 - Power-setting indication/  
Hour meter
- . 4 - Temperature and turbine-status indication
- . 5 - Filter-status indication

## Sub-D 25 interface

### External control of the system



#### Powerful control unit

- . Start / Stop button
- . "Filter full" pre-warning stage (75%)
- . Group-error output  
(speed, temperature, "filter full" 100%)
- . External power control
- . Parameterization access for activating  
special functions and dedusting mode
- . Message cache
- . Digital interface (RS232)

Illustration similar

## Applications



### **Refilling work, packaging processes, feeding and conveying processes**

When materials are moved from one place to another, such as during packaging or transportation, this process can cause particles to be released. Especially since they are not visible to the human eye, the risk should not be underestimated. Particles can develop from turbulences. TBH filter and extraction systems safely remove these particles from the ambient air.



### **Mechanical processing (grinding, deburring, milling, drilling, cutting)**

Processes such as grinding, deburring, milling, drilling or cutting generate dust, vapours and gases. These by-products must be extracted before their tiny particles are inhaled and can cause serious harm to the human body.



### **Laser technology**

Lasers are used for processing metals, woods and plastics. Due to this versatility, companies are intensively involved in laser technology. This not only increases efficiency, but also creates unwanted by-products, regardless of type and performance. TBH systems ensure safe extraction of fine dust and laser fumes.



### **Plastics processing**

Almost every industry today processes plastics. TBH systems are exactly the right solution for the safe extraction and filtration of grinding dusts and vapours that occur during the processing of plastics. Be convinced by our quality.

## Technical data FP 150



Illustration similar

### Delivery scope:

- Completely assembled (incl. the selected filter equipment)
- 4 castors for mobile use\*
- Power cord

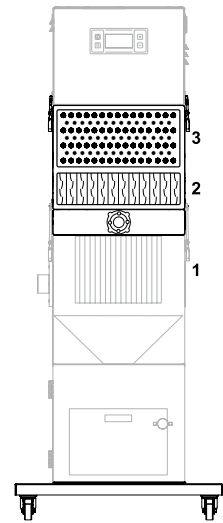
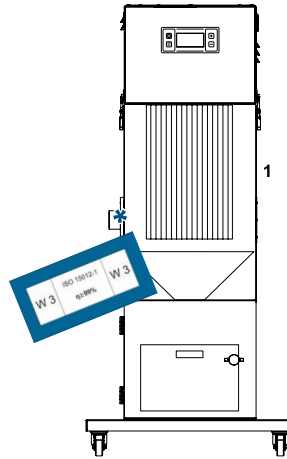
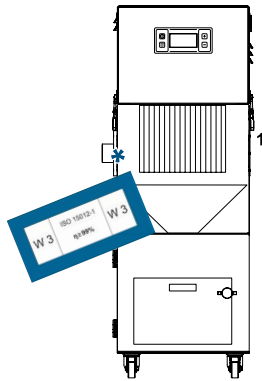
\* Depending on the height of the selected configuration, the system is supplied with machine base.

TECHNICAL DATA	UNIT	FP 150
Air volume flow with free air delivery		max. 280
Effective air flow rate	m <sup>3</sup> /h	30-250
Max. static pressure	Pa	20000
Voltage	V	100-240
Frequency	Hz	50/60
Motor output	kW	1.1
Class of protection	-	1
Drive type	-	Continuous running
Sound level	db(A)	approx. 64
Serial interface	Sub-D	25-pin
Weight	kg	approx. 55
Dimensions (HxWxD) as basic model	mm	1000x350x350
Dimensions (HxWxD) with expanded filter surface	mm	1230x550x550
Intake sleeve NW 50	-	optional
Intake sleeve NW 63	-	optional
Intake sleeve NW 80	-	optional
Automatic dedusting by means of compressed air	-	optional
Dust container	Liters	15
Color	RAL	7035

FILTER CONFIGURATION	
Filter cartridge, anti-static (dust category M)	✓
Particle filter H13	optional
Activated carbon/BAC filter	optional (10 liters)



## Ordering data FP 150



### AS BASE MODELL

DESIGNATION	ART. NO.
FP 150 100-240V 50/60Hz	90070

### WITH EXTENDED FILTER SURFACE

DESIGNATION	ART. NO.
FP 150 100-240V 50/60Hz	90097**

\*\* System is supplied with machine base as standard

### WITH AUTOMATIC DEDUSTING

ADDITIONAL MODULES	ART. NO.
Activated carbon/BAC filter	11610*
<b>Particle filter</b>	14728
Particle filter	14734**
Particle filter + Activated carbon/ BAC filter	15378*

