ESTA

THE WORLD OF EXTRACTION

eco+ Series

EXTRACTION TECHNOLOGY FOR MAXIMUM EFFICIENCY

ESTA EFFICIENCY

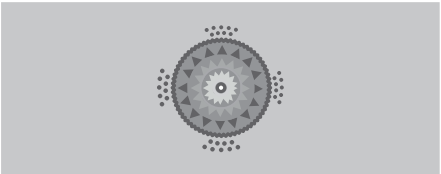
BLUeCOMPETENCE
Alliance Member
Partner of the Engineering Industry Sustainability Initiative

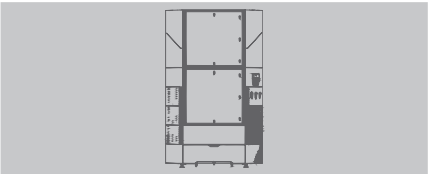
THE ESTA eco+ SERIES – REDEFINING EFFICIENCY

The devices in the eco+ series set new standards for energy-efficient extraction systems. The series provides the ideal balance between the three decisive parameters of an extraction device:

» Acquisition costs
» Operating costs
» Effectiveness

As well as outstanding extraction and filtration performance, the user benefits from the utmost efficiency. To achieve this, the entire system layout was designed with minimal operating costs and the lowest possible energy consumption in mind.





THE FILTERSYSTEM:

» **Special pre-separation systems, developed and patented by ESTA*,** separate coarse particles and sparks and thus reduce the load on the downstream fine filter to a minimum. The result is a long fine filter life and high system reliability.

» **Cleanable long-lasting filters** filter the remaining fine dusts with a separation rate of over 99.9% – for maximum air purity. The low filter load resulting from the pre-separation system means that the fine filter lasts longer and keeps filter costs low.

» **The filter is cleaned** by means of a pulse-jet, which cleans the filter during operation and after the device has been switched off. This ensures consistent extraction performance with low compressed air consumption.

* Depending on the type of device

THE VACUUM UNIT:

» **High performance ventilators** with above-average efficiency ensure maximum extraction performance.

» **Drive motors** with an efficiency class of IE 2 are combined with frequency converters in line with the latest efficiency requirements. The performance of the motors can be adjusted based on the parameters required, thus always remaining in the optimal working range.

THE HOUSING DESIGN:

» **The raw gas channel** in the filter chamber guarantees uniform application of the filter elements and low pressure loss. Thanks to the low flow speed, the filters can be cleaned even during operation.

» **The clean airflow with low pressure loss** ensures low output losses and a low flow noise. Extensive air outlets allow low-draught air return to the working area.

THE DEVICE CONTROL – REDUCED ENERGY CONSUMPTION, LONGER FILTER LIFE, MORE EFFICIENT CLEANING

» The newly-developed **ESTA EasyControl** allows energy-efficient device operation as the sensor signals are optimally processed. Measuring the current volume flow and adapting it to the operating parameters produces **power savings of up to 50%** compared to conventional differential pressure control.

In addition to the **ESTA EasyControl** device control, standard features of the eco+ devices include the following:

» Frequency converter for fan motors

» Programmable timer

» Dust measuring sensors in raw gas and clean air areas (FILTOWER)

» Level measurement in collection container (FILTOWER)

FILTOWER eco+

Hall ventilation system for extraction of welding fumes, dust and oil mist. FILTOWER systems work according to the layer and displacement ventilation principle recommended by the Employers' Liability Association. The systems draw polluted air into the top of the device from a radius of up to 15 meters (depending on performance level). The cleaned air is returned to the hall via diffusers on the sides at floor level, with minimal draught.

FILTOWER F eco+	Ideal for
	Welding fume
	Soldering fume

FILTOWER D eco+	Ideal for
	Light, floating fine dusts
	Chemical dust
	Bulk material applications

FILTOWER L eco+	Ideal for
	Aerosols
	Oil mist
	Emulsion mist
	Fumes

SPECIAL FEATURES:

- Two ventilators connected in parallel
- Pre-separation system* for large particles
- New **ESTA QuickChange*** filter change system for dust-free and time-saving cartridge filter replacement.
- Dust-free discharge of the separated contaminants via a removable 150-litre collection tray**
- Optional W3 test certificate.
- Available in many special designs

* Patent pending
** Depending on device version

Product-Video

TECHNICAL DATA

		FILTOWER 100	FILTOWER 160	FILTOWER 200
Max. Airflow	m³/h	10.000	15.000	20.000
Max. negative pressure	Pa	2.800	2.800	2.800
Voltage	V	400	400	400
Motor	kW	2×3.0	2×4.0	2×7.5
Filter surface	m²	100	160	200
Filter elements	Piece	4	4	4
Dust collection container	l	150	150	150
Dimensions (L/W/H)	mm	2.060×1.510×2.950	2.060×1.510×3.350	2.060×1.510×3.850
Weight	kg	950	1.200	1.500
Sound emission	dB(A)	71	75	77
Order Number				
FILTOWER F eco+		**670100**	**670160**	**670200**
FILTOWER D eco+		**671100**	**671160**	**671200**
FILTOWER L eco+		**672100**	**672160**	**672200**

MOBEX eco+

Universally applicable compact dust extractor for dust, shavings and welding fumes. The devices are designed for single or multi-location extraction. Up to four extraction points can be operated simultaneously via a pipe system.

