

ESTA

THE WORLD OF EXTRACTION



FILTOWER

THE HALL VENTILATION SYSTEM FOR EXTRACTING
WELDING FUMES, DUST & OIL MIST

www.esta.com/en/filtower

FILTOWER hall ventilation system

Unique: the filter tower technology from ESTA

The FILTOWER series is the ideal solution if source collection of fumes, dust or oil emulsion mist alone is insufficient or direct collection is not practical when working on large or complex workpieces.

Available in three performance levels, the towers ensure noticeably improved air quality, depending on the size of the hall.

Plug & Play:

Quick and easy to install

The filter towers do not need a pipe system and can be put into operation in no time at all according to the "plug & play" principle: set up, connect electrical power and compressed air, and you're done! And because the towers can be arranged flexibly in the production areas, they are highly suitable for changing workplaces

3 Various Applications

- » *Welding fume*
- » *Dust*
- » *Oil- & Emulsion mist*

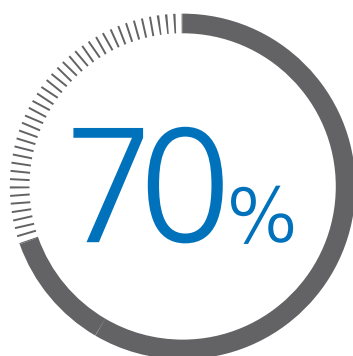
2 Various performance Levels

FILTOWER-160 – 12.000 m³/h
FILTOWER-200 – 18.000 m³/h



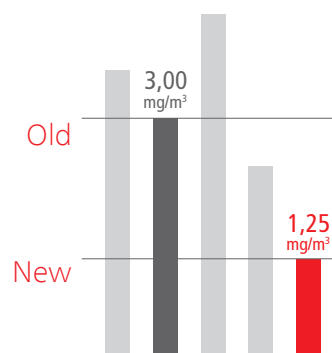
Layered ventilation principle: Saves heating costs

FILTOWERS from ESTA work according to the principle of layered ventilation recommended by the trade associations: they suck in the polluted air at the top of the system, filter it and conduct it directly into the working areas as clean breathing air, close to the floor, with minimal drafts. Thanks to the complete recirculation of the purified air, companies save up to 70% on heating costs in the cold season.



Dust limit values firmly under control

FILTOWER hall ventilation systems offer a twofold advantage: they effectively improve air quality for employees in production areas and make an important contribution to complying with the statutory dust limit values. In practice, the filter towers have often proved a useful support for existing extraction devices, after the General Dust Limit Value for alveolar dusts pursuant to TRGS 900 was drastically tightened up.



More powerful, more energy efficient and quiet

The low noise filter towers from ESTA combine outstanding extraction and filtration performance with maximum efficiency. This is ensured by the new ESTA control in combination with sophisticated sensor technology and the use of frequency converters.



Highly efficient & economical

Users can regulate the extraction power as needed. This reduces the power consumption of the towers significantly.

Low operating noise

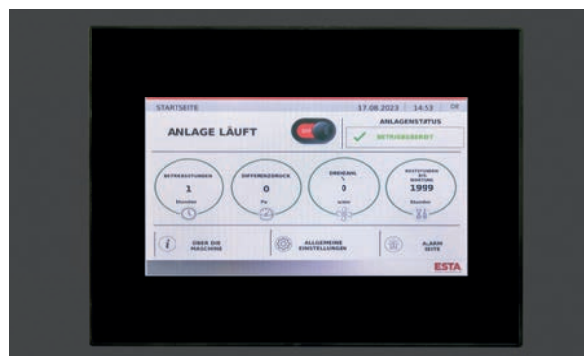
ESTA also sets new standards in terms of noise level thanks to optimized airflow and smooth-running fans: With a maximum of 72 dB(A), the FILTEROWERS are extremely quiet in operation and thus ensure pleasant working conditions.

Top-Performance

The FILTEROWER-Series is available in two power levels up to a maximum airflow of 18,000 cubic metres per hour.

ESTA CONTROL SYSTEM

The ESTA control system ensures energy-efficient operation of the unit. By measuring the current volume flow and the fully automatic adjustment of the extraction power to the respective operating parameters, there is an energy saving of up to 50%