\* only in conjunction with machine base

\*\* in conjunction with automatic dedusting

### SPARE FILTER

Filter cartridge	13016* 1
Particle filter	-
Activated carbon/ BAC filter	-

\* antistatic coated

### SPARE FILTER

Filter cartridge	13403* 1
Particle filter	-
Activated carbon/ BAC filter	-

\* antistatic coated

### SPARE FILTER

Filter cartridge	13016* 1
Particle filter	10013 2
Activated carbon/ BAC filter	13021 3

\* antistatic coated

### INTAKE SOCKET

LeftNW 50	13159
LeftNW 63	13161
LeftNW 80	13163
Right NW 50	13160
Right NW 63	13162
Right NW 80	13164

### PRECOATING SOCKET

NW 63	16251
NW 80	16252

### DESIGNATION

Machine base	16353*
Autom. dedusting	16355
Pressure regulator	11783

\* Raises the system by approx. 30 mm

## Electronic control system



FUNCTION	FP 150
Start / Stop button	✓
Manual output control	✓
Saturated filter notification (complete system)	✓
Visual and audible indication of filter saturation	✓
Display & notification of malfunctions	✓
Manual start of filter-cartridge dedusting*	✓
Indication of filter cleaning status *	✓

\* in conjunction with automatic dedusting

INTERFACE FUNCTION	
Interface	Sub-D
Start / Stop button	✓
Pre-warning, filter saturated to 75%*	✓
Visual and audible indication of filter saturated	✓
Group-error output (speed, temperature, "filter full" 100%)	✓
External speed control	✓
External dedusting start**	✓
Message cache	✓
Parameterization access for activating special functions	✓

\* Message, e.g. to control the dedusting from an external source

\*\* in conjunction with automatic dedusting

## Accessories



### ELECTRIC FOOT SWITCH

USE	DESIGNATION	CABLE LENGTH	ART. NO.
FP 150	Electric foot switch	2 meters	16369

#### FUNKTIONS:

- Start / Stop button
- Switch-on status of the system: Standby operation

**DELIVERY SCOPE:** Foot switch (incl. cable)



### CABLE REMOTE CONTROL

USE	DESIGNATION	CABLE LENGTH	ART. NO.
FP 150	Cable remote control	7 meters	16477

#### FUNKTIONS:

- Indication „Filter saturated“
- Start / Stop button
- Speed control
- Switch-on status of the system: Standby operation

**DELIVERY SCOPE:** Remote control (incl. cable)

## Electronic control system



### USB CONNECTION

USE	DESIGNATION	CABLE LENGTH	ART. NO.
FP 150	USB connection cable	1.5 meters	16455

**DELIVERY SCOPE:** Connection cable (incl. software)

## Harting option



### HARTING MAINS CONNECTION

USE	DESIGNATION	ART. NO.
FP 150	Mains connection Harting option	17036



### INTERFACE HARTING

USE	DESIGNATION	ART. NO.
FP 150	Interface Harting option	15719



### USB CONNECTION HARTING

USE	DESIGNATION	CABLE LENGTH	ART. NO.
FP 150	USB connection cable Harting	1.5 meters	16466

**DELIVERY SCOPE:** Connection cable (incl. software)

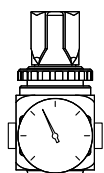
## Accessories



Autom. dedusting

### HOUSING MODULE AS UPGRADE KIT - autom. dedusting

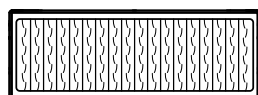
USE	DESIGNATION	ART. NO.
FP 150	for automatic filter dedusting	16355