MOBEX F eco+	Ideal for
	Welding fume
	Soldering fume

MOBEX P eco+	Ideal for
	Metal dust
	Cuttings
	Chipped plastics
	Plastic dust

Product-Video

SPECIAL FEATURES:

- High extraction efficiency
- Low operating noise thanks to sound-insulated housing
- Minimal space requirement due to compact design
- Easy and dust-free discharge of collected material through a new disposal system
- Optional W3 or IH test certificate
- Available in many special designs

TECHNICAL DATA

		F-40	F-60
Max. Airflow	m³/h	2.800	4.500
Intake diameter	mm	224	280
Max. negative pressure	Pa	3.400	3.400
Voltage	V	400	400
Motor	kW	3.0	4.0
Filter surface	m²	40	60
Filter elements	Piece	2	3
Dust collection container	l	2 × 38	2 × 38
Dimensions (L/W/H)	mm	1.910 × 1.040 × 2.030*	2.030 × 1.040 × 2.030*
Weight	kg	310	350
Sound emission	dB(A)	71	74
Order Number			
MOBEX F eco+		**09848**	**09849**

* without spark trap

		P-24	P-36
Max. Airflow	m³/h	2.800	4.500
Intake diameter	mm	200	250
Max. negative pressure	Pa	3.400	3.400
Voltage	V	400	400
Motor	kW	3.0	4.0
Filter surface	m²	24	36
Filter elements	Piece	2	3
Dust collection container	l	100 - 150 (2 × 38*)	100 - 150 (2 × 38*)
Dimensions (L/W/H)	mm	1.910 × 1.040 × 2.030	2.030 × 1.040 × 2.030
Weight	kg	310	350
Sound emission	dB(A)	71	74
Order Number			
MOBEX P eco+		**09842**	**09843**

* with dust collection box

DUSTOMAT 4 eco+

The DUSTOMAT 4 is the ideal device for single or multi-location extraction of free-flowing and dry dust – both for direct extraction at a processing machine and for connection to a pipe system.

Ideal for

- CFK-/GFK dust
- Chemical dust
- Wood dust
- Metal dust
- Plastic dust

SPECIAL FEATURES

- High extraction efficiency combined with good mobility
- Very low operating noise, can be set up directly in the work area
- Removable dust collection tray for easy discharge
- Very user-friendly and easy to maintain
- Optional Hi test certificate
- Available in many special designs

TECHNICAL DATA

		4-10	4-24
Max. Airflow	m³/h	2.000	3.300
Intake diameter	mm	160	200
Max. negative pressure	Pa	2.600	3.600
Voltage	V	400	400
Motor	kW	2.2	4.0
Filter surface	m²	10	24
Filter elements	Piece	2	2
Dust collection container	l	90 (42*)	90 (42*)
Dimensions (L/W/H)	mm	1.400 × 840 × 1.440	1.600 × 840 × 1.640
Weight	kg	230	280
Sound emission	dB(A)	68	72
Order Number			
DUSTOMAT 4 eco+		**09740**	**09770**

* with dust collection box

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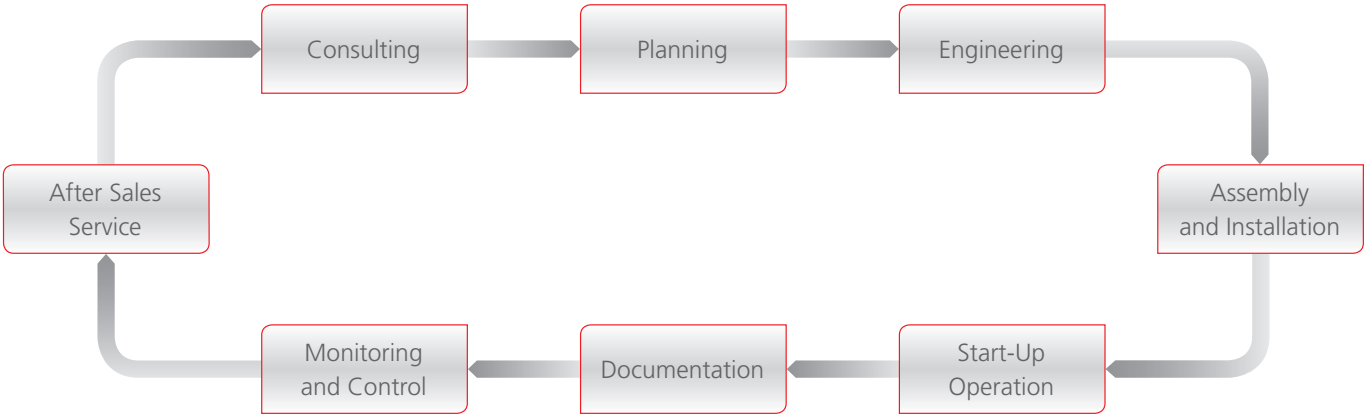
HIGH QUALITY: LONG-LIVED AND PERSISTENT EQUIPMENT FOR OUR CUSTOMERS



ESTA – THE SPECIALIST FOR EXTRACTION TECHNOLOGY

ESTA extraction technology has provided comprehensive solutions for all application areas for more than 40 years. From single devices for a wide range of application purposes to complex extraction systems – we ensure a clean working environment at all times. This protects machines, benefits your employees' health and lays the groundwork for efficient and quality-oriented working.

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