Multi-stage filter system. The result: pure air

1

Extraction of polluted air

2

Simple filter change
thanks to the ESTA
quick-change filter system

3

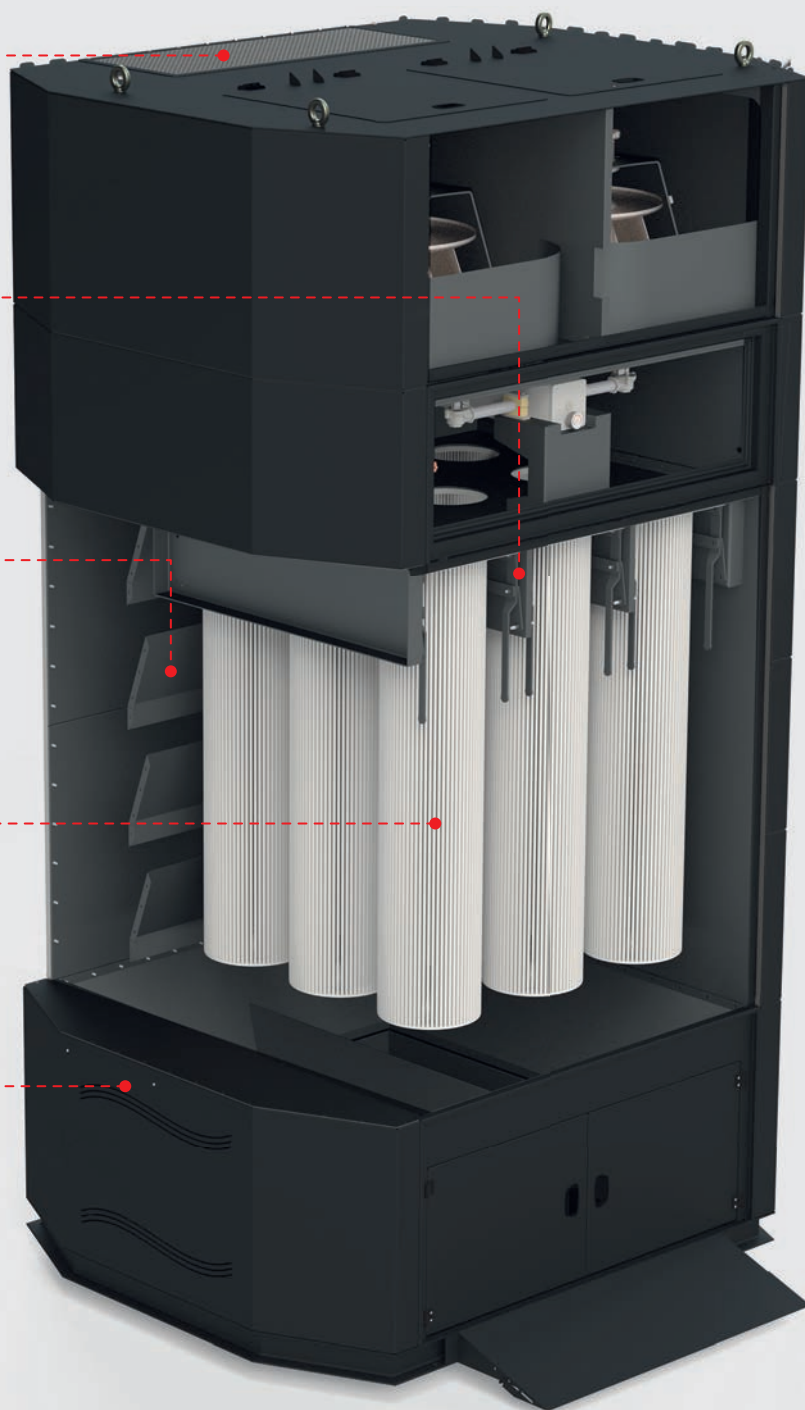
Pre-separation system for
the filtration of coarse particles

4

Main filtration with
separation efficiency 99.95 %

5

Low-draft clean air return



Fast installation, easy handling – the focus is on production

Housing construction

The sound-insulated housing construction and the low-draft clean air outlets ensure a pleasant working environment, even directly at the system.

Filter change system

The **ESTA QuickChange filter change system** ensures dust-free and time-saving replacement of the filter cartridges.



Cleanable filter cartridges

The durable polyester spun-bonded fabric filter material is cleaned of adhering debris fully automatically by means of compressed air during extraction, resulting in low operating costs. This achieves continuous extraction at low operating costs.





Fans

Thanks to the use of the latest fan technology and frequency converters, the filter towers have controllable and thus energy-saving system operation.

Intuitive control



The heart of the control system is the ESTA control system. It allows efficient device operation with optimal processing of sensor signals.

Dust removal



After the filtration process, the separated dust particles fall into a mobile 160 litre drawer below the filter chamber. Two collecting boxes inside are sealed with a lid before removal, which ensures low-dust disposal of the extracted material.* A new, additional collection container collects coarse particles and sparks to protect the main filter and minimise the risk of filter fires.

* Depending on device version

The original filter tower from ESTA

- » Flexible use for welding fumes, dust and oil emulsion mist
- » Better air quality for all employees in production halls
- » Supports compliance with the legally prescribed dust limit values
- » Controllable, energy-saving system operation
- » Power savings of up to 50 % thanks to ESTA EasyControl control system
- » Powerful, with up to 18,000 m³/h air volume flow
- » Low noise during operation
- » Up to 70 % heating cost savings through recirculation mode
- » Plug & play filter tower: set up, connect electrical power and compressed air – done!
- » No pipe installation and assembly work necessary
- » Low operating costs thanks to cleanable permanent filter cartridges

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Technical data

FILTOWER		160	200
Max. volume flow	m ³ /h	12,000	18,000
Mains voltage	V	400	400
Nominal power	kW	7,5	2 × 7,5
Main filter surface	m ²	157,5	225
Main filter quantity	Stück	9	9
Collection volume	l	300	300
Dimensions (L/W/H)	mm	1,800 × 2,250 × 3,500	1,800 × 2,250 × 3,950
Weight	kg	1,320	1,800
Sound pressure level	dB(A)	72	72
Order Number			
Standard		899160	899200



ESTA – the specialist for extraction technology

ESTA extraction technology has been providing comprehensive solutions for all application areas for more than 50 years. From individual devices for a wide variety of purposes to complex extraction systems – we ensure a consistently clean working environment.

This protects machines, serves to keep your employees healthy and creates the conditions for efficient and quality-oriented working.





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