Pressure regulator

### PRESSURE REGULATOR - autom. dedusting

USE	DESIGNATION	ART. NO.
FP 150	preset to 2 bar operating pressure	11783

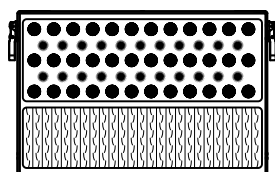


Particle filter H13

### FILTER-HOUSING MODULE\* AS UPGRADE KIT - Particle filter

USE	FILTER CLASS	ART. NO.
FP 150	H13	14728
FP 150	H13	14734*

\* in conjunction with automatic dedusting

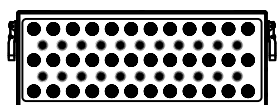


Particle filter H13 +  
Activated carbon/BAC filter

### FILTER-HOUSING MODULE AS UPGRADE KIT - (Particle filter + activated carbon/BAC filter)

USE	FILTER CLASS	ART. NO.
FP 150	H13	15378*

\* only in conjunction with machine base

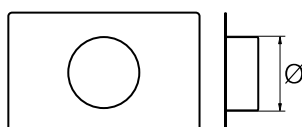


Activated carbon/BAC filter

### FILTER-HOUSING MODULE AS UPGRADE KIT - Activated carbon/BAC filter

USE	SIZE	ART. NO.
FP 150	10 liters	11610*

\* only in conjunction with machine base



### AIR OUTLET PLATE\*

USE	NW (mm)	ART. NO.
FP 150	80	11709
FP 150	100	12839
FP 150	125	12232

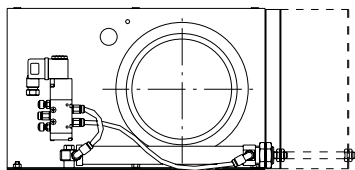
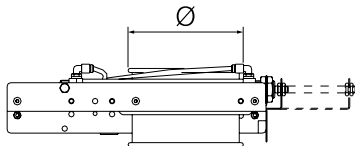
\* Connection plate with socket for specific air discharge via hose

## Accessories



### PNEUMATIC SHUT-OFF VALVES

- automatic control via the extraction system
- prevents the back-thrust of filtrate into the intake piping during filter-cartridge dedusting
- Shut-off valve can easily be integrated into the intake piping



USE	DESIGNATION	NW (mm)	ART. NO.
FP 150	Pneumatic shut-off valve	80	15286*
FP 150	Shut-off valve control line	-	16356*
FP 150	Protective cover	80	17015**

\* Please order control line separately

\*\* Mandatory for safety reasons if the installation is accessible!



### AIR INLET - flexible connection hoses

DESIGNATION	NW (mm)	LENGTH (m)	ART. NO.
Hose set with connecting sleeve	50	2.5	10008
		5.0	10010
Hose set with nipple and hose clamps	63	2.5	13210
		5.0	13211
		10.0	13212
	80	2.5	13179
5.0		13180	
10.0		13197	



### SIGNAL MODULE

USE	ART. NO.
FP 150	16621

### SPARK EXTINGUISHER (Use in piping)



USE	AIR VOLUME	Ø d (mm)	ART. NO.
FP 150	150-300 m³/h	63	16649

### ATEX approval to EN1834

**Installation:** Depending on the application and size, the spark extinguishers can be installed on the wall or on a worktable using a special holder (incl. magnets, included in delivery scope) or with pipe clamps (please order separately).



## Accessories



### MACHINE BASE

USE	DIMENSIONS (HxWxD) mm	ART. NO.
FP 150	30x550x550	16353



### DUST BAG

Dust bag for low-contamination disposal of the dedusted filtrate

USE	DESIGNATION	ART. NO.
FP 150	Dust bag	16711



### FLOW-RATE MONITORING DEVICE

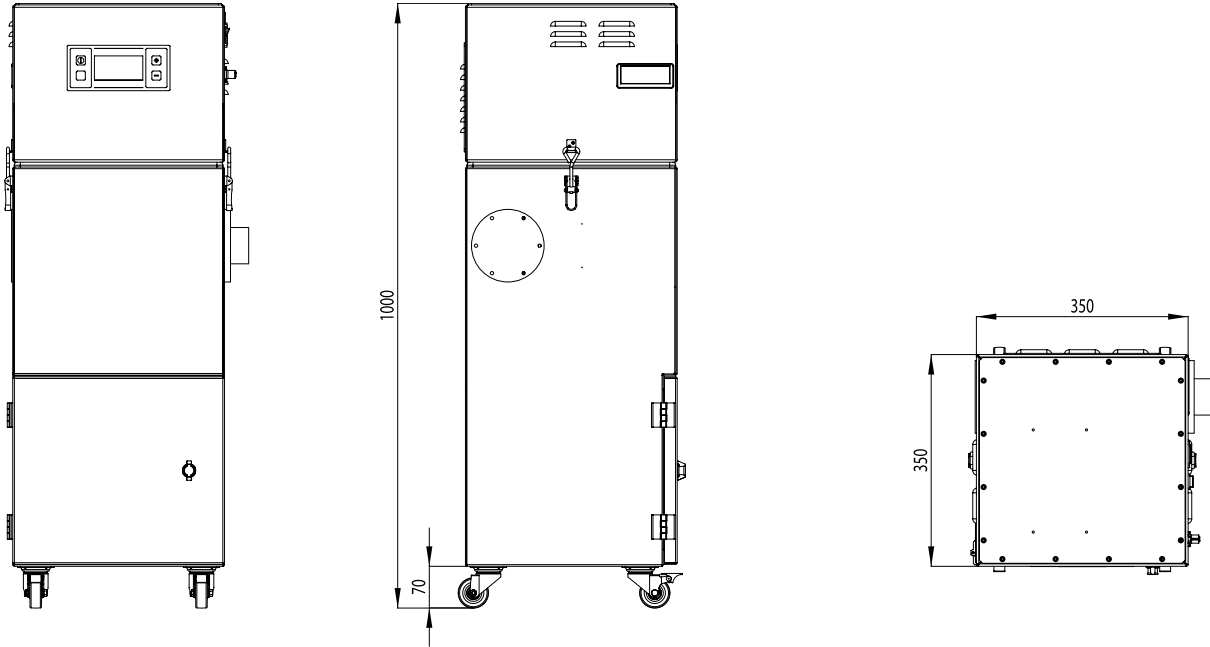
USE	Ø d (mm)	ART. NO.
FP 150	80	16642



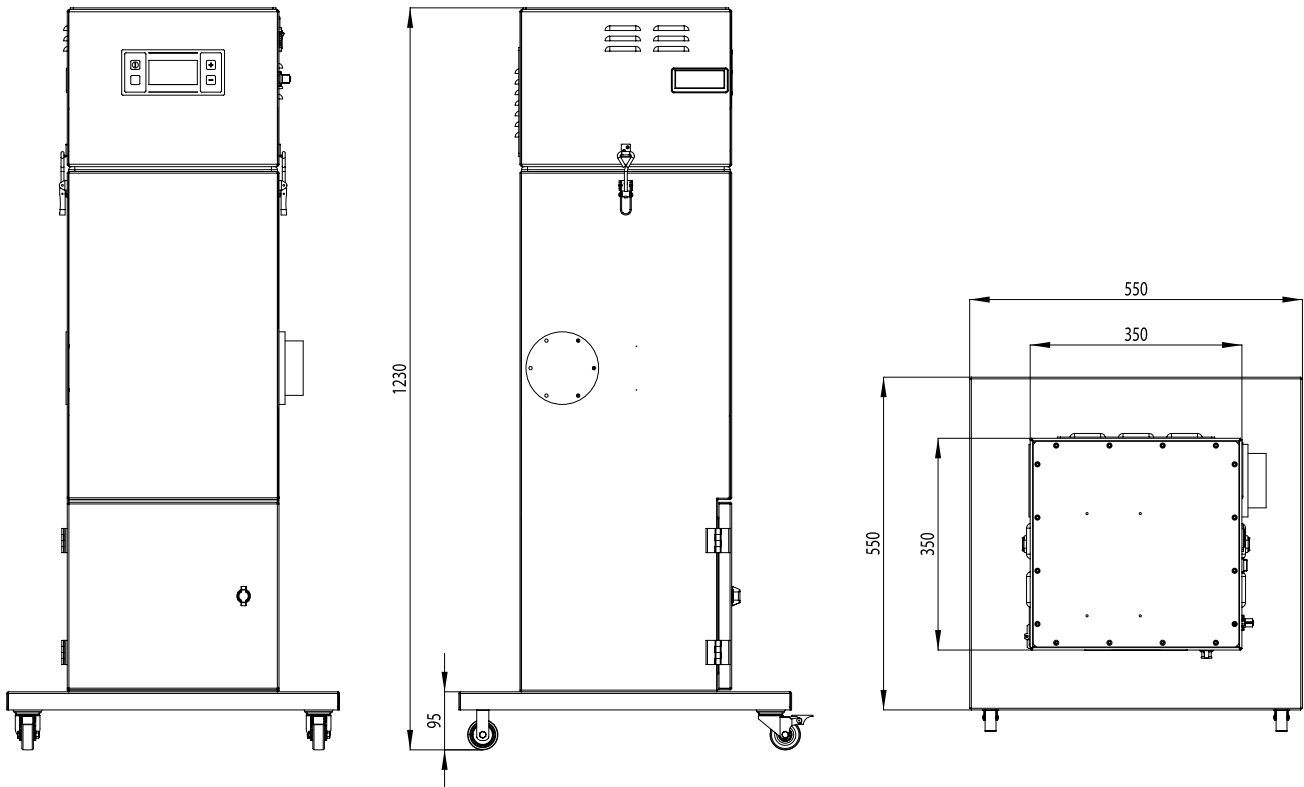
### FILTER-RUPTURE MONITORING DEVICE

USE	Ø d (mm)	ART. NO.
FP 150	100	16651

## Technical drawings

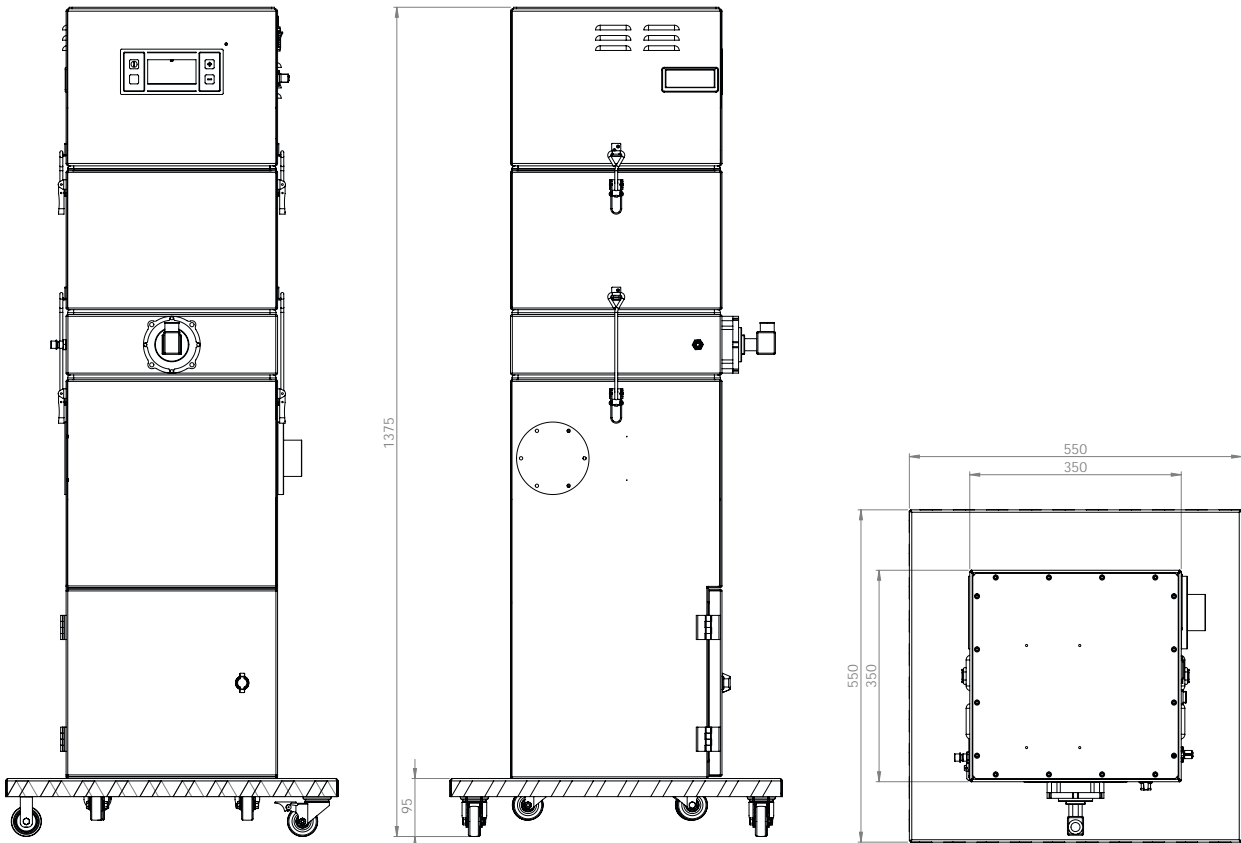


**FP 150 basic model**



**FP 150 (with extended filter surface)**

## Technical drawings



## FP 150 (with Dedusting)

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**Further information on the series**

